

In the Senate of the United States,

April 25, 2002.

Resolved, That the bill from the House of Representatives (H.R. 4) entitled “An Act to enhance energy conservation, research and development and to provide for security and diversity in the energy supply for the American people, and for other purposes.”, do pass with the following

AMENDMENT:

Strike out all after the enacting clause and insert:

1 ***SECTION 1. SHORT TITLE.***

2 *This Act may be cited as the “Energy Policy Act of*
3 *2002”.*

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 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 purposes*
 14 *of this section, the term “energy services” means—*

15 (1) *the generation or transmission of electric en-*
 16 *ergy,*

1 (2) *the transportation, storage, and distribution*
2 *of crude oil, residual fuel oil, refined petroleum prod-*
3 *uct, or natural gas, or*

4 (3) *the reduction in load through increased effi-*
5 *ciency, conservation, or load control measures.*

6 **SEC. 102. FEDERAL SUPPORT FOR REGIONAL COORDINA-**
7 **TION.**

8 (a) *TECHNICAL ASSISTANCE.*—*The Secretary of En-*
9 *ergy shall provide technical assistance to States and re-*
10 *gional organizations formed by two or more States to assist*
11 *them in coordinating their energy policies on a regional*
12 *basis. Such technical assistance may include assistance*
13 *in—*

14 (1) *identifying the areas with the greatest energy*
15 *resource potential, and assessing future supply avail-*
16 *ability and demand requirements,*

17 (2) *planning, coordinating, and siting addi-*
18 *tional energy infrastructure, including generating fa-*
19 *ilities, electric transmission facilities, pipelines, re-*
20 *fineries, and distributed generation facilities to maxi-*
21 *mize the efficiency of energy resources and infrastruc-*
22 *ture and meet regional needs with the minimum ad-*
23 *verse impacts on the environment,*

24 (3) *identifying and resolving problems in dis-*
25 *tribution networks,*

1 (4) *developing plans to respond to surge demand*
2 *or emergency needs, and*

3 (5) *developing renewable energy, energy effi-*
4 *ciency, conservation, and load control programs.*

5 (b) *ANNUAL CONFERENCE ON REGIONAL ENERGY CO-*
6 *ORDINATION.—*

7 (1) *ANNUAL CONFERENCE.—The Secretary of*
8 *Energy shall convene an annual conference to pro-*
9 *mote regional coordination on energy policy and in-*
10 *frastructure issues.*

11 (2) *PARTICIPATION.—The Secretary of Energy*
12 *shall invite appropriate representatives of Federal,*
13 *State, and regional energy organizations, and other*
14 *interested parties.*

15 (3) *STATE AND FEDERAL AGENCY COOPERA-*
16 *TION.—The Secretary of Energy shall consult and co-*
17 *operate with State and regional energy organizations,*
18 *the Secretary of the Interior, the Secretary of Agri-*
19 *culture, the Secretary of Commerce, the Secretary of*
20 *the Treasury, the Chairman of the Federal Energy*
21 *Regulatory Commission, the Administrator of the En-*
22 *vironmental Protection Agency, and the Chairman of*
23 *the Council on Environmental Quality in the plan-*
24 *ning and conduct of the conference.*

1 (4) *AGENDA.*—*The Secretary of Energy, in con-*
 2 *sultation with the officials identified in paragraph*
 3 *(3) and participants identified in paragraph (2),*
 4 *shall establish an agenda for each conference that pro-*
 5 *motes regional coordination on energy policy and in-*
 6 *frastructure issues.*

7 (5) *RECOMMENDATIONS.*—*Not later than 60 days*
 8 *after the conclusion of each annual conference, the*
 9 *Secretary of Energy shall report to the President and*
 10 *the Congress recommendations arising out of the con-*
 11 *ference that may improve—*

12 (A) *regional coordination on energy policy*
 13 *and infrastructure issues, and*

14 (B) *Federal support for regional coordina-*
 15 *tion.*

16 ***TITLE II—ELECTRICITY***
 17 ***Subtitle A—Amendments to the***
 18 ***Federal Power Act***

19 ***SEC. 201. DEFINITIONS.***

20 (a) *DEFINITION OF ELECTRIC UTILITY.*—*Section*
 21 *3(22) of the Federal Power Act (16 U.S.C. 796(22)) is*
 22 *amended to read as follows:*

23 “(22) ‘*electric utility*’ means any person or Fed-
 24 *eral or State agency (including any municipality)*
 25 *that sells electric energy; such term includes the Ten-*

1 *nessee Valley Authority and each Federal power mar-*
 2 *keting agency.”.*

3 *(b) DEFINITION OF TRANSMITTING UTILITY.—Section*
 4 *3(23) of the Federal Power Act (16 U.S.C. 796(23)) is*
 5 *amended to read as follows:*

6 *“(23) TRANSMITTING UTILITY.—The term ‘trans-*
 7 *mitting utility’ means an entity (including any enti-*
 8 *ty described in section 201(f)) that owns or operates*
 9 *facilities used for the transmission of electric energy*
 10 *in—*

11 *“(A) interstate commerce; or*

12 *“(B) for the sale of electric energy at whole-*
 13 *sale.”.*

14 **SEC. 202. ELECTRIC UTILITY MERGERS.**

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

17 *“(a)(1) No public utility shall, without first having se-*
 18 *cured an order of the Commission authorizing it to do so—*

19 *“(A) sell, lease, or otherwise dispose of the whole*
 20 *of its facilities subject to the jurisdiction of the Com-*
 21 *mission, or any part thereof of a value in excess of*
 22 *\$10,000,000,*

23 *“(B) merge or consolidate, directly or indirectly,*
 24 *such facilities or any part thereof with the facilities*
 25 *of any other person, by any means whatsoever,*

1 “(C) purchase, acquire, or take any security of
2 any other public utility, or

3 “(D) purchase, lease, or otherwise acquire exist-
4 ing facilities for the generation of electric energy un-
5 less such facilities will be used exclusively for the sale
6 of electric energy at retail.

7 “(2) No holding company in a holding company sys-
8 tem that includes a transmitting utility or an electric util-
9 ity company shall purchase, acquire, or take any security
10 of, or, by any means whatsoever, directly or indirectly,
11 merge or consolidate with a transmitting utility, an electric
12 utility company, a gas utility company, or a holding com-
13 pany in a holding company system that includes a trans-
14 mitting utility, an electric utility company, or a gas utility
15 company, without first having secured an order of the Com-
16 mission authorizing it to do so.

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

22 “(4) After notice and opportunity for hearing, the
23 Commission shall approve the proposed disposition, consoli-
24 dation, acquisition, or control, if it finds that the proposed
25 transaction—

1 “(A) will be consistent with the public interest;

2 “(B) will not adversely affect the interests of con-
3 sumers of electric energy of any public utility that is
4 a party to the transaction or is an associate company
5 of any party to the transaction;

6 “(C) will not impair the ability of the Commis-
7 sion or any State commission having jurisdiction
8 over any public utility that is a party to the trans-
9 action or an associate company of any party to the
10 transaction to protect the interests of consumers or the
11 public; and

12 “(D) will not lead to cross-subsidization of asso-
13 ciate companies or encumber any utility assets for the
14 benefit of an associate company.

15 “(5) The Commission shall, by rule, adopt procedures
16 for the expeditious consideration of applications for the ap-
17 proval of dispositions, consolidations, or acquisitions under
18 this section. Such rules shall identify classes of transactions,
19 or specify criteria for transactions, that normally meet the
20 standards established in paragraph (4), and shall require
21 the Commission to grant or deny an application for ap-
22 proval of a transaction of such type within 90 days after
23 the conclusion of the hearing or opportunity to comment
24 under paragraph (4). If the Commission does not act within
25 90 days, such application shall be deemed granted unless

1 *the Commission finds that further consideration is required*
2 *to determine whether the proposed transaction meets the*
3 *standards of paragraph (4) and issues one or more orders*
4 *tolling the time for acting on the application for an addi-*
5 *tional 90 days.*

6 “(6) *For purposes of this subsection, the terms ‘asso-*
7 *ciate company’, ‘electric utility company’, ‘gas utility com-*
8 *pany’, ‘holding company’, and ‘holding company system’*
9 *have the meaning given those terms in the Public Utility*
10 *Holding Company Act of 2002.’.*”

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

12 (a) *APPROVAL OF MARKET-BASED RATES.—Section*
13 *205 of the Federal Power Act (16 U.S.C. 824d) is amended*
14 *by adding at the end the following:*

15 “(h) *The Commission may determine whether a mar-*
16 *ket-based rate for the sale of electric energy subject to the*
17 *jurisdiction of the Commission is just and reasonable and*
18 *not unduly discriminatory or preferential. In making such*
19 *determination, the Commission shall consider such factors*
20 *as the Commission may deem to be appropriate and in the*
21 *public interest, including to the extent the Commission con-*
22 *siders relevant to the wholesale power market—*

23 “(1) *market power;*

24 “(2) *the nature of the market and its response*
25 *mechanisms; and*

1 “(3) reserve margins.”.

2 (b) *REVOCATION OF MARKET-BASED RATES.*—Section
3 206 of the Federal Power Act (16 U.S.C. 824e) is amended
4 by adding at the end the following:

5 “(f) Whenever the Commission, after a hearing had
6 upon its own motion or upon complaint, finds that a rate
7 charged by a public utility authorized to charge a market-
8 based rate under section 205 is unjust, unreasonable, un-
9 duly discriminatory or preferential, the Commission shall
10 determine the just and reasonable rate and fix the same by
11 order.”.

12 **SEC. 204. REFUND EFFECTIVE DATE.**

13 Section 206(b) of the Federal Power Act (16 U.S.C.
14 824e(b)) is amended by—

15 (1) striking “the date 60 days after the filing of
16 such complaint nor later than 5 months after the ex-
17 piration of such 60-day period” in the second sen-
18 tence and inserting “the date of the filing of such
19 complaint nor later than 5 months after the filing of
20 such complaint”;

21 (2) striking “60 days after” in the third sentence
22 and inserting “of”; and

23 (3) striking “expiration of such 60-day period”
24 in the third sentence and inserting “publication
25 date”.

1 **SEC. 205. OPEN ACCESS TRANSMISSION BY CERTAIN UTILI-**
2 **TIES.**

3 *Part II of the Federal Power Act is further amended*
4 *by inserting after section 211 the following:*

5 *“OPEN ACCESS BY UNREGULATED TRANSMITTING*
6 *UTILITIES*

7 *“SEC. 211A. (a) Subject to section 212(h), the Commis-*
8 *sion may, by rule or order, require an unregulated trans-*
9 *mitting utility to provide transmission services—*

10 *“(1) at rates that are comparable to those that*
11 *the unregulated transmitting utility charges itself,*
12 *and*

13 *“(2) on terms and conditions (not relating to*
14 *rates) that are comparable to those under Commission*
15 *rules that require public utilities to offer open access*
16 *transmission services and that are not unduly dis-*
17 *criminatory or preferential.*

18 *“(b) The Commission shall exempt from any rule or*
19 *order under this subsection any unregulated transmitting*
20 *utility that—*

21 *“(1) sells no more than 4,000,000 megawatt*
22 *hours of electricity per year;*

23 *“(2) does not own or operate any transmission*
24 *facilities that are necessary for operating an inter-*
25 *connected transmission system (or any portion there-*
26 *of); or*

1 “(3) meets other criteria the Commission deter-
2 mines to be in the public interest.

3 “(c) The rate changing procedures applicable to public
4 utilities under subsections (c) and (d) of section 205 are
5 applicable to unregulated transmitting utilities for pur-
6 poses of this section.

7 “(d) In exercising its authority under paragraph (1),
8 the Commission may remand transmission rates to an un-
9 regulated transmitting utility for review and revision where
10 necessary to meet the requirements of subsection (a).

11 “(e) The provision of transmission services under sub-
12 section (a) does not preclude a request for transmission
13 services under section 211.

14 “(f) The Commission may not require a State or mu-
15 nicipality to take action under this section that constitutes
16 a private business use for purposes of section 141 of the
17 Internal Revenue Code of 1986 (26 U.S.C. 141).

18 “(g) For purposes of this subsection, the term ‘unregu-
19 lated transmitting utility’ means an entity that—

20 “(1) owns or operates facilities used for the
21 transmission of electric energy in interstate com-
22 merce, and

23 “(2) is either an entity described in section
24 201(f) or a rural electric cooperative.”.

1 **SEC. 206. ELECTRIC RELIABILITY STANDARDS.**

2 *Part II of the Federal Power Act (16 U.S.C 824 et*
3 *seq.) is amended by inserting the following after section 215*
4 *as added by this Act:*

5 **“SEC. 216. ELECTRIC RELIABILITY.**

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

7 *“(1) ‘bulk-power system’ means the network of*
8 *interconnected transmission facilities and generating*
9 *facilities;*

10 *“(2) ‘electric reliability organization’ means a*
11 *self-regulating organization certified by the Commis-*
12 *sion under subsection (c) whose purpose is to promote*
13 *the reliability of the bulk-power system; and*

14 *“(3) ‘reliability standard’ means a requirement*
15 *to provide for reliable operation of the bulk-power sys-*
16 *tem approved by the Commission under this section.*

17 *“(b) JURISDICTION AND APPLICABILITY.—The Com-*
18 *mission shall have jurisdiction, within the United States,*
19 *over an electric reliability organization, any regional enti-*
20 *ties, and all users, owners and operators of the bulk-power*
21 *system, including but not limited to the entities described*
22 *in section 201(f), for purposes of approving reliability*
23 *standards and enforcing compliance with this section. All*
24 *users, owners and operators of the bulk-power system shall*
25 *comply with reliability standards that take effect under this*
26 *section.*

1 “(c) *CERTIFICATION.*—(1) *The Commission shall issue*
2 *a final rule to implement the requirements of this section*
3 *not later than 180 days after the date of enactment of this*
4 *section.*

5 “(2) *Following the issuance of a Commission rule*
6 *under paragraph (1), any person may submit an applica-*
7 *tion to the Commission for certification as an electric reli-*
8 *ability organization. The Commission may certify an ap-*
9 *plicant if the Commission determines that the applicant—*

10 “(A) *has the ability to develop, and enforce reli-*
11 *ability standards that provide for an adequate level*
12 *of reliability of the bulk-power system;*

13 “(B) *has established rules that—*

14 “(i) *assure its independence of the users and*
15 *owners and operators of the bulk-power system;*
16 *while assuring fair stakeholder representation in*
17 *the selection of its directors and balanced deci-*
18 *sionmaking in any committee or subordinate or-*
19 *ganizational structure;*

20 “(ii) *allocate equitably dues, fees, and other*
21 *charges among end users for all activities under*
22 *this section;*

23 “(iii) *provide fair and impartial procedures*
24 *for enforcement of reliability standards through*
25 *imposition of penalties (including limitations on*

1 activities, functions, or operations, or other ap-
2 propriate sanctions); and

3 “(iv) provide for reasonable notice and op-
4 portunity for public comment, due process, open-
5 ness, and balance of interests in developing reli-
6 ability standards and otherwise exercising its
7 duties.

8 “(3) If the Commission receives two or more timely
9 applications that satisfy the requirements of this subsection,
10 the Commission shall approve only the application it con-
11 cludes will best implement the provisions of this section.

12 “(d) *RELIABILITY STANDARDS.*—(1) An electric reli-
13 ability organization shall file a proposed reliability stand-
14 ard or modification to a reliability standard with the Com-
15 mission.

16 “(2) The Commission may approve a proposed reli-
17 ability standard or modification to a reliability standard
18 if it determines that the standard is just, reasonable, not
19 unduly discriminatory or preferential, and in the public
20 interest. The Commission shall give due weight to the tech-
21 nical expertise of the electric reliability organization with
22 respect to the content of a proposed standard or modifica-
23 tion to a reliability standard, but shall not defer with re-
24 spect to its effect on competition.

1 “(3) *The electric reliability organization and the Com-*
2 *mission shall rebuttably presume that a proposal from a*
3 *regional entity organized on an interconnection-wide basis*
4 *for a reliability standard or modification to a reliability*
5 *standard to be applicable on an interconnection-wide basis*
6 *is just, reasonable, and not unduly discriminatory or pref-*
7 *erential, and in the public interest.*

8 “(4) *The Commission shall remand to the electric reli-*
9 *ability organization for further consideration a proposed re-*
10 *liability standard or a modification to a reliability stand-*
11 *ard that the Commission disapproves in whole or in part.*

12 “(5) *The Commission, upon its own motion or upon*
13 *complaint, may order an electric reliability organization*
14 *to submit to the Commission a proposed reliability stand-*
15 *ard or a modification to a reliability standard that address-*
16 *es a specific matter if the Commission considers such a new*
17 *or modified reliability standard appropriate to carry out*
18 *this section.*

19 “(e) *ENFORCEMENT.—(1) An electric reliability orga-*
20 *nization may impose a penalty on a user or owner or oper-*
21 *ator of the bulk-power system if the electric reliability orga-*
22 *nization, after notice and an opportunity for a hearing—*

23 “(A) *finds that the user or owner or operator of*
24 *the bulk-power system has violated a reliability*

1 *standard approved by the Commission under sub-*
2 *section (d); and*

3 *“(B) files notice with the Commission, which*
4 *shall affirm, set aside or modify the action.*

5 *“(2) On its own motion or upon complaint, the Com-*
6 *mission may order compliance with a reliability standard*
7 *and may impose a penalty against a user or owner or oper-*
8 *ator of the bulk-power system, if the Commission finds, after*
9 *notice and opportunity for a hearing, that the user or owner*
10 *or operator of the bulk-power system has violated or threat-*
11 *ens to violate a reliability standard.*

12 *“(3) The Commission shall establish regulations au-*
13 *thorizing the electric reliability organization to enter into*
14 *an agreement to delegate authority to a regional entity for*
15 *the purpose of proposing and enforcing reliability stand-*
16 *ards (including related activities) if the regional entity sat-*
17 *isfies the provisions of subsection (c)(2) (A) and (B) and*
18 *the agreement promotes effective and efficient administra-*
19 *tion of bulk-power system reliability, and may modify such*
20 *delegation. The electric reliability organization and the*
21 *Commission shall rebuttably presume that a proposal for*
22 *delegation to a regional entity organized on an interconnec-*
23 *tion-wide basis promotes effective and efficient administra-*
24 *tion of bulk-power system reliability and should be ap-*
25 *proved. Such regulation may provide that the Commission*

1 *may assign the electric reliability organization’s authority*
2 *to enforce reliability standards directly to a regional entity*
3 *consistent with the requirements of this paragraph.*

4 “(4) *The Commission may take such action as is nec-*
5 *essary or appropriate against the electric reliability organi-*
6 *zation or a regional entity to ensure compliance with a reli-*
7 *ability standard or any Commission order affecting the*
8 *electric reliability organization or a regional entity.*

9 “(f) *CHANGES IN ELECTRICITY RELIABILITY ORGANI-*
10 *ZATION RULES.—An electric reliability organization shall*
11 *file with the Commission for approval any proposed rule*
12 *or proposed rule change, accompanied by an explanation*
13 *of its basis and purpose. The Commission, upon its own*
14 *motion or complaint, may propose a change to the rules*
15 *of the electric reliability organization. A proposed rule or*
16 *proposed rule change shall take effect upon a finding by*
17 *the Commission, after notice and opportunity for comment,*
18 *that the change is just, reasonable, not unduly discrimina-*
19 *tory or preferential, is in the public interest, and satisfies*
20 *the requirements of subsection (c)(2).*

21 “(g) *COORDINATION WITH CANADA AND MEXICO.—(1)*
22 *The electric reliability organization shall take all appro-*
23 *priate steps to gain recognition in Canada and Mexico.*

24 “(2) *The President shall use his best efforts to enter*
25 *into international agreements with the governments of Can-*

1 *ada and Mexico to provide for effective compliance with re-*
2 *liability standards and the effectiveness of the electric reli-*
3 *ability organization in the United States and Canada or*
4 *Mexico.*

5 “(h) *RELIABILITY REPORTS.*—*The electric reliability*
6 *organization shall conduct periodic assessments of the reli-*
7 *ability and adequacy of the interconnected bulk-power sys-*
8 *tem in North America.*

9 “(i) *SAVINGS PROVISIONS.*—(1) *The electric reliability*
10 *organization shall have authority to develop and enforce*
11 *compliance with standards for the reliable operation of only*
12 *the bulk-power system.*

13 “(2) *This section does not provide the electric reli-*
14 *ability organization or the Commission with the authority*
15 *to order the construction of additional generation or trans-*
16 *mission capacity or to set and enforce compliance with*
17 *standards for adequacy or safety of electric facilities or serv-*
18 *ices.*

19 “(3) *Nothing in this section shall be construed to pre-*
20 *empt any authority of any State to take action to ensure*
21 *the safety, adequacy, and reliability of electric service with-*
22 *in that State, as long as such action is not inconsistent*
23 *with any reliability standard.*

24 “(4) *Within 90 days of the application of the electric*
25 *reliability organization or other affected party, and after*

1 *notice and opportunity for comment, the Commission shall*
2 *issue a final order determining whether a State action is*
3 *inconsistent with a reliability standard, taking into consid-*
4 *eration any recommendation of the electric reliability orga-*
5 *nization.*

6 “(5) *The Commission, after consultation with the elec-*
7 *tric reliability organization, may stay the effectiveness of*
8 *any State action, pending the Commission’s issuance of a*
9 *final order.*

10 “(j) *APPLICATION OF ANTITRUST LAWS.—*

11 “(1) *IN GENERAL.—To the extent undertaken to*
12 *develop, implement, or enforce a reliability standard,*
13 *each of the following activities shall not, in any ac-*
14 *tion under the antitrust laws, be deemed illegal per*
15 *se—*

16 “(A) *activities undertaken by an electric re-*
17 *liability organization under this section, and*

18 “(B) *activities of a user or owner or oper-*
19 *ator of the bulk-power system undertaken in good*
20 *faith under the rules of an electric reliability or-*
21 *ganization.*

22 “(2) *RULE OF REASON.—In any action under*
23 *the antitrust laws, an activity described in paragraph*
24 *(1) shall be judged on the basis of its reasonableness,*

1 *taking into account all relevant factors affecting com-*
2 *petition and reliability.*

3 “(3) *DEFINITION.*—*For purposes of this sub-*
4 *section, ‘antitrust laws’ has the meaning given the*
5 *term in subsection (a) of the first section of the Clay-*
6 *ton Act (15 U.S.C. 12(a)), except that it includes sec-*
7 *tion 5 of the Federal Trade Commission Act (15 U.*
8 *S.C. 45) to the extent that section 5 applies to unfair*
9 *methods of competition.*

10 “(k) *REGIONAL ADVISORY BODIES.*—*The Commission*
11 *shall establish a regional advisory body on the petition of*
12 *at least two-thirds of the States within a region that have*
13 *more than one-half of their electric load served within the*
14 *region. A regional advisory body shall be composed of one*
15 *member from each participating State in the region, ap-*
16 *pointed by the Governor of each State, and may include*
17 *representatives of agencies, States, and provinces outside the*
18 *United States. A regional advisory body may provide ad-*
19 *vice to the electric reliability organization, a regional reli-*
20 *ability entity, or the Commission regarding the governance*
21 *of an existing or proposed regional reliability entity within*
22 *the same region, whether a standard proposed to apply*
23 *within the region is just, reasonable, not unduly discrimi-*
24 *natory or preferential, and in the public interest, whether*
25 *fees proposed to be assessed within the region are just, rea-*

1 *sonable, not unduly discriminatory or preferential, and in*
2 *the public interest and any other responsibilities requested*
3 *by the Commission. The Commission may give deference to*
4 *the advice of any such regional advisory body if that body*
5 *is organized on an interconnection-wide basis.*

6 “(l) *APPLICATION TO ALASKA AND HAWAII.—The pro-*
7 *visions of this section do not apply to Alaska or Hawaii.”.*

8 **SEC. 207. MARKET TRANSPARENCY RULES.**

9 *Part II of the Federal Power Act is further amended*
10 *by adding at the end the following:*

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

12 “(a) *COMMISSION RULES.—Not later than 180 days*
13 *after the date of enactment of this section, the Commission*
14 *shall issue rules establishing an electronic information sys-*
15 *tem to provide information about the availability and price*
16 *of wholesale electric energy and transmission services to the*
17 *Commission, State commissions, buyers and sellers of*
18 *wholesale electric energy, users of transmission services, and*
19 *the public on a timely basis.*

20 “(b) *INFORMATION REQUIRED.—The Commission*
21 *shall require—*

22 “(1) *each regional transmission organization to*
23 *provide statistical information about the available ca-*
24 *capacity and capacity constraints of transmission fa-*
25 *cilities operated by the organization; and*

1 “(2) *each broker, exchange, or other market-mak-*
2 *ing entity that matches offers to sell and offers to buy*
3 *wholesale electric energy in interstate commerce to*
4 *provide statistical information about the amount and*
5 *sale price of sales of electric energy at wholesale in*
6 *interstate commerce it transacts.*

7 “(c) *TIMELY BASIS.—The Commission shall require*
8 *the information required under subsection (b) to be posted*
9 *on the Internet as soon as practicable and updated as fre-*
10 *quently as practicable.*

11 “(d) *PROTECTION OF SENSITIVE INFORMATION.—The*
12 *Commission shall exempt from disclosure commercial or fi-*
13 *nancial information that the Commission, by rule or order,*
14 *determines to be privileged, confidential, or otherwise sen-*
15 *sitive.”.*

16 **SEC. 208. ACCESS TO TRANSMISSION BY INTERMITTENT**
17 **GENERATORS.**

18 *Part II of the Federal Power Act is further amended*
19 *by adding at the end the following:*

20 **“SEC. 217. ACCESS TO TRANSMISSION BY INTERMITTENT**
21 **GENERATORS.**

22 “(a) *FAIR TREATMENT OF INTERMITTENT GENERA-*
23 *TORS.—The Commission shall ensure that all transmitting*
24 *utilities provide transmission service to intermittent gen-*

1 *erators in a manner that does not unduly prejudice or dis-*
2 *advantage such generators for characteristics that are—*

3 *“(1) inherent to intermittent energy resources;*

4 *and*

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

6 *“(b) POLICIES.—The Commission shall ensure that the*
7 *requirement in subsection (a) is met by adopting such poli-*
8 *cies as it deems appropriate which shall include the fol-*
9 *lowing:*

10 *“(1) Subject to the sole exception set forth in*
11 *paragraph (2), the Commission shall ensure that the*
12 *rates transmitting utilities charge intermittent gener-*
13 *ator customers for transmission services do not un-*
14 *duly prejudice or disadvantage intermittent generator*
15 *customers for scheduling deviations.*

16 *“(2) The Commission may exempt a transmit-*
17 *ting utility from the requirement set forth in para-*
18 *graph (1) if the transmitting utility demonstrates*
19 *that scheduling deviations by its intermittent gener-*
20 *ator customers are likely to have an adverse impact*
21 *on the reliability of the transmitting utility’s system.*

22 *“(3) The Commission shall ensure that to the ex-*
23 *tent any transmission charges recovering the trans-*
24 *mitting utility’s embedded costs are assessed to such*
25 *intermittent generators, they are assessed to such gen-*

1 *erators on the basis of kilowatt-hours generated or*
2 *some other method to ensure that they are fully recov-*
3 *ered by the transmitting utility.*

4 *“(4) The Commission shall require transmitting*
5 *utilities to offer to intermittent generators, and may*
6 *require transmitting utilities to offer to all trans-*
7 *mission customers, access to nonfirm transmission*
8 *service.*

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

10 *“(1) The term ‘intermittent generator’ means a*
11 *facility that generates electricity using wind or solar*
12 *energy and no other energy source.*

13 *“(2) The term ‘nonfirm transmission service’*
14 *means transmission service provided on an ‘as avail-*
15 *able’ basis.*

16 *“(3) The term ‘scheduling deviation’ means de-*
17 *livery of more or less energy than has previously been*
18 *forecast in a schedule submitted by an intermittent*
19 *generator to a control area operator or transmitting*
20 *utility.”.*

21 **SEC. 209. ENFORCEMENT.**

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

24 *(1) inserting “electric utility,” after “Any per-*
25 *son,”; and*

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

3 (b) *INVESTIGATIONS*.—Section 307(a) of the Federal
4 *Power Act* (16 U.S.C. 825f(a)) is amended by inserting “or
5 *transmitting utility*” after “any person” in the first sen-
6 *tence*.

7 (c) *REVIEW OF COMMISSION ORDERS*.—Section 313(a)
8 of the *Federal Power Act* (16 U.S.C. 8251) is amended by
9 inserting “*electric utility*,” after “Any person,” in the first
10 *sentence*.

11 (d) *CRIMINAL PENALTIES*.—Section 316(c) of the Fed-
12 *eral Power Act* (16 U.S.C. 8250(c)) is repealed.

13 (e) *CIVIL PENALTIES*.—Section 316A of the Federal
14 *Power Act* (16 U.S.C. 8250–1) is amended by striking “sec-
15 *tion 211, 212, 213, or 214*” each place it appears and in-
16 *serting “Part II”*.

17 **SEC. 210. ELECTRIC POWER TRANSMISSION SYSTEMS.**

18 *The Federal Government should be attentive to electric*
19 *power transmission issues, including issues that can be ad-*
20 *dressed through policies that facilitate investment in, the*
21 *enhancement of, and the efficiency of electric power trans-*
22 *mission systems.*

1 **Subtitle B—Amendments to the**
2 **Public Utility Holding Company**
3 **Act**

4 **SEC. 221. SHORT TITLE.**

5 *This subtitle may be cited as the “Public Utility Hold-*
6 *ing Company Act of 2002”.*

7 **SEC. 222. DEFINITIONS.**

8 *For purposes of this subtitle:*

9 (1) *The term “affiliate” of a company means*
10 *any company, 5 percent or more of the outstanding*
11 *voting securities of which are owned, controlled, or*
12 *held with power to vote, directly or indirectly, by*
13 *such company.*

14 (2) *The term “associate company” of a company*
15 *means any company in the same holding company*
16 *system with such company.*

17 (3) *The term “Commission” means the Federal*
18 *Energy Regulatory Commission.*

19 (4) *The term “company” means a corporation,*
20 *partnership, association, joint stock company, busi-*
21 *ness trust, or any organized group of persons, whether*
22 *incorporated or not, or a receiver, trustee, or other*
23 *liquidating agent of any of the foregoing.*

24 (5) *The term “electric utility company” means*
25 *any company that owns or operates facilities used for*

1 *the generation, transmission, or distribution of elec-*
2 *tric energy for sale.*

3 (6) *The terms “exempt wholesale generator” and*
4 *“foreign utility company” have the same meanings as*
5 *in sections 32 and 33, respectively, of the Public Util-*
6 *ity Holding Company Act of 1935 (15 U.S.C. 79z–5a,*
7 *79z–5b), as those sections existed on the day before the*
8 *effective date of this subtitle.*

9 (7) *The term “gas utility company” means any*
10 *company that owns or operates facilities used for dis-*
11 *tribution at retail (other than the distribution only in*
12 *enclosed portable containers or distribution to tenants*
13 *or employees of the company operating such facilities*
14 *for their own use and not for resale) of natural or*
15 *manufactured gas for heat, light, or power.*

16 (8) *The term “holding company” means—*

17 (A) *any company that directly or indirectly*
18 *owns, controls, or holds, with power to vote, 10*
19 *percent or more of the outstanding voting securi-*
20 *ties of a public utility company or of a holding*
21 *company of any public utility company; and*

22 (B) *any person, determined by the Commis-*
23 *sion, after notice and opportunity for hearing, to*
24 *exercise directly or indirectly (either alone or*
25 *pursuant to an arrangement or understanding*

1 *with one or more persons) such a controlling in-*
2 *fluence over the management or policies of any*
3 *public utility company or holding company as to*
4 *make it necessary or appropriate for the rate*
5 *protection of utility customers with respect to*
6 *rates that such person be subject to the obliga-*
7 *tions, duties, and liabilities imposed by this sub-*
8 *title upon holding companies.*

9 (9) *The term “holding company system” means*
10 *a holding company, together with its subsidiary com-*
11 *panies.*

12 (10) *The term “jurisdictional rates” means rates*
13 *established by the Commission for the transmission of*
14 *electric energy in interstate commerce, the sale of elec-*
15 *tric energy at wholesale in interstate commerce, the*
16 *transportation of natural gas in interstate commerce,*
17 *and the sale in interstate commerce of natural gas for*
18 *resale for ultimate public consumption for domestic,*
19 *commercial, industrial, or any other use.*

20 (11) *The term “natural gas company” means a*
21 *person engaged in the transportation of natural gas*
22 *in interstate commerce or the sale of such gas in*
23 *interstate commerce for resale.*

24 (12) *The term “person” means an individual or*
25 *company.*

1 (13) *The term “public utility” means any person*
2 *who owns or operates facilities used for transmission*
3 *of electric energy in interstate commerce or sales of*
4 *electric energy at wholesale in interstate commerce.*

5 (14) *The term “public utility company” means*
6 *an electric utility company or a gas utility company.*

7 (15) *The term “State commission” means any*
8 *commission, board, agency, or officer, by whatever*
9 *name designated, of a State, municipality, or other*
10 *political subdivision of a State that, under the laws*
11 *of such State, has jurisdiction to regulate public util-*
12 *ity companies.*

13 (16) *The term “subsidiary company” of a hold-*
14 *ing company means—*

15 (A) *any company, 10 percent or more of the*
16 *outstanding voting securities of which are di-*
17 *rectly or indirectly owned, controlled, or held*
18 *with power to vote, by such holding company;*
19 *and*

20 (B) *any person, the management or policies*
21 *of which the Commission, after notice and oppor-*
22 *tunity for hearing, determines to be subject to a*
23 *controlling influence, directly or indirectly, by*
24 *such holding company (either alone or pursuant*
25 *to an arrangement or understanding with one or*

1 *more other persons) so as to make it necessary*
2 *for the rate protection of utility customers with*
3 *respect to rates that such person be subject to the*
4 *obligations, duties, and liabilities imposed by*
5 *this subtitle upon subsidiary companies of hold-*
6 *ing companies.*

7 (17) *The term “voting security” means any secu-*
8 *rity presently entitling the owner or holder thereof to*
9 *vote in the direction or management of the affairs of*
10 *a company.*

11 **SEC. 223. REPEAL OF THE PUBLIC UTILITY HOLDING COM-**
12 **PANY ACT OF 1935.**

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

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

16 (a) *IN GENERAL.—Each holding company and each*
17 *associate company thereof shall maintain, and shall make*
18 *available to the Commission, such books, accounts, memo-*
19 *randa, and other records as the Commission deems to be*
20 *relevant to costs incurred by a public utility or natural gas*
21 *company that is an associate company of such holding com-*
22 *pany and necessary or appropriate for the protection of*
23 *utility customers with respect to jurisdictional rates.*

24 (b) *AFFILIATE COMPANIES.—Each affiliate of a hold-*
25 *ing company or of any subsidiary company of a holding*

1 company shall maintain, and shall make available to the
2 Commission, such books, accounts, memoranda, and other
3 records with respect to any transaction with another affil-
4 iate, as the Commission deems to be relevant to costs in-
5 curred by a public utility or natural gas company that is
6 an associate company of such holding company and nec-
7 essary or appropriate for the protection of utility customers
8 with respect to jurisdictional rates.

9 (c) *HOLDING COMPANY SYSTEMS.*—The Commission
10 may examine the books, accounts, memoranda, and other
11 records of any company in a holding company system, or
12 any affiliate thereof, as the Commission deems to be rel-
13 evant to costs incurred by a public utility or natural gas
14 company within such holding company system and nec-
15 essary or appropriate for the protection of utility customers
16 with respect to jurisdictional rates.

17 (d) *CONFIDENTIALITY.*—No member, officer, or em-
18 ployee of the Commission shall divulge any fact or informa-
19 tion that may come to his or her knowledge during the
20 course of examination of books, accounts, memoranda, or
21 other records as provided in this section, except as may be
22 directed by the Commission or by a court of competent ju-
23 risdiction.

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

2 (a) *In GENERAL.*—Upon the written request of a State
3 commission having jurisdiction to regulate a public utility
4 company in a holding company system, the holding com-
5 pany or any associate company or affiliate thereof, other
6 than such public utility company, wherever located, shall
7 produce for inspection books, accounts, memoranda, and
8 other records that—

9 (1) *have been identified in reasonable detail by*
10 *the State commission;*

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

13 (3) *are necessary for the effective discharge of the*
14 *responsibilities of the State commission with respect*
15 *to such proceeding.*

16 (b) *LIMITATION.*—Subsection (a) does not apply to
17 any person that is a holding company solely by reason of
18 ownership of one or more qualifying facilities under the
19 *Public Utility Regulatory Policies Act of 1978 (16 U.S.C.*
20 *2601 et seq.).*

21 (c) *CONFIDENTIALITY OF INFORMATION.*—The produc-
22 tion of books, accounts, memoranda, and other records
23 under subsection (a) shall be subject to such terms and con-
24 ditions as may be necessary and appropriate to safeguard
25 against unwarranted disclosure to the public of any trade
26 secrets or sensitive commercial information.

1 (d) *EFFECT ON STATE LAW.*—Nothing in this section
2 shall preempt applicable State law concerning the provision
3 of books, accounts, memoranda, and other records, or in any
4 way limit the rights of any State to obtain books, accounts,
5 memoranda, and other records under any other Federal
6 law, contract, or otherwise.

7 (e) *COURT JURISDICTION.*—Any United States district
8 court located in the State in which the State commission
9 referred to in subsection (a) is located shall have jurisdic-
10 tion to enforce compliance with this section.

11 **SEC. 226. EXEMPTION AUTHORITY.**

12 (a) *RULEMAKING.*—Not later than 90 days after the
13 effective date of this subtitle, the Commission shall promul-
14 gate a final rule to exempt from the requirements of section
15 224 any person that is a holding company, solely with re-
16 spect to one or more—

17 (1) *qualifying facilities under the Public Utility*
18 *Regulatory Policies Act of 1978 (16 U.S.C. 2601 et*
19 *seq.);*

20 (2) *exempt wholesale generators; or*

21 (3) *foreign utility companies.*

22 (b) *OTHER AUTHORITY.*—The Commission shall ex-
23 empt a person or transaction from the requirements of sec-
24 tion 224, if, upon application or upon the motion of the
25 Commission—

1 (1) *the Commission finds that the books, ac-*
2 *counts, memoranda, and other records of any person*
3 *are not relevant to the jurisdictional rates of a public*
4 *utility or natural gas company; or*

5 (2) *the Commission finds that any class of trans-*
6 *actions is not relevant to the jurisdictional rates of a*
7 *public utility or natural gas company.*

8 **SEC. 227. AFFILIATE TRANSACTIONS.**

9 (a) *COMMISSION AUTHORITY UNAFFECTED.*—*Nothing*
10 *in this subtitle shall limit the authority of the Commission*
11 *under the Federal Power Act (16 U.S.C. 791a et seq.) to*
12 *require that jurisdictional rates are just and reasonable, in-*
13 *cluding the ability to deny or approve the pass through of*
14 *costs, the prevention of cross-subsidization, and the promul-*
15 *gation of such rules and regulations as are necessary or ap-*
16 *propriate for the protection of utility consumers.*

17 (b) *RECOVERY OF COSTS.*—*Nothing in this subtitle*
18 *shall preclude the Commission or a State commission from*
19 *exercising its jurisdiction under otherwise applicable law*
20 *to determine whether a public utility company, public util-*
21 *ity, or natural gas company may recover in rates any costs*
22 *of an activity performed by an associate company, or any*
23 *costs of goods or services acquired by such public utility*
24 *company from an associate company.*

1 **SEC. 228. APPLICABILITY.**

2 *Except as otherwise specifically provided in this sub-*
3 *title, no provision of this subtitle shall apply to, or be*
4 *deemed to include—*

5 *(1) the United States;*

6 *(2) a State or any political subdivision of a*
7 *State;*

8 *(3) any foreign governmental authority not oper-*
9 *ating in the United States;*

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

12 *or*

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

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

17 *Nothing in this subtitle precludes the Commission or*
18 *a State commission from exercising its jurisdiction under*
19 *otherwise applicable law to protect utility customers.*

20 **SEC. 230. ENFORCEMENT.**

21 *The Commission shall have the same powers as set*
22 *forth in sections 306 through 317 of the Federal Power Act*
23 *(16 U.S.C. 825e–825p) to enforce the provisions of this sub-*
24 *title.*

1 **SEC. 231. SAVINGS PROVISIONS.**

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

6 (b) *EFFECT ON OTHER COMMISSION AUTHORITY.*—
7 Nothing in this subtitle limits the authority of the Commis-
8 sion under the Federal Power Act (16 U.S.C. 791a et seq.)
9 (including section 301 of that Act) or the Natural Gas Act
10 (15 U.S.C. 717 et seq.) (including section 8 of that Act).

11 **SEC. 232. IMPLEMENTATION.**

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

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

17 (2) submit to the Congress detailed recommenda-
18 tions on technical and conforming amendments to
19 Federal law necessary to carry out this subtitle and
20 the amendments made by this subtitle.

21 **SEC. 233. TRANSFER OF RESOURCES.**

22 All books and records that relate primarily to the func-
23 tions transferred to the Commission under this subtitle shall
24 be transferred from the Securities and Exchange Commis-
25 sion to the Commission.

1 **SEC. 234. INTER-AGENCY REVIEW OF COMPETITION IN THE**
2 **WHOLESALE AND RETAIL MARKETS FOR**
3 **ELECTRIC ENERGY.**

4 (a) *TASK FORCE.*—*There is established an inter-agen-*
5 *cy task force, to be known as the “Electric Energy Market*
6 *Competition Task Force” (referred to in this section as the*
7 *“task force”), which shall consist of—*

8 (1) *one member each from—*

9 (A) *the Department of Justice, to be ap-*
10 *pointed by the Attorney General of the United*
11 *States;*

12 (B) *the Federal Energy Regulatory Com-*
13 *mission, to be appointed by the chairman of that*
14 *Commission; and*

15 (C) *the Federal Trade Commission, to be*
16 *appointed by the chairman of that Commission;*
17 *and*

18 (2) *two advisory members (who shall not vote),*
19 *of whom—*

20 (A) *one shall be appointed by the Secretary*
21 *of Agriculture to represent the Rural Utility*
22 *Service; and*

23 (B) *one shall be appointed by the Chairman*
24 *of the Securities and Exchange Commission to*
25 *represent that Commission.*

26 (b) *STUDY AND REPORT.*—

1 (1) *STUDY.*—*The task force shall perform a*
2 *study and analysis of the protection and promotion*
3 *of competition within the wholesale and retail market*
4 *for electric energy in the United States.*

5 (2) *REPORT.*—

6 (A) *FINAL REPORT.*—*Not later than 1 year*
7 *after the effective date of this subtitle, the task*
8 *force shall submit a final report of its findings*
9 *under paragraph (1) to the Congress.*

10 (B) *PUBLIC COMMENT.*—*At least 60 days*
11 *before submission of a final report to the Con-*
12 *gress under subparagraph (A), the task force*
13 *shall publish a draft report in the Federal Reg-*
14 *ister to provide for public comment.*

15 (c) *FOCUS.*—*The study required by this section shall*
16 *examine—*

17 (1) *the best means of protecting competition*
18 *within the wholesale and retail electric market;*

19 (2) *activities within the wholesale and retail*
20 *electric market that may allow unfair and unjustified*
21 *discriminatory and deceptive practices;*

22 (3) *activities within the wholesale and retail*
23 *electric market, including mergers and acquisitions,*
24 *that deny market access or suppress competition;*

1 (4) *cross-subsidization that may occur between*
2 *regulated and nonregulated activities; and*

3 (5) *the role of State public utility commissions*
4 *in regulating competition in the wholesale and retail*
5 *electric market.*

6 (d) *CONSULTATION.*—*In performing the study required*
7 *by this section, the task force shall consult with and solicit*
8 *comments from its advisory members, the States, represent-*
9 *atives of the electric power industry, and the public.*

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

11 (a) *STUDY.*—*The Comptroller General shall conduct a*
12 *study of the success of the Federal Government and the*
13 *States during the 18-month period following the effective*
14 *date of this subtitle in—*

15 (1) *the prevention of anticompetitive practices*
16 *and other abuses by public utility holding companies,*
17 *including cross-subsidization and other market power*
18 *abuses; and*

19 (2) *the promotion of competition and efficient*
20 *energy markets to the benefit of consumers.*

21 (b) *REPORT TO CONGRESS.*—*Not earlier than 18*
22 *months after the effective date of this subtitle or later than*
23 *24 months after that effective date, the Comptroller General*
24 *shall submit a report to the Congress on the results of the*
25 *study conducted under subsection (a), including probable*

1 *causes of its findings and recommendations to the Congress*
2 *and the States for any necessary legislative changes.*

3 **SEC. 236. EFFECTIVE DATE.**

4 *This subtitle shall take effect 18 months after the date*
5 *of enactment of this subtitle.*

6 **SEC. 237. AUTHORIZATION OF APPROPRIATIONS.**

7 *There are authorized to be appropriated such funds as*
8 *may be necessary to carry out this subtitle.*

9 **SEC. 238. CONFORMING AMENDMENTS TO THE FEDERAL**
10 **POWER ACT.**

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

13 *(b) DEFINITIONS.—(1) Section 201(g) of the Federal*
14 *Power Act (16 U.S.C. 824(g)) is amended by striking*
15 *“1935” and inserting “2002”.*

16 *(2) Section 214 of the Federal Power Act (16 U.S.C.*
17 *824m) is amended by striking “1935” and inserting*
18 *“2002”.*

1 ***Subtitle C—Amendments to the***
2 ***Public Utility Regulatory Poli-***
3 ***cies Act of 1978***

4 ***SEC. 241. REAL-TIME PRICING AND TIME-OF-USE METERING***
5 ***STANDARDS.***

6 *(a) ADOPTION OF STANDARDS.—Section 111(d) of the*
7 *Public Utility Regulatory Policies Act of 1978 (16 U.S.C.*
8 *2621(d)) is amended by adding at the end the following:*

9 *“(11) REAL-TIME PRICING.—(A) Each electric*
10 *utility shall, at the request of an electric consumer,*
11 *provide electric service under a real-time rate sched-*
12 *ule, under which the rate charged by the electric util-*
13 *ity varies by the hour (or smaller time interval) ac-*
14 *cording to changes in the electric utility’s wholesale*
15 *power cost. The real-time pricing service shall enable*
16 *the electric consumer to manage energy use and cost*
17 *through real-time metering and communications tech-*
18 *nology.*

19 *“(B) For purposes of implementing this para-*
20 *graph, any reference contained in this section to the*
21 *date of enactment of the Public Utility Regulatory*
22 *Policies Act of 1978 shall be deemed to be a reference*
23 *to the date of enactment of this paragraph.*

24 *“(C) Notwithstanding subsections (b) and (c) of*
25 *section 112, each State regulatory authority shall con-*

1 *sider and make a determination concerning whether*
2 *it is appropriate to implement the standard set out*
3 *in subparagraph (A) not later than 1 year after the*
4 *date of enactment of this paragraph.*

5 “(12) *TIME-OF-USE METERING.*—(A) *Each elec-*
6 *tric utility shall, at the request of an electric con-*
7 *sumer, provide electric service under a time-of-use*
8 *rate schedule which enables the electric consumer to*
9 *manage energy use and cost through time-of-use me-*
10 *tering and technology.*

11 “(B) *For purposes of implementing this para-*
12 *graph, any reference contained in this section to the*
13 *date of enactment of the Public Utility Regulatory*
14 *Policies Act of 1978 shall be deemed to be a reference*
15 *to the date of enactment of this paragraph.*

16 “(C) *Notwithstanding subsections (b) and (c) of*
17 *section 112, each State regulatory authority shall con-*
18 *sider and make a determination concerning whether*
19 *it is appropriate to implement the standards set out*
20 *in subparagraph (A) not later than 1 year after the*
21 *date of enactment of this paragraph.”.*

22 (b) *SPECIAL RULES.*—*Section 115 of the Public Util-*
23 *ity Regulatory Policies Act of 1978 (16 U.S.C. 2625) is*
24 *amended by adding at the end the following:*

1 “(i) *REAL-TIME PRICING.*—*In a State that permits*
2 *third-party marketers to sell electric energy to retail electric*
3 *consumers, the electric consumer shall be entitled to receive*
4 *the same real-time metering and communication service as*
5 *a direct retail electric consumer of the electric utility.*”

6 “(j) *TIME-OF-USE METERING.*—*In a State that per-*
7 *mits third-party marketers to sell electric energy to retail*
8 *electric consumers, the electric consumer shall be entitled*
9 *to receive the same time-of-use metering and communica-*
10 *tion service as a direct retail electric consumer of the elec-*
11 *tric utility.*”

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

13 (a) *ADOPTION OF STANDARDS.*—*Section 113(b) of the*
14 *Public Utility Regulatory Policies Act of 1978 (16 U.S.C.*
15 *2623(b)) is amended by adding at the end the following:*

16 “(6) *DISTRIBUTED GENERATION.*—*Each electric*
17 *utility shall provide distributed generation, combined*
18 *heat and power, and district heating and cooling sys-*
19 *tems competitive access to the local distribution grid*
20 *and competitive pricing of service, and shall use sim-*
21 *plified standard contracts for the interconnection of*
22 *generating facilities that have a power production ca-*
23 *capacity of 250 kilowatts or less.*”

24 “(7) *DISTRIBUTION INTERCONNECTIONS.*—*No*
25 *electric utility may refuse to interconnect a gener-*

1 *ating facility with the distribution facilities of the*
2 *electric utility if the owner or operator of the gener-*
3 *ating facility complies with technical standards*
4 *adopted by the State regulatory authority and agrees*
5 *to pay the costs established by such State regulatory*
6 *authority.*

7 “(8) *MINIMUM FUEL AND TECHNOLOGY DIVER-*
8 *SITY STANDARD.—Each electric utility shall develop a*
9 *plan to minimize dependence on one fuel source and*
10 *to ensure that the electric energy it sells to consumers*
11 *is generated using a diverse range of fuels and tech-*
12 *nologies, including renewable technologies.*

13 “(9) *FOSSIL FUEL EFFICIENCY.—Each electric*
14 *utility shall develop and implement a ten-year plan*
15 *to increase the efficiency of its fossil fuel generation*
16 *and shall monitor and report to its State regulatory*
17 *authority excessive greenhouse gas emissions resulting*
18 *from the inefficient operation of its fossil fuel gener-*
19 *ating plants.”.*

20 “(b) *TIME FOR ADOPTING STANDARDS.—Section 113 of*
21 *the Public Utility Regulatory Policies Act of 1978 (16*
22 *U.S.C. 2623) is further amended by adding at the end the*
23 *following:*

24 “(d) *SPECIAL RULE.—For purposes of implementing*
25 *paragraphs (6), (7), (8), and (9) of subsection (b), any ref-*

1 erence contained in this section to the date of enactment
 2 of the Public Utility Regulatory Policies Act of 1978 shall
 3 be deemed to be a reference to the date of enactment of this
 4 subsection.”.

5 **SEC. 243. TECHNICAL ASSISTANCE.**

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

9 “(c) **TECHNICAL ASSISTANCE FOR CERTAIN RESPON-**
 10 **SIBILITIES.**—The Secretary may provide such technical as-
 11 sistance as he determines appropriate to assist State regu-
 12 latory authorities and electric utilities in carrying out their
 13 responsibilities under section 111(d)(11) and paragraphs
 14 (6), (7), (8), and (9) of section 113(b).”.

15 **SEC. 244. COGENERATION AND SMALL POWER PRODUCTION**
 16 **PURCHASE AND SALE REQUIREMENTS.**

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

21 “(m) **TERMINATION OF MANDATORY PURCHASE AND**
 22 **SALE REQUIREMENTS.**—

23 “(1) **OBLIGATION TO PURCHASE.**— After the date
 24 of enactment of this subsection, no electric utility
 25 shall be required to enter into a new contract or obli-

1 *gation to purchase electric energy from a qualifying*
2 *cogeneration facility or a qualifying small power pro-*
3 *duction facility under this section if the Commission*
4 *finds that the qualifying cogeneration facility or*
5 *qualifying small power production facility has access*
6 *to independently administered, auction-based day*
7 *ahead and real time wholesale markets for the sale of*
8 *electric energy.*

9 *“(2) OBLIGATION TO SELL.—After the date of en-*
10 *actment of this subsection, no electric utility shall be*
11 *required to enter into a new contract or obligation to*
12 *sell electric energy to a qualifying cogeneration facil-*
13 *ity or a qualifying small power production facility*
14 *under this section if competing retail electric sup-*
15 *pliers are able to provide electric energy to the quali-*
16 *fying cogeneration facility or qualifying small power*
17 *production facility.*

18 *“(3) NO EFFECT ON EXISTING RIGHTS AND REM-*
19 *EDIES.—Nothing in this subsection affects the rights*
20 *or remedies of any party under any contract or obli-*
21 *gation, in effect on the date of enactment of this sub-*
22 *section, to purchase electric energy or capacity from*
23 *or to sell electric energy or capacity to a facility*
24 *under this Act (including the right to recover costs of*
25 *purchasing electric energy or capacity).*

1 “(4) *RECOVERY OF COSTS.*—

2 “(A) *REGULATION.*—*To ensure recovery by*
3 *an electric utility that purchases electric energy*
4 *or capacity from a qualifying facility pursuant*
5 *to any legally enforceable obligation entered into*
6 *or imposed under this section before the date of*
7 *enactment of this subsection, of all prudently in-*
8 *curring costs associated with the purchases, the*
9 *Commission shall issue and enforce such regula-*
10 *tions as may be required to ensure that the elec-*
11 *tric utility shall collect the prudently incurred*
12 *costs associated with such purchases.*

13 “(B) *ENFORCEMENT.*—*A regulation under*
14 *subparagraph (A) shall be enforceable in accord-*
15 *ance with the provisions of law applicable to en-*
16 *forcement of regulations under the Federal Power*
17 *Act (16 U.S.C. 791a et seq.).”.*

18 (b) *ELIMINATION OF OWNERSHIP LIMITATIONS.*—

19 (1) *Section 3(17)(C) of the Federal Power Act*
20 *(16 U.S.C. 796(17)(C)) is amended to read as follows:*

21 “(C) *‘qualifying small power production fa-*
22 *ility’ means a small power production facility*
23 *that the Commission determines, by rule, meets*
24 *such requirements (including requirements re-*
25 *specting minimum size, fuel use, and fuel effi-*

1 *ciency) as the Commission may, by rule, pre-*
2 *scribe.”.*

3 *(2) Section 3(18)(B) of the Federal Power Act*
4 *(16 U.S.C. 796(18)(B)) is amended to read as follows:*

5 *“(B) ‘qualifying cogeneration facility’ means a cogen-*
6 *eration facility that the Commission determines, by rule,*
7 *meets such requirements (including requirements respecting*
8 *minimum size, fuel use, and fuel efficiency) as the Commis-*
9 *sion may, by rule, prescribe.”.*

10 **SEC. 245. NET METERING.**

11 *(a) ADOPTION OF STANDARD.—Section 111(d) of the*
12 *Public Utility Regulatory Policies Act of 1978 (16 U.S.C.*
13 *2621(d)) is further amended by adding at the end the fol-*
14 *lowing:*

15 *“(13) NET METERING.—(A) Each electric utility*
16 *shall make available upon request net metering serv-*
17 *ice to any electric consumer that the electric utility*
18 *serves.*

19 *“(B) For purposes of implementing this para-*
20 *graph, any reference contained in this section to the*
21 *date of enactment of the Public Utility Regulatory*
22 *Policies Act of 1978 shall be deemed to be a reference*
23 *to the date of enactment of this paragraph.*

24 *“(C) Notwithstanding subsections (b) and (c) of*
25 *section 112, each State regulatory authority shall con-*

1 *sider and make a determination concerning whether*
2 *it is appropriate to implement the standard set out*
3 *in subparagraph (A) not later than 1 year after the*
4 *date of enactment of this paragraph.”.*

5 *(b) SPECIAL RULES FOR NET METERING.—Section*
6 *115 of the Public Utility Regulatory Policies Act of 1978*
7 *(16 U.S.C. 2625) is further amended by adding at the end*
8 *the following:*

9 *“(k) NET METERING.—*

10 *“(1) RATES AND CHARGES.—An electric*
11 *utility—*

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

17 *“(B) shall not charge the owner or operator*
18 *of an on-site generating facility any additional*
19 *standby, capacity, interconnection, or other rate*
20 *or charge.*

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

1 operator of an on-site generating facility during a
2 billing period in accordance with normal metering
3 practices.

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

13 “(4) *ELECTRIC ENERGY GENERATED EXCEEDING*
14 *ELECTRIC ENERGY SUPPLIED.*—If the quantity of elec-
15 tric energy supplied by the on-site generating facility
16 to the electric utility exceeds the quantity of electric
17 energy sold by the electric utility to the on-site gener-
18 ating facility during the billing period—

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

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

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

3 “(5) *SAFETY AND PERFORMANCE STANDARDS.—*
4 *An eligible on-site generating facility and net meter-*
5 *ing system used by an electric consumer shall meet all*
6 *applicable safety, performance, reliability, and inter-*
7 *connection standards established by the National*
8 *Electrical Code, the Institute of Electrical and Elec-*
9 *tronics Engineers, and Underwriters Laboratories.*

10 “(6) *ADDITIONAL CONTROL AND TESTING RE-*
11 *QUIREMENTS.—The Commission, after consultation*
12 *with State regulatory authorities and nonregulated*
13 *electric 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 deter-*
17 *mines are necessary to protect public safety and sys-*
18 *tem reliability.*

19 “(7) *DEFINITIONS.—For purposes of this sub-*
20 *section:*

21 “(A) *The term ‘eligible on-site generating*
22 *facility’ means—*

23 “(i) *a facility on the site of a residen-*
24 *tial electric consumer with a maximum gen-*
25 *erating capacity of 10 kilowatts or less that*

1 *is fueled by solar energy, wind energy, or*
2 *fuel cells; or*

3 *“(ii) a facility on the site of a commer-*
4 *cial electric consumer with a maximum*
5 *generating capacity of 500 kilowatts or less*
6 *that is fueled solely by a renewable energy*
7 *resource, landfill gas, or a high efficiency*
8 *system.*

9 *“(B) The term ‘renewable energy resource’*
10 *means solar, wind, biomass, or geothermal en-*
11 *ergy.*

12 *“(C) The term ‘high efficiency system’*
13 *means fuel cells or combined heat and power.*

14 *“(D) The term ‘net metering service’ means*
15 *service to an electric consumer under which elec-*
16 *tric energy generated by that electric consumer*
17 *from an eligible on-site generating facility and*
18 *delivered to the local distribution facilities may*
19 *be used to offset electric energy provided by the*
20 *electric utility to the electric consumer during*
21 *the applicable billing period.”.*

22 ***Subtitle D—Consumer Protections***

23 ***SEC. 251. INFORMATION DISCLOSURE.***

24 *(a) OFFERS AND SOLICITATIONS.—The Federal Trade*
25 *Commission shall issue rules requiring each electric utility*

1 *that makes an offer to sell electric energy, or solicits electric*
2 *consumers to purchase electric energy to provide the electric*
3 *consumer a statement containing the following*
4 *information—*

5 *(1) the nature of the service being offered, includ-*
6 *ing information about interruptibility of service;*

7 *(2) the price of the electric energy, including a*
8 *description of any variable charges;*

9 *(3) a description of all other charges associated*
10 *with the service being offered, including access*
11 *charges, exit charges, back-up service charges, strand-*
12 *ed cost recovery charges, and customer service charges;*
13 *and*

14 *(4) information the Federal Trade Commission*
15 *determines is technologically and economically fea-*
16 *sible to provide, is of assistance to electric consumers*
17 *in making purchasing decisions, and concerns—*

18 *(A) the product or its price;*

19 *(B) the share of electric energy that is gen-*
20 *erated by each fuel type; and*

21 *(C) the environmental emissions produced*
22 *in generating the electric energy.*

23 *(b) PERIODIC BILLINGS.—The Federal Trade Commis-*
24 *sion shall issue rules requiring any electric utility that sells*
25 *electric energy to transmit to each of its electric consumers,*

1 *in addition to the information transmitted pursuant to sec-*
2 *tion 115(f) of the Public Utility Regulatory Policies Act of*
3 *1978 (16 U.S.C. 2625(f)), a clear and concise statement*
4 *containing the information described in subsection (a)(4)*
5 *for each billing period (unless such information is not rea-*
6 *sonably ascertainable by the electric utility).*

7 **SEC. 252. CONSUMER PRIVACY.**

8 (a) *PROHIBITION.*—*The Federal Trade Commission*
9 *shall issue rules prohibiting any electric utility that obtains*
10 *consumer information in connection with the sale or deliv-*
11 *ery of electric energy to an electric consumer from using,*
12 *disclosing, or permitting access to such information unless*
13 *the electric consumer to whom such information relates pro-*
14 *vides prior written approval.*

15 (b) *PERMITTED USE.*—*The rules issued under this sec-*
16 *tion shall not prohibit any electric utility from using, dis-*
17 *closing, or permitting access to consumer information re-*
18 *ferred to in subsection (a) for any of the following*
19 *purposes—*

20 (1) *to facilitate an electric consumer's change in*
21 *selection of an electric utility under procedures ap-*
22 *proved by the State or State regulatory authority;*

23 (2) *to initiate, render, bill, or collect for the sale*
24 *or delivery of electric energy to electric consumers or*
25 *for related services;*

1 (3) *to protect the rights or property of the person*
2 *obtaining such information;*

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

6 (5) *for law enforcement purposes; or*

7 (6) *for purposes of compliance with any Federal,*
8 *State, or local law or regulation authorizing disclo-*
9 *sure of information to a Federal, State, or local agen-*
10 *cy.*

11 (c) *AGGREGATE CONSUMER INFORMATION.—The rules*
12 *issued under this subsection may permit a person to use,*
13 *disclose, and permit access to aggregate consumer informa-*
14 *tion and may require an electric utility to make such infor-*
15 *mation available to other electric utilities upon request and*
16 *payment of a reasonable fee.*

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

18 (1) *The term “aggregate consumer information”*
19 *means collective data that relates to a group or cat-*
20 *egory of retail electric consumers, from which indi-*
21 *vidual consumer identities and characteristics have*
22 *been removed.*

23 (2) *The term “consumer information” means in-*
24 *formation that relates to the quantity, technical con-*

1 *figuration, type, destination, or amount of use of elec-*
2 *tric energy delivered to any retail electric consumer.*

3 **SEC. 253. OFFICE OF CONSUMER ADVOCACY.**

4 *(a) DEFINITIONS.—In this section:*

5 (1) *COMMISSION.—The term “Commission”*
6 *means the Federal Energy Regulatory Commission.*

7 (2) *ENERGY CUSTOMER.—The term “energy cus-*
8 *tomer” means a residential customer or a small com-*
9 *mercial customer that receives products or services*
10 *from a public utility or natural gas company under*
11 *the jurisdiction of the Commission.*

12 (3) *NATURAL GAS COMPANY.—The term “natural*
13 *gas company” has the meaning given the term in sec-*
14 *tion 2 of the Natural Gas Act (15 U.S.C. 717a), as*
15 *modified by section 601(a) of the Natural Gas Policy*
16 *Act of 1978 (15 U.S.C. 3431(a)).*

17 (4) *OFFICE.—The term “Office” means the Office*
18 *of Consumer Advocacy established by subsection*
19 *(b)(1).*

20 (5) *PUBLIC UTILITY.—The term “public utility”*
21 *has the meaning given the term in section 201(e) of*
22 *the Federal Power Act (16 U.S.C. 824(e)).*

23 (6) *SMALL COMMERCIAL CUSTOMER.—The term*
24 *“small commercial customer” means a commercial*

1 *customer that has a peak demand of not more than*
2 *1,000 kilowatts per hour.*

3 *(b) OFFICE.—*

4 *(1) ESTABLISHMENT.—There is established with-*
5 *in the Department of Justice the Office of Consumer*
6 *Advocacy.*

7 *(2) DIRECTOR.—The Office shall be headed by a*
8 *Director to be appointed by the President, by and*
9 *with the advice and consent of the Senate.*

10 *(3) DUTIES.—The Office may represent the in-*
11 *terests of energy customers on matters concerning*
12 *rates or service of public utilities and natural gas*
13 *companies under the jurisdiction of the*
14 *Commission—*

15 *(A) at hearings of the Commission;*

16 *(B) in judicial proceedings in the courts of*
17 *the United States;*

18 *(C) at hearings or proceedings of other Fed-*
19 *eral regulatory agencies and commissions.*

20 **SEC. 254. UNFAIR TRADE PRACTICES.**

21 *(a) SLAMMING.—The Federal Trade Commission shall*
22 *issue rules prohibiting the change of selection of an electric*
23 *utility except with the informed consent of the electric con-*
24 *sumer.*

1 (b) *CRAMMING.*—*The Federal Trade Commission shall*
2 *issue rules prohibiting the sale of goods and services to an*
3 *electric consumer unless expressly authorized by law or the*
4 *electric consumer.*

5 **SEC. 255. APPLICABLE PROCEDURES.**

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

9 **SEC. 256. FEDERAL TRADE COMMISSION ENFORCEMENT.**

10 *Violation of a rule issued under this subtitle shall be*
11 *treated as a violation of a rule under section 18 of the Fed-*
12 *eral Trade Commission Act (15 U.S.C. 57a) respecting un-*
13 *fair or deceptive acts or practices. All functions and powers*
14 *of the Federal Trade Commission under such Act are avail-*
15 *able to the Federal Trade Commission to enforce compliance*
16 *with this subtitle notwithstanding any jurisdictional limits*
17 *in such Act.*

18 **SEC. 257. STATE AUTHORITY.**

19 *Nothing in this subtitle shall be construed to preclude*
20 *a State or State regulatory authority from prescribing and*
21 *enforcing laws, rules, or procedures regarding the practices*
22 *which are the subject of this section.*

23 **SEC. 258. APPLICATION OF SUBTITLE.**

24 *The provisions of this subtitle apply to each electric*
25 *utility if the total sales of electric energy by such utility*

1 *for purposes other than resale exceed 500 million kilowatt-*
2 *hours per calendar year. The provisions of this subtitle do*
3 *not apply to the operations of an electric utility to the ex-*
4 *tent that such operations relate to sales of electric energy*
5 *for purposes of resale.*

6 **SEC. 259. DEFINITIONS.**

7 *As used in this subtitle:*

8 *(1) The term “aggregate consumer information”*
9 *means collective data that relates to a group or cat-*
10 *egory of electric consumers, from which individual*
11 *consumer identities and identifying characteristics*
12 *have been removed.*

13 *(2) The term “consumer information” means in-*
14 *formation that relates to the quantity, technical con-*
15 *figuration, type, destination, or amount of use of elec-*
16 *tric energy delivered to an electric consumer.*

17 *(3) The terms “electric consumer”, “electric util-*
18 *ity”, and “State regulatory authority” have the*
19 *meanings given such terms in section 3 of the Public*
20 *Utility Regulatory Policies Act of 1978 (16 U.S.C.*
21 *2602).*

1 **Subtitle E—Renewable Energy and**
2 **Rural Construction Grants**

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

4 (a) *INCENTIVE PAYMENTS.*—Section 1212(a) of the
5 *Energy Policy Act of 1992 (42 U.S.C. 13317(a))* is amended
6 by striking “and which satisfies” and all that follows
7 through “Secretary shall establish.” and inserting the fol-
8 lowing: “. The Secretary shall establish other procedures
9 necessary for efficient administration of the program. The
10 Secretary shall not establish any criteria or procedures that
11 have the effect of assigning to proposals a higher or lower
12 priority for eligibility or allocation of appropriated funds
13 on the basis of the energy source proposed.”.

14 (b) *QUALIFIED RENEWABLE ENERGY FACILITY.*—Sec-
15 *tion 1212(b) of the Energy Policy Act of 1992 (42 U.S.C.*
16 *13317(b))* is amended—

17 (1) by striking “a State or any political” and
18 all that follows through “nonprofit electrical coopera-
19 tive” and inserting the following: “a nonprofit elec-
20 trical cooperative, a public utility described in section
21 115 of such Code, a State, Commonwealth, territory,
22 or possession of the United States or the District of
23 Columbia, or a political subdivision thereof, or an In-
24 dian tribal government or subdivision thereof;” and

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

3 (c) *ELIGIBILITY WINDOW*.—Section 1212(c) of the En-
4 ergy Policy Act of 1992 (42 U.S.C. 13317(c)) is amended
5 by striking “during the 10-fiscal year period beginning
6 with the first full fiscal year occurring after the enactment
7 of this section” and inserting “before October 1, 2013”.

8 (d) *PAYMENT PERIOD*.—Section 1212(d) of the Energy
9 Policy Act of 1992 (42 U.S.C. 13317(d)) is amended by in-
10 serting “or in which the Secretary finds that all necessary
11 Federal and State authorizations have been obtained to
12 begin construction of the facility” after “eligible for such
13 payments”.

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

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

22 (g) *INCREMENTAL HYDROPOWER; AUTHORIZATION OF*
23 *APPROPRIATIONS*.—Section 1212 of the Energy Policy Act
24 of 1992 (42 U.S.C. 13317) is further amended by striking
25 subsection (g) and inserting the following:

1 “(g) *INCREMENTAL HYDROPOWER.*—

2 “(1) *PROGRAMS.*—Subject to subsection (h)(2), if
3 an incremental hydropower program meets the re-
4 quirements of this section, as determined by the Sec-
5 retary, the incremental hydropower program shall be
6 eligible to receive incentive payments under this sec-
7 tion.

8 “(2) *DEFINITION OF INCREMENTAL HYDRO-*
9 *POWER.*—In this subsection, the term ‘incremental hy-
10 dropower’ means additional generating capacity
11 achieved from increased efficiency or additions of new
12 capacity at a hydroelectric facility in existence on the
13 date of enactment of this paragraph.

14 “(h) *AUTHORIZATION OF APPROPRIATIONS.*—

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

19 “(2) *LIMITATION ON FUNDS USED FOR INCRE-*
20 *MENTAL HYDROPOWER PROGRAMS.*—Not more than
21 30 percent of the amounts made available under
22 paragraph (1) shall be used to carry out programs de-
23 scribed in subsection (g)(2).

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

4 **SEC. 262. ASSESSMENT OF RENEWABLE ENERGY RE-**
5 **SOURCES.**

6 (a) *RESOURCE ASSESSMENT.*—*Not later than 3*
7 *months after the date of enactment of this title, and each*
8 *year thereafter, the Secretary of Energy shall review the*
9 *available assessments of renewable energy resources avail-*
10 *able within the United States, including solar, wind, bio-*
11 *mass, ocean, geothermal, and hydroelectric energy resources,*
12 *and undertake new assessments as necessary, taking into*
13 *account changes in market conditions, available tech-*
14 *nologies and other relevant factors.*

15 (b) *CONTENTS OF REPORTS.*—*Not later than 1 year*
16 *after the date of enactment of this title, and each year there-*
17 *after, the Secretary shall publish a report based on the as-*
18 *essment under subsection (a). The report shall contain—*

19 (1) *a detailed inventory describing the available*
20 *amount and characteristics of the renewable energy*
21 *resources, and*

22 (2) *such other information as the Secretary of*
23 *Energy believes would be useful in developing such re-*
24 *newable energy resources, including descriptions of*
25 *surrounding terrain, population and load centers,*

1 *nearby energy infrastructure, location of energy and*
2 *water resources, and available estimates of the costs*
3 *needed to develop each resource, together with an*
4 *identification of any barriers to providing adequate*
5 *transmission for remote sources of renewable energy*
6 *resources to current and emerging markets, rec-*
7 *ommendations for removing or addressing such bar-*
8 *riers, and ways to provide access to the grid that do*
9 *not unfairly disadvantage renewable or other energy*
10 *producers.*

11 **SEC. 263. FEDERAL PURCHASE REQUIREMENT.**

12 *(a) REQUIREMENT.—The President shall seek to ensure*
13 *that, to the extent economically feasible and technically*
14 *practicable, of the total amount of electric energy the Fed-*
15 *eral Government consumes during any fiscal year—*

16 *(1) not less than 3 percent in fiscal years 2003*
17 *through 2004,*

18 *(2) not less than 5 percent in fiscal years 2005*
19 *through 2009, and*

20 *(3) not less than 7.5 percent in fiscal year 2010*
21 *and each fiscal year thereafter,*

22 *shall be renewable energy. The President shall encourage the*
23 *use of innovative purchasing practices by Federal agencies.*

24 *(b) DEFINITION.—For purposes of this section, the*
25 *term “renewable energy” means electric energy generated*

1 *from solar, wind, biomass, geothermal, fuel cells, municipal*
2 *solid waste, or additional hydroelectric generation capacity*
3 *achieved from increased efficiency or additions of new ca-*
4 *capacity.*

5 (c) *TRIBAL POWER GENERATION.*—*The President shall*
6 *seek to ensure that, to the extent economically feasible and*
7 *technically practicable, not less than one-tenth of the*
8 *amount specified in subsection (a) shall be renewable energy*
9 *that is generated by an Indian tribe or by a corporation,*
10 *partnership, or business association which is wholly or ma-*
11 *jority owned, directly or indirectly, by an Indian tribe. For*
12 *purposes of this subsection, the term “Indian tribe” means*
13 *any Indian tribe, band, nation, or other organized group*
14 *or community, including any Alaskan Native village or re-*
15 *gional or village corporation as defined in or established*
16 *pursuant to the Alaska Native Claims Settlement Act (43*
17 *U.S.C. 1601 et seq.), which is recognized as eligible for the*
18 *special programs and services provided by the United States*
19 *to Indians because of their status as Indians.*

20 (d) *BIENNIAL REPORT.*—*In 2004 and every 2 years*
21 *thereafter, the Secretary of Energy shall report to the Com-*
22 *mittee on Energy and Natural Resources of the Senate and*
23 *the appropriate committees of the House of Representatives*
24 *on the progress of the Federal Government in meeting the*
25 *goals established by this section.*

1 **SEC. 264. RENEWABLE PORTFOLIO STANDARD.**

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

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

5 *“(a) MINIMUM RENEWABLE GENERATION REQUIRE-*
 6 *MENT.—For each calendar year beginning in calendar year*
 7 *2005, each retail electric supplier shall submit to the Sec-*
 8 *retary, not later than April 1 of the following calendar year,*
 9 *renewable energy credits in an amount equal to the required*
 10 *annual percentage specified in subsection (b).*

11 *“(b) REQUIRED ANNUAL PERCENTAGE.—(1) For cal-*
 12 *endar years 2005 through 2020, the required annual per-*
 13 *centage of the retail electric supplier’s base amount that*
 14 *shall be generated from renewable energy resources shall be*
 15 *the percentage specified in the following table:*

| “Calendar Years | Required annual percentage |
|-------------------------|---------------------------------------|
| 2005 through 2006 | 1.0 |
| 2007 through 2008 | 2.2 |
| 2009 through 2010 | 3.4 |
| 2011 through 2012 | 4.6 |
| 2013 through 2014 | 5.8 |
| 2015 through 2016 | 7.0 |
| 2017 through 2018 | 8.5 |
| 2019 through 2020 | 10.0. |

16 *“(2) Not later than January 1, 2015, the Secretary*
 17 *may, by rule, establish required annual percentages in*
 18 *amounts not less than 10.0 for calendar years 2020 through*
 19 *2030.*

1 “(c) *SUBMISSION OF CREDITS.*—(1) *A retail electric*
2 *supplier may satisfy the requirements of subsection (a)*
3 *through the submission of renewable energy credits—*

4 “(A) *issued to the retail electric supplier under*
5 *subsection (d);*

6 “(B) *obtained by purchase or exchange under*
7 *subsection (e); or*

8 “(C) *borrowed under subsection (f).*

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

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

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

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

21 “(B) *the location where 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), (C),*
2 *and (D), the Secretary shall issue to an entity one renew-*
3 *able energy credit for each kilowatt-hour of electric energy*
4 *the entity generates from the date of enactment of this sec-*
5 *tion and in each subsequent calendar year through the use*
6 *of a renewable energy resource at an eligible facility.*

7 “(B) *For incremental hydropower the credits shall be*
8 *calculated based on the expected increase in average annual*
9 *generation resulting from the efficiency improvements or*
10 *capacity additions. The number of credits shall be cal-*
11 *culated using the same water flow information used to de-*
12 *termine a historic average annual generation baseline for*
13 *the hydroelectric facility and certified by the Secretary or*
14 *the Federal Energy Regulatory Commission. The calcula-*
15 *tion of the credits for incremental hydropower shall not be*
16 *based on any operational changes at the hydroelectric facil-*
17 *ity not directly associated with the efficiency improvements*
18 *or capacity additions.*

19 “(C) *The Secretary shall issue two renewable energy*
20 *credits for each kilowatt-hour of electric energy generated*
21 *and supplied to the grid in that calendar year through the*
22 *use of a renewable energy resource at an eligible facility*
23 *located on Indian land. For purposes of this paragraph,*
24 *renewable energy generated by biomass cofired with other*

1 *fuels is eligible for two credits only if the biomass was*
2 *grown on the land eligible under this paragraph.*

3 “(D) *For renewable energy resources produced from a*
4 *generation offset, the Secretary shall issue two renewable*
5 *energy credits for each kilowatt-hour generated.*

6 “(E) *To be eligible for a renewable energy credit, the*
7 *unit of electric energy generated through the use of a renew-*
8 *able energy resource may be sold or may be used by the*
9 *generator. If both a renewable energy resource and a non-*
10 *renewable energy resource are used to generate the electric*
11 *energy, the Secretary shall issue credits based on the propor-*
12 *tion of the renewable energy resource used. The Secretary*
13 *shall identify renewable energy credits by type and date of*
14 *generation.*

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

21 “(6) *The Secretary may issue credits for existing facil-*
22 *ity offsets to be applied against a retail electric supplier’s*
23 *own required annual percentage. The credits are not*
24 *tradeable and may only be used in the calendar year gen-*
25 *eration actually occurs.*

1 “(e) *CREDIT TRADING.*—A renewable energy credit
2 may be sold or exchanged by the entity to whom issued or
3 by any other entity who acquires the credit. A renewable
4 energy credit for any year that is not used to satisfy the
5 minimum renewable generation requirement of subsection
6 (a) for that year may be carried forward for use within
7 the next 4 years.

8 “(f) *CREDIT BORROWING.*—At any time before the end
9 of calendar year 2005, a retail electric supplier that has
10 reason to believe it will not have sufficient renewable energy
11 credits to comply with subsection (a) may—

12 “(1) submit a plan to the Secretary dem-
13 onstrating that the retail electric supplier will earn
14 sufficient credits within the next 3 calendar years
15 which, when taken into account, will enable the retail
16 electric supplier’s to meet the requirements of sub-
17 section (a) for calendar year 2005 and the subsequent
18 calendar years involved; and

19 “(2) upon the approval of the plan by the Sec-
20 retary, apply credits that the plan demonstrates will
21 be earned within the next 3 calendar years to meet
22 the requirements of subsection (a) for each calendar
23 year involved.

24 “(g) *CREDIT COST CAP.*—The Secretary shall offer re-
25 newable energy credits for sale at the lesser of 3 cents per

1 kilowatt-hour or 200 percent of the average market value
2 of credits for the applicable compliance period. On January
3 1 of each year following calendar year 2005, the Secretary
4 shall adjust for inflation the price charged per credit for
5 such calendar year, based on the Gross Domestic Product
6 Implicit Price Deflator.

7 “(h) ENFORCEMENT.—The Secretary may bring an ac-
8 tion in the appropriate United States district court to im-
9 pose a civil penalty on a retail electric supplier that does
10 not comply with subsection (a), unless the retail electric
11 supplier was unable to comply with subsection (a) for rea-
12 sons outside of the supplier’s reasonable control (including
13 weather-related damage, mechanical failure, lack of trans-
14 mission capacity or availability, strikes, lockouts, actions
15 of a governmental authority). A retail electric supplier who
16 does not submit the required number of renewable energy
17 credits under subsection (a) shall be subject to a civil pen-
18 alty of not more than the greater of 3 cents or 200 percent
19 of the average market value of credits for the compliance
20 period for each renewable energy credit not submitted.

21 “(i) INFORMATION COLLECTION.—The Secretary may
22 collect the information necessary to verify and audit—

23 “(1) the annual electric energy generation and
24 renewable energy generation of any entity applying
25 for renewable energy credits under this section,

1 “(2) *the validity of renewable energy credits sub-*
2 *mitted by a retail electric supplier to the Secretary,*
3 *and*

4 “(3) *the quantity of electricity sales of all retail*
5 *electric suppliers.*

6 “(j) *ENVIRONMENTAL SAVINGS CLAUSE.—Incremental*
7 *hydropower shall be subject to all applicable environmental*
8 *laws and licensing and regulatory requirements.*

9 “(k) *STATE SAVINGS CLAUSE.—This section does not*
10 *preclude a State from requiring additional renewable en-*
11 *ergy generation in that State, or from specifying technology*
12 *mix.*

13 “(l) *DEFINITIONS.—For purposes of this section:*

14 “(1) *BIOMASS.—The term ‘biomass’ means any*
15 *organic material that is available on a renewable or*
16 *recurring basis, including dedicated energy crops,*
17 *trees grown for energy production, wood waste and*
18 *wood residues, plants (including aquatic plants,*
19 *grasses, and agricultural crops), residues, fibers, ani-*
20 *mal wastes and other organic waste materials, and*
21 *fats and oils, except that with respect to material re-*
22 *moved from National Forest System lands the term*
23 *includes only organic material from—*

24 “(A) *thinnings from trees that are less than*
25 *12 inches in diameter;*

1 “(B) slash;

2 “(C) brush; and

3 “(D) mill residues.

4 “(2) *ELIGIBLE FACILITY.*—The term ‘eligible fa-
5 *cility*’ means—

6 “(A) a facility for the generation of electric
7 energy from a renewable energy resource that is
8 placed in service on or after the date of enact-
9 ment of this section; or

10 “(B) a repowering or cofiring increment
11 that is placed in service on or after the date of
12 enactment of this section at a facility for the
13 generation of electric energy from a renewable
14 energy resource that was placed in service before
15 that date.

16 “(3) *ELIGIBLE RENEWABLE ENERGY RE-*
17 *SOURCE.*—The term ‘renewable energy resource’
18 means solar, wind, ocean, or geothermal energy, bio-
19 mass (excluding solid waste and paper that is com-
20 monly recycled), landfill gas, a generation offset, or
21 incremental hydropower.

22 “(4) *GENERATION OFFSET.*—The term ‘genera-
23 tion offset’ means reduced electricity usage metered at
24 a site where a customer consumes energy from a re-
25 newable energy technology.

1 “(5) *EXISTING FACILITY OFFSET*.—The term ‘*ex-*
2 *isting facility offset*’ means renewable energy gen-
3 *erated from an existing facility, not classified as an*
4 *eligible facility, that is owned or under contract to a*
5 *retail electric supplier on the date of enactment of*
6 *this section.*

7 “(6) *INCREMENTAL HYDROPOWER*.—The term
8 ‘*incremental hydropower*’ means additional genera-
9 *tion that is achieved from increased efficiency or ad-*
10 *ditions of capacity after the date of enactment of this*
11 *section at a hydroelectric dam that was placed in*
12 *service before that date.*

13 “(7) *INDIAN LAND*.—The term ‘*Indian land*’
14 *means—*

15 “(A) *any land within the limits of any In-*
16 *Indian reservation, pueblo, or rancheria,*

17 “(B) *any land not within the limits of any*
18 *Indian reservation, pueblo, or rancheria title to*
19 *which was on the date of enactment of this para-*
20 *graph either held by the United States for the*
21 *benefit of any Indian tribe or individual or held*
22 *by any Indian tribe or individual subject to re-*
23 *striction by the United States against alienation,*

24 “(C) *any dependent Indian community,*
25 *and*

1 “(D) any land conveyed to any Alaska Na-
2 tive corporation under the Alaska Native Claims
3 Settlement Act.

4 “(8) INDIAN TRIBE.—The term ‘Indian tribe’
5 means any Indian tribe, band, nation, or other orga-
6 nized group or community, including any Alaskan
7 Native village or regional or village corporation as
8 defined in or established pursuant to the Alaska Na-
9 tive Claims Settlement Act (43 U.S.C. 1601 et seq.),
10 which is recognized as eligible for the special pro-
11 grams and services provided by the United States to
12 Indians because of their status as Indians.

13 “(9) RENEWABLE ENERGY.—The term ‘renewable
14 energy’ means electric energy generated by a renew-
15 able energy resource.

16 “(10) RENEWABLE ENERGY RESOURCE.—The
17 term ‘renewable energy resource’ means solar, wind,
18 ocean, or geothermal energy, biomass (including mu-
19 nicipal solid waste), landfill gas, a generation offset,
20 or incremental hydropower.

21 “(11) REPOWERING OR COFIRING INCREMENT.—
22 The term ‘repowering or cofiring increment’ means
23 the additional generation from a modification that is
24 placed in service on or after the date of enactment of
25 this section to expand electricity production at a fa-

1 *cility used to generate electric energy from a renew-*
2 *able energy resource or to cofire biomass that was*
3 *placed in service before the date of enactment of this*
4 *section, or the additional generation above the average*
5 *generation in the 3 years preceding the date of enact-*
6 *ment of this section, to expand electricity production*
7 *at a facility used to generate electric energy from a*
8 *renewable energy resource or to cofire biomass that*
9 *was placed in service before the date of enactment of*
10 *this section.*

11 *“(12) RETAIL ELECTRIC SUPPLIER.—The term*
12 *‘retail electric supplier’ means a person that sells elec-*
13 *tric energy to electric consumers and sold not less*
14 *than 1,000,000 megawatt-hours of electric energy to*
15 *electric consumers for purposes other than resale dur-*
16 *ing the preceding calendar year; except that such*
17 *term does not include the United States, a State or*
18 *any political subdivision of a State, or any agency,*
19 *authority, or instrumentality of any one or more of*
20 *the foregoing, or a rural electric cooperative.*

21 *“(13) RETAIL ELECTRIC SUPPLIER’S BASE*
22 *AMOUNT.—The term ‘retail electric supplier’s base*
23 *amount’ means the total amount of electric energy*
24 *sold by the retail electric supplier to electric customers*
25 *during the most recent calendar year for which infor-*

1 *mation is available, excluding electric energy gen-*
2 *erated by—*

3 *“(A) an eligible renewable energy resource;*

4 *“(B) municipal solid waste; or*

5 *“(C) a hydroelectric facility.*

6 *“(m) SUNSET.—This section expires December 31,*
7 *2030.”.*

8 **SEC. 265. RENEWABLE ENERGY ON FEDERAL LAND.**

9 *(a) COST-SHARE DEMONSTRATION PROGRAM.—With-*
10 *in 12 months after the date of enactment of this section,*
11 *the Secretaries of the Interior, Agriculture, and Energy*
12 *shall develop guidelines for a cost-share demonstration pro-*
13 *gram for the development of wind and solar energy facilities*
14 *on Federal land.*

15 *(b) DEFINITION OF FEDERAL LAND.—As used in this*
16 *section, the term “Federal land” means land owned by the*
17 *United States that is subject to the operation of the mineral*
18 *leasing laws; and is either—*

19 *(1) public land as defined in section 103(e) of*
20 *the Federal Land Policy and Management Act of*
21 *1976 (42 U.S.C. 1702(e)); or*

22 *(2) a unit of the National Forest System as that*
23 *term is used in section 11(a) of the Forest and Range-*
24 *land Renewable Resources Planning Act of 1974 (16*
25 *U.S.C. 1609(a)).*

1 (c) *RIGHTS-OF-WAY.*—*The demonstration program*
2 *shall provide for the issuance of rights-of-way pursuant to*
3 *the provisions of title V of the Federal Land Policy and*
4 *Management Act of 1976 (43 U.S.C. 1761 et seq.) by the*
5 *Secretary of the Interior with respect to Federal land under*
6 *the jurisdiction of the Department of the Interior, and by*
7 *the Secretary of Agriculture with respect to Federal lands*
8 *under the jurisdiction of the Department of Agriculture.*

9 (d) *AVAILABLE SITES.*—*For purposes of this dem-*
10 *onstration program, the issuance of rights-of-way shall be*
11 *limited to areas—*

12 (1) *of high energy potential for wind or solar de-*
13 *velopment;*

14 (2) *that have been identified by the wind or solar*
15 *energy industry, through a process of nomination, ap-*
16 *plication, or otherwise, as being of particular interest*
17 *to one or both industries;*

18 (3) *that are not located within roadless areas;*

19 (4) *where operation of wind or solar facilities*
20 *would be compatible with the scenic, recreational, en-*
21 *vironmental, cultural, or historic values of the Fed-*
22 *eral land, and would not require the construction of*
23 *new roads for the siting of lines or other transmission*
24 *facilities; and*

1 (5) *where issuance of the right-of-way is con-*
2 *sistent with the land and resource management plans*
3 *of the relevant land management agencies.*

4 (e) *COST-SHARE PAYMENTS BY DOE.—The Secretary*
5 *of Energy, in cooperation with the Secretary of the Interior*
6 *with respect to Federal land under the jurisdiction of the*
7 *Department of the Interior, and the Secretary of Agri-*
8 *culture with respect to Federal land under the jurisdiction*
9 *of the Department of Agriculture, shall determine if the por-*
10 *tion of a project on Federal land is eligible for financial*
11 *assistance pursuant to this section. Only those projects that*
12 *are consistent with the requirements of this section and fur-*
13 *ther the purposes of this section shall be eligible. In the event*
14 *a project is selected for financial assistance, the Secretary*
15 *of Energy shall provide no more than 15 percent of the costs*
16 *of the project on the Federal land, and the remainder of*
17 *the costs shall be paid by non-Federal sources.*

18 (f) *REVISION OF LAND USE PLANS.—The Secretary of*
19 *the Interior shall consider development of wind and solar*
20 *energy, as appropriate, in revisions of land use plans under*
21 *section 202 of the Federal Land Policy and Management*
22 *Act of 1976 (42 U.S.C. 1712); and the Secretary of Agri-*
23 *culture shall consider development of wind and solar en-*
24 *ergy, as appropriate, in revisions of land and resource*
25 *management plans under section 5 of the Forest and Range-*

1 *land Renewable Resources Planning Act of 1974 (16 U.S.C.*
2 *1604). Nothing in this subsection shall preclude the issuance*
3 *of a right-of-way for the development of a wind or solar*
4 *energy project prior to the revision of a land use plan by*
5 *the appropriate land management agency.*

6 (g) *REPORT TO CONGRESS.—Within 24 months after*
7 *the date of enactment of this section, the Secretary of the*
8 *Interior shall develop and report to Congress recommenda-*
9 *tions on any statutory or regulatory changes the Secretary*
10 *believes would assist in the development of renewable energy*
11 *on Federal land. The report shall include—*

12 (1) *a five-year plan developed by the Secretary*
13 *of the Interior, in cooperation with the Secretary of*
14 *Agriculture, for encouraging the development of wind*
15 *and solar energy on Federal land in an environ-*
16 *mentally sound manner; and*

17 (2) *an analysis of—*

18 (A) *whether the use of rights-of-ways is the*
19 *best means of authorizing use of Federal land for*
20 *the development of wind and solar energy, or*
21 *whether such resources could be better developed*
22 *through a leasing system, or other method;*

23 (B) *the desirability of grants, loans, tax*
24 *credits or other provisions to promote wind and*
25 *solar energy development on Federal land; and*

1 (C) any problems, including environmental
2 concerns, which the Secretary of the Interior or
3 the Secretary of Agriculture have encountered in
4 managing wind or solar energy projects on Fed-
5 eral land, or believe are likely to arise in rela-
6 tion to the development of wind or solar energy
7 on Federal land;

8 (3) a list, developed in consultation with the Sec-
9 retaries of Energy and Defense, of lands under the ju-
10 risdiction of the Departments of Energy and Defense
11 that would be suitable for development for wind or
12 solar energy, and recommended statutory and regu-
13 latory mechanisms for such development.

14 (h) NATIONAL ACADEMY OF SCIENCES STUDY.— With-
15 in 90 days after the enactment of this Act, the Secretary
16 of the Interior shall contract with the National Academy
17 of Sciences to study the potential for the development of
18 wind, solar, and ocean energy on the Outer Continental
19 Shelf; assess existing Federal authorities for the develop-
20 ment of such resources; and recommend statutory and regu-
21 latory mechanisms for such development. The results of the
22 study shall be transmitted to Congress within 24 months
23 after the enactment of this Act.

1 **Subtitle F—General Provisions**

2 **SEC. 271. CHANGE 3 CENTS TO 1.5 CENTS.**

3 *Notwithstanding any other provision in this Act, “3*
4 *cents” shall be considered by law to be “1.5 cents” in any*
5 *place “3 cents” appears in title II of this Act.*

6 **SEC. 272. BONNEVILLE POWER ADMINISTRATION BONDS.**

7 *Section 13 of the Federal Columbia River Trans-*
8 *mission System Act (16 U.S.C. 838k) is amended—*

9 *(1) by striking the section heading and all that*
10 *follows through “(a) The Administrator” and insert-*
11 *ing the following:*

12 **“SEC. 13. BONNEVILLE POWER ADMINISTRATION BONDS.**

13 **“(a) BONDS.—**

14 **“(1) IN GENERAL.—***The Administrator”;* and

15 **(2) by adding at the end the following:**

16 **“(2) ADDITIONAL BORROWING AUTHORITY.—***In*
17 *addition to the borrowing authority of the Adminis-*
18 *trator authorized under paragraph (1) or any other*
19 *provision of law, an additional \$1,300,000,000 is*
20 *made available, to remain outstanding at any one*
21 *time—*

22 **“(A) to provide funds to assist in financing**
23 **the construction, acquisition, and replacement of**
24 **the transmission system of the Bonneville Power**
25 **Administration; and**

1 “(B) to implement the authorities of the Ad-
 2 ministrators under the Pacific Northwest Electric
 3 Power Planning and Conservation Act (16
 4 U.S.C. 839 et seq.).”

5 **TITLE III—HYDROELECTRIC**
 6 **RELICENSING**

7 **SEC. 301. ALTERNATIVE CONDITIONS AND FISHWAYS.**

8 (a) *ALTERNATIVE MANDATORY CONDITIONS.*—Section
 9 4 of the Federal Power Act (16 U.S.C. 797) is amended
 10 by adding at the end the following:

11 “(h)(1) Whenever any person applies for a license for
 12 any project works within any reservation of the United
 13 States under subsection (e), and the Secretary of the depart-
 14 ment under whose supervision such reservation falls (in this
 15 subsection referred to as the ‘Secretary’) shall deem a condi-
 16 tion to such license to be necessary under the first proviso
 17 of such section, the license applicant may propose an alter-
 18 native condition.

19 “(2) Notwithstanding the first proviso of subsection
 20 (e), the Secretary of the department under whose super-
 21 vision the reservation falls shall accept the proposed alter-
 22 native condition referred to in paragraph (1), and the Com-
 23 mission shall include in the license such alternative condi-
 24 tion, if the Secretary of the appropriate department deter-

1 *mines, based on substantial evidence provided by the license*
2 *applicant, that the alternative condition—*

3 *“(A) provides for the adequate protection and*
4 *utilization of the reservation; and*

5 *“(B) will either—*

6 *“(i) cost less to implement, or*

7 *“(ii) result in improved operation of the*
8 *project works for electricity production as com-*
9 *pared to the condition initially deemed necessary*
10 *by the Secretary.*

11 *“(3) The Secretary shall submit into the public record*
12 *of the Commission proceeding with any condition under*
13 *subsection (e) or alternative condition it accepts under this*
14 *subsection a written statement explaining the basis for such*
15 *condition, and reason for not accepting any alternative con-*
16 *dition under this subsection, including the effects of the con-*
17 *dition accepted and alternatives not accepted on energy*
18 *supply, distribution, cost, and use, air quality, flood con-*
19 *trol, navigation, and drinking, irrigation, and recreation*
20 *water supply, based on such information as may be avail-*
21 *able to the Secretary, including information voluntarily*
22 *provided in a timely manner by the applicant and others.*

23 *“(4) Nothing in this subsection shall prohibit other in-*
24 *terested parties from proposing alternative conditions.”.*

1 **(b) ALTERNATIVE FISHWAYS.**—Section 18 of the Fed-
2 *eral Power Act (16 U.S.C. 811) is amended by—*

3 (1) *inserting “(a)” before the first sentence; and*

4 (2) *adding at the end the following:*

5 “(b)(1) *Whenever the Secretary of the Interior or the*
6 *Secretary of Commerce prescribes a fishway under this sec-*
7 *tion, the license applicant or the licensee may propose an*
8 *alternative to such prescription to construct, maintain, or*
9 *operate a fishway.*

10 “(2) *Notwithstanding subsection (a), the Secretary of*
11 *the Interior or the Secretary of Commerce, as appropriate,*
12 *shall accept and prescribe, and the Commission shall re-*
13 *quire, the proposed alternative referred to in paragraph (1),*
14 *if the Secretary of the appropriate department determines,*
15 *based on substantial evidence provided by the licensee, that*
16 *the alternative—*

17 “(A) *will be no less protective of the fish re-*
18 *sources than the fishway initially prescribed by the*
19 *Secretary; and*

20 “(B) *will either—*

21 “(i) *cost less to implement, or*

22 “(ii) *result in improved operation of the*
23 *project works for electricity production as com-*
24 *pared to the fishway initially prescribed by the*
25 *Secretary.*

1 “(3) *The Secretary shall submit into the public record*
2 *of the Commission proceeding with any prescription under*
3 *subsection (a) or alternative prescription it accepts under*
4 *this subsection a written statement explaining the basis for*
5 *such prescription, and reason for not accepting any alter-*
6 *native prescription under this subsection, including the ef-*
7 *fects of the prescription accepted or alternative not accepted*
8 *on energy supply, distribution, cost, and use, air quality,*
9 *flood control, navigation, and drinking, irrigation, and*
10 *recreation water supply, based on such information as may*
11 *be available to the Secretary, including information volun-*
12 *tarily provided in a timely manner by the applicant and*
13 *others.*

14 “(4) *Nothing in this subsection shall prohibit other in-*
15 *terested parties from proposing alternative prescriptions.*”.

16 (c) *TIME OF FILING APPLICATION.*—Section 15(c)(1)
17 *of the Federal Power Act (16 U.S.C. 808(c)(1)) is amended*
18 *by striking the first sentence and inserting the following:*

19 “(1) *Each application for a new license pursu-*
20 *ant to this section shall be filed with the*
21 *Commission—*

22 “(A) *at least 24 months before the expira-*
23 *tion of the term of the existing license in the case*
24 *of licenses that expire prior to 2008; and*

1 “(B) at least 36 months before the expira-
2 tion of the term of the existing license in the case
3 of licenses that expire in 2008 or any year there-
4 after.”.

5 **TITLE IV—INDIAN ENERGY**

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

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

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

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

12 “(1) *the term ‘Director’ means the Director of the*
13 *Office of Indian Energy Policy and Programs estab-*
14 *lished by section 217 of the Department of Energy*
15 *Organization Act, and*

16 “(2) *the term ‘Indian land’ means—*

17 “(A) *any land within the limits of an In-*
18 *Indian reservation, pueblo, or rancharia;*

19 “(B) *any land not within the limits of an*
20 *Indian reservation, pueblo, or rancharia whose*
21 *title is held—*

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

1 “(ii) by an Indian tribe subject to re-
2 striction by the United States against alien-
3 ation, or

4 “(iii) by a dependent Indian commu-
5 nity; and

6 “(C) land conveyed to an Alaska Native
7 Corporation under the Alaska Native Claims
8 Settlement Act.

9 “(b) *INDIAN ENERGY EDUCATION PLANNING AND MAN-*
10 *AGEMENT ASSISTANCE.—(1) The Director shall establish*
11 *programs within the Office of Indian Energy Policy and*
12 *Programs to assist Indian tribes in meeting their energy*
13 *education, research and development, planning, and man-*
14 *agement needs.*

15 “(2) *The Director may make grants, on a competitive*
16 *basis, to an Indian tribe for—*

17 “(A) *renewable energy, energy efficiency, and*
18 *conservation programs;*

19 “(B) *studies and other activities supporting trib-*
20 *al acquisition of energy supplies, services, and facili-*
21 *ties;*

22 “(C) *planning, constructing, developing, oper-*
23 *ating, maintaining, and improving tribal electrical*
24 *generation, transmission, and distribution facilities;*
25 *and*

1 “(D) developing, constructing, and inter-
2 connecting electric power transmission facilities with
3 transmission facilities owned and operated by a Fed-
4 eral power marketing agency or an electric utility
5 that provides open access transmission service.

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

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

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

13 “(C) the total number of households on the In-
14 dian tribe’s Indian land that have no electricity serv-
15 ice or are under-served; and

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

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

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

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

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

9 “(c) *LOAN GUARANTEE PROGRAM.—*

10 “(1) *AUTHORITY.—The Secretary may guarantee*
11 *not more than 90 percent of the unpaid principal and*
12 *interest due on any loan made to any Indian tribe*
13 *for energy development, including the planning, devel-*
14 *opment, construction, and maintenance of electrical*
15 *generation plants, and for transmission and delivery*
16 *mechanisms for electricity produced on Indian land.*
17 *A loan guaranteed under this subsection shall be*
18 *made by—*

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

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

23 “(2) *AVAILABILITY OF APPROPRIATIONS.—*
24 *Amounts appropriated to cover the cost of loan guar-*
25 *antees shall be available without fiscal year limita-*

1 *tion to the Secretary to fulfill obligations arising*
2 *under this subsection.*

3 “(3) *AUTHORIZATION OF APPROPRIATIONS.—(A)*
4 *There are authorized to be appropriated to the Sec-*
5 *retary such sums as may be necessary to cover the*
6 *cost of loan guarantees, as defined by section 502(5)*
7 *of the Federal Credit Reform Act of 1990 (2 U.S.C.*
8 *661a(5)).*

9 “(B) *There are authorized to be appropriated to*
10 *the Secretary such sums as may be necessary to cover*
11 *the administrative expenses related to carrying out*
12 *the loan guarantee program established by this sub-*
13 *section.*

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

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

22 “(d) *INDIAN ENERGY PREFERENCE.—(1) An agency*
23 *or department of the United States Government may give,*
24 *in the purchase of electricity, oil, gas, coal, or other energy*
25 *product or by-product, preference in such purchase to an*

1 *energy and resource production enterprise, partnership,*
 2 *corporation, or other type of business organization majority*
 3 *or wholly owned and controlled by a tribal government.*

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

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

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

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

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

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

20 “OFFICE OF INDIAN ENERGY POLICY AND PROGRAMS

21 “SEC. 217. (a) *There is established within the Depart-*
 22 *ment an Office of Indian Energy Policy and Programs.*
 23 *This Office shall be headed by a Director, who shall be ap-*
 24 *pointed by the Secretary and compensated at the rate equal*
 25 *to that of level IV of the Executive Schedule under section*
 26 *5315 of title 5, United States Code.*

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

5 “(1) *promote tribal energy efficiency and utiliza-*
6 *tion;*

7 “(2) *modernize and develop, for the benefit of In-*
8 *dian tribes, tribal energy and economic infrastructure*
9 *related to natural resource development and elec-*
10 *trification;*

11 “(3) *preserve and promote tribal sovereignty and*
12 *self determination related to energy matters and en-*
13 *ergy deregulation;*

14 “(4) *lower or stabilize energy costs; and*

15 “(5) *electrify tribal members’ homes and tribal*
16 *lands.*

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

20 **SEC. 403. CONFORMING AMENDMENTS.**

21 (a) *AUTHORIZATION OF APPROPRIATIONS.—Section*
22 *2603(c) of the Energy Policy Act of 1992 (25 U.S.C.*
23 *3503(c)) is amended to read as follows:*

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

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

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

7 (c) *EXECUTIVE SCHEDULE.*—*Section 5315 of title 5,*
8 *United States Code, is amended by inserting “Director, Of-*
9 *fice of Indian Energy Policy and Programs, Department*
10 *of Energy.” after “Inspector General, Department of En-*
11 *ergy.”.*

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

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

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

23 (2) *INTERESTED PARTY.*—*The term “interested*
24 *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 section.*

3 (3) *PETITION.*—*The term “petition” means a*
4 *written request submitted to the Secretary for the re-*
5 *view of an action (or inaction) of the Indian tribe*
6 *that is claimed to be in violation of the approved trib-*
7 *al regulations.*

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

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

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

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

23 (ii) *within the boundaries of the last*
24 *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 by*
7 *an Indian tribe that are within such tribe’s reserva-*
8 *tion.*

9 (b) *LEASES INVOLVING GENERATION, TRANSMISSION,*
10 *DISTRIBUTION OR ENERGY PROCESSING FACILITIES.*—*An*
11 *Indian tribe may grant a lease of tribal land for electric*
12 *generation, transmission, or distribution facilities, or facili-*
13 *ties to process or refine renewable or nonrenewable energy*
14 *resources developed on tribal lands, and such leases shall*
15 *not require the approval of the Secretary if the lease is exe-*
16 *cuted under tribal regulations approved by the Secretary*
17 *under this subsection and the term of the lease does not ex-*
18 *ceed 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 into*
13 *under this subsection may be renewed at the discretion of*
14 *the Indian tribe in accordance with the requirements of this*
15 *section.*

16 (e) *TRIBAL REGULATION REQUIREMENTS.—(1) The*
17 *Secretary shall have the authority to approve or disapprove*
18 *tribal regulations required under this subsection. The Sec-*
19 *retary shall approve such tribal regulations if they are com-*
20 *prehensive in nature, including provisions that address—*

21 (A) *securing necessary information from the les-*
22 *see or right-of-way applicant;*

23 (B) *term of the conveyance;*

24 (C) *amendments and renewals;*

25 (D) *consideration for the lease or right-of-way;*

1 (E) technical or other relevant requirements;

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

4 (G) requirements for complying with all applica-
5 ble environmental laws; and

6 (H) final approval authority.

7 (2) No lease or right-of-way shall be valid unless au-
8 thorized in compliance with the approved tribal regula-
9 tions.

10 (3) An Indian tribe, as a condition of securing Secre-
11 tarial approval as contemplated in paragraph (1), must es-
12 tablish an environmental review process that includes the
13 following—

14 (A) an identification and evaluation of all sig-
15 nificant environmental impacts of the proposed action
16 as compared to a no action alternative;

17 (B) identification of proposed mitigation;

18 (C) a process for ensuring that the public is in-
19 formed of and has an opportunity to comment on the
20 proposed action prior to tribal approval of the lease
21 or right-of-way; and

22 (D) sufficient administrative support and tech-
23 nical capability to carry out the environmental re-
24 view process.

1 (4) *The Secretary shall review and approve or dis-*
2 *approve the regulations of the Indian tribe within 180 days*
3 *of the submission of such regulations to the Secretary. Any*
4 *disapproval of such regulations by the Secretary shall be*
5 *accompanied by written documentation that sets forth the*
6 *basis for the disapproval. The 180-day period may be ex-*
7 *tended by the Secretary after consultation with the Indian*
8 *tribe.*

9 (5) *If the Indian tribe executes a lease or right-of-way*
10 *pursuant to tribal regulations required under this sub-*
11 *section, the Indian tribe shall provide the Secretary with—*

12 (A) *a copy of the lease or right-of-way document*
13 *and all amendments and renewals thereto; and*

14 (B) *in the case of regulations or a lease or right-*
15 *of-way that permits payment to be made directly to*
16 *the Indian tribe, documentation of the payments suf-*
17 *ficient to enable the Secretary to discharge the trust*
18 *responsibility of the United States as appropriate*
19 *under existing law.*

20 (6) *The United States shall not be liable for losses sus-*
21 *tained by any party to a lease executed pursuant to tribal*
22 *regulations under this subsection, including the Indian*
23 *tribe.*

24 (7)(A) *An interested party may, after exhaustion of*
25 *tribal remedies, submit, in a timely manner, a petition to*

1 *the Secretary to review the compliance of the Indian tribe*
2 *with any tribal regulations approved under this subsection.*
3 *If upon such review, the Secretary determines that the regu-*
4 *lations were violated, the Secretary may take such action*
5 *as may be necessary to remedy the violation, including re-*
6 *scinding or holding the lease or right-of-way in abeyance*
7 *until the violation is cured. The Secretary may also rescind*
8 *the approval of the tribal regulations and reassume the re-*
9 *sponsibility for approval of leases or rights-of-way associ-*
10 *ated with the facilities addressed in this section.*

11 *(B) If the Secretary seeks to remedy a violation de-*
12 *scribed in subparagraph (A), the Secretary shall—*

13 *(i) make a written determination with respect to*
14 *the regulations that have been violated;*

15 *(ii) provide the Indian tribe with a written no-*
16 *tice of the alleged violation together with such written*
17 *determination; and*

18 *(iii) prior to the exercise of any remedy or the*
19 *rescission of the approval of the regulations involved*
20 *and reassumption of the lease or right-of-way ap-*
21 *proval responsibility, provide the Indian tribe with a*
22 *hearing and a reasonable opportunity to cure the al-*
23 *leged violation.*

24 *(C) The tribe shall retain all rights to appeal as pro-*
25 *vided by regulations promulgated by the Secretary.*

1 (f) *AGREEMENTS.*—(1) *Agreements between an Indian*
2 *tribe and a business entity that are directly associated with*
3 *the development of electric generation, transmission or dis-*
4 *tribution facilities, or facilities to process or refine renew-*
5 *able or nonrenewable energy resources developed on tribal*
6 *lands, shall not separately require the approval of the Sec-*
7 *retary pursuant to section 18 of title 25, United States*
8 *Code, so long as the activity that is the subject of the agree-*
9 *ment has been the subject of an environmental review proc-*
10 *ess pursuant to subsection (e) of this section.*

11 (2) *The United States shall not be liable for any losses*
12 *or damages sustained by any party, including the Indian*
13 *tribe, that are associated with an agreement entered into*
14 *under this subsection.*

15 (g) *DISCLAIMER.*—*Nothing in this section is intended*
16 *to modify or otherwise affect the applicability of any provi-*
17 *sion of the Indian Mineral Leasing Act of 1938 (25 U.S.C.*
18 *396a–396g); Indian Mineral Development Act of 1982 (25*
19 *U.S.C. 2101–2108); Surface Mining Control and Reclama-*
20 *tion Act of 1977 (30 U.S.C. 1201–1328); any amendments*
21 *thereto; or any other laws not specifically addressed in this*
22 *section.*

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

24 (a) *IN GENERAL.*—*The Secretary of the Interior shall*
25 *conduct a review of the activities that have been conducted*

1 *by the governments of Indian tribes under the authority of*
2 *the Indian Mineral Development Act of 1982 (25 U.S.C.*
3 *2101 et seq.).*

4 *(b) REPORT.—Not later than 1 year after the date of*
5 *the enactment of this Act, the Secretary shall transmit to*
6 *the Committee on Resources of the House of Representatives*
7 *and the Committee on Indian Affairs and the Committee*
8 *on Energy and Natural Resources of the Senate a report*
9 *containing—*

10 *(1) the results of the review;*

11 *(2) recommendations designed to help ensure*
12 *that Indian tribes have the opportunity to develop*
13 *their nonrenewable energy resources; and*

14 *(3) an analysis of the barriers to the development*
15 *of energy resources on Indian land, including Federal*
16 *policies and regulations, and make recommendations*
17 *regarding the removal of those barriers.*

18 *(c) CONSULTATION.—The Secretary shall consult with*
19 *Indian tribes on a government-to-government basis in devel-*
20 *oping the report and recommendations as provided in this*
21 *subsection.*

22 **SEC. 406. RENEWABLE ENERGY STUDY.**

23 *(a) IN GENERAL.—Not later than 2 years after the*
24 *date of the enactment of this Act, and once every 2 years*
25 *thereafter, the Secretary of Energy shall transmit to the*

1 *Committees on Energy and Commerce and Resources of the*
 2 *House of Representatives and the Committees on Energy*
 3 *and Natural Resources and Indian Affairs of the Senate*
 4 *a report on energy consumption and renewable energy de-*
 5 *velopment potential on Indian land. The report shall iden-*
 6 *tify barriers to the development of renewable energy by In-*
 7 *dian tribes, including Federal policies and regulations, and*
 8 *make recommendations regarding the removal of such bar-*
 9 *riers.*

10 (b) *CONSULTATION.*—*The Secretary shall consult with*
 11 *Indian tribes on a government-to-government basis in devel-*
 12 *oping the report and recommendations as provided in this*
 13 *section.*

14 **SEC. 407. FEDERAL POWER MARKETING ADMINISTRATIONS.**

15 *Title XXVI of the Energy Policy Act of 1992 (25*
 16 *U.S.C. 3501) (as amended by section 201) is amended by*
 17 *adding at the end the following:*

18 **“SEC. 2608. FEDERAL POWER MARKETING ADMINISTRA-**
 19 **TIONS.**

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

22 *“(1) the Administrator of the Bonneville Power*
 23 *Administration; or*

24 *“(2) the Administrator of the Western Area*
 25 *Power Administration.*

1 “(b) *ASSISTANCE FOR TRANSMISSION STUDIES.—(1)*
2 *Each Administrator may provide technical assistance to In-*
3 *dian tribes seeking to use the high-voltage transmission sys-*
4 *tem for delivery of electric power. The costs of such technical*
5 *assistance shall be funded—*

6 “(A) *by the Administrator using non-reimburs-*
7 *able funds appropriated for this purpose, or*

8 “(B) *by the Indian tribe.*

9 “(2) *PRIORITY FOR ASSISTANCE FOR TRANSMISSION*
10 *STUDIES.—In providing discretionary assistance to Indian*
11 *tribes under paragraph (1), each Administrator shall give*
12 *priority in funding to Indian tribes that have limited fi-*
13 *nancial capability to conduct such studies.*

14 “(c) *POWER ALLOCATION STUDY.—(1) Not later than*
15 *2 years after the date of enactment of this Act, the Secretary*
16 *of Energy shall transmit to the Committees on Energy and*
17 *Commerce and Resources of the House of Representatives*
18 *and the Committees on Energy and Natural Resources and*
19 *Indian Affairs of the Senate a report on Indian tribes’ utili-*
20 *zation of Federal power allocations of the Western Area*
21 *Power Administration, or power sold by the Southwestern*
22 *Power Administration, and the Bonneville Power Adminis-*
23 *tration to or for the benefit of Indian tribes in their service*
24 *areas. The report shall identify—*

1 “(A) *the amount of power allocated to tribes by*
 2 *the Western Area Power Administration, and how the*
 3 *benefit of that power is utilized by the tribes;*

4 “(B) *the amount of power sold to tribes by other*
 5 *Power Marketing Administrations; and*

6 “(C) *existing barriers that impede tribal access*
 7 *to and utilization of Federal power, and opportuni-*
 8 *ties to remove such barriers and improve the ability*
 9 *of the Power Marketing Administration to facilitate*
 10 *the utilization of Federal power by Indian tribes.*

11 “(2) *The Power Marketing Administrations shall con-*
 12 *sult with Indian tribes on a government-to-government*
 13 *basis in developing the report provided in this section.*

14 “(d) *AUTHORIZATION FOR APPROPRIATION.—There*
 15 *are authorized to be appropriated to the Secretary of En-*
 16 *ergy such sums as may be necessary to carry out the pur-*
 17 *poses of this section.”.*

18 **SEC. 408. FEASIBILITY STUDY OF COMBINED WIND AND HY-**

19 **DROPOWER DEMONSTRATION PROJECT.**

20 (a) *STUDY.—The Secretary of Energy, in coordination*
 21 *with the Secretary of the Army and the Secretary of the*
 22 *Interior, shall conduct a study of the cost and feasibility*
 23 *of developing a demonstration project that would use wind*
 24 *energy generated by Indian tribes and hydropower gen-*
 25 *erated by the Army Corps of Engineers on the Missouri*

1 *River to supply firming power to the Western Area Power*
2 *Administration.*

3 (b) *SCOPE OF STUDY.*—*The study shall—*

4 (1) *determine the feasibility of the blending of*
5 *wind energy and hydropower generated from the Mis-*
6 *souri River dams operated by the Army Corps of En-*
7 *gineers;*

8 (2) *review historical purchase requirements and*
9 *projected purchase requirements for firming and the*
10 *patterns of availability and use of firming energy;*

11 (3) *assess the wind energy resource potential on*
12 *tribal lands and projected cost savings through a*
13 *blend of wind and hydropower over a thirty-year pe-*
14 *riod;*

15 (4) *include a preliminary interconnection study*
16 *and a determination of resource adequacy of the*
17 *Upper Great Plains Region of the Western Area*
18 *Power Administration;*

19 (5) *determine seasonal capacity needs and asso-*
20 *ciated transmission upgrades for integration of tribal*
21 *wind generation; and*

22 (6) *include an independent tribal engineer as a*
23 *study team member.*

24 (c) *REPORT.*—*The Secretary of Energy and Secretary*
25 *of the Army shall submit a report to Congress not later than*

1 1 year after the date of enactment of this title. The Secre-
2 taries shall include in the report—

3 (1) an analysis of the potential energy cost sav-
4 ings to the customers of the Western Area Power Ad-
5 ministration through the blend of wind and hydro-
6 power;

7 (2) an evaluation of whether a combined wind
8 and hydropower system can reduce reservoir fluctua-
9 tion, enhance efficient and reliable energy production
10 and provide Missouri River management flexibility;

11 (3) recommendations for a demonstration project
12 which the Western Area Power Administration could
13 carry out in partnership with an Indian tribal gov-
14 ernment or tribal government energy consortium to
15 demonstrate the feasibility and potential of using
16 wind energy produced on Indian lands to supply
17 firming energy to the Western Area Power Adminis-
18 tration or other Federal power marketing agency; and

19 (4) an identification of the economic and envi-
20 ronmental benefits to be realized through such a Fed-
21 eral-tribal partnership and identification of how such
22 a partnership could contribute to the energy security
23 of the United States.

24 (d) CONSULTATION.—The Secretary shall consult with
25 Indian tribes on a government-to-government basis in devel-

1 *oping the report and recommendations provided in this sec-*
 2 *tion.*

3 *(e) AUTHORIZATION OF APPROPRIATIONS.—There are*
 4 *authorized to be appropriated \$500,000 to carry out this*
 5 *section, which shall remain available until expended. All*
 6 *costs incurred by the Western Area Power Administration*
 7 *associated with performing the tasks required under this*
 8 *section shall be nonreimbursable.*

9 **TITLE V—NUCLEAR POWER**
 10 **Subtitle A—Price-Anderson Act**
 11 **Reauthorization**

12 **SEC. 501. SHORT TITLE.**

13 *This subtitle may be cited as the “Price-Anderson*
 14 *Amendments Act of 2002”.*

15 **SEC. 502. EXTENSION OF INDEMNIFICATION AUTHORITY.**

16 *(a) INDEMNIFICATION OF NUCLEAR REGULATORY*
 17 *COMMISSION LICENSEES.—Section 170c. of the Atomic En-*
 18 *ergy Act of 1954 (42 U.S.C. 2210(c)) is amended—*

19 *(1) in the subsection heading, by striking “LI-*
 20 *CENSES” and inserting “LICENSEES”; and*

21 *(2) by striking “August 1, 2002” each place it*
 22 *appears and inserting “August 1, 2012”.*

23 *(b) INDEMNIFICATION OF DEPARTMENT OF ENERGY*
 24 *CONTRACTORS.—Section 170d.(1)(A) of the Atomic Energy*

1 *Act of 1954 (42 U.S.C. 2210(d)(1)(A)) is amended by strik-*
2 *ing “, until August 1, 2002.”.*

3 (c) *INDEMNIFICATION OF NONPROFIT EDUCATIONAL*
4 *INSTITUTIONS.—Section 170k. of the Atomic Energy Act of*
5 *1954 (42 U.S.C. 2210(k)) is amended by striking “August*
6 *1, 2002” each place it appears and inserting “August 1,*
7 *2012”.*

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

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

13 “(2) *In agreements of indemnification entered*
14 *into under paragraph (1), the Secretary—*

15 “(A) *may require the contractor to provide*
16 *and maintain financial protection of such a type*
17 *and in such amounts as the Secretary shall de-*
18 *termine to be appropriate to cover public liabil-*
19 *ity arising out of or in connection with the con-*
20 *tractual activity; and*

21 “(B) *shall indemnify the persons indem-*
22 *nified against such liability above the amount of*
23 *the financial protection required, in the amount*
24 *of \$10,000,000,000 (subject to adjustment for in-*
25 *flation under subsection t.), in the aggregate, for*

1 *all persons indemnified in connection with such*
2 *contract and for each nuclear incident, including*
3 *such legal costs of the contractor as are approved*
4 *by the Secretary.”.*

5 **(b) CONTRACT AMENDMENTS.**—*Section 170d. of the*
6 *Atomic Energy Act of 1954 (42 U.S.C. 2210(d)) is further*
7 *amended by striking paragraph (3) and inserting the fol-*
8 *lowing:*

9 *“(3) All agreements of indemnification under*
10 *which the Department of Energy (or its predecessor*
11 *agencies) may be required to indemnify any person*
12 *under this section shall be deemed to be amended, on*
13 *the date of the enactment of the Price-Anderson*
14 *Amendments Act of 2002, to reflect the amount of in-*
15 *demnity for public liability and any applicable fi-*
16 *nancial protection required of the contractor under*
17 *this subsection.”.*

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

21 *(1) by striking “the maximum amount of finan-*
22 *cial protection required under subsection b. or”;* and

23 *(2) by striking “paragraph (3) of subsection d.,*
24 *whichever amount is more” and inserting “paragraph*
25 *(2) of subsection d.”.*

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

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

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

9 **SEC. 505. REPORTS.**

10 Section 170p. *of the Atomic Energy Act of 1954 (42*
11 *U.S.C. 2210(p)) is amended by striking “August 1, 1998”*
12 *and inserting “August 1, 2008”.*

13 **SEC. 506. INFLATION ADJUSTMENT.**

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

16 (1) *by redesignating paragraph (2) as para-*
17 *graph (3); and*

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

19 “(2) *The Secretary shall adjust the amount of in-*
20 *demnification provided under an agreement of indem-*
21 *nification under subsection d. not less than once dur-*
22 *ing each 5-year period following July 1, 2002, in ac-*
23 *cordance with the aggregate percentage change in the*
24 *Consumer Price Index since—*

25 “(A) *that date, in the case of the first ad-*
26 *justment under this paragraph; or*

1 “(B) the previous adjustment under this
2 paragraph.”.

3 **SEC. 507. CIVIL PENALTIES.**

4 (a) *REPEAL OF AUTOMATIC REMISSION.*—Section
5 234Ab.(2) of the Atomic Energy Act of 1954 (42 U.S.C.
6 2282a(b)(2)) is amended by striking the last sentence.

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

11 “d.(1) Notwithstanding subsection a., in the case
12 of any not-for-profit contractor, subcontractor, or sup-
13 plier, the total amount of civil penalties assessed
14 under subsection a. may not exceed the total amount
15 of fees paid within any one-year period (as deter-
16 mined by the Secretary) under the contract under
17 which the violation occurs.

18 “(2) For purposes of this section, the term ‘not-
19 for-profit’ means that no part of the net earnings of
20 the contractor, subcontractor, or supplier inures, or
21 may lawfully inure, to the benefit of any natural per-
22 son or for-profit artificial person.”.

23 (c) *EFFECTIVE DATE.*—The amendments made by this
24 section shall not apply to any violation of the Atomic En-

1 *ergy Act of 1954 occurring under a contract entered into*
2 *before the date of enactment of this section.*

3 **SEC. 508. TREATMENT OF MODULAR REACTORS.**

4 *Section 170b. of the Atomic Energy Act of 1954 (42*
5 *U.S.C. 2210(b)) is amended by adding at the end the fol-*
6 *lowing:*

7 *“(5)(A) For purposes of this section only, the*
8 *Commission shall consider a combination of facilities*
9 *described in subparagraph (B) to be a single facility*
10 *having a rated capacity of 100,000 electrical kilo-*
11 *watts or more.*

12 *“(B) A combination of facilities referred to in*
13 *subparagraph (A) is two or more facilities located at*
14 *a single site, each of which has a rated capacity of*
15 *100,000 electrical kilowatts or more but not more*
16 *than 300,000 electrical kilowatts, with a combined*
17 *rated capacity of not more than 1,300,000 electrical*
18 *kilowatts.”.*

19 **SEC. 509. EFFECTIVE DATE.**

20 *The amendments made by sections 503(a) and 504 do*
21 *not apply to any nuclear incident that occurs before the*
22 *date of the enactment of this subtitle.*

1 **Subtitle B—Miscellaneous**
 2 **Provisions**

3 **SEC. 511. URANIUM SALES.**

4 (a) *INVENTORY SALES.*—Section 3112(d) of the USEC
 5 *Privatization Act (42 U.S.C. 2297h–10(d)) is amended to*
 6 *read as follows:*

7 “(d) *INVENTORY SALES.*—(1) *In addition to the trans-*
 8 *fers authorized under subsections (b), (c), and (e), the Sec-*
 9 *retary may, from time to time, sell or transfer uranium*
 10 *(including natural uranium concentrates, natural uranium*
 11 *hexafluoride, enriched uranium, and depleted uranium)*
 12 *from the Department of Energy’s stockpile.*

13 “(2) *Except as provided in subsections (b), (c), and*
 14 *(e), the Secretary may not deliver uranium in any form*
 15 *for consumption by end users in any year in excess of the*
 16 *following amounts:*

“Annual Maximum Deliveries to End Users

| “Year: | (Million lbs. U₃O₈ equivalent) |
|-------------------------------------|---|
| 2003 through 2009 | 3 |
| 2010 | 5 |
| 2011 | 5 |
| 2012 | 7 |
| 2013 and each year thereafter | 10. |

17 “(3) *Except as provided in subsections (b), (c), and*
 18 *(e), no sale or transfer of uranium in any form shall be*
 19 *made unless—*

20 “(A) *the President determines that the material*
 21 *is not necessary for national security needs;*

1 “(B) the Secretary determines, based on the writ-
2 ten views of the Secretary of State and the Assistant
3 to the President for National Security Affairs, that
4 the sale or transfer will not adversely affect the na-
5 tional security interests of the United States;

6 “(C) the Secretary determines that the sale of the
7 material will not have an adverse material impact on
8 the domestic uranium mining, conversion, or enrich-
9 ment industry, taking into account the sales of ura-
10 nium under the Russian HEU Agreement and the
11 Suspension Agreement; and

12 “(D) the price paid to the Secretary will not be
13 less than the fair market value of the material.”.

14 (b) *EXEMPT TRANSFERS AND SALES.*—Section 3112(e)
15 of the USEC Privatization Act (42 U.S.C. 2297h–10(e)) is
16 amended to read as follows:

17 “(e) *EXEMPT SALES OR TRANSFERS.*—Notwith-
18 standing subsection (d)(2), the Secretary may transfer or
19 sell uranium—

20 “(1) to the Tennessee Valley Authority for use
21 pursuant to the Department of Energy’s highly en-
22 riched uranium or tritium program, to the extent
23 provided by law;

24 “(2) to research and test reactors under the Uni-
25 versity Reactor Fuel Assistance and Support Pro-

1 *gram or the Reduced Enrichment for Research and*
2 *Test Reactors Program;*

3 “(3) *to USEC Inc. to replace contaminated ura-*
4 *nium received from the Department of Energy when*
5 *the United States Enrichment Corporation was*
6 *privatized;*

7 “(4) *to any person for emergency purposes in the*
8 *event of a disruption in supply to end users in the*
9 *United States; and*

10 “(5) *to any person for national security pur-*
11 *poses, as determined by the Secretary.”*

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

14 (a) *REIMBURSEMENT OF THORIUM LICENSEES.— Sec-*
15 *tion 1001(b)(2)(C) of the Energy Policy Act of 1992 (42*
16 *U.S.C. 2296a) is amended—*

17 (1) *by striking “\$140,000,000” and inserting*
18 *“\$365,000,000”; and*

19 (2) *by adding at the end the following: “Such*
20 *payments shall not exceed the following amounts:*

21 “(i) *\$90,000,000 in fiscal year 2002.*

22 “(ii) *\$55,000,000 in fiscal year 2003.*

23 “(iii) *\$20,000,000 in fiscal year 2004.*

24 “(iv) *\$20,000,000 in fiscal year 2005.*

25 “(v) *\$20,000,000 in fiscal year 2006.*

1 “(vi) \$20,000,000 in fiscal year 2007.
2 Any amounts authorized to be paid in a fiscal
3 year under this subparagraph that are not paid
4 in that fiscal year may be paid in subsequent
5 fiscal years.”.

6 (b) *AUTHORIZATION OF APPROPRIATIONS.*—Section
7 1003(a) of the *Energy Policy Act of 1992* (42 U.S.C. 2296a–
8 2) is amended by striking “\$490,000,000” and inserting
9 “\$715,000,000”.

10 (c) *DECONTAMINATION AND DECOMMISSIONING*
11 *FUND.*—Section 1802(a) of the *Atomic Energy Act of 1954*
12 (42 U.S.C. 2297g–1(a)) is amended—

13 (1) by striking “\$488,333,333” and inserting
14 “\$518,233,333”; and

15 (2) by inserting after “inflation” the following:
16 “beginning on the date of enactment of the *Energy*
17 *Policy Act of 1992*”.

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

19 The Secretary of Energy shall not reactivate the *Fast*
20 *Flux Test Facility* to conduct—

21 (1) any atomic energy defense activity,

22 (2) any space-related mission, or

23 (3) any program for the production or utiliza-
24 tion of nuclear material if the Secretary has deter-

1 *mined, in a record of decision, that the program can*
2 *be carried out at existing operating facilities.*

3 **SEC. 514. NUCLEAR POWER 2010.**

4 (a) *DEFINITIONS.—In this section:*

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

7 (2) *OFFICE.—The term “Office” means the Office*
8 *of Nuclear Energy Science and Technology of the De-*
9 *partment of Energy.*

10 (3) *DIRECTOR.—The term “Director” means the*
11 *Director of the Office of Nuclear Energy Science and*
12 *Technology of the Department of Energy.*

13 (4) *PROGRAM.—The term “Program” means the*
14 *Nuclear Power 2010 Program.*

15 (b) *ESTABLISHMENT.—The Secretary shall carry out*
16 *a program, to be managed by the Director.*

17 (c) *PURPOSE.—The program shall aggressively pursue*
18 *those activities that will result in regulatory approvals and*
19 *design completion in a phased approach, with joint govern-*
20 *ment/industry cost sharing, which would allow for the con-*
21 *struction and startup of new nuclear plants in the United*
22 *States by 2010.*

23 (d) *ACTIVITIES.—In carrying out the program, the Di-*
24 *rector shall—*

1 (1) *issue a solicitation to industry seeking pro-*
2 *posals from joint venture project teams comprised of*
3 *reactor vendors and power generation companies to*
4 *participate in the Nuclear Power 2010 program;*

5 (2) *seek innovative business arrangements, such*
6 *as consortia among designers, constructors, nuclear*
7 *steam supply systems and major equipment suppliers,*
8 *and plant owner/operators, with strong and common*
9 *incentives to build and operate new plants in the*
10 *United States;*

11 (3) *conduct the Nuclear Power 2010 program*
12 *consistent with the findings of “A Roadmap to De-*
13 *ploy New Nuclear Power Plants in the United States*
14 *by 2010” issued by the Near-Term Deployment Work-*
15 *ing Group of the Nuclear Energy Research Advisory*
16 *Committee of the Department of Energy;*

17 (4) *rely upon the expertise and capabilities of*
18 *the Department of Energy national laboratories and*
19 *sites in the areas of advanced nuclear fuel cycles and*
20 *fuels testing, giving consideration to existing lead lab-*
21 *oratory designations and the unique capabilities and*
22 *facilities available at each national laboratory and*
23 *site;*

24 (5) *pursue deployment of both water-cooled and*
25 *gas-cooled reactor designs on a dual track basis that*

1 *will provide maximum potential for the success of*
2 *both;*

3 *(6) include participation of international col-*
4 *laborators in research and design efforts where bene-*
5 *ficial; and*

6 *(7) seek to accomplish the essential regulatory*
7 *and technical work, both generic and design-specific,*
8 *to make possible new nuclear plants within this dec-*
9 *ade.*

10 *(e) AUTHORIZATION OF APPROPRIATIONS.—There are*
11 *authorized to be appropriated to the Secretary to carry out*
12 *the purposes of this section such sums as are necessary for*
13 *fiscal year 2003 and for each fiscal year thereafter.*

14 **SEC. 515. OFFICE OF SPENT NUCLEAR FUEL RESEARCH.**

15 *(a) FINDINGS.—Congress finds that—*

16 *(1) before the Federal Government takes any ir-*
17 *reversible action relating to the disposal of spent nu-*
18 *clear fuel, Congress must determine whether the spent*
19 *fuel in the repository should be treated as waste sub-*
20 *ject to permanent burial or should be considered an*
21 *energy resource that is needed to meet future energy*
22 *requirements; and*

23 *(2) national policy on spent nuclear fuel may*
24 *evolve with time as improved technologies for spent*
25 *fuel are developed or as national energy needs evolve.*

1 **(b) DEFINITIONS.**—*In this section:*

2 **(1) ASSOCIATE DIRECTOR.**—*The term “Associate*
3 *Director” means the Associate Director of the Office.*

4 **(2) OFFICE.**—*The term “Office” means the Office*
5 *of Spent Nuclear Fuel Research within the Office of*
6 *Nuclear Energy Science and Technology of the De-*
7 *partment of Energy.*

8 **(c) ESTABLISHMENT.**—*There is established an Office*
9 *of Spent Nuclear Fuel Research within the Office of Nuclear*
10 *Energy Science and Technology of the Department of En-*
11 *ergy.*

12 **(d) HEAD OF OFFICE.**—*The Office shall be headed by*
13 *the Associate Director, who shall be a member of the Senior*
14 *Executive Service appointed by the Director of the Office*
15 *of Nuclear Energy Science and Technology, and com-*
16 *pensated at a rate determined by applicable law.*

17 **(e) DUTIES OF THE ASSOCIATE DIRECTOR.**—

18 **(1) IN GENERAL.**—*The Associate Director shall*
19 *be responsible for carrying out an integrated research,*
20 *development, and demonstration program on tech-*
21 *nologies for treatment, recycling, and disposal of*
22 *high-level nuclear radioactive waste and spent nuclear*
23 *fuel, subject to the general supervision of the Sec-*
24 *retary.*

1 (2) *PARTICIPATION.*—*The Associate Director*
2 *shall coordinate the participation of national labora-*
3 *tories, universities, the commercial nuclear industry,*
4 *and other organizations in the investigation of tech-*
5 *nologies for the treatment, recycling, and disposal of*
6 *spent nuclear fuel and high-level radioactive waste.*

7 (3) *ACTIVITIES.*—*The Associate Director shall—*

8 (A) *develop a research plan to provide rec-*
9 *ommendations by 2015;*

10 (B) *identify promising technologies for the*
11 *treatment, recycling, and disposal of spent nu-*
12 *clear fuel and high-level radioactive waste;*

13 (C) *conduct research and development ac-*
14 *tivities for promising technologies;*

15 (D) *ensure that all activities include as key*
16 *objectives minimization of proliferation concerns*
17 *and risk to the health of the general public or*
18 *site workers, as well as development of cost-effec-*
19 *tive technologies;*

20 (E) *require research on both reactor- and*
21 *accelerator-based transmutation systems;*

22 (F) *require research on advanced processing*
23 *and separations;*

24 (G) *include participation of international*
25 *collaborators in research efforts, and provide*

1 *funding to a collaborator that brings unique ca-*
2 *pabilities not available in the United States if*
3 *the country in which the collaborator is located*
4 *is unable to provide for their support; and*

5 *(H) ensure that research efforts are coordi-*
6 *nated with research on advanced fuel cycles and*
7 *reactors conducted by the Office of Nuclear En-*
8 *ergy Science and Technology.*

9 *(f) GRANT AND CONTRACT AUTHORITY.—The Sec-*
10 *retary may make grants, or enter into contracts, for the*
11 *purposes of the research projects and activities described in*
12 *this section.*

13 *(g) REPORT.—The Associate Director shall annually*
14 *submit to Congress a report on the activities and expendi-*
15 *tures of the Office that describes the progress being made*
16 *in achieving the objectives of this section.*

17 **SEC. 516. DECOMMISSIONING PILOT PROGRAM.**

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

1 (b) *AUTHORIZATION OF APPROPRIATIONS.*—*There is*
2 *authorized to be appropriated to carry out this section*
3 *\$16,000,000.*

4 ***Subtitle C—Growth of Nuclear***
5 ***Energy***

6 ***SEC. 521. COMBINED LICENSE PERIODS.***

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

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

11 *“c. LICENSE PERIOD.—*

12 *“(1) IN GENERAL.—Each such”; and*

13 *(2) by adding at the end the following:*

14 *“(2) COMBINED LICENSES.—In the case of a*
15 *combined construction and operating license issued*
16 *under section 185(b), the duration of the operating*
17 *phase of the license period shall not be less than the*
18 *duration of the operating license if application had*
19 *been made for separate construction and operating li-*
20 *censes.”.*

1 ***Subtitle D—NRC Regulatory***
2 ***Reform***

3 **SEC. 531. ANTITRUST REVIEW.**

4 (a) *IN GENERAL.*—Section 105 of the Atomic Energy
5 Act of 1954 (42 U.S.C. 2135) is amended by adding at the
6 end the following:

7 “d. *ANTITRUST LAWS.*—

8 “(1) *NOTIFICATION.*—Except as provided in
9 paragraph (4), when the Commission proposes to
10 issue a license under section 103 or 104b., the Com-
11 mission shall notify the Attorney General of the pro-
12 posed license and the proposed terms and conditions
13 of the license.

14 “(2) *ACTION BY THE ATTORNEY GENERAL.*—
15 Within a reasonable time (but not more than 90
16 days) after receiving notification under paragraph
17 (1), the Attorney General shall submit to the Commis-
18 sion and publish in the Federal Register a determina-
19 tion whether, insofar as the Attorney General is able
20 to determine, the proposed license would tend to cre-
21 ate or maintain a situation inconsistent with the
22 antitrust laws.

23 “(3) *INFORMATION.*—On the request of the Attor-
24 ney General, the Commission shall furnish or cause to
25 be furnished such information as the Attorney Gen-

1 *eral determines to be appropriate or necessary to en-*
2 *able the Attorney General to make the determination*
3 *under paragraph (2).*

4 “(4) *APPLICABILITY.*—*This subsection shall not*
5 *apply to such classes or type of licenses as the Com-*
6 *mission, with the approval of the Attorney General,*
7 *determines would not significantly affect the activities*
8 *of a licensee under the antitrust laws.”*

9 (b) *CONFORMING AMENDMENT.*—*Section 105c. of the*
10 *Atomic Energy Act of 1954 (42 U.S.C. 2135(c)) is amended*
11 *by adding at the end the following:*

12 “(9) *APPLICABILITY.*—*This subsection does not*
13 *apply to an application for a license to construct or*
14 *operate a utilization facility under section 103 or*
15 *104b. that is filed on or after the date of enactment*
16 *of subsection d.”*

17 **SEC. 532. DECOMMISSIONING.**

18 (a) *AUTHORITY OVER FORMER LICENSEES FOR DE-*
19 *COMMISSIONING FUNDING.*—*Section 161i. of the Atomic*
20 *Energy Act of 1954 (42 U.S.C. 2201(i)) is amended—*

21 (1) *by striking “and (3)” and inserting “(3)”;*
22 *and*

23 (2) *by inserting before the semicolon at the end*
24 *the following: “, and (4) to ensure that sufficient*
25 *funds will be available for the decommissioning of*

1 *any production or utilization facility licensed under*
2 *section 103 or 104b., including standards and restric-*
3 *tions governing the control, maintenance, use, and*
4 *disbursement by any former licensee under this Act*
5 *that has control over any fund for the decommis-*
6 *sioning of the facility”.*

7 **(b) TREATMENT OF NUCLEAR REACTOR FINANCIAL**
8 **OBLIGATIONS.**—*Section 523 of title 11, United States Code,*
9 *is amended by adding at the end the following:*

10 **“(f) TREATMENT OF NUCLEAR REACTOR FINANCIAL**
11 **OBLIGATIONS.**—*Notwithstanding any other provision of*
12 *this title—*

13 *“(1) any funds or other assets held by a licensee*
14 *or former licensee of the Nuclear Regulatory Commis-*
15 *sion, or by any other person, to satisfy the responsi-*
16 *bility of the licensee, former licensee, or any other per-*
17 *son to comply with a regulation or order of the Nu-*
18 *clear Regulatory Commission governing the decon-*
19 *tamination and decommissioning of a nuclear power*
20 *reactor licensed under section 103 or 104b. of the*
21 *Atomic Energy Act of 1954 (42 U.S.C. 2133, 2134(b))*
22 *shall not be used to satisfy the claim of any creditor*
23 *in any proceeding under this title, other than a claim*
24 *resulting from an activity undertaken to satisfy that*
25 *responsibility, until the decontamination and decom-*

1 *missioning of the nuclear power reactor is completed*
2 *to the satisfaction of the Nuclear Regulatory Commis-*
3 *sion;*

4 *“(2) obligations of licensees, former licensees, or*
5 *any other person to use funds or other assets to satisfy*
6 *a responsibility described in paragraph (1) may not*
7 *be rejected, avoided, or discharged in any proceeding*
8 *under this title or in any liquidation, reorganization,*
9 *receivership, or other insolvency proceeding under*
10 *Federal or State law; and*

11 *“(3) private insurance premiums and standard*
12 *deferred premiums held and maintained in accord-*
13 *ance with section 170b. of the Atomic Energy Act of*
14 *1954 (42 U.S.C. 2210(b)) shall not be used to satisfy*
15 *the claim of any creditor in any proceeding under*
16 *this title, until the indemnification agreement exe-*
17 *cuted in accordance with section 170c. of that Act (42*
18 *U.S.C. 2210(c)) is terminated.”.*

19 ***Subtitle E—NRC Personnel Crisis***

20 ***SEC. 541. ELIMINATION OF PENSION OFFSET.***

21 *Section 161 of the Atomic Energy Act of 1954 (42*
22 *U.S.C. 2201) is amended by adding at the end the following:*

23 *“y. exempt from the application of sections 8344 and*
24 *8468 of title 5, United States Code, an annuitant who was*
25 *formerly an employee of the Commission who is hired by*

1 *the Commission as a consultant, if the Commission finds*
2 *that the annuitant has a skill that is critical to the perform-*
3 *ance of the duties of the Commission.”.*

4 **SEC. 542. NRC TRAINING PROGRAM.**

5 (a) *IN GENERAL.*—*In order to maintain the human*
6 *resource investment and infrastructure of the United States*
7 *in the nuclear sciences, health physics, and engineering*
8 *fields, in accordance with the statutory authorities of the*
9 *Commission relating to the civilian nuclear energy pro-*
10 *gram, the Nuclear Regulatory Commission shall carry out*
11 *a training and fellowship program to address shortages of*
12 *individuals with critical safety skills.*

13 (b) *AUTHORIZATION OF APPROPRIATIONS.*—

14 (1) *IN GENERAL.*—*There are authorized to be ap-*
15 *propriated to carry out this section \$1,000,000 for*
16 *each of fiscal years 2003 through 2006.*

17 (2) *AVAILABILITY.*—*Funds made available under*
18 *paragraph (1) shall remain available until expended.*

1 ***DIVISION B—DOMESTIC OIL AND***
2 ***GAS PRODUCTION AND***
3 ***TRANSPORTATION***
4 ***TITLE VI—OIL AND GAS***
5 ***PRODUCTION***

6 ***SEC. 601. PERMANENT AUTHORITY TO OPERATE THE STRA-***
7 ***TEGIC PETROLEUM RESERVE.***

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

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

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

16 *(2) by striking part E (42 U.S.C. 6251; relating*
17 *to the expiration of title I of the Act) and its heading.*

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

22 *(1) by striking section 256(h) (42 U.S.C.*
23 *6276(h)) and inserting—*

24 *“(h) AUTHORIZATION OF APPROPRIATIONS.—There*
25 *are authorized to be appropriated to the Secretary such*

1 *sums as may be necessary to carry out this part, to remain*
2 *available until expended.”;*

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

6 *(3) by striking part D (42 U.S.C. 6285; relating*
7 *to the expiration of title II of the Act) and its head-*
8 *ing.*

9 *(c) TECHNICAL AMENDMENTS.—The table of contents*
10 *for the Energy Policy and Conservation Act is amended by*
11 *striking the items relating to part D of title I and part*
12 *D of title II.*

13 **SEC. 602. FEDERAL ONSHORE LEASING PROGRAMS FOR OIL**
14 **AND GAS.**

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

19 *(1) ensure expeditious compliance with the re-*
20 *quirements of section 102(2)(C) of the National Envi-*
21 *ronmental Policy Act of 1969 (42 U.S.C. 4332(2)(C));*

22 *(2) improve consultation and coordination with*
23 *the States; and*

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

1 (b) *IMPROVED ENFORCEMENT.*—*The Secretary shall*
2 *improve inspection and enforcement of oil and gas activi-*
3 *ties, including enforcement of terms and conditions in per-*
4 *mits to drill.*

5 (c) *AUTHORIZATION OF APPROPRIATIONS.*—*For each*
6 *of the fiscal years 2003 through 2006, in addition to*
7 *amounts otherwise authorized to be appropriated for the*
8 *purpose of carrying out section 17 of the Mineral Leasing*
9 *Act (30 U.S.C. 226), there are authorized to be appro-*
10 *priated to the Secretary of the Interior—*

11 (1) *\$40,000,000 for the purpose of carrying out*
12 *paragraphs (1) through (3) of subsection (a); and*

13 (2) *\$20,000,000 for the purpose of carrying out*
14 *subsection (b).*

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

16 *Section 27(d)(1) of the Mineral Leasing Act (30 U.S.C.*
17 *184(d)(1)) is amended by inserting after “acreage held in*
18 *special tar sand areas” the following: “as well as acreage*
19 *under any lease any portion of which has been committed*
20 *to a federally approved unit or cooperative plan or*
21 *communitization agreement, or for which royalty, includ-*
22 *ing compensatory royalty or royalty in kind, was paid in*
23 *the preceding calendar year.”.*

1 **SEC. 604. ORPHANED AND ABANDONED WELLS ON FEDERAL**
2 **LAND.**

3 (a) *ESTABLISHMENT.*—(1) *The Secretary of the Inte-*
4 *rior, in cooperation with the Secretary of Agriculture, shall*
5 *establish a program to ensure within 3 years after the date*
6 *of enactment of this Act, remediation, reclamation, and clo-*
7 *sure of orphaned oil and gas wells located on lands admin-*
8 *istered by the land management agencies within the De-*
9 *partment of the Interior and the United States Forest Serv-*
10 *ice that are—*

11 (A) *abandoned;*

12 (B) *orphaned; or*

13 (C) *idled for more than 5 years and having no*
14 *beneficial use.*

15 (2) *The program shall include a means of ranking crit-*
16 *ical sites for priority in remediation based on potential en-*
17 *vironmental harm, other land use priorities, and public*
18 *health and safety.*

19 (3) *The program shall provide that responsible parties*
20 *be identified wherever possible and that the costs of remedi-*
21 *ation be recovered.*

22 (4) *In carrying out the program, the Secretary of the*
23 *Interior shall work cooperatively with the Secretary of Agri-*
24 *culture and the States within which the Federal lands are*
25 *located, and shall consult with the Secretary of Energy, and*
26 *the Interstate Oil and Gas Compact Commission.*

1 **(b) PLAN.**—*Within 6 months from the date of enact-*
2 *ment of this section, the Secretary of the Interior, in co-*
3 *operation with the Secretary of Agriculture, shall prepare*
4 *a plan for carrying out the program established under sub-*
5 *section (a). Copies of the plan shall be transmitted to the*
6 *Committee on Energy and Natural Resources of the Senate*
7 *and the Committee on Resources of the House of Representa-*
8 *tives.*

9 **(c) AUTHORIZATION OF APPROPRIATIONS.**—*There are*
10 *authorized to be appropriated to the Secretary of the Inte-*
11 *rior \$5,000,000 for each of fiscal years 2003 through 2005*
12 *to carry out the activities provided for in this section.*

13 **SEC. 605. ORPHANED AND ABANDONED OIL AND GAS WELL**
14 **PROGRAM.**

15 **(a) ESTABLISHMENT.**—*The Secretary of Energy shall*
16 *establish a program to provide technical assistance to the*
17 *various oil and gas producing States to facilitate State ef-*
18 *forts over a 10-year period to ensure a practical and eco-*
19 *nomical remedy for environmental problems caused by or-*
20 *phaned and abandoned exploration or production well sites*
21 *on State and private lands. The Secretary shall work with*
22 *the States, through the Interstate Oil and Gas Compact*
23 *Commission, to assist the States in quantifying and miti-*
24 *gating environmental risks of onshore abandoned and or-*
25 *phaned wells on State and private lands.*

1 (b) *PROGRAM ELEMENTS.*—*The program should*
2 *include—*

3 (1) *mechanisms to facilitate identification of re-*
4 *sponsible parties wherever possible;*

5 (2) *criteria for ranking critical sites based on*
6 *factors such as other land use priorities, potential en-*
7 *vironmental harm and public visibility; and*

8 (3) *information and training programs on best*
9 *practices for remediation of different types of sites.*

10 (c) *AUTHORIZATION OF APPROPRIATIONS.*—*There are*
11 *authorized to be appropriated to the Secretary of Energy*
12 *for the activities under this section \$5,000,000 for each of*
13 *fiscal years 2003 through 2005 to carry out the provisions*
14 *of this section.*

15 **SEC. 606. OFFSHORE DEVELOPMENT.**

16 *Section 5 of the Outer Continental Shelf Lands Act*
17 *of 1953 (43 U.S.C. 1334) is amended by adding at the end*
18 *the following:*

19 “(k) *SUSPENSION OF OPERATIONS FOR SUBSALT EX-*
20 *PLORATION.*—*Notwithstanding any other provision of law*
21 *or regulation, the Secretary may grant a request for a sus-*
22 *pension of operations under any lease to allow the lessee*
23 *to reprocess or reinterpret geologic or geophysical data be-*
24 *neath allocthonous salt sheets, when in the Secretary’s judg-*
25 *ment such suspension is necessary to prevent waste caused*

1 *by the drilling of unnecessary wells, and to maximize ultimate*
2 *recovery of hydrocarbon resources under the lease.*
3 *Such suspension shall be limited to the minimum period*
4 *of time the Secretary determines is necessary to achieve the*
5 *objectives of this subsection.”.*

6 **SEC. 607. COALBED METHANE STUDY.**

7 (a) *STUDY.*—*The National Academy of Sciences shall*
8 *conduct a study on the effects of coalbed methane production*
9 *on surface and water resources.*

10 (b) *DATA ANALYSIS.*—*The study shall analyze available*
11 *hydrogeologic and water quality data, along with other*
12 *pertinent environmental or other information to*
13 *determine—*

14 (1) *adverse effects associated with surface or sub-*
15 *surface disposal of waters produced during extraction*
16 *of coalbed methane;*

17 (2) *depletion of groundwater aquifers or drink-*
18 *ing water sources associated with production of coal-*
19 *bed methane;*

20 (3) *any other significant adverse impacts to sur-*
21 *face or water resources associated with production of*
22 *coalbed methane; and*

23 (4) *production techniques or other factors that*
24 *can mitigate adverse impacts from coalbed methane*
25 *development.*

1 (c) *RECOMMENDATIONS.*—*The study shall analyze ex-*
2 *isting Federal and State laws and regulations, and make*
3 *recommendations as to changes, if any, to Federal law nec-*
4 *essary to address adverse impacts to surface or water re-*
5 *sources attributable to coalbed methane development.*

6 (d) *COMPLETION OF STUDY.*—*The National Academy*
7 *of Sciences shall submit the study to the Secretary of the*
8 *Interior within 18 months after the date of enactment of*
9 *this Act, and shall make the study available to the public*
10 *at the same time.*

11 (e) *REPORT TO CONGRESS.*—*The Secretary of the Inte-*
12 *rior shall report to Congress within 6 months of her receipt*
13 *of the study on—*

14 (1) *the findings and recommendations of the*
15 *study;*

16 (2) *the Secretary's agreement or disagreement*
17 *with each of its findings and recommendations; and*

18 (3) *any recommended changes in funding to ad-*
19 *dress the effects of coalbed methane production on sur-*
20 *face and water resources.*

21 **SEC. 608. FISCAL POLICIES TO MAXIMIZE RECOVERY OF DO-**
22 **MESTIC OIL AND GAS RESOURCES.**

23 (a) *EVALUATION.*—*The Secretary of Energy, in coordi-*
24 *nation with the Secretaries of the Interior, Commerce, and*
25 *Treasury, Indian tribes and the Interstate Oil and Gas*

1 *Compact Commission, shall evaluate the impact of existing*
2 *Federal and State tax and royalty policies on the develop-*
3 *ment of domestic oil and gas resources and on revenues to*
4 *Federal, State, local and tribal governments.*

5 (b) *SCOPE.—The evaluation under subsection (a)*
6 *shall—*

7 (1) *analyze the impact of fiscal policies on oil*
8 *and natural gas exploration, development drilling,*
9 *and production under different price scenarios, in-*
10 *cluding the impact of the individual and corporate*
11 *Alternative Minimum Tax, State and local produc-*
12 *tion taxes and fixed royalty rates during low price*
13 *periods;*

14 (2) *assess the effect of existing Federal and State*
15 *fiscal policies on investment under different geological*
16 *and developmental circumstances, including but not*
17 *limited to deepwater environments, subsalt forma-*
18 *tions, deep and deviated wells, coalbed methane and*
19 *other unconventional oil and gas formations;*

20 (3) *assess the extent to which Federal and State*
21 *fiscal policies negatively impact the ultimate recovery*
22 *of resources from existing fields and smaller accumu-*
23 *lations in offshore waters, especially in water depths*
24 *less than 800 meters, of the Gulf of Mexico;*

1 (4) compare existing Federal and State policies
2 with tax and royalty regimes in other countries with
3 particular emphasis on similar geological, develop-
4 mental and infrastructure conditions; and

5 (5) evaluate how alternative tax and royalty
6 policies, including counter-cyclical measures, could
7 increase recovery of domestic oil and natural gas re-
8 sources and revenues to Federal, State, local and trib-
9 al governments.

10 (c) *POLICY RECOMMENDATIONS.*—Based upon the
11 findings of the evaluation under subsection (a), a report de-
12 scribing the findings and recommendations for policy
13 changes shall be provided to the President, the Congress, the
14 Governors of the member States of the Interstate Oil and
15 Gas Compact Commission, and Indian tribes having an oil
16 and gas lease approved by the Secretary of the Interior. The
17 recommendations should ensure that the public interest in
18 receiving the economic benefits of tax and royalty revenues
19 is balanced with the broader national security and eco-
20 nomic interests in maximizing recovery of domestic re-
21 sources. The report should include recommendations regard-
22 ing actions to—

23 (1) ensure stable development drilling during pe-
24 riods of low oil and/or natural gas prices to maintain
25 reserve replacement and deliverability;

1 (2) *minimize the negative impact of a volatile*
2 *investment climate on the oil and gas service industry*
3 *and domestic oil and gas exploration and production;*

4 (3) *ensure a consistent level of domestic activity*
5 *to encourage the education and retention of a tech-*
6 *nical workforce; and*

7 (4) *maintain production capability during peri-*
8 *ods of low oil and/or natural gas prices.*

9 (d) *ROYALTY GUIDELINES.—The recommendations re-*
10 *quired under (c) should include guidelines for private re-*
11 *source holders as to the appropriate level of royalties given*
12 *geology, development cost, and the national interest in*
13 *maximizing recovery of oil and gas resources.*

14 (e) *REPORT.—The study under subsection (a) shall be*
15 *completed not later than 18 months after the date of enact-*
16 *ment of this section. The report and recommendations re-*
17 *quired in (c) shall be transmitted to the President, the Con-*
18 *gress, Indian tribes, and the Governors of the member States*
19 *of the Interstate Oil and Gas Compact Commission.*

20 **SEC. 609. 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 Pol-*
24 *icy and Conservation Act (42 U.S.C. 6231 et seq.) to*
25 *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 En-*
10 *ergy 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 con-*
16 *sumption of petroleum and the reliance on imported*
17 *petroleum.*

18 **SEC. 610. HYDRAULIC FRACTURING.**

19 *Section 1421 of the Safe Drinking Water Act (42*
20 *U.S.C. 300h) is amended by adding at the end the following:*

21 “(e) *HYDRAULIC FRACTURING FOR OIL AND GAS PRO-*
22 *DUCTION.—*

23 “(1) *STUDY OF THE EFFECTS OF HYDRAULIC*
24 *FRACTURING.—*

1 “(A) *IN GENERAL.*—As soon as practicable,
2 but in no event later than 24 months after the
3 date of enactment of this subsection, the Admin-
4 istrator shall complete a study of the known and
5 potential effects on underground drinking water
6 sources of hydraulic fracturing, including the ef-
7 fects of hydraulic fracturing on underground
8 drinking water sources on a nationwide basis,
9 and within specific regions, States, or portions of
10 States.

11 “(B) *CONSULTATION.*—In planning and
12 conducting the study, the Administrator shall
13 consult with the Secretary of the Interior, the
14 Secretary of Energy, the Ground Water Protec-
15 tion Council, affected States, and, as appro-
16 priate, representatives of environmental, indus-
17 try, academic, scientific, public health, and other
18 relevant organizations. Such study may be ac-
19 complished in conjunction with other ongoing
20 studies related to the effects of oil and gas pro-
21 duction on groundwater resources.

22 “(C) *STUDY ELEMENTS.*—The study con-
23 ducted under subparagraph (A) shall, at a min-
24 imum, examine and make findings as to
25 whether—

1 “(i) such hydraulic fracturing has en-
2 dangered or will endanger (as defined under
3 subsection (d)(2)) underground drinking
4 water sources, including those sources with-
5 in specific regions, States or portions of
6 States;

7 “(ii) there are specific methods, prac-
8 tices, or hydrogeologic circumstances in
9 which hydraulic fracturing has endangered
10 or will endanger underground drinking
11 water sources; and

12 “(iii) there are any precautionary ac-
13 tions that may reduce or eliminate any
14 such endangerment.

15 “(D) *STUDY OF HYDRAULIC FRACTURING IN*
16 *A PARTICULAR TYPE OF GEOLOGIC FORMATION.—*
17 *The Administrator may also complete a separate*
18 *study on the known and potential effects on un-*
19 *derground drinking water sources of hydraulic*
20 *fracturing in a particular type of geologic for-*
21 *mation:*

22 “(i) *If such a study is undertaken, the*
23 *Administrator shall follow the procedures*
24 *for study preparation and independent sci-*
25 *entific review set forth in subparagraphs (1)*

1 *(B) and (C) and (2) of this subsection. The*
2 *Administrator may complete this separate*
3 *study prior to the completion of the broader*
4 *study of hydraulic fracturing required pur-*
5 *suant to subparagraph (A) of this sub-*
6 *section.*

7 *“(ii) At the conclusion of independent*
8 *scientific review for any separate study, the*
9 *Administrator shall determine, pursuant to*
10 *paragraph (3), whether regulation of hy-*
11 *draulic fracturing in the particular type of*
12 *geologic formation addressed in the separate*
13 *study is necessary under this part to ensure*
14 *that underground sources of drinking water*
15 *will not be endangered on a nationwide*
16 *basis, or within a specific region, State or*
17 *portions of a State. Subparagraph (4) of*
18 *this subsection shall apply to any such de-*
19 *termination by the Administrator.*

20 *“(iii) If the Administrator completes a*
21 *separate study, the Administrator may use*
22 *the information gathered in the course of*
23 *such a study in undertaking her broad*
24 *study to the extent appropriate. The broader*
25 *study need not include a reexamination of*

1 *the conclusions reached by the Adminis-*
2 *trator in any separate study.*

3 “(2) *INDEPENDENT SCIENTIFIC REVIEW.*—

4 “(A) *IN GENERAL.*—*Prior to the time the*
5 *study under paragraph (1) is completed, the Ad-*
6 *ministrator shall enter into an appropriate*
7 *agreement with the National Academy of*
8 *Sciences to have the Academy review the conclu-*
9 *sions of the study.*

10 “(B) *REPORT.*—*Not later than 11 months*
11 *after entering into an appropriate agreement*
12 *with the Administrator, the National Academy of*
13 *Sciences shall report to the Administrator, the*
14 *Committee on Energy and Commerce of the*
15 *House of Representatives, and the Committee on*
16 *Environment and Public Works of the Senate, on*
17 *the—*

18 “(i) *findings related to the study con-*
19 *ducted by the Administrator under para-*
20 *graph (1);*

21 “(ii) *the scientific and technical basis*
22 *for such findings; and*

23 “(iii) *recommendations, if any, for*
24 *modifying the findings of the study.*

25 “(3) *REGULATORY DETERMINATION.*—

1 “(A) *IN GENERAL.*—Not later than 6
2 months after receiving the National Academy of
3 Sciences report under paragraph (2), the Admin-
4 istrator shall determine, after informal public
5 hearings and public notice and opportunity for
6 comment, and based on information developed or
7 accumulated in connection with the study re-
8 quired under paragraph (1) and the National
9 Academy of Sciences report under paragraph
10 (2), either—

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

17 “(ii) *that regulation described under*
18 *clause (i) is unnecessary.*

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

23 “(4) *PROMULGATION OF REGULATIONS.*—

24 “(A) *REGULATION NECESSARY.*—*If the Ad-*
25 *ministrator determines under paragraph (3) that*

1 regulation by hydraulic fracturing under this
2 part is necessary to ensure that hydraulic frac-
3 turing does not endanger underground drinking
4 water sources on a nationwide basis, or within
5 a specific region, State or portions of a State,
6 the Administrator shall, within 6 months after
7 the issuance of that determination, and after
8 public notice and opportunity for comment, pro-
9 mulgate regulations under section 1421 (42
10 U.S.C. 300h) to ensure that hydraulic fracturing
11 will not endanger such underground sources of
12 drinking water. However, for purposes of the Ad-
13 ministrators approval or disapproval under sec-
14 tion 1422 of any State underground injection
15 control program for regulating hydraulic frac-
16 turing, a State at any time may make the alter-
17 native demonstration provided for in section
18 1425 of this title.

19 “(B) REGULATION UNNECESSARY.—The Ad-
20 ministrators shall not regulate or require States
21 to regulate hydraulic fracturing under this part
22 unless the Administrator determines under para-
23 graph (3) that such regulation is necessary. This
24 provision shall not apply to any State which has
25 a program for the regulation of hydraulic frac-

1 *turing that was approved by the Administrator*
2 *under this part prior to the effective date of this*
3 *subsection.*

4 “(C) *EXISTING REGULATIONS.*—*A deter-*
5 *mination by the Administrator under paragraph*
6 *(3) that regulation is unnecessary will relieve all*
7 *States (including those with existing approved*
8 *programs for the regulation of hydraulic frac-*
9 *turing) from any further obligation to regulate*
10 *hydraulic fracturing as an underground injec-*
11 *tion under this part.*

12 “(5) *DEFINITION OF HYDRAULIC FRACTURING.*—
13 *For purposes of this subsection, the term ‘hydraulic*
14 *fracturing’ means the process of creating a fracture in*
15 *a reservoir rock, and injecting fluids and propping*
16 *agents, for the purposes of reservoir stimulation re-*
17 *lated to oil and gas production activities.*

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

21 **SEC. 611. AUTHORIZATION OF APPROPRIATIONS.**

22 *There are authorized to be appropriated to the Admin-*
23 *istrator of the Environmental Protection Agency \$100,000*
24 *for fiscal year 2003, to remain available until expended,*
25 *for a grant to the State of Alabama to assist in the imple-*

1 *mentation of its regulatory program under section 1425 of*
2 *the Safe Drinking Water Act.*

3 **SEC. 612. PRESERVATION OF OIL AND GAS RESOURCE**
4 **DATA.**

5 *The Secretary of the Interior, through the United*
6 *States Geological Survey, may enter into appropriate ar-*
7 *rangements with State agencies that conduct geological sur-*
8 *vey activities to collect, archive, and provide public access*
9 *to data and study results regarding oil and natural gas*
10 *resources. The Secretary may accept private contributions*
11 *of property and services for purposes of this section.*

12 **SEC 613. RESOLUTION OF FEDERAL RESOURCE DEVELOP-**
13 **MENT CONFLICTS IN THE POWDER RIVER**
14 **BASIN.**

15 *The Secretary of the Interior shall undertake a review*
16 *of existing authorities to resolve conflicts between the devel-*
17 *opment of Federal coal and the development of Federal and*
18 *non-Federal coalbed methane in the Powder River Basin*
19 *in Wyoming and Montana. Not later than 90 days from*
20 *enactment of this Act, the Secretary shall report to Congress*
21 *on her plan to resolve these conflicts.*

1 **TITLE VII—NATURAL GAS**
2 **PIPELINES**
3 **Subtitle A—Alaska Natural Gas**
4 **Pipeline**

5 **SEC. 701. SHORT TITLE.**

6 *This subtitle may be cited as the “Alaska Natural Gas*
7 *Pipeline Act of 2002”.*

8 **SEC. 702. FINDINGS.**

9 *The Congress finds that:*

10 (1) *Construction of a natural gas pipeline sys-*
11 *tem from the Alaskan North Slope to United States*
12 *markets is in the national interest and will enhance*
13 *national energy security by providing access to the*
14 *significant gas reserves in Alaska needed to meet the*
15 *anticipated demand for natural gas.*

16 (2) *The Commission issued a conditional certifi-*
17 *cate of public convenience and necessity for the Alas-*
18 *ka Natural Gas Transportation System, which re-*
19 *mains in effect.*

20 **SEC. 703. PURPOSES.**

21 *The purposes of this subtitle are—*

22 (1) *to provide a statutory framework for the ex-*
23 *pedited approval, construction, and initial operation*
24 *of an Alaska natural gas transportation project, as*
25 *an alternative to the framework provided in the Alas-*

1 *ka Natural Gas Transportation Act of 1976 (15*
2 *U.S.C. 719–719o), which remains in effect;*

3 *(2) to establish a process for providing access to*
4 *such transportation project in order to promote com-*
5 *petition in the exploration, development and produc-*
6 *tion of Alaska natural gas;*

7 *(3) to clarify Federal authorities under the Alas-*
8 *ka Natural Gas Transportation Act; and*

9 *(4) to authorize Federal financial assistance to*
10 *an Alaska natural gas transportation project as pro-*
11 *vided in this subtitle.*

12 **SEC. 704. ISSUANCE OF CERTIFICATE OF PUBLIC CONVEN-**
13 **IENCE AND NECESSITY.**

14 *(a) AUTHORITY OF THE COMMISSION.—Notwith-*
15 *standing the provisions of the Alaska Natural Gas Trans-*
16 *portation Act of 1976 (15 U.S.C. 719–719o), the Commis-*
17 *sion may, pursuant to section 7(c) of the Natural Gas Act*
18 *(15 U.S.C. 717f(c)), consider and act on an application for*
19 *the issuance of a certificate of public convenience and neces-*
20 *sity authorizing the construction and operation of an Alas-*
21 *ka natural gas transportation project other than the Alaska*
22 *Natural Gas Transportation System.*

23 *(b) ISSUANCE OF CERTIFICATE.—(1) The Commission*
24 *shall issue a certificate of public convenience and necessity*
25 *authorizing the construction and operation of an Alaska*

1 *natural gas transportation project under this section if the*
2 *applicant has satisfied the requirements of section 7(e) of*
3 *the Natural Gas Act (15 U.S.C. 717f(e)).*

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

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

9 (B) *sufficient downstream capacity will exist to*
10 *transport the Alaska natural gas moving through such*
11 *project to markets in the contiguous United States.*

12 (c) *EXPEDITED APPROVAL PROCESS.—The Commis-*
13 *sion shall issue a final order granting or denying any ap-*
14 *plication for a certificate of public convenience and neces-*
15 *sity under section 7(c) of the Natural Gas Act (15 U.S.C.*
16 *717f(c)) and this section not more than 60 days after the*
17 *issuance of the final environmental impact statement for*
18 *that project pursuant to section 705.*

19 (d) *PROHIBITION ON CERTAIN PIPELINE ROUTE.—No*
20 *license, permit, lease, right-of-way, authorization or other*
21 *approval required under Federal law for the construction*
22 *of any pipeline to transport natural gas from lands within*
23 *the Prudhoe Bay oil and gas lease area may be granted*
24 *for any pipeline that follows a route that traverses—*

1 (1) *the submerged lands (as defined by the Sub-*
2 *merged Lands Act) beneath, or the adjacent shoreline*
3 *of, the Beaufort Sea; and*

4 (2) *enters Canada at any point north of 68 de-*
5 *grees North latitude.*

6 (e) *OPEN SEASON.—Except where an expansion is or-*
7 *dered pursuant to section 706, initial or expansion capacity*
8 *on any Alaska natural gas transportation project shall be*
9 *allocated in accordance with procedures to be established*
10 *by the Commission in regulations governing the conduct of*
11 *open seasons for such project. Such procedures shall include*
12 *the criteria for and timing of any open seasons, be con-*
13 *sistent with the purposes set forth in section 703(2) and,*
14 *for any open season for capacity beyond the initial capac-*
15 *ity, provide the opportunity for the transportation of nat-*
16 *ural gas other than from the Prudhoe Bay and Point*
17 *Thompson units. The Commission shall issue such regula-*
18 *tions no later than 120 days after the enactment of this*
19 *subtitle.*

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

1 *constructed pursuant to the Alaska Natural Gas Transpor-*
2 *tation Act of 1976, the provisions of that Act shall continue*
3 *to apply.*

4 (g) *STUDY OF IN-STATE NEEDS.*—*The holder of the*
5 *certificate of public convenience and necessity issued, modi-*
6 *fied, or amended by the Commission for an Alaska natural*
7 *gas transportation project shall demonstrate that it has con-*
8 *ducted a study of Alaska in-State needs, including tie-in*
9 *points along the Alaska natural gas transportation project*
10 *for in-State access.*

11 (h) *ALASKA ROYALTY GAS.*—*The Commission, upon*
12 *the request of the State of Alaska and after a hearing, may*
13 *provide for reasonable access to the Alaska natural gas*
14 *transportation project for the State of Alaska or its designee*
15 *for the transportation of the State’s royalty gas for local*
16 *consumption needs within the State: Provided, That the*
17 *rates of existing shippers of subscribed capacity on such*
18 *project shall not be increased as a result of such access.*

19 (i) *REGULATIONS.*—*The Commission may issue regu-*
20 *lations to carry out the provisions of this section.*

21 **SEC. 705. ENVIRONMENTAL REVIEWS.**

22 (a) *COMPLIANCE WITH NEPA.*—*The issuance of a cer-*
23 *tificate of public convenience and necessity authorizing the*
24 *construction and operation of any Alaska natural gas*
25 *transportation project under section 704 shall be treated as*

1 *a major Federal action significantly affecting the quality*
2 *of the human environment within the meaning of section*
3 *102(2)(C) of the National Environmental Policy Act of*
4 *1969 (42 U.S.C. 4332(2)(C)).*

5 **(b) DESIGNATION OF LEAD AGENCY.**—*The Commis-*
6 *sion shall be the lead agency for purposes of complying with*
7 *the National Environmental Policy Act of 1969, and shall*
8 *be responsible for preparing the statement required by sec-*
9 *tion 102(2)(c) of that Act (42 U.S.C. 4332(2)(c)) with re-*
10 *spect to an Alaska natural gas transportation project under*
11 *section 704. The Commission shall prepare a single environ-*
12 *mental statement under this section, which shall consolidate*
13 *the environmental reviews of all Federal agencies consid-*
14 *ering any aspect of the project.*

15 **(c) OTHER AGENCIES.**—*All Federal agencies consid-*
16 *ering aspects of the construction and operation of an Alaska*
17 *natural gas transportation project under section 704 shall*
18 *cooperate with the Commission, and shall comply with*
19 *deadlines established by the Commission in the preparation*
20 *of the statement under this section. The statement prepared*
21 *under this section shall be used by all such agencies to sat-*
22 *isfy their responsibilities under section 102(2)(C) of the Na-*
23 *tional Environmental Policy Act of 1969 (42 U.S.C.*
24 *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 application*
4 *to be complete and shall issue the final statement not later*
5 *than 6 months after the Commission issues the draft state-*
6 *ment, unless the Commission for good cause finds that addi-*
7 *tional time is needed.*

8 **SEC. 706. PIPELINE EXPANSION.**

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

15 (b) *REQUIREMENTS.*—*Before ordering an expansion*
16 *the Commission shall—*

17 (1) *approve or establish rates for the expansion*
18 *service that are designed to ensure the recovery, on an*
19 *incremental or rolled-in basis, of the cost associated*
20 *with the expansion (including a reasonable rate of re-*
21 *turn on investment);*

22 (2) *ensure that the rates as established do not re-*
23 *quire existing shippers on the Alaska natural gas*
24 *transportation project to subsidize expansion ship-*
25 *pers;*

1 (3) *find that the proposed shipper will comply*
2 *with, and the proposed expansion and the expansion*
3 *of service will be undertaken and implemented based*
4 *on, terms and conditions consistent with the then-ef-*
5 *fective tariff of the Alaska natural gas transportation*
6 *project;*

7 (4) *find that the proposed facilities will not ad-*
8 *versely affect the financial or economic viability of the*
9 *Alaska natural gas transportation project;*

10 (5) *find that the proposed facilities will not ad-*
11 *versely affect the overall operations of the Alaska nat-*
12 *ural gas transportation project;*

13 (6) *find that the proposed facilities will not di-*
14 *minish the contract rights of existing shippers to pre-*
15 *viously subscribed certificated capacity;*

16 (7) *ensure that all necessary environmental re-*
17 *views have been completed; and*

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

21 (c) *REQUIREMENT FOR A FIRM TRANSPORTATION*
22 *AGREEMENT.—Any order of the Commission issued pursu-*
23 *ant to this section shall be null and void unless the person*
24 *or persons requesting the order executes a firm transpor-*
25 *tation agreement with the Alaska natural gas transpor-*

1 *tation project within a reasonable period of time as speci-*
2 *fied in such order.*

3 (d) *LIMITATION.*—*Nothing in this section shall be con-*
4 *strued to expand or otherwise affect any authorities of the*
5 *Commission with respect to any natural gas pipeline lo-*
6 *cated outside the State of Alaska.*

7 (e) *REGULATIONS.*—*The Commission may issue regu-*
8 *lations to carry out the provisions of this section.*

9 **SEC. 707. FEDERAL COORDINATOR.**

10 (a) *ESTABLISHMENT.*—*There is established as an inde-*
11 *pendent establishment in the executive branch, the Office*
12 *of the Federal Coordinator for Alaska Natural Gas Trans-*
13 *portation Projects.*

14 (b) *THE FEDERAL COORDINATOR.*—*The Office shall be*
15 *headed by a Federal Coordinator for Alaska Natural Gas*
16 *Transportation Projects, 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 respon-*
24 *sible 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 (d) *REVIEWS AND ACTIONS OF OTHER FEDERAL*
7 *AGENCIES.—(1) All reviews conducted and actions taken by*
8 *any Federal officer or agency relating to an Alaska natural*
9 *gas transportation project authorized under this section*
10 *shall be expedited, in a manner consistent with completion*
11 *of the necessary reviews and approvals by the deadlines set*
12 *forth in this subtitle.*

13 (2) *No Federal officer or agency shall have the author-*
14 *ity to include terms and conditions that are permitted, but*
15 *not required, by law on any certificate, right-of-way, per-*
16 *mit, lease or other authorization issued to an Alaska nat-*
17 *ural gas transportation project if the Federal Coordinator*
18 *determines that the terms and conditions would prevent or*
19 *impair in any significant respect the expeditious construc-*
20 *tion and operation of the project.*

21 (3) *Unless required by law, no Federal officer or agen-*
22 *cy shall add to, amend, or abrogate any certificate, right-*
23 *of-way, permit, lease or other authorization issued to an*
24 *Alaska natural gas transportation project if the Federal Co-*
25 *ordinator determines that such action would prevent or im-*

1 *pair in any significant respect the expeditious construction*
2 *and operation of the project.*

3 (e) *STATE COORDINATION.*—*The Federal Coordinator*
4 *shall enter into a Joint Surveillance and Monitoring Agree-*
5 *ment, approved by the President and the Governor of Alas-*
6 *ka, with the State of Alaska similar to that in effect during*
7 *construction of the Trans-Alaska Oil Pipeline to monitor*
8 *the construction of the Alaska natural gas transportation*
9 *project. The Federal Government shall have primary sur-*
10 *veillance and monitoring responsibility where the Alaska*
11 *natural gas transportation project crosses Federal lands*
12 *and private lands, and the State government shall have pri-*
13 *mary surveillance and monitoring responsibility where the*
14 *Alaska natural gas transportation project crosses State*
15 *lands.*

16 **SEC. 708. JUDICIAL REVIEW.**

17 (a) *EXCLUSIVE JURISDICTION.*—*The United States*
18 *Court of Appeals for the District of Columbia Circuit shall*
19 *have exclusive jurisdiction to determine—*

20 (1) *the validity of any final order or action (in-*
21 *cluding a failure to act) of any Federal agency or of-*
22 *ficer under this subtitle;*

23 (2) *the constitutionality of any provision of this*
24 *subtitle, or any decision made or action taken there-*
25 *under; or*

1 (3) *the adequacy of any environmental impact*
2 *statement prepared under the National Environ-*
3 *mental Policy Act of 1969 with respect to any action*
4 *under this subtitle.*

5 (b) *DEADLINE FOR FILING CLAIM.—Claims arising*
6 *under this subtitle may be brought not later than 60 days*
7 *after the date of the decision or action giving rise to the*
8 *claim.*

9 (c) *EXPEDITED CONSIDERATION.—The United States*
10 *Court of Appeals for the District of Columbia Circuit shall*
11 *set any action brought under subsection (a) of this section*
12 *for expedited consideration, taking into account the na-*
13 *tional interest as described in section 702 of this subtitle.*

14 (d) *AMENDMENT TO ANGTA.—Section 10(c) of the*
15 *Alaska Gas Transportation Act of 1976 (15 U.S.C. 719h)*
16 *is amended by adding the following paragraph:*

17 “(2) *EXPEDITED CONSIDERATION.—The United*
18 *States Court of Appeals for the District of Columbia*
19 *Circuit shall set any action brought under subsection*
20 *(a) of this section for expedited consideration, taking*
21 *into account the national interest described in section*
22 *2 of this Act.”.*

1 **SEC. 709. STATE JURISDICTION OVER IN-STATE DELIVERY**
2 **OF NATURAL GAS.**

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

10 (b) *ADDITIONAL PIPELINES.*—Nothing in this subtitle,
11 except as provided in subsection 704(d), shall preclude or
12 affect a future gas pipeline that may be constructed to de-
13 liver natural gas to Fairbanks, Anchorage, Matanuska-
14 Susitna Valley, or the Kenai peninsula or Valdez or any
15 other site in the State of Alaska for consumption within
16 or distribution outside the State of Alaska.

17 (c) *RATE COORDINATION.*—Pursuant to the Natural
18 Gas Act, the Commission shall establish rates for the trans-
19 portation of natural gas on the Alaska natural gas trans-
20 portation project. In exercising such authority, the Commis-
21 sion, pursuant to Section 17(b) of the Natural Gas Act (15
22 U.S.C. 717p), shall confer with the State of Alaska regard-
23 ing rates (including rate settlements) applicable to natural
24 gas transported on and delivered from the Alaska natural
25 gas transportation project for use within the State of Alas-
26 ka.

1 **SEC. 710. LOAN GUARANTEE.**

2 (a) *AUTHORITY.*—*The Secretary of Energy may guar-*
3 *antee not more than 80 percent of the principal of any loan*
4 *made to the holder of a certificate of public convenience and*
5 *necessity issued under section 704(b) of this Act or section*
6 *9 of the Alaska Natural Gas Transportation Act of 1976*
7 *(15 U.S.C. 719g) for the purpose of constructing an Alaska*
8 *natural gas transportation project.*

9 (b) *CONDITIONS.*—(1) *The Secretary of Energy may*
10 *not guarantee a loan under this section unless the guarantee*
11 *has filed an application for a certificate of public conven-*
12 *ience and necessity under section 704(b) of this Act or for*
13 *an amended certificate under section 9 of the Alaska Nat-*
14 *ural Gas Transportation Act of 1976 (15 U.S.C. 719g) with*
15 *the Commission not later than 18 months after the date of*
16 *enactment of this subtitle.*

17 (2) *A loan guaranteed under this section shall be made*
18 *by a financial institution subject to the examination of the*
19 *Secretary.*

20 (3) *Loan requirements, including term, maximum size,*
21 *collateral requirements and other features shall be deter-*
22 *mined by the Secretary.*

23 (c) *LIMITATION ON AMOUNT.*—*Commitments to guar-*
24 *antee loans may be made by the Secretary of Energy only*
25 *to the extent that the total loan principal, any part of which*
26 *is guaranteed, will not exceed \$10,000,000,000.*

1 (d) *REGULATIONS.*—*The Secretary of Energy may*
2 *issue regulations to carry out the provisions of this section.*

3 (e) *AUTHORIZATION OF APPROPRIATIONS.*—*There are*
4 *authorized to be appropriated to the Secretary such sums*
5 *as may be necessary to cover the cost of loan guarantees,*
6 *as defined by section 502(5) of the Federal Credit Reform*
7 *Act of 1990 (2 U.S.C. 661a(5)).*

8 **SEC. 711. STUDY OF ALTERNATIVE MEANS OF CONSTRUC-**
9 **TION.**

10 (a) *REQUIREMENT OF STUDY.*—*If no application for*
11 *the issuance of a certificate or amended certificate of public*
12 *convenience and necessity authorizing the construction and*
13 *operation of an Alaska natural gas transportation project*
14 *has been filed with the Commission within 18 months after*
15 *the date of enactment of this title, the Secretary of Energy*
16 *shall conduct a study of alternative approaches to the con-*
17 *struction and operation of the project.*

18 (b) *SCOPE OF STUDY.*—*The study shall consider the*
19 *feasibility of establishing a Government corporation to con-*
20 *struct an Alaska natural gas transportation project, and*
21 *alternative means of providing Federal financing and own-*
22 *ership (including alternative combinations of Government*
23 *and private corporate ownership) of the project.*

24 (c) *CONSULTATION.*—*In conducting the study, the Sec-*
25 *retary of Energy shall consult with the Secretary of the*

1 *Treasury and the Secretary of the Army (acting through*
2 *the Commanding General of the Corps of Engineers).*

3 (d) *REPORT.*—*If the Secretary of Energy is required*
4 *to conduct a study under subsection (a), he shall submit*
5 *a report containing the results of the study, his rec-*
6 *ommendations, and any proposals for legislation to imple-*
7 *ment his recommendations to the Congress within 6 months*
8 *after the expiration of the Secretary of Energy’s authority*
9 *to guarantee a loan under section 710.*

10 **SEC. 712. CLARIFICATION OF ANGTA STATUS AND AUTHORI-**
11 **TIES.**

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

18 (b) *CLARIFICATION OF AUTHORITY TO AMEND TERMS*
19 *AND CONDITIONS TO MEET CURRENT PROJECT REQUIRE-*
20 *MENTS.*—*Any Federal officer or agency responsible for*
21 *granting or issuing any certificate, permit, right-of-way,*
22 *lease, or other authorization under section 9 of the Alaska*
23 *Natural Gas Transportation Act of 1976 (15 U.S.C. 719g)*
24 *may add to, amend, or abrogate any term or condition in-*
25 *cluded in such certificate, permit, right-of-way, lease, or*

1 *other authorization to meet current project requirements*
2 *(including the physical design, facilities, and tariff speci-*
3 *fications), so long as such action does not compel a change*
4 *in the basic nature and general route of the Alaska Natural*
5 *Gas Transportation System as designated and described in*
6 *section 2 of the President’s Decision, or would otherwise*
7 *prevent or impair in any significant respect the expeditious*
8 *construction and initial operation of such transportation*
9 *system.*

10 *(c) UPDATED ENVIRONMENTAL REVIEWS.—The Sec-*
11 *retary of Energy shall require the sponsor of the Alaska*
12 *Natural Gas Transportation System to submit such up-*
13 *dated environmental data, reports, permits, and impact*
14 *analyses as the Secretary determines are necessary to de-*
15 *velop detailed terms, conditions, and compliance plans re-*
16 *quired by section 5 of the President’s Decision.*

17 **SEC. 713. DEFINITIONS.**

18 *For purposes of this subtitle:*

19 *(1) The term “Alaska natural gas” means nat-*
20 *ural gas derived from the area of the State of Alaska*
21 *lying north of 64 degrees North latitude.*

22 *(2) The term “Alaska natural gas transportation*
23 *project” means any natural gas pipeline system that*
24 *carries Alaska natural gas to the border between Alas-*
25 *ka and Canada (including related facilities subject to*

1 *the jurisdiction of the Commission) that is authorized*
2 *under either—*

3 *(A) the Alaska Natural Gas Transportation*
4 *Act of 1976 (15 U.S.C. 719–719o); or*

5 *(B) section 704 of this subtitle.*

6 *(3) The term “Alaska Natural Gas Transpor-*
7 *tation System” means the Alaska natural gas trans-*
8 *portation project authorized under the Alaska Natural*
9 *Gas Transportation Act of 1976 and designated and*
10 *described in section 2 of the President’s Decision.*

11 *(4) The term “Commission” means the Federal*
12 *Energy Regulatory Commission.*

13 *(5) The term “President’s Decision” means the*
14 *Decision and Report to Congress on the Alaska Nat-*
15 *ural Gas Transportation system issued by the Presi-*
16 *dent on September 22, 1977 pursuant to section 7 of*
17 *the Alaska Natural Gas Transportation Act of 1976*
18 *(15 U.S.C. 719c) and approved by Public Law 95–*
19 *158.*

20 **SEC. 714. SENSE OF THE SENATE.**

21 *It is the sense of the Senate that an Alaska natural*
22 *gas transportation project will provide significant economic*
23 *benefits to the United States and Canada. In order to maxi-*
24 *mize those benefits, the Senate urges the sponsors of the*
25 *pipeline project to make every effort to use steel that is man-*

1 *ufactured or produced in North America and to negotiate*
2 *a project labor agreement to expedite construction of the*
3 *pipeline.*

4 **SEC. 715. ALASKAN PIPELINE CONSTRUCTION TRAINING**
5 **PROGRAM.**

6 *(a) Within six months after enactment of this Act, the*
7 *Secretary of Labor (in this section referred to as the “Sec-*
8 *retary”)* shall submit a report to the Committee on Energy
9 *and Natural Resources of the United States Senate and the*
10 *Committee on Resources of the United States House of Rep-*
11 *resentatives setting forth a program to train Alaska resi-*
12 *dents in the skills and crafts required in the design, con-*
13 *struction, and operation of an Alaska gas pipeline system*
14 *and that will enhance employment and contracting oppor-*
15 *tunities for Alaskan residents. The report shall also describe*
16 *any laws, rules, regulations and policies which act as a de-*
17 *terrent to hiring Alaskan residents or contracting with*
18 *Alaskan residents to perform work on Alaska gas pipelines,*
19 *together with any recommendations for change. For pur-*
20 *poses of this subsection, Alaskan residents shall be defined*
21 *as those individuals eligible to vote within the State of Alas-*
22 *ka on the date of enactment of this Act.*

23 *(b) Within 1 year of the date the report is transmitted*
24 *to Congress, the Secretary shall establish within the State*
25 *of Alaska, at such locations as are appropriate, one or more*

1 *training centers for the express purpose of training Alaskan*
 2 *residents in the skills and crafts necessary in the design,*
 3 *construction and operation of gas pipelines in Alaska. Each*
 4 *such training center shall also train Alaskan residents in*
 5 *the skills required to write, offer, and monitor contracts in*
 6 *support of the design, construction, and operation of Alaska*
 7 *gas pipelines.*

8 *(c) In implementing the report and program described*
 9 *in this subsection, the Secretary shall consult with the Alas-*
 10 *kan Governor.*

11 *(d) There are authorized to be appropriated to the Sec-*
 12 *retary such sums as may be necessary, but not to exceed*
 13 *\$20,000,000 for the purposes of this subsection.*

14 ***Subtitle B—Operating Pipelines***

15 ***SEC. 721. ENVIRONMENTAL REVIEW AND PERMITTING OF*** 16 ***NATURAL GAS PIPELINE PROJECTS.***

17 *(a) INTERAGENCY REVIEW.—The Chairman of the*
 18 *Council on Environmental Quality, in coordination with*
 19 *the Federal Energy Regulatory Commission, shall establish*
 20 *an interagency task force to develop an interagency memo-*
 21 *randum of understanding to expedite the environmental re-*
 22 *view and permitting of natural gas pipeline projects.*

23 *(b) MEMBERSHIP OF INTERAGENCY TASK FORCE.—*
 24 *The task force shall consist of—*

1 (1) *the Chairman of the Council on Environ-*
2 *mental Quality, who shall serve as the Chairman of*
3 *the interagency task force,*

4 (2) *the Chairman of the Federal Energy Regu-*
5 *latory Commission,*

6 (3) *the Director of the Bureau of Land Manage-*
7 *ment,*

8 (4) *the Director of the United States Fish and*
9 *Wildlife Service,*

10 (5) *the Commanding General, United States*
11 *Army Corps of Engineers,*

12 (6) *the Chief of the Forest Service,*

13 (7) *the Administrator of the Environmental Pro-*
14 *tection Agency,*

15 (8) *the Chairman of the Advisory Council on*
16 *Historic Preservation, and*

17 (9) *the heads of such other agencies as the Chair-*
18 *man of the Council on Environmental Quality and*
19 *the Chairman of the Federal Energy Regulatory Com-*
20 *mission deem appropriate.*

21 (c) *MEMORANDUM OF UNDERSTANDING.—The agencies*
22 *represented by the members of the interagency task force*
23 *shall enter into the memorandum of understanding not*
24 *later than 1 year after the date of the enactment of this*
25 *section.*

1 **Subtitle C—Pipeline Safety**
2 **PART I—SHORT TITLE; AMENDMENT OF**
3 **TITLE 49**

4 **SEC. 741. SHORT TITLE; AMENDMENT OF TITLE 49, UNITED**
5 **STATES CODE.**

6 (a) *SHORT TITLE.*—This subtitle may be cited as the
7 “Pipeline Safety Improvement Act of 2002”.

8 (b) *AMENDMENT OF TITLE 49, UNITED STATES*
9 *CODE.*—Except as otherwise expressly provided, whenever
10 in this subtitle an amendment or repeal is expressed in
11 terms of an amendment to, or a repeal of, a section or other
12 provision, the reference shall be considered to be made to
13 a section or other provision of title 49, United States Code.

14 **PART II—PIPELINE SAFETY**
15 **IMPROVEMENT ACT OF 2002**

16 **SEC. 761. IMPLEMENTATION OF INSPECTOR GENERAL REC-**
17 **COMMENDATIONS.**

18 (a) *IN GENERAL.*—Except as otherwise required by
19 this subtitle, the Secretary shall implement the safety im-
20 provement recommendations provided for in the Depart-
21 ment of Transportation Inspector General’s Report (RT-
22 2000–069).

23 (b) *REPORTS BY THE SECRETARY.*—Not later than 90
24 days after the date of enactment of this Act, and every 90
25 days thereafter until each of the recommendations referred

1 *to in subsection (a) has been implemented, the Secretary*
2 *shall transmit to the Committee on Commerce, Science, and*
3 *Transportation of the Senate and the Committee on Trans-*
4 *portation and Infrastructure of the House of Representa-*
5 *tives a report on the specific actions taken to implement*
6 *such recommendations.*

7 (c) *REPORTS BY THE INSPECTOR GENERAL.—The In-*
8 *spector General shall periodically transmit to the commit-*
9 *tees referred to in subsection (b) a report assessing the Sec-*
10 *retary’s progress in implementing the recommendations re-*
11 *ferred to in subsection (a) and identifying options for the*
12 *Secretary to consider in accelerating recommendation im-*
13 *plementation.*

14 **SEC. 762. NTSB SAFETY RECOMMENDATIONS.**

15 (a) *IN GENERAL.—The Secretary of Transportation,*
16 *the Administrator of Research and Special Program Ad-*
17 *ministration, and the Director of the Office of Pipeline*
18 *Safety shall fully comply with section 1135 of title 49,*
19 *United States Code, to ensure timely responsiveness to Na-*
20 *tional Transportation Safety Board recommendations*
21 *about pipeline safety.*

22 (b) *PUBLIC AVAILABILITY.—The Secretary, Adminis-*
23 *trator, or Director, respectively, shall make a copy of each*
24 *recommendation on pipeline safety and response, as de-*

1 *scribed in sections 1135 (a) and (b) of title 49, United*
2 *States Code, available to the public at reasonable cost.*

3 *(c) REPORTS TO CONGRESS.—The Secretary, Admin-*
4 *istrator, or Director, respectively, shall submit to the Con-*
5 *gress by January 1 of each year a report containing each*
6 *recommendation on pipeline safety made by the Board dur-*
7 *ing the prior year and a copy of the response to each such*
8 *recommendation.*

9 **SEC. 763. QUALIFICATIONS OF PIPELINE PERSONNEL.**

10 *(a) QUALIFICATION PLAN.—Each pipeline operator*
11 *shall make available to the Secretary of Transportation, or,*
12 *in the case of an intrastate pipeline facility operator, the*
13 *appropriate State regulatory agency, a plan that is de-*
14 *signed to enhance the qualifications of pipeline personnel*
15 *and to reduce the likelihood of accidents and injuries. The*
16 *plan shall be made available not more than 6 months after*
17 *the date of enactment of this Act, and the operator shall*
18 *revise or update the plan as appropriate.*

19 *(b) REQUIREMENTS.—The enhanced qualification plan*
20 *shall include, at a minimum, criteria to demonstrate the*
21 *ability of an individual to safely and properly perform*
22 *tasks identified under section 60102 of title 49, United*
23 *States Code. The plan shall also provide for training and*
24 *periodic reexamination of pipeline personnel qualifications*
25 *and provide for requalification as appropriate. The Sec-*

1 *retary, or, in the case of an intrastate pipeline facility oper-*
2 *ator, the appropriate State regulatory agency, may review*
3 *and certify the plans to determine if they are sufficient to*
4 *provide a safe operating environment and shall periodically*
5 *review the plans to ensure the continuation of a safe oper-*
6 *ation. The Secretary may establish minimum standards for*
7 *pipeline personnel training and evaluation, which may in-*
8 *clude written examination, oral examination, work per-*
9 *formance history review, observation during performance*
10 *on the job, on the job training, simulations, or other forms*
11 *of assessment.*

12 *(c) REPORT TO CONGRESS.—*

13 *(1) IN GENERAL.—The Secretary shall submit a*
14 *report to the Congress evaluating the effectiveness of*
15 *operator qualification and training efforts,*
16 *including—*

17 *(A) actions taken by inspectors;*

18 *(B) recommendations made by inspectors*
19 *for changes to operator qualification and train-*
20 *ing programs; and*

21 *(C) industry and employee organization re-*
22 *sponses to those actions and recommendations.*

23 *(2) CRITERIA.—The Secretary may establish cri-*
24 *teria for use in evaluating and reporting on operator*

1 *qualification and training for purposes of this sub-*
2 *section.*

3 (3) *DUE DATE.*—*The Secretary shall submit the*
4 *report required by paragraph (1) to the Congress 3*
5 *years after the date of enactment of this Act.*

6 **SEC. 764. PIPELINE INTEGRITY INSPECTION PROGRAM.**

7 *Section 60109 is amended by adding at the end the*
8 *following:*

9 “(c) *INTEGRITY MANAGEMENT.*—

10 “(1) *GENERAL REQUIREMENT.*—*The Secretary*
11 *shall promulgate regulations requiring operators of*
12 *hazardous liquid pipelines and natural gas trans-*
13 *mission pipelines to evaluate the risks to the opera-*
14 *tor’s pipeline facilities in areas identified pursuant to*
15 *subsection (a)(1), and to adopt and implement a pro-*
16 *gram for integrity management that reduces the risk*
17 *of an incident in those areas. The regulations shall be*
18 *issued no later than 1 year after the Secretary has*
19 *issued standards pursuant to subsections (a) and (b)*
20 *of this section or by December 31, 2003, whichever is*
21 *sooner.*

22 “(2) *STANDARDS FOR PROGRAM.*—*In promul-*
23 *gating regulations under this section, the Secretary*
24 *shall require an operator’s integrity management*

1 *plan to be based on risk analysis and each plan shall*
2 *include, at a minimum—*

3 *“(A) periodic assessment of the integrity of*
4 *the pipeline through methods including internal*
5 *inspection, pressure testing, direct assessment, or*
6 *other effective methods. The assessment period*
7 *shall be no less than every 5 years unless the De-*
8 *partment of Transportation Inspector General,*
9 *after consultation with the Secretary determines*
10 *there is not a sufficient capability or it is*
11 *deemed unnecessary because of more technically*
12 *appropriate monitoring or creates undue inter-*
13 *ruption of necessary supply to fulfill the require-*
14 *ments under this paragraph;*

15 *“(B) clearly defined criteria for evaluating*
16 *the results of the periodic assessment methods*
17 *carried out under subparagraph (A) and proce-*
18 *dures to ensure identified problems are corrected*
19 *in a timely manner; and*

20 *“(C) measures, as appropriate, that prevent*
21 *and mitigate unintended releases, such as leak*
22 *detection, integrity evaluation, restrictive flow*
23 *devices, or other measures.*

24 *“(3) CRITERIA FOR PROGRAM STANDARDS.—In*
25 *deciding how frequently the integrity assessment*

1 *methods carried out under paragraph (2)(A) must be*
2 *conducted, an operator shall take into account the po-*
3 *tential for new defects developing or previously identi-*
4 *fied structural defects caused by construction or in-*
5 *stallation, the operational characteristics of the pipe-*
6 *line, and leak history. In addition, the Secretary may*
7 *establish a minimum testing requirement for opera-*
8 *tors of pipelines to conduct internal inspections.*

9 *“(4) STATE ROLE.—A State authority that has*
10 *an agreement in effect with the Secretary under sec-*
11 *tion 60106 is authorized to review and assess an op-*
12 *erator’s risk analyses and integrity management*
13 *plans required under this section for interstate pipe-*
14 *lines located in that State. The reviewing State au-*
15 *thority shall provide the Secretary with a written as-*
16 *essment of the plans, make recommendations, as ap-*
17 *propriate, to address safety concerns not adequately*
18 *addressed in the operator’s plans, and submit docu-*
19 *mentation explaining the State-proposed plan revi-*
20 *sions. The Secretary shall carefully consider the*
21 *State’s proposals and work in consultation with the*
22 *States and operators to address safety concerns.*

23 *“(5) MONITORING IMPLEMENTATION.—The Sec-*
24 *retary of Transportation shall review the risk anal-*
25 *ysis and program for integrity management required*

1 *under this section and provide for continued moni-*
2 *toring of such plans. Not later than 2 years after the*
3 *implementation of integrity management plans under*
4 *this section, the Secretary shall complete an assess-*
5 *ment and evaluation of the effects on safety and the*
6 *environment of extending all of the requirements*
7 *mandated by the regulations described in paragraph*
8 *(1) to additional areas. The Secretary shall submit*
9 *the assessment and evaluation to Congress along with*
10 *any recommendations to improve and expand the uti-*
11 *lization of integrity management plans.*

12 *“(6) OPPORTUNITY FOR LOCAL INPUT ON INTEG-*
13 *RITY MANAGEMENT.—Within 18 months after the date*
14 *of enactment of the Pipeline Safety Improvement Act*
15 *of 2002, the Secretary shall, by regulation, establish*
16 *a process for raising and addressing local safety con-*
17 *cerns about pipeline integrity and the operator’s pipe-*
18 *line integrity plan. The process shall include—*

19 *“(A) a requirement that an operator of a*
20 *hazardous liquid or natural gas transmission*
21 *pipeline facility provide information about the*
22 *risk analysis and integrity management plan re-*
23 *quired under this section to local officials in a*
24 *State in which the facility is located;*

1 “(B) a description of the local officials re-
2 quired to be informed, the information that is to
3 be provided to them and the manner, which may
4 include traditional or electronic means, in which
5 it is provided;

6 “(C) the means for receiving input from the
7 local officials that may include a public forum
8 sponsored by the Secretary or by the State, or
9 the submission of written comments through tra-
10 ditional or electronic means;

11 “(D) the extent to which an operator of a
12 pipeline facility must participate in a public
13 forum sponsored by the Secretary or in another
14 means for receiving input from the local officials
15 or in the evaluation of that input; and

16 “(E) the manner in which the Secretary
17 will notify the local officials about how their con-
18 cerns are being addressed.”.

19 **SEC. 765. ENFORCEMENT.**

20 (a) *IN GENERAL.*—Section 60112 is amended—

21 (1) by striking subsection (a) and inserting the
22 following:

23 “(a) *GENERAL AUTHORITY.*—After notice and an op-
24 portunity for a hearing, the Secretary of Transportation

1 *may decide a pipeline facility is hazardous if the Secretary*
 2 *decides that—*

3 *“(1) operation of the facility is or would be haz-*
 4 *ardous to life, property, or the environment; or*

5 *“(2) the facility is, or would be, constructed or*
 6 *operated, or a component of the facility is, or would*
 7 *be, constructed or operated with equipment, material,*
 8 *or a technique that the Secretary decides is hazardous*
 9 *to life, property, or the environment.”; and*

10 *(2) by striking “is hazardous,” in subsection (d)*
 11 *and inserting “is, or would be, hazardous,”.*

12 **SEC. 766. PUBLIC EDUCATION, EMERGENCY PREPARED-**
 13 **NESS, AND COMMUNITY RIGHT-TO-KNOW.**

14 *(a) Section 60116 is amended to read as follows:*

15 **“§60116. Public education, emergency preparedness,**
 16 **and community right-to-know**

17 *“(a) PUBLIC EDUCATION PROGRAMS.—(1) Each*
 18 *owner or operator of a gas or hazardous liquid pipeline fa-*
 19 *cility shall carry out a continuing program to educate the*
 20 *public on the use of a one-call notification system prior to*
 21 *excavation and other damage prevention activities, the pos-*
 22 *sible hazards associated with unintended releases from the*
 23 *pipeline facility, the physical indications that such a re-*
 24 *lease may have occurred, what steps should be taken for*

1 *public safety in the event of a pipeline release, and how*
2 *to report such an event.*

3 “(2) *Within 12 months after the date of enactment of*
4 *the Pipeline Safety Improvement Act of 2002, each owner*
5 *or operator of a gas or hazardous liquid pipeline facility*
6 *shall review its existing public education program for effec-*
7 *tiveness and modify the program as necessary. The com-*
8 *pleted program shall include activities to advise affected*
9 *municipalities, school districts, businesses, and residents of*
10 *pipeline facility locations. The completed program shall be*
11 *submitted to the Secretary or, in the case of an intrastate*
12 *pipeline facility operator, the appropriate State agency and*
13 *shall be periodically reviewed by the Secretary or, in the*
14 *case of an intrastate pipeline facility operator, the appro-*
15 *priate State agency.*

16 “(3) *The Secretary may issue standards prescribing*
17 *the elements of an effective public education program. The*
18 *Secretary may also develop material for use in the program.*

19 “(b) *EMERGENCY PREPAREDNESS.—*

20 “(1) *OPERATOR LIAISON.—Within 12 months*
21 *after the date of enactment of the Pipeline Safety Im-*
22 *provement Act of 2002, an operator of a gas trans-*
23 *mission or hazardous liquid pipeline facility shall*
24 *initiate and maintain liaison with the State emer-*
25 *gency response commissions, and local emergency*

1 *planning committees in the areas of pipeline right-of-*
2 *way, established under section 301 of the Emergency*
3 *Planning and Community Right-To-Know Act of*
4 *1986 (42 U.S.C. 11001) in each State in which it op-*
5 *erates.*

6 “(2) *INFORMATION.*—*An operator shall, upon re-*
7 *quest, make available to the State emergency response*
8 *commissions and local emergency planning commit-*
9 *tees, and shall make available to the Office of Pipeline*
10 *Safety in a standardized form for the purpose of pro-*
11 *viding the information to the public, the information*
12 *described in section 60102(d), the operator’s program*
13 *for integrity management, and information about im-*
14 *plementation of that program. The information about*
15 *the facility shall also include, at a minimum—*

16 “(A) *the business name, address, telephone*
17 *number of the operator, including a 24-hour*
18 *emergency contact number;*

19 “(B) *a description of the facility, including*
20 *pipe diameter, the product or products carried,*
21 *and the operating pressure;*

22 “(C) *with respect to transmission pipeline*
23 *facilities, maps showing the location of the facil-*
24 *ity and, when available, any high consequence*

1 *areas which the pipeline facility traverses or ad-*
2 *joins and abuts;*

3 “(D) *a summary description of the integ-*
4 *riety measures the operator uses to assure safety*
5 *and protection for the environment; and*

6 “(E) *a point of contact to respond to ques-*
7 *tions from emergency response representative.*

8 “(3) *SMALLER COMMUNITIES.—In a community*
9 *without a local emergency planning committee, the*
10 *operator shall maintain liaison with the local fire,*
11 *police, and other emergency response agencies.*

12 “(4) *PUBLIC ACCESS.—The Secretary shall pre-*
13 *scribe requirements for public access, as appropriate,*
14 *to this information, including a requirement that the*
15 *information be made available to the public by widely*
16 *accessible computerized database.*

17 “(c) *COMMUNITY RIGHT-TO-KNOW.—Not later than 12*
18 *months after the date of enactment of the Pipeline Safety*
19 *Improvement Act of 2002, and annually thereafter, the*
20 *owner or operator of each gas transmission or hazardous*
21 *liquid pipeline facility shall provide to the governing body*
22 *of each municipality in which the pipeline facility is lo-*
23 *cated, a map identifying the location of such facility. The*
24 *map may be provided in electronic form. The Secretary*
25 *may provide technical assistance to the pipeline industry*

1 *on developing public safety and public education program*
2 *content and best practices for program delivery, and on*
3 *evaluating the effectiveness of the programs. The Secretary*
4 *may also provide technical assistance to State and local of-*
5 *ficials in applying practices developed in these programs*
6 *to their activities to promote pipeline safety.*

7 “(d) *PUBLIC AVAILABILITY OF REPORTS.—The Sec-*
8 *retary shall—*

9 “(1) *make available to the public—*

10 “(A) *a safety-related condition report filed*
11 *by an operator under section 60102(h);*

12 “(B) *a report of a pipeline incident filed by*
13 *an operator;*

14 “(C) *the results of any inspection by the Of-*
15 *fice of Pipeline Safety or a State regulatory offi-*
16 *cial; and*

17 “(D) *a description of any corrective action*
18 *taken in response to a safety-related condition*
19 *reported under subparagraph (A), (B), or (C);*
20 *and*

21 “(2) *prescribe requirements for public access, as*
22 *appropriate, to integrity management program infor-*
23 *mation prepared under this chapter, including re-*
24 *quirements that will ensure data accessibility to the*
25 *greatest extent feasible.”.*

1 (b) *SAFETY CONDITION REPORTS.*—Section
 2 60102(h)(2) is amended by striking “authorities.” and in-
 3 serting “officials, including the local emergency respond-
 4 ers.”.

5 (c) *CONFORMING AMENDMENT.*—The chapter analysis
 6 for chapter 601 is amended by striking the item relating
 7 to section 60116 and inserting the following:

“60116. Public education, emergency preparedness, community right-to-know.”.

8 **SEC. 767. PENALTIES.**

9 (a) *CIVIL PENALTIES.*—Section 60122 is amended—

10 (1) by striking “\$25,000” in subsection (a)(1)
 11 and inserting “\$500,000”;

12 (2) by striking “\$500,000” in subsection (a)(1)
 13 and inserting “\$1,000,000”;

14 (3) by adding at the end of subsection (a)(1) the
 15 following: “The preceding sentence does not apply to
 16 judicial enforcement action under section 60120 or
 17 60121.”; and

18 (4) by striking subsection (b) and inserting the
 19 following:

20 “(b) *PENALTY CONSIDERATIONS.*—In determining the
 21 amount of a civil penalty under this section—

22 “(1) the Secretary shall consider—

23 “(A) the nature, circumstances, and gravity
 24 of the violation, including adverse impact on the
 25 environment;

1 “(B) with respect to the violator, the degree
2 of culpability, any history of prior violations,
3 the ability to pay, any effect on ability to con-
4 tinue doing business; and

5 “(C) good faith in attempting to comply;
6 and

7 “(2) the Secretary may consider—

8 “(A) the economic benefit gained from the
9 violation without any discount because of subse-
10 quent damages; and

11 “(B) other matters that justice requires.”.

12 (b) *EXCAVATOR DAMAGE*.—Section 60123(d) is
13 amended—

14 (1) by striking “knowingly and willfully”;

15 (2) by inserting “knowingly and willfully” before
16 “engages” in paragraph (1); and

17 (3) striking paragraph (2)(B) and inserting the
18 following:

19 “(B) a pipeline facility, is aware of dam-
20 age, and does not report the damage promptly to
21 the operator of the pipeline facility and to other
22 appropriate authorities; or”.

23 (c) *CIVIL ACTIONS*.—Section 60120(a)(1) is amended
24 to read as follows:

1 “(1) *On the request of the Secretary of Transportation,*
2 *the Attorney General may bring a civil action in an appro-*
3 *priate district court of the United States to enforce this*
4 *chapter, including section 60112 of this chapter, or a regu-*
5 *lation prescribed or order issued under this chapter. The*
6 *court may award appropriate relief, including a temporary*
7 *or permanent injunction, punitive damages, and assessment*
8 *of civil penalties considering the same factors as prescribed*
9 *for the Secretary in an administrative case under section*
10 *60122.”.*

11 **SEC. 768. STATE OVERSIGHT ROLE.**

12 (a) *STATE AGREEMENTS WITH CERTIFICATION.*—*Sec-*
13 *tion 60106 is amended—*

14 (1) *by striking “GENERAL AUTHORITY.—” in*
15 *subsection (a) and inserting “AGREEMENTS WITHOUT*
16 *CERTIFICATION.—”;*

17 (2) *by redesignating subsections (b), (c), and (d)*
18 *as subsections (c), (d), and (e); and*

19 (3) *by inserting after subsection (a) the fol-*
20 *lowing:*

21 “(b) *AGREEMENTS WITH CERTIFICATION.*—

22 “(1) *IN GENERAL.*—*If the Secretary accepts a*
23 *certification under section 60105 of this title and*
24 *makes the determination required under this sub-*
25 *section, the Secretary may make an agreement with*

1 *a State authority authorizing it to participate in the*
2 *oversight of interstate pipeline transportation. Each*
3 *such agreement shall include a plan for the State au-*
4 *thority to participate in special investigations involv-*
5 *ing incidents or new construction and allow the State*
6 *authority to participate in other activities overseeing*
7 *interstate pipeline transportation or to assume addi-*
8 *tional inspection or investigatory duties. Nothing in*
9 *this section modifies section 60104(c) or authorizes*
10 *the Secretary to delegate the enforcement of safety*
11 *standards prescribed under this chapter to a State*
12 *authority.*

13 *“(2) DETERMINATIONS REQUIRED.—The Sec-*
14 *retary may not enter into an agreement under this*
15 *subsection, unless the Secretary determines that—*

16 *“(A) the agreement allowing participation*
17 *of the State authority is consistent with the Sec-*
18 *retary’s program for inspection and consistent*
19 *with the safety policies and provisions provided*
20 *under this chapter;*

21 *“(B) the interstate participation agreement*
22 *would not adversely affect the oversight respon-*
23 *sibilities of intrastate pipeline transportation by*
24 *the State authority;*

1 “(C) the State is carrying out a program
2 demonstrated to promote preparedness and risk
3 prevention activities that enable communities to
4 live safely with pipelines;

5 “(D) the State meets the minimum stand-
6 ards for State one-call notification set forth in
7 chapter 61; and

8 “(E) the actions planned under the agree-
9 ment would not impede interstate commerce or
10 jeopardize public safety.

11 “(3) *EXISTING AGREEMENTS.*—If requested by
12 the State authority, the Secretary shall authorize a
13 State authority which had an interstate agreement in
14 effect after January 1999, to oversee interstate pipe-
15 line transportation pursuant to the terms of that
16 agreement until the Secretary determines that the
17 State meets the requirements of paragraph (2) and
18 executes a new agreement, or until December 31,
19 2003, whichever is sooner. Nothing in this paragraph
20 shall prevent the Secretary, after affording the State
21 notice, hearing, and an opportunity to correct any al-
22 leged deficiencies, from terminating an agreement
23 that was in effect before enactment of the Pipeline
24 Safety Improvement Act of 2002 if—

1 “(A) the State authority fails to comply
2 with the terms of the agreement;

3 “(B) implementation of the agreement has
4 resulted in a gap in the oversight responsibilities
5 of intrastate pipeline transportation by the State
6 authority; or

7 “(C) continued participation by the State
8 authority in the oversight of interstate pipeline
9 transportation has had an adverse impact on
10 pipeline safety.”

11 (b) *ENDING AGREEMENTS*.—Subsection (e) of section
12 60106, as redesignated by subsection (a), is amended to read
13 as follows:

14 “(e) *ENDING AGREEMENTS*.—

15 “(1) *PERMISSIVE TERMINATION*.—The Secretary
16 may end an agreement under this section when the
17 Secretary finds that the State authority has not com-
18 plied with any provision of the agreement.

19 “(2) *MANDATORY TERMINATION OF AGREE-*
20 *MENT*.—The Secretary shall end an agreement for the
21 oversight of interstate pipeline transportation if the
22 Secretary finds that—

23 “(A) implementation of such agreement has
24 resulted in a gap in the oversight responsibilities

1 *of intrastate pipeline transportation by the State*
2 *authority;*

3 “(B) *the State actions under the agreement*
4 *have failed to meet the requirements under sub-*
5 *section (b); or*

6 “(C) *continued participation by the State*
7 *authority in the oversight of interstate pipeline*
8 *transportation would not promote pipeline safe-*
9 *ty.*

10 “(3) *PROCEDURAL REQUIREMENTS.—The Sec-*
11 *retary shall give the notice and an opportunity for a*
12 *hearing to a State authority before ending an agree-*
13 *ment under this section. The Secretary may provide*
14 *a State an opportunity to correct any deficiencies be-*
15 *fore ending an agreement. The finding and decision*
16 *to end the agreement shall be published in the Federal*
17 *Register and may not become effective for at least 15*
18 *days after the date of publication unless the Secretary*
19 *finds that continuation of an agreement poses an im-*
20 *minent hazard.”.*

21 **SEC. 769. IMPROVED DATA AND DATA AVAILABILITY.**

22 “(a) *IN GENERAL.—Within 12 months after the date*
23 *of enactment of this Act, the Secretary shall develop and*
24 *implement a comprehensive plan for the collection and use*
25 *of gas and hazardous liquid pipeline data to revise the caus-*

1 *al categories on the incident report forms to eliminate over-*
2 *lapping and confusing categories and include subcategories.*
3 *The plan shall include components to provide the capability*
4 *to perform sound incident trend analysis and evaluations*
5 *of pipeline operator performance using normalized accident*
6 *data.*

7 *(b) REPORT OF RELEASES EXCEEDING 5 GALLONS.—*
8 *Section 60117(b) is amended—*

9 *(1) by inserting “(1)” before “To”;*

10 *(2) redesignating paragraphs (1) and (2) as sub-*
11 *paragraphs (A) and (B);*

12 *(3) inserting before the last sentence the fol-*
13 *lowing:*

14 *“(2) A person owning or operating a hazardous liquid*
15 *pipeline facility shall report to the Secretary each release*
16 *to the environment greater than 5 gallons of the hazardous*
17 *liquid or carbon dioxide transported. This section applies*
18 *to releases from pipeline facilities regulated under this*
19 *chapter. A report must include the location of the release,*
20 *fatalities and personal injuries, type of product, amount*
21 *of product release, cause or causes of the release, extent of*
22 *damage to property and the environment, and the response*
23 *undertaken to clean up the release.*

24 *“(3) During the course of an incident investigation,*
25 *a person owning or operating a pipeline facility shall make*

1 records, reports, and information required under subsection
2 (a) of this section or other reasonably described records, re-
3 ports, and information relevant to the incident investiga-
4 tion, available to the Secretary within the time limits pre-
5 scribed in a written request.”; and

6 (4) indenting the first word of the last sentence
7 and inserting “(4)” before “The Secretary” in that
8 sentence.

9 (c) *PENALTY AUTHORITIES*.—(1) Section 60122(a) is
10 amended by striking “60114(c)” and inserting
11 “60117(b)(3)”.

12 (2) Section 60123(a) is amended by striking
13 “60114(c),” and inserting “60117(b)(3),”.

14 (d) *ESTABLISHMENT OF NATIONAL DEPOSITORY*.—
15 Section 60117 is amended by adding at the end the fol-
16 lowing:

17 “(l) *NATIONAL DEPOSITORY*.—The Secretary shall es-
18 tablish a national depository of data on events and condi-
19 tions, including spill histories and corrective actions for
20 specific incidents, that can be used to evaluate the risk of,
21 and to prevent, pipeline failures and releases. The Secretary
22 shall administer the program through the Bureau of Trans-
23 portation Statistics, in cooperation with the Research and
24 Special Programs Administration, and shall make such in-

1 *formation available for use by State and local planning and*
2 *emergency response authorities and the public.”.*

3 **SEC. 770. RESEARCH AND DEVELOPMENT.**

4 *(a) INNOVATIVE TECHNOLOGY DEVELOPMENT.—*

5 *(1) IN GENERAL.—As part of the Department of*
6 *Transportation’s research and development program,*
7 *the Secretary of Transportation shall direct research*
8 *attention to the development of alternative*
9 *technologies—*

10 *(A) to expand the capabilities of internal*
11 *inspection devices to identify and accurately*
12 *measure defects and anomalies;*

13 *(B) to inspect pipelines that cannot accom-*
14 *modate internal inspection devices available on*
15 *the date of enactment;*

16 *(C) to develop innovative techniques meas-*
17 *uring the structural integrity of pipelines;*

18 *(D) to improve the capability, reliability,*
19 *and practicality of external leak detection de-*
20 *vices; and*

21 *(E) to develop and improve alternative tech-*
22 *nologies to identify and monitor outside force*
23 *damage to pipelines.*

24 *(2) COOPERATIVE.—The Secretary may partici-*
25 *pate in additional technological development through*

1 *cooperative agreements with trade associations, aca-*
2 *demie institutions, or other qualified organizations.*

3 *(b) PIPELINE SAFETY AND RELIABILITY RESEARCH*
4 *AND DEVELOPMENT.—*

5 *(1) IN GENERAL.—The Secretary of Transpor-*
6 *tation, in coordination with the Secretary of Energy,*
7 *shall develop and implement an accelerated coopera-*
8 *tive program of research and development to ensure*
9 *the integrity of natural gas and hazardous liquid*
10 *pipelines. This research and development program—*

11 *(A) shall include materials inspection tech-*
12 *niques, risk assessment methodology, and infor-*
13 *mation systems surety; and*

14 *(B) shall complement, and not replace, the*
15 *research program of the Department of Energy*
16 *addressing natural gas pipeline issues existing*
17 *on the date of enactment of this Act.*

18 *(2) PURPOSE.—The purpose of the cooperative*
19 *research program shall be to promote pipeline safety*
20 *research and development to—*

21 *(A) ensure long-term safety, reliability and*
22 *service life for existing pipelines;*

23 *(B) expand capabilities of internal inspec-*
24 *tion devices to identify and accurately measure*
25 *defects and anomalies;*

1 (C) develop inspection techniques for pipe-
2 lines that cannot accommodate the internal in-
3 spection devices available on the date of enact-
4 ment;

5 (D) develop innovative techniques to meas-
6 ure the structural integrity of pipelines to pre-
7 vent pipeline failures;

8 (E) develop improved materials and coat-
9 ings for use in pipelines;

10 (F) improve the capability, reliability, and
11 practicality of external leak detection devices;

12 (G) identify underground environments that
13 might lead to shortened service life;

14 (H) enhance safety in pipeline siting and
15 land use;

16 (I) minimize the environmental impact of
17 pipelines;

18 (J) demonstrate technologies that improve
19 pipeline safety, reliability, and integrity;

20 (K) provide risk assessment tools for opti-
21 mizing risk mitigation strategies; and

22 (L) provide highly secure information sys-
23 tems for controlling the operation of pipelines.

24 (3) AREAS.—In carrying out this subsection, the
25 Secretary of Transportation, in coordination with the

1 *Secretary of Energy, shall consider research and de-*
2 *velopment on natural gas, crude oil and petroleum*
3 *product pipelines for—*

4 *(A) early crack, defect, and damage detec-*
5 *tion, including real-time damage monitoring;*

6 *(B) automated internal pipeline inspection*
7 *sensor systems;*

8 *(C) land use guidance and set back manage-*
9 *ment along pipeline rights-of-way for commu-*
10 *nities;*

11 *(D) internal corrosion control;*

12 *(E) corrosion-resistant coatings;*

13 *(F) improved cathodic protection;*

14 *(G) inspection techniques where internal in-*
15 *spection is not feasible, including measurement*
16 *of structural integrity;*

17 *(H) external leak detection, including port-*
18 *able real-time video imaging technology, and the*
19 *advancement of computerized control center leak*
20 *detection systems utilizing real-time remote field*
21 *data input;*

22 *(I) longer life, high strength, non-corrosive*
23 *pipeline materials;*

24 *(J) assessing the remaining strength of ex-*
25 *isting pipes;*

1 (K) risk and reliability analysis models, to
2 be used to identify safety improvements that
3 could be realized in the near term resulting from
4 analysis of data obtained from a pipeline per-
5 formance tracking initiative;

6 (L) identification, monitoring, and preven-
7 tion of outside force damage, including satellite
8 surveillance; and

9 (M) any other areas necessary to ensuring
10 the public safety and protecting the environment.

11 (4) POINTS OF CONTACT.—

12 (A) IN GENERAL.—To coordinate and im-
13 plement the research and development programs
14 and activities authorized under this subsection—

15 (i) the Secretary of Transportation
16 shall designate, as the point of contact for
17 the Department of Transportation, an offi-
18 cer of the Department of Transportation
19 who has been appointed by the President
20 and confirmed by the Senate; and

21 (ii) the Secretary of Energy shall des-
22 ignate, as the point of contact for the De-
23 partment of Energy, an officer of the De-
24 partment of Energy who has been appointed

1 *by the President and confirmed by the Sen-*
2 *ate.*

3 *(B) DUTIES.—*

4 *(i) The point of contact for the Depart-*
5 *ment of Transportation shall have the pri-*
6 *mary responsibility for coordinating and*
7 *overseeing the implementation of the re-*
8 *search, development, and demonstration*
9 *program plan under paragraphs (5) and*
10 *(6).*

11 *(ii) The points of contact shall jointly*
12 *assist in arranging cooperative agreements*
13 *for research, development and demonstra-*
14 *tion involving their respective Departments,*
15 *national laboratories, universities, and in-*
16 *dustry research organizations.*

17 *(5) RESEARCH AND DEVELOPMENT PROGRAM*
18 *PLAN.—Within 240 days after the date of enactment*
19 *of this Act, the Secretary of Transportation, in co-*
20 *ordination with the Secretary of Energy and the*
21 *Pipeline Integrity Technical Advisory Committee,*
22 *shall prepare and submit to the Congress a 5-year*
23 *program plan to guide activities under this sub-*
24 *section. In preparing the program plan, the Secretary*
25 *shall consult with appropriate representatives of the*

1 *natural gas, crude oil, and petroleum product pipe-*
2 *line industries to select and prioritize appropriate*
3 *project proposals. The Secretary may also seek the ad-*
4 *vice of utilities, manufacturers, institutions of higher*
5 *learning, Federal agencies, the pipeline research insti-*
6 *tutions, national laboratories, State pipeline safety*
7 *officials, environmental organizations, pipeline safety*
8 *advocates, and professional and technical societies.*

9 (6) *IMPLEMENTATION.*—*The Secretary of Trans-*
10 *portation shall have primary responsibility for ensur-*
11 *ing the 5-year plan provided for in paragraph (5) is*
12 *implemented as intended. In carrying out the re-*
13 *search, development, and demonstration activities*
14 *under this paragraph, the Secretary of Transpor-*
15 *tation and the Secretary of Energy may use, to the*
16 *extent authorized under applicable provisions of law,*
17 *contracts, cooperative agreements, cooperative research*
18 *and development agreements under the Stevenson-*
19 *Wylder Technology Innovation Act of 1980 (15 U.S.C.*
20 *3701 et seq.), grants, joint ventures, other trans-*
21 *actions, and any other form of agreement available to*
22 *the Secretary consistent with the recommendations of*
23 *the Advisory Committee.*

24 (7) *REPORTS TO CONGRESS.*—*The Secretary of*
25 *Transportation shall report to the Congress annually*

1 *as to the status and results to date of the implementa-*
2 *tion of the research and development program plan.*
3 *The report shall include the activities of the Depart-*
4 *ments of Transportation and Energy, the national*
5 *laboratories, universities, and any other research or-*
6 *ganizations, including industry research organiza-*
7 *tions.*

8 **SEC. 771. PIPELINE INTEGRITY TECHNICAL ADVISORY COM-**
9 **MITTEE.**

10 (a) *ESTABLISHMENT.*—*The Secretary of Transpor-*
11 *tation shall enter into appropriate arrangements with the*
12 *National Academy of Sciences to establish and manage the*
13 *Pipeline Integrity Technical Advisory Committee for the*
14 *purpose of advising the Secretary of Transportation and*
15 *the Secretary of Energy on the development and implemen-*
16 *tation of the 5-year research, development, and demonstra-*
17 *tion program plan under section 770(b)(5). The Advisory*
18 *Committee shall have an ongoing role in evaluating the*
19 *progress and results of the research, development, and dem-*
20 *onstration carried out under that section.*

21 (b) *MEMBERSHIP.*—*The National Academy of Sciences*
22 *shall appoint the members of the Pipeline Integrity Tech-*
23 *nical Advisory Committee after consultation with the Sec-*
24 *retary of Transportation and the Secretary of Energy.*
25 *Members appointed to the Advisory Committee should have*

1 *the necessary qualifications to provide technical contribu-*
2 *tions to the purposes of the Advisory Committee.*

3 **SEC. 772. AUTHORIZATION OF APPROPRIATIONS.**

4 (a) *GAS AND HAZARDOUS LIQUIDS.*—Section
5 60125(a) is amended to read as follows:

6 “(a) *GAS AND HAZARDOUS LIQUID.*—To carry out
7 this chapter and other pipeline-related damage prevention
8 activities of this title (except for section 60107), there are
9 authorized to be appropriated to the Department of Trans-
10 portation—\$30,000,000 for each of the fiscal years 2003,
11 2004, and 2005 of which \$23,000,000 is to be derived from
12 user fees for fiscal years 2003, 2004, and 2005 collected
13 under section 60301 of this title.”.

14 (b) *GRANTS TO STATES.*—Section 60125(c) is amended
15 to read as follows:

16 “(c) *STATE GRANTS.*—Not more than the following
17 amounts may be appropriated to the Secretary to carry out
18 section 60107—\$20,000,000 for the fiscal years 2003, 2004,
19 and 2005 of which \$18,000,000 is to be derived from user
20 fees for fiscal years 2003, 2004, and 2005 collected under
21 section 60301 of this title.”.

22 (c) *OIL SPILLS.*—Section 60125 is amended by redес-
23 ignating subsections (d), (e), and (f) as subsections (e), (f),
24 (g) and inserting after subsection (c) the following:

1 “(d) *OIL SPILL LIABILITY TRUST FUND.*—Of the
2 amounts available in the Oil Spill Liability Trust Fund,
3 \$8,000,000 shall be transferred to the Secretary of Trans-
4 portation, as provided in appropriation Acts, to carry out
5 programs authorized in this title for each of fiscal years
6 2003, 2004, and 2005.”.

7 (d) *PIPELINE INTEGRITY PROGRAM.*—(1) There are
8 authorized to be appropriated to the Secretary of Transpor-
9 tation for carrying out sections 770(b) and 771 of this sub-
10 title \$3,000,000, to be derived from user fees under section
11 60301 of title 49, United States Code, for each of the fiscal
12 years 2003 through 2007.

13 (2) Of the amounts available in the Oil Spill Liability
14 Trust Fund established by section 9509 of the Internal Rev-
15 enue Code of 1986 (26 U.S.C. 9509), \$3,000,000 shall be
16 transferred to the Secretary of Transportation, as provided
17 in appropriation Acts, to carry out programs for detection,
18 prevention and mitigation of oil spills under sections 770(b)
19 and 771 of this subtitle for each of the fiscal years 2003
20 through 2007.

21 (3) There are authorized to be appropriated to the Sec-
22 retary of Energy for carrying out sections 770(b) and 771
23 of this subtitle such sums as may be necessary for each of
24 the fiscal years 2003 through 2007.

1 **SEC. 773. OPERATOR ASSISTANCE IN INVESTIGATIONS.**

2 (a) *IN GENERAL.*—*If the Department of Transpor-*
3 *tation or the National Transportation Safety Board inves-*
4 *tigate an accident, the operator involved shall make avail-*
5 *able to the representative of the Department or the Board*
6 *all records and information that in any way pertain to*
7 *the accident (including integrity management plans and*
8 *test results), and shall afford all reasonable assistance in*
9 *the investigation of the accident.*

10 (b) *CORRECTIVE ACTION ORDERS.*—*Section 60112(d)*
11 *is amended—*

12 (1) *by inserting “(1)” after “CORRECTIVE AC-*
13 *TION ORDERS.—”; and*

14 (2) *by adding at the end the following:*

15 “(2) *If, in the case of a corrective action order issued*
16 *following an accident, the Secretary determines that the ac-*
17 *tions of an employee carrying out an activity regulated*
18 *under this chapter, including duties under section 60102(a),*
19 *may have contributed substantially to the cause of the acci-*
20 *dent, the Secretary shall direct the operator to relieve the*
21 *employee from performing those activities, reassign the em-*
22 *ployee, or place the employee on leave until the earlier of*
23 *the date on which—*

24 “(A) *the Secretary determines, after notice and*
25 *an opportunity for a hearing, that the employee’s per-*
26 *formance of duty in carrying out the activity did not*

1 *contribute substantially to the cause of the accident;*
 2 *or*

3 “(B) *the Secretary determines the employee has*
 4 *been re-qualified or re-trained as provided for in sec-*
 5 *tion 763 of the Pipeline Safety Improvement Act of*
 6 *2002 and can safely perform those activities.*

7 “(3) *Action taken by an operator under paragraph (2)*
 8 *shall be in accordance with the terms and conditions of any*
 9 *applicable collective bargaining agreement to the extent it*
 10 *is not inconsistent with the requirements of this section.”.*

11 **SEC. 774. PROTECTION OF EMPLOYEES PROVIDING PIPE-**
 12 **LINE SAFETY INFORMATION.**

13 “(a) *IN GENERAL.*—Chapter 601 is amended by adding
 14 *at the end the following:*

15 **“§ 60129. Protection of employees providing pipeline**
 16 **safety information**

17 “(a) *DISCRIMINATION AGAINST PIPELINE EMPLOY-*
 18 *EES.*—*No pipeline operator or contractor or subcontractor*
 19 *of a pipeline may discharge an employee or otherwise dis-*
 20 *criminate against an employee with respect to compensa-*
 21 *tion, terms, conditions, or privileges of employment because*
 22 *the employee (or any person acting pursuant to a request*
 23 *of the employee)—*

24 “(1) *provided, caused to be provided, or is about*
 25 *to provide (with any knowledge of the employer) or*

1 *cause to be provided to the employer or Federal Gov-*
2 *ernment information relating to any violation or al-*
3 *leged violation of any order, regulation, or standard*
4 *of the Research and Special Programs Administration*
5 *or any other provision of Federal law relating to*
6 *pipeline safety under this chapter or any other law*
7 *of the United States;*

8 *“(2) has filed, caused to be filed, or is about to*
9 *file (with any knowledge of the employer) or cause to*
10 *be filed a proceeding relating to any violation or al-*
11 *leged violation of any order, regulation, or standard*
12 *of the Administration or any other provision of Fed-*
13 *eral law relating to pipeline safety under this chapter*
14 *or any other law of the United States;*

15 *“(3) testified or is about to testify in such a pro-*
16 *ceeding; or*

17 *“(4) assisted or participated or is about to assist*
18 *or participate in such a proceeding.*

19 *“(b) DEPARTMENT OF LABOR COMPLAINT PROCE-*
20 *DURE.—*

21 *“(1) FILING AND NOTIFICATION.—A person who*
22 *believes that he or she has been discharged or other-*
23 *wise discriminated against by any person in viola-*
24 *tion of subsection (a) may, not later than 90 days*
25 *after the date on which such violation occurs, file (or*

1 *have any person file on his or her behalf) a complaint*
2 *with the Secretary of Labor alleging such discharge or*
3 *discrimination. Upon receipt of such a complaint, the*
4 *Secretary of Labor shall notify, in writing, the person*
5 *named in the complaint and the Administrator of the*
6 *Research and Special Programs Administration of the*
7 *filing of the complaint, of the allegations contained in*
8 *the complaint, of the substance of evidence supporting*
9 *the complaint, and of the opportunities that will be*
10 *afforded to such person under paragraph (2).*

11 “(2) *INVESTIGATION; PRELIMINARY ORDER.*—

12 “(A) *IN GENERAL.*—*Not later than 60 days*
13 *after the date of receipt of a complaint filed*
14 *under paragraph (1) and after affording the per-*
15 *son named in the complaint an opportunity to*
16 *submit to the Secretary of Labor a written re-*
17 *sponse to the complaint and an opportunity to*
18 *meet with a representative of the Secretary to*
19 *present statements from witnesses, the Secretary*
20 *of Labor shall conduct an investigation and de-*
21 *termine whether there is reasonable cause to be-*
22 *lieve that the complaint has merit and notify in*
23 *writing the complainant and the person alleged*
24 *to have committed a violation of subsection (a)*
25 *of the Secretary’s findings. If the Secretary of*

1 *Labor concludes that there is reasonable cause to*
2 *believe that a violation of subsection (a) has oc-*
3 *curred, the Secretary shall accompany the Sec-*
4 *retary's findings with a preliminary order pro-*
5 *viding the relief prescribed by paragraph (3)(B).*
6 *Not later than 30 days after the date of notifica-*
7 *tion of findings under this paragraph, either the*
8 *person alleged to have committed the violation or*
9 *the complainant may file objections to the find-*
10 *ings or preliminary order, or both, and request*
11 *a hearing on the record. The filing of such objec-*
12 *tions shall not operate to stay any reinstatement*
13 *remedy contained in the preliminary order. Such*
14 *hearings shall be conducted expeditiously. If a*
15 *hearing is not requested in such 30-day period,*
16 *the preliminary order shall be deemed a final*
17 *order that is not subject to judicial review.*

18 “(B) REQUIREMENTS.—

19 “(i) REQUIRED SHOWING BY COM-
20 PLAINANT.—*The Secretary of Labor shall*
21 *dismiss a complaint filed under this sub-*
22 *section and shall not conduct an investiga-*
23 *tion otherwise required under subparagraph*
24 *(A) unless the complainant makes a prima*
25 *facie showing that any behavior described*

1 in paragraphs (1) through (4) of subsection
2 (a) was a contributing factor in the unfa-
3 vorable personnel action alleged in the com-
4 plaint.

5 “(ii) *SHOWING BY EMPLOYER.*—Not-
6 withstanding a finding by the Secretary
7 that the complainant has made the showing
8 required under clause (i), no investigation
9 otherwise required under subparagraph (A)
10 shall be conducted if the employer dem-
11 onstrates, by clear and convincing evidence,
12 that the employer would have taken the
13 same unfavorable personnel action in the
14 absence of that behavior.

15 “(iii) *CRITERIA FOR DETERMINATION*
16 *BY SECRETARY.*—The Secretary may deter-
17 mine that a violation of subsection (a) has
18 occurred only if the complainant dem-
19 onstrates that any behavior described in
20 paragraphs (1) through (4) of subsection (a)
21 was a contributing factor in the unfavorable
22 personnel action alleged in the complaint.

23 “(iv) *PROHIBITION.*—Relief may not
24 be ordered under subparagraph (A) if the
25 employer demonstrates by clear and con-

1 *vincing evidence that the employer would*
2 *have taken the same unfavorable personnel*
3 *action in the absence of that behavior.*

4 “(3) *FINAL ORDER.*—

5 “(A) *DEADLINE FOR ISSUANCE; SETTLE-*
6 *MENT AGREEMENTS.*—*Not later than 120 days*
7 *after the date of conclusion of a hearing under*
8 *paragraph (2), the Secretary of Labor shall issue*
9 *a final order providing the relief prescribed by*
10 *this paragraph or denying the complaint. At any*
11 *time before issuance of a final order, a pro-*
12 *ceeding under this subsection may be terminated*
13 *on the basis of a settlement agreement entered*
14 *into by the Secretary of Labor, the complainant,*
15 *and the person alleged to have committed the*
16 *violation.*

17 “(B) *REMEDY.*—*If, in response to a com-*
18 *plaint filed under paragraph (1), the Secretary*
19 *of Labor determines that a violation of sub-*
20 *section (a) has occurred, the Secretary of Labor*
21 *shall order the person who committed such viola-*
22 *tion to—*

23 “(i) *take affirmative action to abate*
24 *the violation;*

1 “(ii) reinstate the complainant to his
2 or her former position together with the
3 compensation (including back pay) and re-
4 store the terms, conditions, and privileges
5 associated with his or her employment; and

6 “(iii) provide compensatory damages
7 to the complainant.

8 If such an order is issued under this paragraph,
9 the Secretary of Labor, at the request of the com-
10 plainant, shall assess against the person whom
11 the order is issued a sum equal to the aggregate
12 amount of all costs and expenses (including at-
13 torney’s and expert witness fees) reasonably in-
14 curred, as determined by the Secretary of Labor,
15 by the complainant for, or in connection with,
16 the bringing the complaint upon which the order
17 was issued.

18 “(C) *FRIVOLOUS COMPLAINTS.*—If the Sec-
19 retary of Labor finds that a complaint under
20 paragraph (1) is frivolous or has been brought in
21 bad faith, the Secretary of Labor may award to
22 the prevailing employer a reasonable attorney’s
23 fee not exceeding \$1,000.

24 “(4) *REVIEW.*—

1 “(A) *APPEAL TO COURT OF APPEALS.*—Any
2 *person adversely affected or aggrieved by an*
3 *order issued under paragraph (3) may obtain re-*
4 *view of the order in the United States Court of*
5 *Appeals for the circuit in which the violation,*
6 *with respect to which the order was issued, alleg-*
7 *edly occurred or the circuit in which the com-*
8 *plainant resided on the date of such violation.*
9 *The petition for review must be filed not later*
10 *than 60 days after the date of issuance of the*
11 *final order of the Secretary of Labor. Review*
12 *shall conform to chapter 7 of title 5, United*
13 *States Code. The commencement of proceedings*
14 *under this subparagraph shall not, unless or-*
15 *dered by the court, operate as a stay of the order.*

16 “(B) *LIMITATION ON COLLATERAL AT-*
17 *TACK.*—An order of the Secretary of Labor with
18 *respect to which review could have been obtained*
19 *under subparagraph (A) shall not be subject to*
20 *judicial review in any criminal or other civil*
21 *proceeding.*

22 “(5) *ENFORCEMENT OF ORDER BY SECRETARY*
23 *OF LABOR.*—Whenever any person has failed to com-
24 *ply with an order issued under paragraph (3), the*
25 *Secretary of Labor may file a civil action in the*

1 *United States district court for the district in which*
2 *the violation was found to occur to enforce such order.*
3 *In actions brought under this paragraph, the district*
4 *courts shall have jurisdiction to grant all appropriate*
5 *relief, including, but not to be limited to, injunctive*
6 *relief and compensatory damages.*

7 “(6) *ENFORCEMENT OF ORDER BY PARTIES.*—

8 “(A) *COMMENCEMENT OF ACTION.*—*A per-*
9 *son on whose behalf an order was issued under*
10 *paragraph (3) may commence a civil action*
11 *against the person to whom such order was*
12 *issued to require compliance with such order.*
13 *The appropriate United States district court*
14 *shall have jurisdiction, without regard to the*
15 *amount in controversy or the citizenship of the*
16 *parties, to enforce such order.*

17 “(B) *ATTORNEY FEES.*—*The court, in*
18 *issuing any final order under this paragraph,*
19 *may award costs of litigation (including reason-*
20 *able attorney and expert witness fees) to any*
21 *party whenever the court determines such award*
22 *costs is appropriate.*

23 “(c) *MANDAMUS.*—*Any nondiscretionary duty im-*
24 *posed by this section shall be enforceable in a mandamus*

1 *proceeding brought under section 1361 of title 28, United*
2 *States Code.*

3 “(d) *NONAPPLICABILITY TO DELIBERATE VIOLA-*
4 *TIONS.—Subsection (a) shall not apply with respect to an*
5 *employee of a pipeline, contractor or subcontractor who,*
6 *acting without direction from the pipeline contractor or*
7 *subcontractor (or such person’s agent), deliberately causes*
8 *a violation of any requirement relating to pipeline safety*
9 *under this chapter or any other law of the United States.*

10 “(e) *CONTRACTOR DEFINED.—In this section, the term*
11 *‘contractor’ means a company that performs safety-sensitive*
12 *functions by contract for a pipeline.”.*

13 “(b) *CIVIL PENALTY.—Section 60122(a) is amended by*
14 *adding at the end the following:*

15 “(3) *A person violating section 60129, or an order*
16 *issued thereunder, is liable to the Government for a civil*
17 *penalty of not more than \$1,000 for each violation. The*
18 *penalties provided by paragraph (1) do not apply to a vio-*
19 *lation of section 60129 or an order issued thereunder.”.*

20 “(c) *CONFORMING AMENDMENT.—The chapter analysis*
21 *for chapter 601 is amended by adding at the end the fol-*
22 *lowing:*

 “60129. *Protection of employees providing pipeline safety information.”.*

23 **SEC. 775. STATE PIPELINE SAFETY ADVISORY COMMITTEES.**

24 *Within 90 days after receiving recommendations for*
25 *improvements to pipeline safety from an advisory com-*

1 *mittee appointed by the Governor of any State, the Sec-*
2 *retary of Transportation shall respond in writing to the*
3 *committee setting forth what action, if any, the Secretary*
4 *will take on those recommendations and the Secretary's rea-*
5 *sons for acting or not acting upon any of the recommenda-*
6 *tions.*

7 **SEC. 776. FINES AND PENALTIES.**

8 *The Inspector General of the Department of Transpor-*
9 *tation shall conduct an analysis of the Department's assess-*
10 *ment of fines and penalties on gas transmission and haz-*
11 *ardous liquid pipelines, including the cost of corrective ac-*
12 *tions required by the Department in lieu of fines, and, no*
13 *later than 6 months after the date of enactment of this Act,*
14 *shall provide a report to the Senate Committee on Com-*
15 *merce, Science, and Transportation and the House Com-*
16 *mittee on Transportation and Infrastructure on any find-*
17 *ings and recommendations for actions by the Secretary or*
18 *Congress to ensure the fines assessed are an effective deter-*
19 *rent for reducing safety risks.*

20 **SEC. 777. STUDY OF RIGHTS-OF-WAY.**

21 *The Secretary of Transportation is authorized to con-*
22 *duct a study on how best to preserve environmental re-*
23 *sources in conjunction with maintaining pipeline rights-*
24 *of-way. The study shall recognize pipeline operators' regu-*

1 *latory obligations to maintain rights-of-way and to protect*
2 *public safety.*

3 **SEC. 778. STUDY OF NATURAL GAS RESERVE.**

4 *(a) FINDINGS.—Congress finds that:*

5 *(1) In the last few months, natural gas prices*
6 *across the country have tripled.*

7 *(2) In California, natural gas prices have in-*
8 *creased twenty-fold, from \$3 per million British ther-*
9 *mal units to nearly \$60 per million British thermal*
10 *units.*

11 *(3) One of the major causes of these price in-*
12 *creases is a lack of supply, including a lack of nat-*
13 *ural gas reserves.*

14 *(4) The lack of a reserve was compounded by the*
15 *rupture of an El Paso Natural Gas Company pipe-*
16 *line in Carlsbad, New Mexico on August 1, 2000.*

17 *(5) Improving pipeline safety will help prevent*
18 *similar accidents that interrupt the supply of natural*
19 *gas and will help save lives.*

20 *(6) It is also necessary to find solutions for the*
21 *lack of natural gas reserves that could be used during*
22 *emergencies.*

23 *(b) STUDY BY THE NATIONAL ACADEMY OF*
24 *SCIENCES.—The Secretary of Energy shall request the Na-*
25 *tional Academy of Sciences to—*

1 (1) *conduct a study to—*

2 (A) *determine the causes of recent increases*
3 *in the price of natural gas, including whether*
4 *the increases have been caused by problems with*
5 *the supply of natural gas or by problems with*
6 *the natural gas transmission system;*

7 (B) *identify any Federal or State policies*
8 *that may have contributed to the price increases;*
9 *and*

10 (C) *determine what Federal action would be*
11 *necessary to improve the reserve supply of nat-*
12 *ural gas for use in situations of natural gas*
13 *shortages and price increases, including deter-*
14 *mining the feasibility and advisability of a Fed-*
15 *eral strategic natural gas reserve system; and*

16 (2) *not later than 60 days after the date of en-*
17 *actment of this Act, submit to Congress a report on*
18 *the results of the study.*

19 **SEC. 779. STUDY AND REPORT ON NATURAL GAS PIPELINE**
20 **AND STORAGE FACILITIES IN NEW ENGLAND.**

21 (a) *STUDY.*—*The Federal Energy Regulatory Commis-*
22 *sion, in consultation with the Department of Energy, shall*
23 *conduct a study on the natural gas pipeline transmission*
24 *network in New England and natural gas storage facilities*

1 *associated with that network. In carrying out the study,*
2 *the Commission shall consider—*

3 *(1) the ability of natural gas pipeline and stor-*
4 *age facilities in New England to meet current and*
5 *projected demand by gas-fired power generation*
6 *plants and other consumers;*

7 *(2) capacity constraints during unusual weather*
8 *periods;*

9 *(3) potential constraint points in regional, inter-*
10 *state, and international pipeline capacity serving*
11 *New England; and*

12 *(4) the quality and efficiency of the Federal envi-*
13 *ronmental review and permitting process for natural*
14 *gas pipelines.*

15 *(b) REPORT.—Not later than 120 days after the date*
16 *of the enactment of this Act, the Federal Energy Regulatory*
17 *Commission shall prepare and submit to the Senate Com-*
18 *mittee on Energy and Natural Resources and the appro-*
19 *priate committee of the House of Representatives a report*
20 *containing the results of the study conducted under sub-*
21 *section (a), including recommendations for addressing po-*
22 *tential natural gas transmission and storage capacity prob-*
23 *lems in New England.*

1 **PART III—PIPELINE SECURITY SENSITIVE**
2 **INFORMATION**

3 **SEC. 781. MEETING COMMUNITY RIGHT TO KNOW WITHOUT**
4 **SECURITY RISKS.**

5 *Section 60117 is amended by adding at the end the*
6 *following:*

7 *“(l) WITHHOLDING CERTAIN INFORMATION.—*

8 *“(1) IN GENERAL.—Notwithstanding any other*
9 *provision of this chapter requiring the Secretary to*
10 *provide information obtained by the Secretary or an*
11 *officer, employee, or agent in carrying out this chap-*
12 *ter to State or local government officials, the public,*
13 *or any other person, the Secretary shall withhold such*
14 *information if it is information that is described in*
15 *section 552(b)(1)(A) of title 5, United States Code.*

16 *“(2) CONDITIONAL RELEASE.—Notwithstanding*
17 *paragraph (1), upon the receipt of assurances satis-*
18 *factory to the Secretary that the information will be*
19 *handled appropriately, the Secretary may provide in-*
20 *formation permitted to be withheld under that*
21 *paragraph—*

22 *“(A) to the owner or operator of the affected*
23 *pipeline system;*

24 *“(B) to an officer, employee or agent of a*
25 *Federal, State, tribal, or local government, in-*

1 *cluding a volunteer fire department, concerned*
2 *with carrying out this chapter, with protecting*
3 *the facilities, with protecting public safety, or*
4 *with national security issues;*

5 “(C) *in an administrative or judicial pro-*
6 *ceeding brought under this chapter or an admin-*
7 *istrative or judicial proceeding that addresses*
8 *terrorist actions or threats of such actions; or*

9 “(D) *to such other persons as the Secretary*
10 *determines necessary to protect public safety and*
11 *security.*

12 “(3) *REPORT TO CONGRESS.—The Secretary*
13 *shall provide an annual report to the Congress, in ap-*
14 *propriate form as determined by the Secretary, con-*
15 *taining a summary of determinations made by the*
16 *Secretary during the preceding year to withhold in-*
17 *formation from release under paragraph (1).”.*

18 **SEC. 782. TECHNICAL ASSISTANCE FOR SECURITY OF PIPE-**

19 **LINE FACILITIES.**

20 *The Secretary of Transportation may provide tech-*
21 *nical assistance to an operator of a pipeline facility or to*
22 *State, tribal, or local officials to prevent or respond to acts*
23 *of terrorism that may impact the pipeline facility,*
24 *including—*

1 (1) actions by the Secretary that support the use
2 of National Guard or State or Federal personnel to
3 provide additional security for a pipeline facility at
4 risk of terrorist attack or in response to such an at-
5 tack;

6 (2) use of resources available to the Secretary to
7 develop and implement security measures for a pipe-
8 line facility;

9 (3) identification of security issues with respect
10 to the operation of a pipeline facility; and

11 (4) the provision of information and guidance on
12 security practices that prevent damage to pipeline fa-
13 cilities from terrorist attacks.

14 **SEC. 783. CRIMINAL PENALTIES FOR DAMAGING OR DE-**
15 **STROYING A FACILITY.**

16 Section 60123(b) of title 49, United States Code, is
17 amended—

18 (1) by striking “or” after “gas pipeline facility”
19 and inserting a comma; and

20 (2) by inserting after “liquid pipeline facility”
21 the following: “, or either an intrastate gas pipeline
22 facility or an intrastate hazardous liquid pipeline fa-
23 cility that is used in interstate or foreign commerce
24 or in any activity affecting interstate or foreign com-
25 merce”.

1 ***DIVISION C—DIVERSIFYING EN-***
2 ***ERGY DEMAND AND IMPROV-***
3 ***ING EFFICIENCY***

4 ***TITLE VIII—FUELS AND***
5 ***VEHICLES***

6 ***Subtitle A—CAFE Standards, Alter-***
7 ***native Fuels, and Advanced***
8 ***Technology***

9 ***SEC. 801. INCREASED FUEL ECONOMY STANDARDS.***

10 *(a) REQUIREMENT FOR NEW REGULATIONS.—*

11 *(1) IN GENERAL.—The Secretary of Transpor-*
12 *tation shall issue, under section 32902 of title 49,*
13 *United States Code, new regulations setting forth in-*
14 *creased average fuel economy standards for auto-*
15 *mobiles that are determined on the basis of the max-*
16 *imum feasible average fuel economy levels for the*
17 *automobiles, taking into consideration the matters set*
18 *forth in subsection (f) of such section.*

19 *(2) TIME FOR ISSUING REGULATIONS.—*

20 *(A) NON-PASSENGER AUTOMOBILES.—For*
21 *non-passenger automobiles, the Secretary of*
22 *Transportation shall issue the final regulations*
23 *not later than 15 months after the date of the en-*
24 *actment of this Act.*

1 (B) *PASSENGER AUTOMOBILES.*—*For pas-*
2 *senger automobiles, the Secretary of Transpor-*
3 *tation shall issue—*

4 (i) *the proposed regulations not later*
5 *than 180 days after the date of the enact-*
6 *ment of this Act; and*

7 (ii) *the final regulations not later than*
8 *2 years after that date.*

9 (b) *PHASED INCREASES.*—*The regulations issued pur-*
10 *suant to subsection (a) shall specify standards that take ef-*
11 *fect successively over several vehicle model years not exceed-*
12 *ing 15 vehicle model years.*

13 (c) *CLARIFICATION OF AUTHORITY TO AMEND PAS-*
14 *SENGER AUTOMOBILE STANDARD.*—*Section 32902(b) of*
15 *title 49, United States Code, is amended by inserting before*
16 *the period at the end the following: “or such other number*
17 *as the Secretary prescribes under subsection (c)”.*

18 (d) *ENVIRONMENTAL ASSESSMENT.*—*When issuing*
19 *final regulations setting forth increased average fuel econ-*
20 *omy standards under this section, the Secretary of Trans-*
21 *portation shall also issue an environmental assessment of*
22 *the effects of the implementation of the increased standards*
23 *on the environment under the National Environmental Pol-*
24 *icy Act of 1969 (42 U.S.C. 4321 et seq.).*

1 (e) *AUTHORIZATION OF APPROPRIATIONS.*—*There is*
2 *authorized to be appropriated to the Department of Trans-*
3 *portation for fiscal year 2003, to remain available until*
4 *expended, \$2,000,000 to carry out this section.*

5 **SEC. 802. EXPEDITED PROCEDURES FOR CONGRESSIONAL**
6 **INCREASE IN FUEL ECONOMY STANDARDS.**

7 (a) *CONDITION FOR APPLICABILITY.*—*If the Secretary*
8 *of Transportation fails to issue final regulations with re-*
9 *spect to non-passenger automobiles under section 801, or*
10 *fails to issue final regulations with respect to passenger*
11 *automobiles under such section, on or before the date by*
12 *which such final regulations are required by such section*
13 *to be issued, respectively, then this section shall apply with*
14 *respect to a bill described in subsection (b).*

15 (b) *BILL.*—*A bill referred to in this subsection is a*
16 *bill that satisfies the following requirements:*

17 (1) *INTRODUCTION.*—*The bill is introduced by*
18 *one or more Members of Congress not later than 60*
19 *days after the date referred to in subsection (a).*

20 (2) *TITLE.*—*The title of the bill is as follows: “A*
21 *bill to establish new average fuel economy standards*
22 *for certain motor vehicles.”.*

23 (3) *TEXT.*—*The bill provides after the enacting*
24 *clause only the text specified in subparagraph (A) or*

1 (B) or any provision described in subparagraph (C),
2 as follows:

3 (A) *NON-PASSENGER AUTOMOBILES.*—*In the*
4 *case of a bill relating to a failure timely to issue*
5 *final regulations relating to non-passenger auto-*
6 *mobiles, the following text:*

7 *“That, section 32902 of title 49, United States Code, is*
8 *amended by adding at the end the following new subsection:*

9 *“() NON-PASSENGER AUTOMOBILES.—The average*
10 *fuel economy standard for non-passenger automobiles man-*
11 *ufactured by a manufacturer in a model year after model*
12 *year ____ shall be ____ miles per gallon.’”, the first blank*
13 *space being filled in with a subsection designation, the sec-*
14 *ond blank space being filled in with the number of a year,*
15 *and the third blank space being filled in with a number.*

16 (B) *PASSENGER AUTOMOBILES.*—*In the*
17 *case of a bill relating to a failure timely to issue*
18 *final regulations relating to passenger auto-*
19 *mobiles, the following text:*

20 *“That, section 32902(b) of title 49, United States Code, is*
21 *amended to read as follows:*

22 *“(b) PASSENGER AUTOMOBILES.—Except as provided*
23 *in this section, the average fuel economy standard for pas-*
24 *senger automobiles manufactured by a manufacturer in a*
25 *model year after model year ____ shall be ____ miles per*

1 gallon.’”, the first blank space being filled in with the num-
2 ber of a year and the second blank space being filled in
3 with a number.

4 (C) *SUBSTITUTE TEXT.*—Any text sub-
5 stituted by an amendment that is in order under
6 subsection (c)(3).

7 (c) *EXPEDITED PROCEDURES.*—A bill described in
8 subsection (b) shall be considered in a House of Congress
9 in accordance with the procedures provided for the consider-
10 ation of joint resolutions in paragraphs (3) through (8) of
11 section 8066(c) of the Department of Defense Appropria-
12 tions Act, 1985 (as contained in section 101(h) of Public
13 Law 98–473; 98 Stat. 1936), with the following exceptions:

14 (1) *REFERENCES TO RESOLUTION.*—The ref-
15 erences in such paragraphs to a resolution shall be
16 deemed to refer to the bill described in subsection (b).

17 (2) *COMMITTEES OF JURISDICTION.*—The com-
18 mittees to which the bill is referred under this sub-
19 section shall—

20 (A) in the Senate, be the Committee on
21 Commerce, Science, and Transportation; and

22 (B) in the House of Representatives, be the
23 Committee on Energy and Commerce.

24 (3) *AMENDMENTS.*—

1 (A) *AMENDMENTS IN ORDER.*—Only four
2 amendments to the bill are in order in each
3 House, as follows:

4 (i) *Two amendments proposed by the*
5 *majority leader of that House.*

6 (ii) *Two amendments proposed by the*
7 *minority leader of that House.*

8 (B) *FORM AND CONTENT.*—To be in order
9 under subparagraph (A), an amendment shall
10 propose to strike all after the enacting clause and
11 substitute text that only includes the same text as
12 is proposed to be stricken except for one or more
13 different numbers in the text.

14 (C) *DEBATE, ET CETERA.*—Subparagraph
15 (B) of section 8066(c)(5) of the Department of
16 Defense Appropriations Act, 1985 (98 Stat.
17 1936) shall apply to the consideration of each
18 amendment proposed pursuant to subparagraph
19 (A) of this paragraph in the same manner as
20 such subparagraph (B) applies to debatable mo-
21 tions.

1 **SEC. 803. REVISED CONSIDERATIONS FOR DECISIONS ON**
2 **MAXIMUM FEASIBLE AVERAGE FUEL ECON-**
3 **OMY.**

4 *Section 32902(f) of title 49, United States Code, is*
5 *amended to read as follows:*

6 “(f) *CONSIDERATIONS FOR DECISIONS ON MAXIMUM*
7 *FEASIBLE AVERAGE FUEL ECONOMY.—When deciding*
8 *maximum feasible average fuel economy under this section,*
9 *the Secretary of Transportation shall consider the following*
10 *matters:*

11 “(1) *Technological feasibility.*

12 “(2) *Economic practicability.*

13 “(3) *The effect of other motor vehicle standards*
14 *of the Government on fuel economy.*

15 “(4) *The need of the United States to conserve*
16 *energy.*

17 “(5) *The desirability of reducing United States*
18 *dependence on imported oil.*

19 “(6) *The effects of the average fuel economy*
20 *standards on motor vehicle and passenger safety.*

21 “(7) *The effects of increased fuel economy on air*
22 *quality.*

23 “(8) *The adverse effects of average fuel economy*
24 *standards on the relative competitiveness of manufac-*
25 *turers.*

1 “(9) *The effects of compliance with average fuel*
2 *economy standards on levels of employment in the*
3 *United States.*

4 “(10) *The cost and lead time necessary for the*
5 *introduction of the necessary new technologies.*

6 “(11) *The potential for advanced technology ve-*
7 *hicles, such as hybrid and fuel cell vehicles, to con-*
8 *tribute to the achievement of significant reductions in*
9 *fuel consumption.*

10 “(12) *The extent to which the necessity for vehi-*
11 *cle manufacturers to incur near-term costs to comply*
12 *with the average fuel economy standards adversely af-*
13 *fects the availability of resources for the development*
14 *of advanced technology for the propulsion of motor ve-*
15 *hicles.*

16 “(13) *The report of the National Research Coun-*
17 *cil that is entitled ‘Effectiveness and Impact of Cor-*
18 *porate Average Fuel Economy Standards’, issued in*
19 *January 2002.’.*

20 **SEC. 804. EXTENSION OF MAXIMUM FUEL ECONOMY IN-**
21 **CREASE FOR ALTERNATIVE FUELED VEHI-**
22 **CLES.**

23 *Section 32906(a)(1) of title 49, United States Code,*
24 *is amended—*

1 (1) *in subparagraph (A), by striking “1993–*
2 *2004” and inserting “1993 through 2008”; and*

3 (2) *in subparagraph (B), by striking “2005–*
4 *2008” and inserting “2009 through 2012”.*

5 **SEC. 805. PROCUREMENT OF ALTERNATIVE FUELED AND**
6 **HYBRID LIGHT DUTY TRUCKS.**

7 (a) *VEHICLE FLEETS NOT COVERED BY REQUIRE-*
8 *MENT IN ENERGY POLICY ACT OF 1992.—*

9 (1) *HYBRID VEHICLES.—The head of each agen-*
10 *cy of the executive branch shall coordinate with the*
11 *Administrator of General Services to ensure that only*
12 *hybrid vehicles are procured by or for each agency*
13 *fleet of light duty trucks that is not in a fleet of vehi-*
14 *cles to which section 303 of the Energy Policy Act of*
15 *1992 (42 U.S.C. 13212) applies.*

16 (2) *WAIVER AUTHORITY.—The head of an agen-*
17 *cy, in consultation with the Administrator, may*
18 *waive the applicability of the policy regarding the*
19 *procurement of hybrid vehicles in paragraph (1) to*
20 *that agency to the extent that the head of that agency*
21 *determines necessary—*

22 (A) *to meet specific requirements of the*
23 *agency for capabilities of light duty trucks;*

1 (B) to procure vehicles consistent with the
2 standards applicable to the procurement of fleet
3 vehicles for the Federal Government;

4 (C) to adjust to limitations on the commer-
5 cial availability of light duty trucks that are hy-
6 brid vehicles; or

7 (D) to avoid the necessity of procuring a
8 hybrid vehicle for the agency when each of the
9 hybrid vehicles available for meeting the require-
10 ments of the agency has a cost to the United
11 States that exceeds the costs of comparable non-
12 hybrid vehicles by a factor that is significantly
13 higher than the difference between—

14 (i) the real cost of the hybrid vehicle to
15 retail purchasers, taking into account the
16 benefit of any tax incentives available to re-
17 tail purchasers for the purchase of the hy-
18 brid vehicle; and

19 (ii) the costs of the comparable non-
20 hybrid vehicles to retail purchasers.

21 (3) *APPLICABILITY TO PROCUREMENTS AFTER*
22 *FISCAL YEAR 2004.*—*This subsection applies with re-*
23 *spect to procurements of light duty trucks in fiscal*
24 *year 2005 and subsequent fiscal years.*

1 **(b) REQUIREMENT TO EXCEED REQUIREMENT IN EN-**
2 **ERGY POLICY ACT OF 1992.—**

3 **(1) LIGHT DUTY TRUCKS.—***The head of each*
4 *agency of the executive branch shall coordinate with*
5 *the Administrator of General Services to ensure that,*
6 *of the light duty trucks procured in fiscal years after*
7 *fiscal year 2004 for the fleets of light duty vehicles of*
8 *the agency to which section 303 of the Energy Policy*
9 *Act of 1992 (42 U.S.C. 13212) applies—*

10 **(A)** *5 percent of the total number of such*
11 *trucks that are procured in each of fiscal years*
12 *2005 and 2006 are alternative fueled vehicles or*
13 *hybrid vehicles; and*

14 **(B)** *10 percent of the total number of such*
15 *trucks that are procured in each fiscal year after*
16 *fiscal year 2006 are alternative fueled vehicles or*
17 *hybrid vehicles.*

18 **(2) COUNTING OF TRUCKS.—***Light duty trucks*
19 *acquired for an agency of the executive branch that*
20 *are counted to comply with section 303 of the Energy*
21 *Policy Act of 1992 (42 U.S.C. 13212) for a fiscal year*
22 *shall be counted to determine the total number of light*
23 *duty trucks procured for that agency for that fiscal*
24 *year for the purposes of paragraph (1), but shall not*

1 *be counted to satisfy the requirement in that para-*
2 *graph.*

3 (c) *DEFINITIONS.—In this section:*

4 (1) *HYBRID VEHICLE.—The term “hybrid vehi-*
5 *cle” means—*

6 (A) *a motor vehicle that draws propulsion*
7 *energy from onboard sources of stored energy*
8 *that are both—*

9 (i) *an internal combustion or heat en-*
10 *gine using combustible fuel; and*

11 (ii) *a rechargeable energy storage sys-*
12 *tem; and*

13 (B) *any other vehicle that is defined as a*
14 *hybrid vehicle in regulations prescribed by the*
15 *Secretary of Energy for the administration of*
16 *title III of the Energy Policy Act of 1992.*

17 (2) *ALTERNATIVE FUELED VEHICLE.—The term*
18 *“alternative fueled vehicle” has the meaning given*
19 *that term in section 301 of the Energy Policy Act of*
20 *1992 (42 U.S.C. 13211).*

21 (d) *INAPPLICABILITY TO DEPARTMENT OF DE-*
22 *FENSE.—This section does not apply to the Department of*
23 *Defense, which is subject to comparable requirements under*
24 *section 318 of the National Defense Authorization Act for*

1 *Fiscal Year 2002 (Public Law 107–107; 115 Stat. 1055;*
2 *10 U.S.C. 2302 note).*

3 **SEC. 806. USE OF ALTERNATIVE FUELS.**

4 (a) *EXCLUSIVE USE OF ALTERNATIVE FUELS IN DUAL*
5 *FUELED VEHICLES.*—*The head of each agency of the execu-*
6 *tive branch shall coordinate with the Administrator of Gen-*
7 *eral Services to ensure that, not later than January 1, 2009,*
8 *the fuel actually used in the fleet of dual fueled vehicles used*
9 *by the agency is an alternative fuel.*

10 (b) *WAIVER AUTHORITY.*—

11 (1) *CAPABILITY WAIVER.*—

12 (A) *AUTHORITY.*—*If the Secretary of Trans-*
13 *portation determines that not all of the dual*
14 *fueled vehicles can operate on alternative fuels at*
15 *all times, the Secretary may waive the require-*
16 *ment of subsection (a) in part, but only to the*
17 *extent that—*

18 (i) *not later than January 1, 2009, not*
19 *less than 50 percent of the total annual vol-*
20 *ume of fuel used in the dual fueled vehicles*
21 *shall be alternative fuels; and*

22 (ii) *not later than January 1, 2011,*
23 *not less than 75 percent of the total annual*
24 *volume of fuel used in the dual fueled vehi-*
25 *cles shall be alternative fuels.*

1 (B) *EXPIRATION.*—*In no case may a waiver*
2 *under subparagraph (A) remain in effect after*
3 *December 31, 2012.*

4 (2) *REGIONAL FUEL AVAILABILITY WAIVER.*—*The*
5 *Secretary may waive the applicability of the require-*
6 *ment of subsection (a) to vehicles used by an agency*
7 *in a particular geographic area where the alternative*
8 *fuel otherwise required to be used in the vehicles is*
9 *not reasonably available to retail purchasers of the*
10 *fuel, as certified to the Secretary by the head of the*
11 *agency.*

12 (c) *DEFINITIONS.*—*In this section:*

13 (1) *ALTERNATIVE FUEL.*—*The term “alternative*
14 *fuel” has the meaning given that term in section*
15 *32901(a)(1) of title 49, United States Code.*

16 (2) *DUAL FUELED VEHICLE.*—*The term “dual*
17 *fueled vehicle” has the meaning given the term “dual*
18 *fueled automobile” in section 32901(a)(8) of title 49,*
19 *United States Code.*

20 (3) *FLEET.*—*The term “fleet”, with respect to*
21 *dual fueled vehicles, has the meaning that is given*
22 *that term with respect to light duty motor vehicles in*
23 *section 301(9) of the Energy Policy Act of 1992 (42*
24 *U.S.C. 13211(9)).*

1 **SEC. 807. HYBRID ELECTRIC AND FUEL CELL VEHICLES.**

2 (a) *EXPANSION OF SCOPE.*—*The Secretary of Energy*
3 *shall expand the research and development program of the*
4 *Department of Energy on advanced technologies for improv-*
5 *ing the environmental cleanliness of vehicles to emphasize*
6 *research and development on the following:*

7 (1) *Fuel cells, including—*

8 (A) *high temperature membranes for fuel*
9 *cells; and*

10 (B) *fuel cell auxiliary power systems.*

11 (2) *Hydrogen storage.*

12 (3) *Advanced vehicle engine and emission control*
13 *systems.*

14 (4) *Advanced batteries and power electronics for*
15 *hybrid vehicles.*

16 (5) *Advanced fuels.*

17 (6) *Advanced materials.*

18 (b) *AUTHORIZATION OF APPROPRIATIONS.*—*There is*
19 *authorized to be appropriated to the Department of Energy*
20 *for fiscal year 2003, the amount of \$225,000,000 for car-*
21 *rying out the expanded research and development program*
22 *provided for under this section.*

23 **SEC. 808. DIESEL FUELED VEHICLES.**

24 (a) *DIESEL COMBUSTION AND AFTER TREATMENT*
25 *TECHNOLOGIES.*—*The Secretary of Energy shall accelerate*
26 *research and development directed toward the improvement*

1 *of diesel combustion and after treatment technologies for use*
2 *in diesel fueled motor vehicles.*

3 (b) *GOAL.*—

4 (1) *COMPLIANCE WITH TIER 2 EMISSION STAND-*
5 *ARDS BY 2010.*—*The Secretary shall carry out sub-*
6 *section (a) with a view to developing and dem-*
7 *onstrating diesel technology meeting tier 2 emission*
8 *standards not later than 2010.*

9 (2) *TIER 2 EMISSION STANDARDS DEFINED.*—*In*
10 *this subsection, the term “tier 2 emission standards”*
11 *means the motor vehicle emission standards promul-*
12 *gated by the Administrator of the Environmental*
13 *Protection Agency on February 10, 2000, under sec-*
14 *tions 202 and 211 of the Clean Air Act to apply to*
15 *passenger cars, light trucks, and larger passenger ve-*
16 *hicles of model years after the 2003 vehicle model*
17 *year.*

18 **SEC. 809. FUEL CELL DEMONSTRATION.**

19 (a) *PROGRAM REQUIRED.*—*The Secretary of Energy*
20 *and the Secretary of Defense shall jointly carry out a pro-*
21 *gram to demonstrate—*

22 (1) *fuel cell technologies developed in the PNGV*
23 *and Freedom Car programs;*

1 (2) *fuel cell technologies developed in research*
2 *and development programs of the Department of De-*
3 *fense; and*

4 (3) *follow-on fuel cell technologies.*

5 (b) *PURPOSES OF PROGRAM.—The purposes of the pro-*
6 *gram are to identify and support technological advances*
7 *that are necessary to achieve accelerated availability of fuel*
8 *cell technology for use both for nonmilitary and military*
9 *purposes.*

10 (c) *COOPERATION WITH INDUSTRY.—*

11 (1) *IN GENERAL.—The demonstration program*
12 *shall be carried out in cooperation with industry, in-*
13 *cluding the automobile manufacturing industry and*
14 *the automotive systems and component suppliers in-*
15 *dustry.*

16 (2) *COST SHARING.—The Secretary of Energy*
17 *and the Secretary of Defense shall provide for indus-*
18 *try to bear, in cash or in kind, at least one-half of*
19 *the total cost of carrying out the demonstration pro-*
20 *gram.*

21 (d) *DEFINITIONS.—In this section:*

22 (1) *PNGV PROGRAM.—The term “PNGV pro-*
23 *gram” means the Partnership for a New Generation*
24 *of Vehicles, a cooperative program engaged in by the*
25 *Departments of Commerce, Energy, Transportation,*

1 *and Defense, the Environmental Protection Agency,*
2 *the National Science Foundation, and the National*
3 *Aeronautics and Space Administration with the auto-*
4 *motive industry for the purpose of developing a new*
5 *generation of vehicles with capabilities resulting in*
6 *significantly improved fuel efficiency together with*
7 *low emissions without compromising the safety, per-*
8 *formance, affordability, or utility of the vehicles.*

9 (2) *FREEDOM CAR PROGRAM.*—*The term “Free-*
10 *dom Car program” means a cooperative research pro-*
11 *gram engaged in by the Department of Energy with*
12 *the United States Council on Automotive Research as*
13 *a follow-on to the PNGV program.*

14 **SEC. 810. BUS REPLACEMENT.**

15 (a) *REQUIREMENT FOR STUDY.*—*The Secretary of*
16 *Transportation shall carry out a study to determine how*
17 *best to provide for converting the composition of the fleets*
18 *of buses in metropolitan areas and school systems from*
19 *buses utilizing current diesel technology to—*

20 (1) *buses that draw propulsion from onboard fuel*
21 *cells;*

22 (2) *buses that are hybrid electric vehicles;*

23 (3) *buses that are fueled by clean-burning fuels,*
24 *such as renewable fuels (including agriculture-based*

1 *biodiesel fuels), natural gas, and ultra-low sulphur*
2 *diesel;*

3 *(4) buses that are powered by clean diesel en-*
4 *gines: or*

5 *(5) an assortment of buses described in para-*
6 *graphs (1), (2), (3), and (4).*

7 *(b) REPORT.—*

8 *(1) REQUIREMENT.—The Secretary of Transpor-*
9 *tation shall submit a report on the results of the study*
10 *on bus fleet conversions under subsection (a) to Con-*
11 *gress.*

12 *(2) CONTENT.—The report on bus fleet conver-*
13 *sions shall include the following:*

14 *(A) An assessment of effectuating conver-*
15 *sions by the following means:*

16 *(i) Replacement of buses.*

17 *(ii) Replacement of power and propul-*
18 *sion systems in buses utilizing current die-*
19 *sel technology.*

20 *(iii) Other means.*

21 *(B) Feasible schedules for carrying out the*
22 *conversions.*

23 *(C) Estimated costs of carrying out the con-*
24 *versions.*

1 (D) *An assessment of the benefits of the con-*
2 *versions in terms of emissions control and reduc-*
3 *tion of fuel consumption.*

4 **SEC. 811. AVERAGE FUEL ECONOMY STANDARDS FOR PICK-**
5 **UP TRUCKS.**

6 (a) *IN GENERAL.*—Section 32902(a) of title 49, United
7 *States Code, is amended—*

8 (1) *by inserting “(1)” after the after “AUTO-*
9 *MOBILES.—”; and*

10 (2) *by adding at the end the following new para-*
11 *graph:*

12 “(2) *The average fuel economy standard for pickup*
13 *trucks manufactured by a manufacturer in a model year*
14 *after model year 2004 shall be no higher than 20.7 miles*
15 *per gallon. No average fuel economy standard prescribed*
16 *under another provision of this section shall apply to pick-*
17 *up trucks.”.*

18 (b) *DEFINITION OF PICKUP TRUCK.*—Section
19 *32901(a) of such title is amended by adding at the end the*
20 *following new paragraph:*

21 “(17) *‘pickup truck’ has the meaning given that*
22 *term in regulations prescribed by the Secretary for*
23 *the administration of this chapter, as in effect on*
24 *January 1, 2002, except that such term shall also in-*
25 *clude any additional vehicle that the Secretary de-*

1 *fines as a pickup truck in regulations prescribed for*
2 *the administration of this chapter after such date.”.*

3 **SEC. 812. EXCEPTION TO HOV PASSENGER REQUIREMENTS**
4 **FOR ALTERNATIVE FUEL VEHICLES.**

5 *Section 102(a)(1) of title 23, United States Code, is*
6 *amended by inserting after “required” the following: “(un-*
7 *less, in the discretion of the State transportation depart-*
8 *ment, the vehicle is being operated on, or is being fueled*
9 *by, an alternative fuel (as defined in section 301(2) of the*
10 *Energy Policy Act of 1992 (42 U.S.C. 13211(2)))”.*

11 **SEC. 813. DATA COLLECTION.**

12 *Section 205 of the Department of Energy Organization*
13 *Act (42 U.S.C. 7135) is amended by adding at the end the*
14 *following:*

15 *“(m) In order to improve the ability to evaluate the*
16 *effectiveness of the Nation’s renewable fuels mandate, the*
17 *Administrator shall conduct and publish the results of a*
18 *survey of renewable fuels consumption in the motor vehicle*
19 *fuels market in the United States monthly, and in a man-*
20 *ner designed to protect the confidentiality of individual re-*
21 *sponses. In conducting the survey, the Administrator shall*
22 *collect information retrospectively to 1998, both on a na-*
23 *tional basis and a regional basis, including—*

24 *(1) the quantity of renewable fuels produced;*

25 *(2) the cost of production;*

- 1 (3) *the cost of blending and marketing;*
2 (4) *the quantity of renewable fuels blended;*
3 (5) *the quantity of renewable fuels imported; and*
4 (6) *market price data.*

5 **SEC. 814. GREEN SCHOOL BUS PILOT PROGRAM.**

6 (a) *ESTABLISHMENT.*—*The Secretary of Energy and*
7 *the Secretary of Transportation shall jointly establish a*
8 *pilot program for awarding grants on a competitive basis*
9 *to eligible entities for the demonstration and commercial*
10 *application of alternative fuel school buses and ultra-low*
11 *sulfur diesel school buses.*

12 (b) *REQUIREMENTS.*—*Not later than 3 months after*
13 *the date of the enactment of this Act, the Secretary shall*
14 *establish and publish in the Federal Register grant require-*
15 *ments on eligibility for assistance, and on implementation*
16 *of the program established under subsection (a), including*
17 *certification requirements to ensure compliance with this*
18 *subtitle.*

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

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

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

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

7 (e) *TYPES OF GRANTS.*—

8 (1) *IN GENERAL.*—Grants under this section
9 shall be for the demonstration and commercial appli-
10 cation of technologies to facilitate the use of alter-
11 native fuel school buses and ultra-low sulfur diesel
12 school buses instead of buses manufactured before
13 model year 1977 and diesel-powered buses manufac-
14 tured before model year 1991.

15 (2) *NO ECONOMIC BENEFIT.*—Other than the re-
16 ceipt of the grant, a recipient of a grant under this
17 section may not receive any economic benefit in con-
18 nection with the receipt of the grant.

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

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

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

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

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

11 (B) *to provide—*

12 (i) *up to 10 percent of the price of the*
13 *alternative fuel buses acquired, for necessary*
14 *alternative fuel infrastructure if the infra-*
15 *structure will only be available to the grant*
16 *recipient; and*

17 (ii) *up to 15 percent of the price of the*
18 *alternative fuel buses acquired, for necessary*
19 *alternative fuel infrastructure if the infra-*
20 *structure will be available to the grant re-*
21 *ipient and to other bus fleets.*

22 (3) *The grant recipient shall be required to pro-*
23 *vide at least the lesser of 15 percent of the total cost*
24 *of each bus received or \$15,000 per bus.*

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

10 (g) *BUSES.—Funding under a grant made under this*
11 *section may only be used to demonstrate the use of new al-*
12 *ternative fuel school buses or ultra-low sulfur diesel school*
13 *buses that—*

14 (1) *have a gross vehicle weight greater than*
15 *14,000 pounds;*

16 (2) *are powered by a heavy duty engine;*

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

19 (A) *for buses manufactured in model year*
20 *2002, 2.5 grams per brake horsepower-hour of*
21 *nonmethane hydrocarbons and oxides of nitrogen*
22 *and .01 grams per brake horsepower-hour of par-*
23 *ticulate matter; and*

24 (B) *for buses manufactured in model years*
25 *2003 through 2006, 1.8 grams per brake horse-*

1 *power-hour of nonmethane hydrocarbons and ox-*
2 *ides of nitrogen and .01 grams per brake horse-*
3 *power-hour of particulate matter; and*

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

6 (A) *the emissions of nonmethane hydro-*
7 *carbons, oxides of nitrogen, and particulate mat-*
8 *ter of the best performing technology of the same*
9 *class of ultra-low sulfur diesel school buses com-*
10 *mercially available at the time the grant is*
11 *made; or*

12 (B) *the applicable following amounts—*

13 (i) *for buses manufactured in model*
14 *year 2002 or 2003, 3.0 grams per brake*
15 *horsepower-hour of oxides of nitrogen and*
16 *.01 grams per brake horsepower-hour of*
17 *particulate matter; and*

18 (ii) *for buses manufactured in model*
19 *years 2004 through 2006, 2.5 grams per*
20 *brake horsepower-hour of nonmethane hy-*
21 *drocarbons and oxides of nitrogen and .01*
22 *grams per brake horsepower-hour of partic-*
23 *ulate matter.*

24 (h) *DEPLOYMENT AND DISTRIBUTION.—The Secretary*
25 *shall seek to the maximum extent practicable to achieve na-*

1 *tionwide deployment of alternative fuel school buses through*
2 *the program under this section, and shall ensure a broad*
3 *geographic distribution of grant awards, with a goal of no*
4 *State receiving more than 10 percent of the grant funding*
5 *made available under this section for a fiscal year.*

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

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

12 (1) *the term “alternative fuel school bus” means*
13 *a bus powered substantially by electricity (including*
14 *electricity supplied by a fuel cell), or by liquefied nat-*
15 *ural gas, compressed natural gas, liquefied petroleum*
16 *gas, hydrogen, propane, or methanol or ethanol at no*
17 *less than 85 percent by volume;*

18 (2) *the term “idling” means not turning off an*
19 *engine while remaining stationary for more than ap-*
20 *proximately 3 minutes; and*

21 (3) *the term “ultra-low sulfur diesel school bus”*
22 *means a school bus powered by diesel fuel which con-*
23 *tains sulfur at not more than 15 parts per million.*

24 (k) *REDUCTION OF SCHOOL BUS IDLING.—Each local*
25 *educational agency (as defined in section 9101 of the Ele-*

1 *mentary and Secondary Education Act of 1965 (20 U.S.C.*
2 *7801)) that receives Federal funds under the Elementary*
3 *and Secondary Education Act of 1965 (20 U.S.C. 6301 et*
4 *seq.) is encouraged to develop a policy to reduce the inci-*
5 *dence of school buses idling at schools when picking up and*
6 *unloading students.*

7 **SEC. 815. FUEL CELL BUS DEVELOPMENT AND DEMONSTRA-**
8 **TION PROGRAM.**

9 (a) *ESTABLISHMENT OF PROGRAM.*—*The Secretary*
10 *shall establish a program for entering into cooperative*
11 *agreements with private sector fuel cell bus developers for*
12 *the development of fuel cell-powered school buses, and subse-*
13 *quently with not less than two units of local government*
14 *using natural gas-powered school buses and such private*
15 *sector fuel cell bus developers to demonstrate the use of fuel*
16 *cell-powered school buses.*

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

19 (1) *20 percent for fuel infrastructure develop-*
20 *ment activities; and*

21 (2) *50 percent for demonstration activities and*
22 *for development activities not described in paragraph*
23 *(1).*

24 (c) *FUNDING.*—*No more than \$25,000,000 of the*
25 *amounts authorized under section 815 may be used for car-*

1 *rying out this section for the period encompassing fiscal*
2 *years 2003 through 2006.*

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

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

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

12 **SEC. 816. AUTHORIZATION OF APPROPRIATIONS.**

13 *There are authorized to be appropriated to the Sec-*
14 *retary of Energy for carrying out sections 814 and 815,*
15 *to remain available until expended—*

16 *(1) \$50,000,000 for fiscal year 2003;*

17 *(2) \$60,000,000 for fiscal year 2004;*

18 *(3) \$70,000,000 for fiscal year 2005; and*

19 *(4) \$80,000,000 for fiscal year 2006.*

20 **SEC. 817. TEMPORARY BIODIESEL CREDIT EXPANSION.**

21 *(a) BIODIESEL CREDIT EXPANSION.—Section 312(b)*
22 *of the Energy Policy Act of 1992 (42 U.S.C. 13220(b)) is*
23 *amended by striking paragraph (2) and inserting the fol-*
24 *lowing:*

25 *“(2) USE.—*

1 “(A) *IN GENERAL.*—A fleet or covered
2 person—

3 “(i) may use credits allocated under
4 subsection (a) to satisfy more than 50 per-
5 cent of the alternative fueled vehicle require-
6 ments of a fleet or covered person under this
7 title, title IV, and title V; but

8 “(ii) may use credits allocated under
9 subsection (a) to satisfy 100 percent of the
10 alternative fueled vehicle requirements of a
11 fleet or covered person under title V for 1 or
12 more of model years 2002 through 2005.

13 “(B) *APPLICABILITY.*—Subparagraph (A)
14 does not apply to a fleet or covered person that
15 is a biodiesel alternative fuel provider described
16 in section 501(a)(2)(A).”.

17 (b) *TREATMENT AS SECTION 508 CREDITS.*—Section
18 312(c) of the Energy Policy Act of 1992 (42 U.S.C.
19 13220(c)) is amended—

20 (1) in the subsection heading, by striking
21 “CREDIT NOT” and inserting “TREATMENT AS”; and

22 (2) by striking “shall not be considered” and in-
23 serting “shall be treated as”.

24 (c) *ALTERNATIVE FUELED VEHICLE STUDY AND RE-*
25 *PORT.*—

1 (1) *DEFINITIONS.—In this subsection:*

2 (A) *ALTERNATIVE FUEL.—The term “alter-*
3 *native fuel” has the meaning given the term in*
4 *section 301 of the Energy Policy Act of 1992 (42*
5 *U.S.C. 13211).*

6 (B) *ALTERNATIVE FUELED VEHICLE.—The*
7 *term “alternative fueled vehicle” has the mean-*
8 *ing given the term in section 301 of the Energy*
9 *Policy Act of 1992 (42 U.S.C. 13211).*

10 (C) *LIGHT DUTY MOTOR VEHICLE.—The*
11 *term “light duty motor vehicle” has the meaning*
12 *given the term in section 301 of the Energy Pol-*
13 *icy Act of 1992 (42 U.S.C. 13211).*

14 (D) *SECRETARY.—The term “Secretary”*
15 *means the Secretary of Energy.*

16 (2) *BIODIESEL CREDIT EXTENSION STUDY.—As*
17 *soon as practicable after the date of enactment of this*
18 *Act, the Secretary shall conduct a study—*

19 (A) *to determine the availability and cost of*
20 *light duty motor vehicles that qualify as alter-*
21 *native fueled vehicles under title V of the Energy*
22 *Policy Act of 1992 (42 U.S.C. 13251 et seq.);*
23 *and*

24 (B) *to compare—*

1 (i) the availability and cost of bio-
2 diesel; with

3 (ii) the availability and cost of fuels
4 that qualify as alternative fuels under title
5 V of the Energy Policy Act of 1992 (42
6 U.S.C. 13251 et seq.).

7 (3) *REPORT*.—Not later than 1 year after the
8 date of enactment of this Act, the Secretary shall sub-
9 mit to Congress a report that—

10 (A) describes the results of the study con-
11 ducted under paragraph (2); and

12 (B) includes any recommendations of the
13 Secretary for legislation to extend the temporary
14 credit provided under subsection (a) beyond
15 model year 2005.

16 **SEC. 818. NEIGHBORHOOD ELECTRIC VEHICLES.**

17 Section 301 of the Energy Policy Act of 1992 (42
18 U.S.C. 13211) is amended—

19 (1) by striking “or a dual fueled vehicle” and in-
20 serting “, a dual fueled vehicle, or a neighborhood
21 electric vehicle”;

22 (2) by striking “and” at the end of paragraph
23 (13);

24 (3) by striking the period at the end of subpara-
25 graph (14) and inserting “; and”; and

1 (4) by adding at the end the following:

2 “(15) the term ‘neighborhood electric vehicle’
3 means a motor vehicle that qualifies as both—

4 “(A) a low-speed vehicle, as such term is de-
5 fined in section 571.3(b) of title 49, Code of Fed-
6 eral Regulations; and

7 “(B) a zero-emission vehicle, as such term is
8 defined in section 86.1703–99 of title 40, Code of
9 Federal Regulations.”.

10 **SEC. 819. CREDIT FOR HYBRID VEHICLES, DEDICATED AL-**
11 **TERNATIVE FUEL VEHICLES, AND INFRA-**
12 **STRUCTURE.**

13 Section 507 of the Energy Policy Act of 1992 (42
14 U.S.C. 13258) is amended by adding at the end the fol-
15 lowing:

16 “(p) **CREDITS FOR NEW QUALIFIED HYBRID MOTOR**
17 **VEHICLES.**—

18 “(1) **DEFINITIONS.**—In this subsection:

19 “(A) **2000 MODEL YEAR CITY FUEL EFFI-**
20 **CIENCY.**—The term ‘2000 model year city fuel ef-
21 ficiency’, with respect to a motor vehicle, means
22 fuel efficiency determined in accordance with the
23 following tables:

24 “(i) In the case of a passenger auto-
25 mobile:

1 *ciency specified in table 1 in paragraph (2)(C)*
2 *over the average 2000 model year city fuel effi-*
3 *ciency of vehicles in the same weight class.*

4 “(E) *MAXIMUM AVAILABLE POWER.*—*The*
5 *term ‘maximum available power’, with respect to*
6 *a new qualified hybrid motor vehicle that is a*
7 *passenger vehicle or light truck, means the*
8 *quotient obtained by dividing—*

9 “(i) *the maximum power available*
10 *from the electrical storage device of the new*
11 *qualified hybrid motor vehicle, during a*
12 *standard 10-second pulse power or equiva-*
13 *lent test; by*

14 “(ii) *the sum of—*

15 “(I) *the maximum power de-*
16 *scribed in clause (i); and*

17 “(II) *the net power of the internal*
18 *combustion or heat engine, as deter-*
19 *mined in accordance with standards*
20 *established by the Society of Auto-*
21 *mobile Engineers.*

22 “(F) *MOTOR VEHICLE.*—*The term ‘motor*
23 *vehicle’ has the meaning given the term in sec-*
24 *tion 216 of the Clean Air Act (42 U.S.C. 7550).*

1 “(G) *NEW QUALIFIED HYBRID MOTOR VEHI-*
2 *CLE.—The term ‘new qualified hybrid motor ve-*
3 *hicle’ means a motor vehicle that—*

4 “(i) *draws propulsion energy from*
5 *both—*

6 “(I) *an internal combustion en-*
7 *gine (or heat engine that uses combus-*
8 *tible fuel); and*

9 “(II) *an energy storage device;*

10 “(ii) *in the case of a passenger auto-*
11 *mobile or light truck—*

12 “(I) *in the case of a 2001 or later*
13 *model vehicle, receives a certificate of*
14 *conformity under the Clean Air Act*
15 *(42 U.S.C. 7401 et seq.) and produces*
16 *emissions at a level that is at or below*
17 *the applicable qualifying California*
18 *low emissions vehicle standards estab-*
19 *lished under authority of section*
20 *243(e)(2) of the Clean Air Act (42*
21 *U.S.C. 7583(e)(2)) for that make and*
22 *model year; and*

23 “(II) *in the case of a 2004 or*
24 *later model vehicle, is certified by the*
25 *Administrator as producing emissions*

1 at a level that is at or below the level
2 established for Bin 5 vehicles in the
3 Tier 2 regulations promulgated by the
4 Administrator under section 202(i) of
5 the Clean Air Act (42 U.S.C. 7521(i))
6 for that make and model year vehicle;
7 and

8 “(iii) employs a vehicle braking system
9 that recovers waste energy to charge an en-
10 ergy storage device.

11 “(H) *VEHICLE INERTIA WEIGHT CLASS*.—
12 The term ‘vehicle inertia weight class’ has the
13 meaning given the term in regulations promul-
14 gated by the Administrator for purposes of the
15 administration of title II of the Clean Air Act
16 (42 U.S.C. 7521 et seq.).

17 “(2) *ALLOCATION*.—

18 “(A) *IN GENERAL*.—The Secretary shall al-
19 locate a partial credit to a fleet or covered person
20 under this title if the fleet or person acquires a
21 new qualified hybrid motor vehicle that is eligi-
22 ble to receive a credit under each of the tables in
23 subparagraph (C).

24 “(B) *AMOUNT*.—The amount of a partial
25 credit allocated under subparagraph (A) for a

1 vehicle described in that subparagraph shall be
 2 equal to the sum of—

3 “(i) the partial credits determined
 4 under table 1 in subparagraph (C); and

5 “(ii) the partial credits determined
 6 under table 2 in subparagraph (C).

7 “(C) TABLES.—The tables referred to in
 8 subparagraphs (A) and (B) are as follows:

“Table 1

| “Partial credit for increased fuel efficiency: | Amount of credit: |
|--|--------------------------|
| At least 125% but less than 150% of 2000 model year city fuel efficiency | 0.14 |
| At least 150% but less than 175% of 2000 model year city fuel efficiency | 0.21 |
| At least 175% but less than 200% of 2000 model year city fuel efficiency | 0.28 |
| At least 200% but less than 225% of 2000 model year city fuel efficiency | 0.35 |
| At least 225% but less than 250% of 2000 model year city fuel efficiency | 0.50. |

“Table 2

| “Partial credit for ‘Maximum Available Power’: | Amount of credit: |
|---|--------------------------|
| At least 5% but less than 10% | 0.125 |
| At least 10% but less than 20% | 0.250 |
| At least 20% but less than 30% | 0.375 |
| At least 30% or more | 0.500. |

9 “(D) USE OF CREDITS.—At the request of a
 10 fleet or covered person allocated a credit under
 11 this subsection, the Secretary shall, for the year
 12 in which the acquisition of the qualified hybrid
 13 motor vehicle is made, treat that credit as the ac-
 14 quisition of 1 alternative fueled vehicle that the

1 *fleet or covered person is required to acquire*
2 *under this title.*

3 “(3) *REGULATIONS.*—*The Secretary shall pro-*
4 *mulgate regulations under which any Federal fleet*
5 *that acquires a new qualified hybrid motor vehicle*
6 *will receive partial credits determined under the ta-*
7 *bles contained in paragraph (2)(C) for purposes of*
8 *meeting the requirements of section 303.*

9 “(q) *CREDIT FOR SUBSTANTIAL CONTRIBUTION TO-*
10 *WARDS USE OF DEDICATED VEHICLES IN NONCOVERED*
11 *FLEETS.*—

12 “(1) *DEFINITIONS.*—*In this subsection:*

13 “(A) *DEDICATED VEHICLE.*—*The term*
14 *‘dedicated vehicle’ includes—*

15 “(i) *a light, medium, or heavy duty ve-*
16 *hicle; and*

17 “(ii) *a neighborhood electric vehicle.*

18 “(B) *MEDIUM OR HEAVY DUTY VEHICLE.*—
19 *The term ‘medium or heavy duty vehicle’ in-*
20 *cludes a vehicle that—*

21 “(i) *operates solely on alternative fuel;*
22 *and*

23 “(ii)(I) *in the case of a medium duty*
24 *vehicle, has a gross vehicle weight rating of*

1 *more than 8,500 pounds but not more than*
2 *14,000 pounds; or*

3 *“(II) in the case of a heavy duty vehi-*
4 *cle, has a gross vehicle weight rating of*
5 *more than 14,000 pounds.*

6 *“(C) SUBSTANTIAL CONTRIBUTION.—The*
7 *term ‘substantial contribution’ (equal to 1 full*
8 *credit) means not less than \$15,000 in cash or*
9 *in kind services, as determined by the Secretary.*

10 *“(2) ISSUANCE OF CREDITS.—The Secretary*
11 *shall issue a credit to a fleet or covered person under*
12 *this title if the fleet or person makes a substantial*
13 *contribution toward the acquisition and use of dedi-*
14 *cated vehicles by a person that owns, operates, leases,*
15 *or otherwise controls a fleet that is not covered by this*
16 *title.*

17 *“(3) MULTIPLE CREDITS FOR MEDIUM AND*
18 *HEAVY DUTY DEDICATED VEHICLES.—The Secretary*
19 *shall issue 2 full credits to a fleet or covered person*
20 *under this title if the fleet or person acquires a me-*
21 *dium or heavy duty dedicated vehicle.*

22 *“(4) USE OF CREDITS.—At the request of a fleet*
23 *or covered person allocated a credit under this sub-*
24 *section, the Secretary shall, for the year in which the*
25 *acquisition of the dedicated vehicle is made, treat that*

1 *credit as the acquisition of 1 alternative fueled vehicle*
2 *that the fleet or covered person is required to acquire*
3 *under this title.*

4 “(5) *LIMITATION.—Per vehicle credits acquired*
5 *under this subsection shall not exceed the per vehicle*
6 *credits allowed under this section to a fleet for quali-*
7 *fying vehicles in each of the weight categories (light,*
8 *medium, or heavy duty).*

9 “(r) *CREDIT FOR SUBSTANTIAL INVESTMENT IN AL-*
10 *TERNATIVE FUEL INFRASTRUCTURE.—*

11 “(1) *DEFINITIONS.—In this section, the term*
12 *‘qualifying infrastructure’ means—*

13 “(A) *equipment required to refuel or re-*
14 *charge alternative fueled vehicles;*

15 “(B) *facilities or equipment required to*
16 *maintain, repair, or operate alternative fueled*
17 *vehicles;*

18 “(C) *training programs, educational mate-*
19 *rials, or other activities necessary to provide in-*
20 *formation regarding the operation, maintenance,*
21 *or benefits associated with alternative fueled ve-*
22 *hicles; and*

23 “(D) *such other activities the Secretary con-*
24 *siders to constitute an appropriate expenditure*
25 *in support of the operation, maintenance, or fur-*

1 *ther widespread adoption of or utilization of al-*
2 *ternative fueled vehicles.*

3 “(2) *ISSUANCE OF CREDITS.*—*The Secretary*
4 *shall issue a credit to a fleet or covered person under*
5 *this title for investment in qualifying infrastructure*
6 *if the qualifying infrastructure is open to the general*
7 *public during regular business hours.*

8 “(3) *AMOUNT.*—*For the purposes of credits*
9 *under this subsection—*

10 “(A) *1 credit shall be equal to a minimum*
11 *investment of \$25,000 in cash or in kind serv-*
12 *ices, as determined by the Secretary; and*

13 “(B) *except in the case of a Federal or State*
14 *fleet, no part of the investment may be provided*
15 *by Federal or State funds.*

16 “(4) *USE OF CREDITS.*—*At the request of a fleet*
17 *or covered person allocated a credit under this sub-*
18 *section, the Secretary shall, for the year in which the*
19 *investment is made, treat that credit as the acquisi-*
20 *tion of 1 alternative fueled vehicle that the fleet or*
21 *covered person is required to acquire under this*
22 *title.”.*

23 **SEC. 820. RENEWABLE CONTENT OF MOTOR VEHICLE FUEL.**

24 (a) *IN GENERAL.*—*Section 211 of the Clean Air Act*
25 *(42 U.S.C. 7545) is amended—*

1 (1) *by redesignating subsection (o) as subsection*
2 *(q); and*

3 (2) *by inserting after subsection (n) the fol-*
4 *lowing:*

5 “(o) *RENEWABLE FUEL PROGRAM.—*

6 “(1) *DEFINITIONS.—In this section:*

7 “(A) *CELLULOSIC BIOMASS ETHANOL.—The*
8 *term ‘cellulosic biomass ethanol’ means ethanol*
9 *derived from any lignocellulosic or hemicellulosic*
10 *matter that is available on a renewable or recur-*
11 *ring basis, including—*

12 “(i) *dedicated energy crops and trees;*

13 “(ii) *wood and wood residues;*

14 “(iii) *plants;*

15 “(iv) *grasses;*

16 “(v) *agricultural residues;*

17 “(vi) *fibers;*

18 “(vii) *animal wastes and other waste*
19 *materials; and*

20 “(viii) *municipal solid waste.*

21 “(B) *RENEWABLE FUEL.—*

22 “(i) *IN GENERAL.—The term ‘renew-*
23 *able fuel’ means motor vehicle fuel that—*

24 “(I)(aa) *is produced from grain,*
25 *starch, oilseeds, or other biomass; or*

1 “(bb) is natural gas produced
2 from a biogas source, including a land-
3 fill, sewage waste treatment plant,
4 feedlot, or other place where decaying
5 organic material is found; and

6 “(II) is used to replace or reduce
7 the quantity of fossil fuel present in a
8 fuel mixture used to operate a motor
9 vehicle.

10 “(ii) *INCLUSION.*—The term ‘renewable
11 fuel’ includes cellulosic biomass ethanol and
12 biodiesel (as defined in section 312(f) of the
13 Energy Policy Act of 1992 (42 U.S.C.
14 13220(f)).

15 “(C) *SMALL REFINERY.*—The term ‘small
16 refinery’ means a refinery for which average ag-
17 gregate daily crude oil throughput for the cal-
18 endar year (as determined by dividing the aggre-
19 gate throughput for the calendar year by the
20 number of days in the calendar year) does not
21 exceed 75,000 barrels.

22 “(2) *RENEWABLE FUEL PROGRAM.*—

23 “(A) *IN GENERAL.*—Not later than 1 year
24 from enactment of this provision, the Adminis-
25 trator shall promulgate regulations ensuring that

1 gasoline sold or dispensed to consumers in the
 2 United States, on an annual average basis, con-
 3 tains the applicable volume of renewable fuel as
 4 specified in subparagraph (B). Regardless of the
 5 date of promulgation, such regulations shall con-
 6 tain compliance provisions for refiners, blenders,
 7 and importers, as appropriate, to ensure that the
 8 requirements of this section are met, but shall
 9 not restrict where renewables can be used, or im-
 10 pose any per-gallon obligation for the use of re-
 11 newables. If the Administrator does not promul-
 12 gate such regulations, the applicable percentage,
 13 on a volume percentage of gasoline basis, shall be
 14 1.62 in 2004.

15 “(B) APPLICABLE VOLUME.—

16 (i) CALENDAR YEARS 2004 THROUGH
 17 2012.—For the purpose of subparagraph (A),
 18 the applicable volume for any of calendar
 19 years 2004 through 2012 shall be deter-
 20 mined in accordance with the following
 21 table:

Applicable volume of renewable fuel

| “Calendar year: | (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 |

| “Calendar year: | (In billions of gallons) |
|------------------------|---------------------------------|
| 2011 | 4.7 |
| 2012 | 5.0. |

1 “(ii) CALENDAR YEAR 2013 AND
2 THEREAFTER.—For the purpose of subpara-
3 graph (A), the applicable volume for cal-
4 endar year 2013 and each calendar year
5 thereafter shall be equal to the product ob-
6 tained by multiplying—

7 “(I) the number of gallons of gaso-
8 line that the Administrator estimates
9 will be sold or introduced into com-
10 merce in the calendar year; and

11 “(II) the ratio that—

12 “(aa) 5.0 billion gallons of
13 renewable fuels; bears to

14 “(bb) the number of gallons
15 of gasoline sold or introduced into
16 commerce in calendar year 2012.

17 “(3) APPLICABLE PERCENTAGES.—Not later
18 than October 31 of each calendar year, through 2011,
19 the Administrator of the Energy Information Admin-
20 istration shall provide the Administrator an estimate
21 of the volumes of gasoline sales in the United States
22 for the coming calendar year. Based on such esti-
23 mates, the Administrator shall by November 30 of
24 each calendar year, through 2011, determine and pub-

1 *lish in the Federal Register, the renewable fuel obliga-*
2 *tion, on a volume percentage of gasoline basis, appli-*
3 *cable to refiners, blenders, distributors and importers,*
4 *as appropriate, for the coming calendar year, to en-*
5 *sure that the requirements of paragraph (2) are met.*
6 *For each calendar year, the Administrator shall es-*
7 *tablish a single applicable percentage that applies to*
8 *all parties, and make provision to avoid redundant*
9 *obligations. In determining the applicable percent-*
10 *ages, the Administrator shall make adjustments to ac-*
11 *count for the use of renewable fuels by exempt small*
12 *refineries during the previous year.*

13 *“(4) CELLULOSIC BIOMASS ETHANOL.—For the*
14 *purpose of paragraph (2), 1 gallon of cellulosic bio-*
15 *mass ethanol shall be considered to be the equivalent*
16 *of 1.5 gallon of renewable fuel.*

17 *“(5) CREDIT PROGRAM.—*

18 *“(A) IN GENERAL.—The regulations pro-*
19 *mulgated to carry out this subsection shall pro-*
20 *vide for the generation of an appropriate*
21 *amount of credits by any person that refines,*
22 *blends, or imports gasoline that contains a quan-*
23 *tity of renewable fuel that is greater than the*
24 *quantity required under paragraph (2). Such*
25 *regulations shall provide for the generation of an*

1 *appropriate amount of credits for biodiesel fuel.*
2 *If a small refinery notifies the Administrator*
3 *that it waives the exemption provided by this*
4 *Act, the regulations shall provide for the genera-*
5 *tion of credits by the small refinery beginning in*
6 *the year following such notification.*

7 “(B) *USE OF CREDITS.*—*A person that gen-*
8 *erates credits under subparagraph (A) may use*
9 *the credits, or transfer all or a portion of the*
10 *credits to another person, for the purpose of com-*
11 *plying with paragraph (2).*

12 “(C) *LIFE OF CREDITS.*—*A credit generated*
13 *under this paragraph shall be valid to show com-*
14 *pliance:*

15 (i) *in the calendar year in which the*
16 *credit was generated or the next calendar*
17 *year, or*

18 (ii) *in the calendar year in which the*
19 *credit was generated or next two consecutive*
20 *calendar years if the Administrator promul-*
21 *gates regulations under paragraph (6).*

22 “(D) *INABILITY TO PURCHASE SUFFICIENT*
23 *CREDITS.*—*The regulations promulgated to carry*
24 *out this subsection shall include provisions al-*
25 *lowing any person that is unable to generate or*

1 purchase sufficient credits to meet the require-
2 ments under paragraph (2) to carry forward a
3 renewables deficit provided that, in the calendar
4 year following the year in which the renewables
5 deficit is created, such person shall achieve com-
6 pliance with the renewables requirement under
7 paragraph (2), and shall generate or purchase
8 additional renewables credits to offset the renew-
9 ables deficit of the previous year.

10 “(6) SEASONAL VARIATIONS IN RENEWABLE
11 FUEL USE.—

12 “(A) STUDY.—For each of calendar years
13 2004 through 2012, the Administrator of the En-
14 ergy Information Administration, shall conduct
15 a study of renewable fuels blending to determine
16 whether there are excessive seasonal variations in
17 the use of renewable fuels.

18 “(B) REGULATION OF EXCESSIVE SEASONAL
19 VARIATIONS.—If, for any calendar year, the Ad-
20 ministrator of the Energy Information Adminis-
21 tration, based on the study under subparagraph
22 (A), makes the determinations specified in sub-
23 paragraph (C), the Administrator shall promul-
24 gate regulations to ensure that 35 percent or
25 more of the quantity of renewable fuels necessary

1 to meet the requirement of paragraph (2) is used
2 during each of the periods specified in subpara-
3 graph (D) of each subsequent calendar year.

4 “(C) *DETERMINATIONS.*—The determina-
5 tions referred to in subparagraph (B) are that—

6 “(i) less than 35 percent of the quan-
7 tity of renewable fuels necessary to meet the
8 requirement of paragraph (2) has been used
9 during one of the periods specified in sub-
10 paragraph (D) of the calendar year; and

11 “(ii) a pattern of excessive seasonal
12 variation described in clause (i) will con-
13 tinue in subsequent calendar years.

14 “(D) *PERIODS.*—The two periods referred to
15 in this paragraph are—

16 “(i) April through September; and

17 “(ii) January through March and Oc-
18 tober through December.

19 “(E) *EXCLUSIONS.*—Renewable fuels blend-
20 ed or consumed in 2004 in a state which has re-
21 ceived a waiver under section 209(b) shall not be
22 included in the study in subparagraph (A).

23 “(7) *WAIVERS.*—

24 “(A) *IN GENERAL.*—The Administrator, in
25 consultation with the Secretary of Agriculture

1 *and the Secretary of Energy, may waive the re-*
2 *quirement of paragraph (2) in whole or in part*
3 *on petition by one or more States by reducing*
4 *the national quantity of renewable fuel required*
5 *under this subsection—*

6 “(i) based on a determination by the
7 Administrator, after public notice and op-
8 portunity for comment, that implementa-
9 tion of the requirement would severely harm
10 the economy or environment of a State, a
11 region, or the United States; or

12 “(ii) based on a determination by the
13 Administrator, after public notice and op-
14 portunity for comment, that there is an in-
15 adequate domestic supply or distribution
16 capacity to meet the requirement.

17 “(B) *PETITIONS FOR WAIVERS.*—*The Ad-*
18 *ministrator, in consultation with the Secretary*
19 *of Agriculture and the Secretary of Energy, shall*
20 *approve or disapprove a State petition for a*
21 *waiver of the requirement of paragraph (2) with-*
22 *in 90 days after the date on which the petition*
23 *is received by the Administrator.*

24 “(C) *TERMINATION OF WAIVERS.*—*A waiver*
25 *granted under subparagraph (A) shall terminate*

1 *after 1 year, but may be renewed by the Admin-*
2 *istrator after consultation with the Secretary of*
3 *Agriculture and the Secretary of Energy.*

4 “(8) *STUDY AND WAIVER FOR INITIAL YEAR OF*
5 *PROGRAM.—Not later than 180 days from enactment,*
6 *the Secretary of Energy shall complete for the Admin-*
7 *istrator a study assessing whether the renewable fuels*
8 *requirement under paragraph (2) will likely result in*
9 *significant adverse consumer impacts in 2004, on a*
10 *national, regional or state basis. Such study shall*
11 *evaluate renewable fuel supplies and prices, blendstock*
12 *supplies, and supply and distribution system capa-*
13 *bilities. Based on such study, the Secretary shall*
14 *make specific recommendations to the Administrator*
15 *regarding waiver of the requirements of paragraph*
16 *(2), in whole or in part, to avoid any such adverse*
17 *impacts. Within 270 days from enactment, the Ad-*
18 *ministrator shall, consistent with the recommenda-*
19 *tions of the Secretary waive, in whole or in part, the*
20 *renewable fuels requirement under paragraph (2) by*
21 *reducing the national quantity of renewable fuel re-*
22 *quired under this subsection in 2004. This provision*
23 *shall not be interpreted as limiting the Administra-*
24 *tor’s authority to waive the requirements of para-*

1 *graph (2) in whole, or in part, under paragraph (7),*
2 *pertaining to waivers.*

3 “(9) *SMALL REFINERIES.*—

4 “(A) *IN GENERAL.*—*The requirement of*
5 *paragraph (2) shall not apply to small refineries*
6 *until January 1, 2008. Not later than December*
7 *31, 2006, the Secretary of Energy shall complete*
8 *for the Administrator a study to determine*
9 *whether the requirement of paragraph (2) would*
10 *impose a disproportionate economic hardship on*
11 *small refineries. For any small refinery that the*
12 *Secretary of Energy determines would experience*
13 *a disproportionate economic hardship, the Ad-*
14 *ministrator shall extend the small refinery ex-*
15 *emption for such small refinery for no less than*
16 *two additional years.*

17 “(B) *ECONOMIC HARDSHIP.*—

18 “(i) *EXTENSION OF EXEMPTION.*—*A*
19 *small refinery may at any time petition the*
20 *Administrator for an extension of the ex-*
21 *emption from the requirement of paragraph*
22 *(2) for the reason of disproportionate eco-*
23 *nomical hardship. In evaluating a hardship*
24 *petition, the Administrator, in consultation*
25 *with the Secretary of Energy, shall consider*

1 *the findings of the study in addition to*
2 *other economic factors.*

3 “(ii) *DEADLINE FOR ACTION ON PETI-*
4 *TIONS.—The Administrator shall act on*
5 *any petition submitted by a small refinery*
6 *for a hardship exemption not later than 90*
7 *days after the receipt of the petition.*

8 “(C) *CREDIT PROGRAM.—If a small refin-*
9 *ery notifies the Administrator that it waives the*
10 *exemption provided by this Act, the regulations*
11 *shall provide for the generation of credits by the*
12 *small refinery beginning in the year following*
13 *such notification.*

14 “(D) *OPT-IN FOR SMALL REFINERS.—A*
15 *small refinery shall be subject to the require-*
16 *ments of this section if it notifies the Adminis-*
17 *trator that it waives the exemption under sub-*
18 *paragraph (A).*

19 “(b) *PENALTIES AND ENFORCEMENT.—Section 211(d)*
20 *of the Clean Air Act (42 U.S.C. 7545(d)) is amended—*

21 *(1) in paragraph (1)—*

22 *(A) in the first sentence, by striking “or*
23 *(n)” each place it appears and inserting “(n) or*
24 *(o)”;* and

1 (B) in the second sentence, by striking “or
2 (m)” and inserting “(m), or (o)”; and
3 (2) in the first sentence of paragraph (2), by
4 striking “and (n)” each place it appears and insert-
5 ing “(n), and (o)”.

6 (c) *EXCLUSION FROM ETHANOL WAIVER.*—Section
7 211(h) of the Clean Air Act (42 U.S.C. 7545(h)) is
8 amended—

9 (1) by redesignating paragraph (5) as para-
10 graph (6); and

11 (2) by inserting after paragraph (4) the fol-
12 lowing:

13 “(5) *EXCLUSION FROM ETHANOL WAIVER.*—

14 “(A) *PROMULGATION OF REGULATIONS.*—

15 Upon notification, accompanied by supporting
16 documentation, from the Governor of a State
17 that the Reid vapor pressure limitation estab-
18 lished by paragraph (4) will increase emissions
19 that contribute to air pollution in any area in
20 the State, the Administrator shall, by regulation,
21 apply, in lieu of the Reid vapor pressure limita-
22 tion established by paragraph (4), the Reid
23 vapor pressure limitation established by para-
24 graph (1) to all fuel blends containing gasoline
25 and 10 percent denatured anhydrous ethanol

1 that are sold, offered for sale, dispensed, sup-
2 plied, offered for supply, transported or intro-
3 duced into commerce in the area during the high
4 ozone season.

5 “(B) *DEADLINE FOR PROMULGATION.*—*The*
6 *Administrator shall promulgate regulations*
7 *under subparagraph (A) not later than 90 days*
8 *after the date of receipt of a notification from a*
9 *Governor under that subparagraph.*

10 “(C) *EFFECTIVE DATE.*—

11 “(i) *IN GENERAL.*—*With respect to an*
12 *area in a State for which the Governor sub-*
13 *mits a notification under subparagraph*
14 *(A), the regulations under that subpara-*
15 *graph shall take effect on the later of—*

16 “(I) *the first day of the first high*
17 *ozone season for the area that begins*
18 *after the date of receipt of the notifica-*
19 *tion; or*

20 “(II) *1 year after the date of re-*
21 *ceipt of the notification.*

22 “(ii) *EXTENSION OF EFFECTIVE DATE*
23 *BASED ON DETERMINATION OF INSUFFI-*
24 *CIENT SUPPLY.*—

1 “(I) *IN GENERAL.*—If, after re-
2 *ceipt of a notification with respect to*
3 *an area from a Governor of a State*
4 *under subparagraph (A), the Administra-*
5 *trator determines, on the Administra-*
6 *tor’s own motion or on petition of any*
7 *person and after consultation with the*
8 *Secretary of Energy, that the promul-*
9 *gation of regulations described in sub-*
10 *paragraph (A) would result in an in-*
11 *sufficient supply of gasoline in the*
12 *State, the Administrator, by*
13 *regulation—*

14 “(aa) *shall extend the effec-*
15 *tive date of the regulations under*
16 *clause (i) with respect to the area*
17 *for not more than 1 year; and*

18 “(bb) *may renew the exten-*
19 *sion under item (aa) for two ad-*
20 *ditional periods, each of which*
21 *shall not exceed 1 year.*

22 “(II) *DEADLINE FOR ACTION ON*
23 *PETITIONS.*—*The Administrator shall*
24 *act on any petition submitted under*
25 *subclause (I) not later than 180 days*

1 *after the date of receipt of the peti-*
2 *tion.”.*

3 *(d) SURVEY OF RENEWABLE FUEL MARKET.—*

4 *(1) SURVEY AND REPORT.—Not later than De-*
5 *cember 1, 2005, and annually thereafter, the Admin-*
6 *istrator shall—*

7 *(A) conduct, with respect to each conven-*
8 *tional gasoline use area and each reformulated*
9 *gasoline use area in each State, a survey to de-*
10 *termine the market shares of—*

11 *(i) conventional gasoline containing*
12 *ethanol;*

13 *(ii) reformulated gasoline containing*
14 *ethanol;*

15 *(iii) conventional gasoline containing*
16 *renewable fuel; and*

17 *(iv) reformulated gasoline containing*
18 *renewable fuel; and*

19 *(B) submit to Congress, and make publicly*
20 *available, a report on the results of the survey*
21 *under subparagraph (A).*

22 *(2) RECORDKEEPING AND REPORTING REQUIRE-*
23 *MENTS.—The Administrator may require any refiner,*
24 *blender, or importer to keep such records and make*
25 *such reports as are necessary to ensure that the survey*

1 *conducted under paragraph (1) is accurate. The Ad-*
2 *ministrator shall rely, to the extent practicable, on ex-*
3 *isting reporting and recordkeeping requirements to*
4 *avoid duplicative requirements.*

5 (3) *APPLICABLE LAW.—Activities carried out*
6 *under this subsection shall be conducted in a manner*
7 *designed to protect confidentiality of individual re-*
8 *sponses.*

9 (e) *RENEWABLE FUELS SAFE HARBOR.—*

10 (1) *IN GENERAL.—Notwithstanding any other*
11 *provision of federal or state law, no renewable fuel, as*
12 *defined by this Act, used or intended to be used as a*
13 *motor vehicle fuel, nor any motor vehicle fuel con-*
14 *taining such renewable fuel, shall be deemed defective*
15 *in design or manufacture by virtue of the fact that it*
16 *is, or contains, such a renewable fuel, if it does not*
17 *violate a control or prohibition imposed by the Ad-*
18 *ministrator under section 211 of the Clean Air Act,*
19 *as amended by this Act, and the manufacturer is in*
20 *compliance with all requests for information under*
21 *section 211(b) of the Clean Air Act, as amended by*
22 *this Act. In the event that the safe harbor under this*
23 *section does not apply, the existence of a design defect*
24 *or manufacturing defect shall be determined under*
25 *otherwise applicable law.*

1 (2) *EXCEPTIONS.*—*This subsection shall not*
2 *apply to ethers.*

3 (3) *EFFECTIVE DATE.*—*This subsection shall be*
4 *effective as of the date of enactment and shall apply*
5 *with respect to all claims filed on or after that date.*

6 **SEC. 820A. FEDERAL AGENCY ETHANOL-BLENDED GASO-**
7 **LINE AND BIODIESEL PURCHASING REQUIRE-**
8 **MENT.**

9 *Title III of the Energy Policy Act of 1992 is amended*
10 *by striking section 306 (42 U.S.C. 13215) and inserting the*
11 *following:*

12 **“SEC. 306. FEDERAL AGENCY ETHANOL-BLENDED GASOLINE**
13 **AND BIODIESEL PURCHASING REQUIREMENT.**

14 “(a) *ETHANOL-BLENDED GASOLINE.*—*The head of*
15 *each Federal agency shall ensure that, in areas in which*
16 *ethanol-blended gasoline is reasonably available at a gen-*
17 *erally competitive price, the Federal agency purchases eth-*
18 *anol-blended gasoline containing at least 10 percent ethanol*
19 *rather than nonethanol-blended gasoline, for use in vehicles*
20 *used by the agency that use gasoline.*

21 “(b) *BIODIESEL.*—

22 “(1) *DEFINITION OF BIODIESEL.*—*In this sub-*
23 *section, the term ‘biodiesel’ has the meaning given the*
24 *term in section 312(f).*

1 “(2) *REQUIREMENT.*—*The head of each Federal*
2 *agency shall ensure that the Federal agency pur-*
3 *chases, for use in fueling fleet vehicles that use diesel*
4 *fuel used by the Federal agency at the location at*
5 *which fleet vehicles of the Federal agency are centrally*
6 *fuelled, in areas in which the biodiesel-blended diesel*
7 *fuel described in paragraphs (A) and (B) is available*
8 *at a generally competitive price—*

9 “(A) *as of the date that is 5 years after the*
10 *date of enactment of this paragraph, biodiesel-*
11 *blended diesel fuel that contains at least 2 per-*
12 *cent biodiesel, rather than nonbiodiesel-blended*
13 *diesel fuel; and*

14 “(B) *as of the date that is 10 years after the*
15 *date of enactment of this paragraph, biodiesel-*
16 *blended diesel fuel that contains at least 20 per-*
17 *cent biodiesel, rather than nonbiodiesel-blended*
18 *diesel fuel.*

19 “(3) *REQUIREMENT OF FEDERAL LAW.*—*The*
20 *provisions of this subsection shall not be considered a*
21 *requirement of Federal law for the purposes of section*
22 *312.*

23 “(c) *EXEMPTION.*—*This section does not apply to fuel*
24 *used in vehicles excluded from the definition of ‘fleet’ by*
25 *subparagraphs (A) through (H) of section 301(9).”.*

1 **SEC. 820B. COMMERCIAL BYPRODUCTS FROM MUNICIPAL**
2 **SOLID WASTE LOAN GUARANTEE PROGRAM.**

3 (a) *DEFINITION OF MUNICIPAL SOLID WASTE.*—In
4 this section, the term “municipal solid waste” has the
5 meaning given the term “solid waste” in section 1004 of
6 the Solid Waste Disposal Act (42 U.S.C. 6903).

7 (b) *ESTABLISHMENT OF PROGRAM.*—The Secretary of
8 Energy shall establish a program to provide guarantees of
9 loans by private institutions for the construction of facili-
10 ties for the processing and conversion of municipal solid
11 waste into fuel ethanol and other commercial byproducts.

12 (c) *REQUIREMENTS.*—The Secretary may provide a
13 loan guarantee under subsection (b) to an applicant if—

14 (1) without a loan guarantee, credit is not avail-
15 able to the applicant under reasonable terms or condi-
16 tions sufficient to finance the construction of a facil-
17 ity described in subsection (b);

18 (2) the prospective earning power of the appli-
19 cant and the character and value of the security
20 pledged provide a reasonable assurance of repayment
21 of the loan to be guaranteed in accordance with the
22 terms of the loan; and

23 (3) the loan bears interest at a rate determined
24 by the Secretary to be reasonable, taking into account
25 the current average yield on outstanding obligations

1 of the United States with remaining periods of matu-
2 rity comparable to the maturity of the loan.

3 (d) *CRITERIA.*—In selecting recipients of loan guaran-
4 tees from among applicants, the Secretary shall give pref-
5 erence to proposals that—

6 (1) meet all applicable Federal and State per-
7 mitting requirements;

8 (2) are most likely to be successful; and

9 (3) are located in local markets that have the
10 greatest need for the facility because of—

11 (A) the limited availability of land for
12 waste disposal; or

13 (B) a high level of demand for fuel ethanol
14 or other commercial byproducts of the facility.

15 (e) *MATURITY.*—A loan guaranteed under subsection
16 (b) shall have a maturity of not more than 20 years.

17 (f) *TERMS AND CONDITIONS.*—The loan agreement for
18 a loan guaranteed under subsection (b) shall provide that
19 no provision of the loan agreement may be amended or
20 waived without the consent of the Secretary.

21 (g) *ASSURANCE OF REPAYMENT.*—The Secretary shall
22 require that an applicant for a loan guarantee under sub-
23 section (b) provide an assurance of repayment in the form
24 of a performance bond, insurance, collateral, or other means

1 acceptable to the Secretary in an amount equal to not less
2 than 20 percent of the amount of the loan.

3 (h) *GUARANTEE FEE.*—The recipient of a loan guar-
4 antee under subsection (b) shall pay the Secretary an
5 amount determined by the Secretary to be sufficient to cover
6 the administrative costs of the Secretary relating to the loan
7 guarantee.

8 (i) *FULL FAITH AND CREDIT.*—The full faith and
9 credit of the United States is pledged to the payment of
10 all guarantees made under this section. Any such guarantee
11 made by the Secretary shall be conclusive evidence of the
12 eligibility of the loan for the guarantee with respect to prin-
13 cipal and interest. The validity of the guarantee shall be
14 incontestable in the hands of a holder of the guaranteed
15 loan.

16 (j) *REPORTS.*—Until each guaranteed loan under this
17 section has been repaid in full, the Secretary shall annually
18 submit to Congress an report on the activities of the Sec-
19 retary under this section.

20 (k) *AUTHORIZATION OF APPROPRIATIONS.*—There are
21 authorized to be appropriated such sums as are necessary
22 to carry out this section.

23 (l) *TERMINATION OF AUTHORITY.*—The authority of
24 the Secretary to issue a loan guarantee under subsection

1 (b) terminates on the date that is 10 years after the date
2 of enactment of this Act.

3 **Subtitle B—Additional Fuel**
4 **Efficiency Measures**

5 **SEC. 821. FUEL EFFICIENCY OF THE FEDERAL FLEET OF**
6 **AUTOMOBILES.**

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

9 **“§ 32917. Standards for executive agency automobiles**

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

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

21 “(1) not later than September 30, 2003, the aver-
22 age fuel economy of the new automobiles in the agen-
23 cy’s fleet of automobiles is not less than 1 mile per
24 gallon higher than the baseline average fuel economy
25 determined under subsection (a) for that fleet; and

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

6 “(c) *CALCULATION OF AVERAGE FUEL ECONOMY.*—
7 Average fuel economy shall be calculated for the purposes
8 of this section in accordance with guidance which the Sec-
9 retary of Transportation shall prescribe for the implementa-
10 tion of this section.

11 “(d) *DEFINITIONS.*—In this section:

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

15 “(2) The term ‘executive agency’ has the mean-
16 ing given that term in section 105 of title 5.

17 “(3) The term ‘new automobile’, with respect to
18 the fleet of automobiles of an executive agency, means
19 an automobile that is leased for at least 60 consec-
20 utive days or bought, by or for the agency, after Sep-
21 tember 30, 1999.”.

1 **SEC. 822. IDLING REDUCTION SYSTEMS IN HEAVY DUTY VE-**
2 **HICLES.**

3 *Title III of the Energy Policy and Conservation Act*
4 *(42 U.S.C. 6291 et seq.) is amended by adding at the end*
5 *the following:*

6 **“PART K—REDUCING TRUCK IDLING**

7 **“SEC. 400AAA. REDUCING TRUCK IDLING.**

8 *“(a) STUDY.—Not later than 18 months after the date*
9 *of enactment of this section, the Secretary shall, in consulta-*
10 *tion with the Secretary of Transportation, commence a*
11 *study to analyze the potential fuel savings resulting from*
12 *long duration idling of main drive engines in heavy-duty*
13 *vehicles.*

14 *“(b) REGULATIONS.—Upon completion of the study*
15 *under subsection (a), the Secretary may issue regulations*
16 *requiring the installation of idling reduction systems on all*
17 *newly manufactured heavy-duty vehicles.*

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

19 *“(1) The term ‘heavy-duty vehicle’ means a vehi-*
20 *cle that has a gross vehicle weight rating greater than*
21 *8,500 pounds and is powered by a diesel engine.*

22 *“(2) The term ‘idling reduction system’ means a*
23 *device or system of devices used to reduce long dura-*
24 *tion idling of a diesel engine in a vehicle.*

25 *“(3) The term ‘long duration idling’ means the*
26 *operation of a main drive engine of a heavy-duty ve-*

1 *hicle for a period of more than 15 consecutive minutes*
2 *when the main drive engine is not engaged in gear,*
3 *except that such term does not include idling as a re-*
4 *sult of traffic congestion or other impediments to the*
5 *movement of a heavy-duty vehicle.*

6 *“(4) The term ‘vehicle’ has the meaning given*
7 *such term in section 4 of title 1, United States*
8 *Code.”.*

9 **SEC. 823. CONSERVE BY BICYCLING PROGRAM.**

10 *(a) ESTABLISHMENT.—The Secretary of Transpor-*
11 *tation shall establish a Conserve By Bicycling pilot pro-*
12 *gram that shall provide for up to 10 geographically dis-*
13 *persed projects to encourage the use of bicycles in place of*
14 *motor vehicles. Such projects shall use education and mar-*
15 *keting to convert motor vehicle trips to bike trips, document*
16 *project results and energy savings, and facilitate partner-*
17 *ships among entities in the fields of transportation, law en-*
18 *forcement, education, public health, environment, or energy.*
19 *At least 20 percent of the cost of each project shall be pro-*
20 *vided from State or local sources. Not later than 2 years*
21 *after implementation of the projects, the Secretary of Trans-*
22 *portation shall submit a report to Congress on the results*
23 *of the pilot program.*

24 *(b) NATIONAL ACADEMY STUDY.—The Secretary of*
25 *Transportation shall contract with the National Academy*

1 *of Sciences to conduct a study on the feasibility and benefits*
2 *of converting motor vehicle trips to bicycle trips and to*
3 *issue a report, not later than 2 years after enactment of*
4 *this Act, on the findings of such study.*

5 *(c) AUTHORIZATION OF APPROPRIATIONS.—There is*
6 *authorized to be appropriated to the Secretary of Transpor-*
7 *tation \$5,500,000, to remain available until expended, to*
8 *carry out the pilot program and study pursuant to this sec-*
9 *tion.*

10 **SEC. 824. FUEL CELL VEHICLE PROGRAM.**

11 *Not later than 1 year from date of enactment of this*
12 *section, the Secretary shall develop a program with time-*
13 *tables for developing technologies to enable at least 100,000*
14 *hydrogen-fueled fuel cell vehicles to be available for sale in*
15 *the United States by 2010 and at least 2.5 million of such*
16 *vehicles to be available by 2020 and annually thereafter.*
17 *The program shall also include timetables for development*
18 *of technologies to provide 50 million gasoline equivalent*
19 *gallons of hydrogen for sale in fueling stations in the United*
20 *States by 2010 and at least 2.5 billion gasoline equivalent*
21 *gallons by 2020 and annually thereafter. The Secretary*
22 *shall annually include a review of the progress toward meet-*
23 *ing the vehicle sales of Energy budget.*

1 ***Subtitle C—Federal Reformulated***
2 ***Fuels***

3 **SEC. 831. SHORT TITLE.**

4 *This subtitle may be cited as the “Federal Reformu-*
5 *lated Fuels Act of 2002”.*

6 **SEC. 832. LEAKING UNDERGROUND STORAGE TANKS.**

7 *(a) USE OF LUST FUNDS FOR REMEDIATION OF CON-*
8 *TAMINATION FROM ETHER FUEL ADDITIVES.—Section*
9 *9003(h) of the Solid Waste Disposal Act (42 U.S.C.*
10 *6991b(h)) is amended—*

11 *(1) in paragraph (7)(A)—*

12 *(A) by striking “paragraphs (1) and (2) of*
13 *this subsection” and inserting “paragraphs (1),*
14 *(2), and (12)”;* and

15 *(B) by inserting “and section 9010” before*
16 *“if”;* and

17 *(2) by adding at the end the following:*

18 *“(12) REMEDIATION OF CONTAMINATION FROM*
19 *ETHER FUEL ADDITIVES.—*

20 *“(A) IN GENERAL.—The Administrator and*
21 *the States may use funds made available under*
22 *section 9013(1) to carry out corrective actions*
23 *with respect to a release of methyl tertiary butyl*
24 *ether or other ether fuel additive that presents a*

1 *threat to human health, welfare, or the environ-*
2 *ment.*

3 “(B) *APPLICABLE AUTHORITY.*—Subpara-
4 *graph (A) shall be carried out—*

5 “(i) *in accordance with paragraph (2),*
6 *except that a release with respect to which*
7 *a corrective action is carried out under sub-*
8 *paragraph (A) shall not be required to be*
9 *from an underground storage tank; and*

10 “(ii) *in the case of a State, in accord-*
11 *ance with a cooperative agreement entered*
12 *into by the Administrator and the State*
13 *under paragraph (7).”.*

14 (b) *RELEASE PREVENTION AND COMPLIANCE.*—Sub-
15 *title I of the Solid Waste Disposal Act (42 U.S.C. 6991 et*
16 *seq.) is amended by striking section 9010 and inserting the*
17 *following:*

18 **“SEC. 9010. RELEASE PREVENTION AND COMPLIANCE.**

19 “*Funds made available under section 9013(2) from the*
20 *Leaking Underground Storage Tank Trust Fund may be*
21 *used for conducting inspections, or for issuing orders or*
22 *bringing actions under this subtitle—*

23 “(1) *by a State (pursuant to section 9003(h)(7))*
24 *acting under—*

1 “(A) a program approved under section
2 9004; or

3 “(B) State requirements regulating under-
4 ground storage tanks that are similar or iden-
5 tical to this subtitle, as determined by the Ad-
6 ministrators; and

7 “(2) by the Administrator, acting under this
8 subtitle or a State program approved under section
9 9004.

10 **“SEC. 9011. BEDROCK BIOREMEDIATION.**

11 *“The Administrator shall establish, at an institution
12 of higher education (as defined in section 101 of the Higher
13 Education Act of 1965 (20 U.S.C. 1001)) with established
14 expertise in bioremediation of contaminated bedrock
15 aquifers, a resource center—*

16 *“(1) to conduct research concerning bioremedi-
17 ation of methyl tertiary butyl ether in contaminated
18 underground aquifers, including contaminated bed-
19 rock; and*

20 *“(2) to provide for States a technical assistance
21 clearinghouse for information concerning innovative
22 technologies for bioremediation described in para-
23 graph (1).*

1 **“SEC. 9012. SOIL REMEDIATION.**

2 *“The Administrator may establish a program to con-*
3 *duct research concerning remediation of methyl tertiary*
4 *butyl ether contamination of soil, including granitic or vol-*
5 *canic soil.*

6 **“SEC. 9013. AUTHORIZATION OF APPROPRIATIONS.**

7 *“In addition to amounts made available under section*
8 *2007(f), there are authorized to be appropriated from the*
9 *Leaking Underground Storage Tank Trust Fund, notwith-*
10 *standing section 9508(c)(1) of the Internal Revenue Code*
11 *of 1986—*

12 *“(1) to carry out section 9003(h)(12),*
13 *\$200,000,000 for fiscal year 2003, to remain available*
14 *until expended;*

15 *“(2) to carry out section 9010—*

16 *“(A) \$50,000,000 for fiscal year 2003; and*

17 *“(B) \$30,000,000 for each of fiscal years*
18 *2004 through 2008;*

19 *“(3) to carry out section 9011—*

20 *“(A) \$500,000 for fiscal year 2003; and*

21 *“(B) \$300,000 for each of fiscal years 2004*
22 *through 2008; and*

23 *“(4) to carry out section 9012—*

24 *“(A) \$100,000 for fiscal year 2003; and*

25 *“(B) \$50,000 for each of fiscal years 2004*
26 *through 2008.*

1 (c) *TECHNICAL AMENDMENTS.—(1) Section 1001 of*
2 *the Solid Waste Disposal Act (42 U.S.C. prec. 6901) is*
3 *amended by striking the item relating to section 9010 and*
4 *inserting the following:*

 “Sec. 9010. Release prevention and compliance.

 “Sec. 9011. Bedrock bioremediation.

 “Sec. 9012. Soil remediation.

 “Sec. 9013. Authorization of appropriations.”.

5 (2) *Section 9001(3)(A) of the Solid Waste Disposal Act*
6 *(42 U.S.C. 6991(3)(A)) is amended by striking “sustances”*
7 *and inserting “substances”.*

8 (3) *Section 9003(f)(1) of the Solid Waste Disposal Act*
9 *(42 U.S.C. 6991b(f)(1)) is amended by striking “subsection*
10 *(c) and (d) of this section” and inserting “subsections (c)*
11 *and (d)”.*

12 (4) *Section 9004(a) of the Solid Waste Disposal Act*
13 *(42 U.S.C. 6991c(a)) is amended in the second sentence by*
14 *striking “referred to” and all that follows and inserting “re-*
15 *ferred to in subparagraph (A) or (B), or both, of section*
16 *9001(2).”.*

17 (5) *Section 9005 of the Solid Waste Disposal Act (42*
18 *U.S.C. 6991d) is amended—*

19 (A) *in subsection (a), by striking “study taking”*
20 *and inserting “study, taking”;*

21 (B) *in subsection (b)(1), by striking “relevent”*
22 *and inserting “relevant”; and*

1 (C) in subsection (b)(4), by striking
2 “*Environmental*” and inserting “*Environmental*”.

3 **SEC. 833. AUTHORITY FOR WATER QUALITY PROTECTION**
4 **FROM FUELS.**

5 (a) *FINDINGS.*—Congress finds that—

6 (1) since 1979, methyl tertiary butyl ether (re-
7 ferred to in this section as “*MTBE*”) has been used
8 nationwide at low levels in gasoline to replace lead as
9 an octane booster or anti-knocking agent;

10 (2) Public Law 101–549 (commonly known as
11 the “*Clean Air Act Amendments of 1990*”) (42 U.S.C.
12 7401 *et seq.*) established a fuel oxygenate standard
13 under which reformulated gasoline must contain at
14 least 2 percent oxygen by weight;

15 (3) at the time of the adoption of the fuel oxygen
16 standard, Congress was aware that significant use of
17 *MTBE* could result from the adoption of that stand-
18 ard, and that the use of *MTBE* would likely be im-
19 portant to the cost-effective implementation of that
20 program;

21 (4) Congress is aware that gasoline and its com-
22 ponent additives have leaked from storage tanks, with
23 consequences for water quality;

1 (5) *the fuel industry responded to the fuel oxy-*
2 *genate standard established by Public Law 101–549*
3 *by making substantial investments in—*

4 (A) *MTBE production capacity; and*

5 (B) *systems to deliver MTBE-containing*
6 *gasoline to the marketplace;*

7 (6) *when leaked or spilled into the environment,*
8 *MTBE may cause serious problems of drinking water*
9 *quality;*

10 (7) *in recent years, MTBE has been detected in*
11 *water sources throughout the United States;*

12 (8) *MTBE can be detected by smell and taste at*
13 *low concentrations;*

14 (9) *while small quantities of MTBE can render*
15 *water supplies unpalatable, the precise human health*
16 *effects of MTBE consumption at low levels are yet un-*
17 *known;*

18 (10) *in the report entitled “Achieving Clean Air*
19 *and Clean Water: The Report of the Blue Ribbon*
20 *Panel on Oxygenates in Gasoline” and dated Sep-*
21 *tember 1999, Congress was urged—*

22 (A) *to eliminate the fuel oxygenate stand-*
23 *ard;*

24 (B) *to greatly reduce use of MTBE; and*

1 (C) to maintain the environmental perform-
2 ance of reformulated gasoline;

3 (11) Congress has—

4 (A) reconsidered the relative value of MTBE
5 in gasoline; and

6 (B) decided to eliminate use of MTBE as a
7 fuel additive;

8 (12) the timeline for elimination of use of MTBE
9 as a fuel additive must be established in a manner
10 that achieves an appropriate balance among the goals
11 of—

12 (A) environmental protection;

13 (B) adequate energy supply; and

14 (C) reasonable fuel prices; and

15 (13) it is appropriate for Congress to provide
16 some limited transition assistance—

17 (A) to merchant producers of MTBE who
18 produced MTBE in response to a market created
19 by the oxygenate requirement contained in the
20 Clean Air Act; and

21 (B) for the purpose of mitigating any fuel
22 supply problems that may result from elimi-
23 nation of a widely-used fuel additive.

24 (b) PURPOSES.—The purposes of this section are—

1 (1) to eliminate use of MTBE as a fuel oxygen-
2 ate; and

3 (2) to provide assistance to merchant producers
4 of MTBE in making the transition from producing
5 MTBE to producing other fuel additives.

6 (c) *AUTHORITY FOR WATER QUALITY PROTECTION*
7 *FROM FUELS.*—Section 211(c) of the Clean Air Act (42
8 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) *PROHIBITION ON USE OF MTBE.*—

19 “(A) *IN GENERAL.*—Subject to subpara-
20 graph (E), not later than 4 years after the date
21 of enactment of this paragraph, the use of methyl
22 tertiary butyl ether in motor vehicle fuel in any
23 State other than a State described in subpara-
24 graph (C) is prohibited.

1 “(B) *REGULATIONS.*—*The Administrator*
2 *shall promulgate regulations to effect the prohibi-*
3 *tion in subparagraph (A).*

4 “(C) *STATES THAT AUTHORIZE USE.*—*A*
5 *State described in this subparagraph is a State*
6 *that submits to the Administrator a notice that*
7 *the State authorizes use of methyl tertiary butyl*
8 *ether in motor vehicle fuel sold or used in the*
9 *State.*

10 “(D) *PUBLICATION OF NOTICE.*—*The Ad-*
11 *ministrator shall publish in the Federal Register*
12 *each notice submitted by a State under subpara-*
13 *graph (C).*

14 “(E) *TRACE QUANTITIES.*—*In carrying out*
15 *subparagraph (A), the Administrator may allow*
16 *trace quantities of methyl tertiary butyl ether,*
17 *not to exceed 0.5 percent by volume, to be present*
18 *in motor vehicle fuel in cases that the Adminis-*
19 *trator determines to be appropriate.*

20 “(6) *MTBE MERCHANT PRODUCER CONVERSION*
21 *ASSISTANCE.*—

22 “(A) *IN GENERAL.*—

23 “(i) *GRANTS.*—*The Secretary of En-*
24 *ergy, in consultation with the Adminis-*
25 *trator, may make grants to merchant pro-*

1 *ducers of methyl tertiary butyl ether in the*
2 *United States to assist the producers in the*
3 *conversion of eligible production facilities*
4 *described in subparagraph (C) to the pro-*
5 *duction of iso-octane and alkylates.*

6 “(ii) *DETERMINATION.*—*The Adminis-*
7 *trator, in consultation with the Secretary of*
8 *Energy, may determine that transition as-*
9 *sistance for the production of iso-octane and*
10 *alkylates is inconsistent with the provisions*
11 *of subparagraph (B) and, on that basis,*
12 *may deny applications for grants author-*
13 *ized by this provision.*

14 “(B) *FURTHER GRANTS.*—*The Secretary of*
15 *Energy, in consultation with the Administrator,*
16 *may also further make grants to merchant pro-*
17 *ducers of MTBE in the United States to assist*
18 *the producers in the conversion of eligible pro-*
19 *duction facilities described in subparagraph (C)*
20 *to the production of such other fuel additives*
21 *that, consistent with 211(c)—*

22 “(i) *unless the Administrator deter-*
23 *mines that such fuel additives may reason-*
24 *ably be anticipated to endanger public*
25 *health or the environment;*

1 “(ii) have been registered and have
2 been tested or are being tested in accordance
3 with the requirements of this section; and

4 “(iii) will contribute to replacing gaso-
5 line volumes lost as a result of paragraph
6 (5).

7 “(C) *ELIGIBLE PRODUCTION FACILITIES.*—
8 A production facility shall be eligible to receive
9 a grant under this paragraph if the production
10 facility—

11 “(i) is located in the United States;

12 and

13 “(ii) produced methyl tertiary butyl
14 ether for consumption in nonattainment
15 areas during the period—

16 “(I) beginning on the date of en-
17 actment of this paragraph; and

18 “(II) ending on the effective date
19 of the prohibition on the use of methyl
20 tertiary butyl ether under paragraph
21 (5).

22 “(D) *AUTHORIZATION OF APPROPRIA-*
23 *TIONS.*—There is authorized to be appropriated
24 to carry out this paragraph \$250,000,000 for
25 each of fiscal years 2003 through 2005.”.

1 (d) *NO EFFECT ON LAW CONCERNING STATE AUTHOR-*
2 *ITY.—The amendments made by subsection (c) have no ef-*
3 *fect on the law in effect on the day before the date of enact-*
4 *ment of this Act regarding the authority of States to limit*
5 *the use of methyl tertiary butyl ether in motor vehicle fuel.*

6 **SEC. 834. ELIMINATION OF OXYGEN CONTENT REQUIRE-**
7 **MENT FOR REFORMULATED GASOLINE.**

8 (a) *ELIMINATION.—*

9 (1) *IN GENERAL.—Section 211(k) of the Clean*
10 *Air Act (42 U.S.C. 7545(k)) is amended—*

11 (A) *in paragraph (2)—*

12 (i) *in the second sentence of subpara-*
13 *graph (A), by striking “(including the oxy-*
14 *gen content requirement contained in sub-*
15 *paragraph (B))”;*

16 (ii) *by striking subparagraph (B); and*

17 (iii) *by redesignating subparagraphs*
18 *(C) and (D) as subparagraphs (B) and (C),*
19 *respectively;*

20 (B) *in paragraph (3)(A), by striking clause*

21 (v);

22 (C) *in paragraph (7)—*

23 (i) *in subparagraph (A)—*

24 (I) *by striking clause (i); and*

1 (II) by redesignating clauses (ii)
2 and (iii) as clauses (i) and (ii), respec-
3 tively; and

4 (ii) in subparagraph (C)—

5 (I) by striking clause (ii); and

6 (II) by redesignating clause (iii)
7 as clause (ii); and

8 (2) *EFFECTIVE DATE.*—*The amendments made*
9 *by paragraph (1) take effect 270 days after the date*
10 *of enactment of this Act, except that such amendments*
11 *shall take effect upon enactment in any State that has*
12 *received a waiver under section 209(b) of the Clean*
13 *Air Act.*

14 (b) *MAINTENANCE OF TOXIC AIR POLLUTANT EMIS-*
15 *SION REDUCTIONS.*—*Section 211(k)(1) of the Clean Air Act*
16 *(42 U.S.C. 7545(k)(1)) is amended—*

17 (1) by striking “*Within 1 year after the enact-*
18 *ment of the Clean Air Act Amendments of 1990,*” and
19 *inserting the following:*

20 “(A) *IN GENERAL.*—*Not later than Novem-*
21 *ber 15, 1991,*”; and

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

23 “(B) *MAINTENANCE OF TOXIC AIR POLLUT-*
24 *ANT EMISSIONS REDUCTIONS FROM REFORMU-*
25 *LATED GASOLINE.*—

1 “(i) *DEFINITIONS.*—*In this subpara-*
2 *graph the term ‘PADD’ means a Petroleum*
3 *Administration for Defense District.*

4 “(ii) *REGULATIONS REGARDING EMIS-*
5 *SIONS OF TOXIC AIR POLLUTANTS.*—*Not*
6 *later than 270 days after the date of enact-*
7 *ment of this subparagraph, the Adminis-*
8 *trator shall establish, for each refinery or*
9 *importer (other than a refinery or importer*
10 *in a State that has received a waiver under*
11 *section 209(b) with regard to gasoline pro-*
12 *duced for use in that state), standards for*
13 *toxic air pollutants from use of the reformu-*
14 *lated gasoline produced or distributed by*
15 *the refinery or importer that maintain the*
16 *reduction of the average annual aggregate*
17 *emissions of toxic air pollutants for refor-*
18 *mulated gasoline produced or distributed by*
19 *the refinery or importer during calendar*
20 *years 1999 and 2000, determined on the*
21 *basis of data collected by the Administrator*
22 *with respect to the refinery or importer.*

23 “(iii) *STANDARDS APPLICABLE TO SPE-*
24 *CIFIC REFINERIES OR IMPORTERS.*—

1 “(I) *APPLICABILITY OF STAND-*
2 *ARDS.—For any calendar year, the*
3 *standards applicable to a refinery or*
4 *importer under clause (ii) shall apply*
5 *to the quantity of gasoline produced or*
6 *distributed by the refinery or importer*
7 *in the calendar year only to the extent*
8 *that the quantity is less than or equal*
9 *to the average annual quantity of re-*
10 *formulated gasoline produced or dis-*
11 *tributed by the refinery or importer*
12 *during calendar years 1999 and 2000.*

13 “(II) *APPLICABILITY OF OTHER*
14 *STANDARDS.—For any calendar year,*
15 *the quantity of gasoline produced or*
16 *distributed by a refinery or importer*
17 *that is in excess of the quantity subject*
18 *to subclause (I) shall be subject to*
19 *standards for toxic air pollutants pro-*
20 *mulgated under subparagraph (A) and*
21 *paragraph (3)(B).*

22 “(iv) *CREDIT PROGRAM.—The Admin-*
23 *istrator shall provide for the granting and*
24 *use of credits for emissions of toxic air pol-*

1 *lutants in the same manner as provided in*
2 *paragraph (7).*

3 “(v) *REGIONAL PROTECTION OF TOXICS*
4 *REDUCTION BASELINES.*—

5 “(I) *IN GENERAL.*—*Not later than*
6 *60 days after the date of enactment of*
7 *this subparagraph, and not later than*
8 *April 1 of each calendar year that be-*
9 *gins after that date of enactment, the*
10 *Administrator shall publish in the*
11 *Federal Register a report that specifies,*
12 *with respect to the previous calendar*
13 *year—*

14 “(aa) *the quantity of refor-*
15 *mulated gasoline produced that is*
16 *in excess of the average annual*
17 *quantity of reformulated gasoline*
18 *produced in 1999 and 2000; and*

19 “(bb) *the reduction of the av-*
20 *erage annual aggregate emissions*
21 *of toxic air pollutants in each*
22 *PADD, based on retail survey*
23 *data or data from other appro-*
24 *priate sources.*

1 “(II) *EFFECT OF FAILURE TO*
2 *MAINTAIN AGGREGATE TOXICS REDUC-*
3 *TIONS.—If, in any calendar year, the*
4 *reduction of the average annual aggre-*
5 *gate emissions of toxic air pollutants*
6 *in a PADD fails to meet or exceed the*
7 *reduction of the average annual aggre-*
8 *gate emissions of toxic air pollutants*
9 *in the PADD in calendar years 1999*
10 *and 2000, the Administrator, not later*
11 *than 90 days after the date of publica-*
12 *tion of the report for the calendar year*
13 *under subclause (I), shall—*

14 “(aa) *identify, to the max-*
15 *imum extent practicable, the rea-*
16 *sons for the failure, including the*
17 *sources, volumes, and characteris-*
18 *tics of reformulated gasoline that*
19 *contributed to the failure; and*

20 “(bb) *promulgate revisions to*
21 *the regulations promulgated under*
22 *clause (ii), to take effect not ear-*
23 *lier than 180 days but not later*
24 *than 270 days after the date of*
25 *promulgation, to provide that,*

1 *notwithstanding clause (iii)(II),*
2 *all reformulated gasoline produced*
3 *or distributed at each refinery or*
4 *importer shall meet the standards*
5 *applicable under clause (iii) not*
6 *later than April 1 of the year fol-*
7 *lowing the report in subclause (II)*
8 *and for subsequent years.*

9 “(vi) *REGULATIONS TO CONTROL HAZ-*
10 *ARDOUS AIR POLLUTANTS FROM MOTOR VE-*
11 *HICLES AND MOTOR VEHICLE FUELS.—Not*
12 *later than July 1, 2004, the Administrator*
13 *shall promulgate final regulations to control*
14 *hazardous air pollutants from motor vehi-*
15 *cles and motor vehicle fuels, as provided for*
16 *in section 80.1045 of title 40, Code of Fed-*
17 *eral Regulations (as in effect on the date of*
18 *enactment of this subparagraph).”.*

19 (c) *CONSOLIDATION IN REFORMULATED GASOLINE*
20 *REGULATIONS.—Not later than 180 days after the date of*
21 *enactment of this Act, the Administrator shall revise the*
22 *reformulated gasoline regulations under subpart D of part*
23 *80 of title 40, Code of Federal Regulations, to consolidate*
24 *the regulations applicable to VOC-Control Regions 1 and*
25 *2 under section 80.41 of that title by eliminating the less*

1 *stringent requirements applicable to gasoline designated for*
2 *VOC-Control Region 2 and instead applying the more strin-*
3 *gent requirements applicable to gasoline designated for*
4 *VOC-Control Region 1.*

5 *(d) SAVINGS CLAUSE.—Nothing in this section is in-*
6 *tended to affect or prejudice any legal claims or actions*
7 *with respect to regulations promulgated by the Adminis-*
8 *trator prior to enactment of this Act regarding emissions*
9 *of toxic air pollutants from motor vehicles.*

10 *(e) DETERMINATION REGARDING A STATE PETI-*
11 *TION.—Section 211(k) of the Clean Air Act (42 U.S.C.*
12 *7545(k)) is amended by inserting after paragraph (10) the*
13 *following:*

14 *“(11) DETERMINATION REGARDING A STATE PE-*
15 *TITION.—*

16 *“(A) IN GENERAL.—Notwithstanding any*
17 *other provision of this section, not less than 30*
18 *days after enactment of this paragraph the Ad-*
19 *ministrator must determine the adequacy of any*
20 *petition received from a Governor of a State to*
21 *exempt gasoline sold in that State from the re-*
22 *quirements of paragraph (2)(B).*

23 *“(B) APPROVAL.—If the determination in*
24 *(A) is not made within thirty days of enactment*

1 of this paragraph, the petition shall be deemed
2 approved.”.

3 **SEC. 835. PUBLIC HEALTH AND ENVIRONMENTAL IMPACTS**
4 **OF FUELS AND FUEL ADDITIVES.**

5 Section 211(b) of the Clean Air Act (42 U.S.C.
6 7545(b)) is amended—

7 (1) in paragraph (2)—

8 (A) by striking “may also” and inserting
9 “shall, on a regular basis,”; and

10 (B) by striking subparagraph (A) and in-
11 serting the following:

12 “(A) to conduct tests to determine potential
13 public health and environmental effects of the
14 fuel or additive (including carcinogenic,
15 teratogenic, or mutagenic effects); and”;

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

17 “(4) *STUDY ON CERTAIN FUEL ADDITIVES AND*
18 *BLENDSTOCKS.—*

19 “(A) *IN GENERAL.—*Not later than 2 years
20 after the date of enactment of this paragraph, the
21 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 ter-*
2 *tiary butyl ether in gasoline—*

3 *“(I) ethyl tertiary butyl ether;*

4 *“(II) tertiary amyl methyl ether;*

5 *“(III) di-isopropyl ether;*

6 *“(IV) tertiary butyl alcohol;*

7 *“(V) other ethers and heavy alco-*

8 *hols, as determined by then Adminis-*
9 *trator;*

10 *“(VI) ethanol;*

11 *“(VII) iso-octane; and*

12 *“(VIII) alkylates; and*

13 *“(ii) conduct a study on the effects on*
14 *public health, air quality, and water re-*
15 *sources of the adjustment for ethanol-blend-*
16 *ed reformulated gasoline to the VOC per-*
17 *formance requirements otherwise applicable*
18 *under sections 211(k)(1) and 211(k)(3) of*
19 *the Clean Air Act.*

20 *“(iii) submit to the Committee on En-*
21 *vironment and Public Works of the Senate*
22 *and the Committee on Energy and Com-*
23 *merce of the House of Representatives a re-*
24 *port describing the results of these studies.*

1 “(B) *CONTRACTS FOR STUDY.*—*In carrying*
2 *out this paragraph, the Administrator may enter*
3 *into one or more contracts with nongovernmental*
4 *entities including but not limited to National*
5 *Energy Laboratories and institutions of higher*
6 *education (as defined in section 101 of the High-*
7 *er Education Act of 1965 (20 U.S.C. 1001)).”.*

8 **SEC. 836. ANALYSES OF MOTOR VEHICLE FUEL CHANGES.**

9 *Section 211 of the Clean Air Act (42 U.S.C. 7545) (as*
10 *amended by section 820(a)) is amended by inserting after*
11 *subsection (o) the following:*

12 “(p) *ANALYSES OF MOTOR VEHICLE FUEL CHANGES*
13 *AND EMISSIONS MODEL.—*

14 “(1) *ANTI-BACKSLIDING ANALYSIS.—*

15 “(A) *DRAFT ANALYSIS.*—*Not later than 4*
16 *years after the date of enactment of this para-*
17 *graph, the Administrator shall publish for public*
18 *comment a draft analysis of the changes in emis-*
19 *sions of air pollutants and air quality due to the*
20 *use of motor vehicle fuel and fuel additives re-*
21 *sulting from implementation of the amendments*
22 *made by the Federal Reformulated Fuels Act of*
23 *2002.*

24 “(B) *FINAL ANALYSIS.*—*After providing a*
25 *reasonable opportunity for comment but not*

1 *later than 5 years after the date of enactment of*
 2 *this paragraph, the Administrator shall publish*
 3 *the analysis in final form.*

4 “(2) *EMISSIONS MODEL.*—*For the purposes of*
 5 *this subsection, as soon as the necessary data are*
 6 *available, the Administrator shall develop and final-*
 7 *ize an emissions model that reasonably reflects the ef-*
 8 *fects of gasoline characteristics or components on*
 9 *emissions from vehicles in the motor vehicle fleet dur-*
 10 *ing calendar year 2005.”.*

11 **SEC. 837. ADDITIONAL OPT-IN AREAS UNDER REFORMU-**
 12 **LATED GASOLINE PROGRAM.**

13 *Section 211(k)(6) of the Clean Air Act (42 U.S.C.*
 14 *7545(k)(6)) is amended—*

15 (1) *by striking “(6) OPT-IN AREAS.—(A) Upon”*
 16 *and inserting the following:*

17 “(6) *OPT-IN AREAS.*—

18 “(A) *CLASSIFIED AREAS.*—

19 “(i) *IN GENERAL.*—*Upon”;*

20 (2) *in subparagraph (B), by striking “(B) If”*
 21 *and inserting the following:*

22 “(ii) *EFFECT OF INSUFFICIENT DO-*
 23 *MESTIC CAPACITY TO PRODUCE REFORMU-*
 24 *LATED GASOLINE.—If”;*

1 (3) in subparagraph (A)(ii) (as redesignated by
2 paragraph (2))—

3 (A) in the first sentence, by striking “sub-
4 paragraph (A)” and inserting “clause (i)”; and

5 (B) in the second sentence, by striking “this
6 paragraph” and inserting “this subparagraph”;

7 and

8 (4) by adding at the end the following:

9 “(B) OZONE TRANSPORT REGION.—

10 “(i) APPLICATION OF PROHIBITION.—

11 “(I) IN GENERAL.—In addition to
12 the provisions of subparagraph (A),
13 upon the application of the Governor
14 of a State in the ozone transport re-
15 gion established by section 184(a), the
16 Administrator, not later than 180 days
17 after the date of receipt of the applica-
18 tion, shall apply the prohibition speci-
19 fied in paragraph (5) to any area in
20 the State (other than an area classified
21 as a marginal, moderate, serious, or se-
22 vere ozone nonattainment area under
23 subpart 2 of part D of title I) unless
24 the Administrator determines under

1 *clause (iii) that there is insufficient ca-*
2 *capacity to supply reformulated gasoline.*

3 *“(II) PUBLICATION OF APPLICA-*
4 *TION.—As soon as practicable after the*
5 *date of receipt of an application under*
6 *subclause (I), the Administrator shall*
7 *publish the application in the Federal*
8 *Register.*

9 *“(ii) PERIOD OF APPLICABILITY.—*
10 *Under clause (i), the prohibition specified*
11 *in paragraph (5) shall apply in a State—*

12 *“(I) commencing as soon as prac-*
13 *ticable but not later than 2 years after*
14 *the date of approval by the Adminis-*
15 *trator of the application of the Gov-*
16 *ernor of the State; and*

17 *“(II) ending not earlier than 4*
18 *years after the commencement date de-*
19 *termined under subclause (I).*

20 *“(iii) EXTENSION OF COMMENCEMENT*
21 *DATE BASED ON INSUFFICIENT CAPACITY.—*

22 *“(I) IN GENERAL.—If, after re-*
23 *ceipt of an application from a Gov-*
24 *ernor of a State under clause (i), the*
25 *Administrator determines, on the Ad-*

1 *administrator's own motion or on peti-*
2 *tion of any person, after consultation*
3 *with the Secretary of Energy, that*
4 *there is insufficient capacity to supply*
5 *reformulated gasoline, the Adminis-*
6 *trator, by regulation—*

7 *“(aa) shall extend the com-*
8 *mencement date with respect to*
9 *the State under clause (ii)(I) for*
10 *not more than 1 year; and*

11 *“(bb) may renew the exten-*
12 *sion under item (aa) for two ad-*
13 *ditional periods, each of which*
14 *shall not exceed 1 year.*

15 *“(II) DEADLINE FOR ACTION ON*
16 *PETITIONS.—The Administrator shall*
17 *act on any petition submitted under*
18 *subclause (I) not later than 180 days*
19 *after the date of receipt of the peti-*
20 *tion.”.*

21 **SEC. 838. FEDERAL ENFORCEMENT OF STATE FUELS RE-**
22 **QUIREMENTS.**

23 *Section 211(c)(4)(C) of the Clean Air Act (42 U.S.C.*
24 *7545(c)(4)(C)) is amended—*

1 (1) *by striking “(C) A State” and inserting the*
2 *following:*

3 “(C) *AUTHORITY OF STATE TO CONTROL*
4 *FUELS AND FUEL ADDITIVES FOR REASONS OF*
5 *NECESSITY.—*

6 “(i) *IN GENERAL.—A State*”; and

7 (2) *by adding at the end the following:*

8 “(ii) *ENFORCEMENT BY THE ADMINIS-*
9 *TRATOR.—In any case in which a State*
10 *prescribes and enforces a control or prohibi-*
11 *tion under clause (i), the Administrator, at*
12 *the request of the State, shall enforce the*
13 *control or prohibition as if the control or*
14 *prohibition had been adopted under the*
15 *other provisions of this section.”.*

16 **SEC. 839. FUEL SYSTEM REQUIREMENTS HARMONIZATION**
17 **STUDY.**

18 (a) *STUDY.—*

19 (1) *IN GENERAL.—The Administrator of the En-*
20 *vironmental Protection Agency and the Secretary of*
21 *Energy shall jointly conduct a study of Federal,*
22 *State, and local requirements concerning motor vehi-*
23 *cle fuels, including—*

1 (A) requirements relating to reformulated
2 gasoline, volatility (measured in Reid vapor
3 pressure), oxygenated fuel, and diesel fuel; and

4 (B) other requirements that vary from State
5 to State, region to region, or locality to locality.

6 (2) *REQUIRED ELEMENTS.*—The study shall
7 assess—

8 (A) the effect of the variety of requirements
9 described in paragraph (1) on the supply, qual-
10 ity, and price of motor vehicle fuels available to
11 the consumer;

12 (B) the effect of the requirements described
13 in paragraph (1) on achievement of—

14 (i) national, regional, and local air
15 quality standards and goals; and

16 (ii) related environmental and public
17 health protection standards and goals;

18 (C) the effect of Federal, State, and local
19 motor vehicle fuel regulations, including multiple
20 motor vehicle fuel requirements, on—

21 (i) domestic refineries;

22 (ii) the fuel distribution system; and

23 (iii) industry investment in new ca-
24 pacity;

1 (D) the effect of the requirements described
2 in paragraph (1) on emissions from vehicles, re-
3 fineries, and fuel handling facilities;

4 (E) the feasibility of developing national or
5 regional motor vehicle fuel slates for the 48 con-
6 tiguous States that, while protecting and im-
7 proving air quality at the national, regional,
8 and local levels, could—

9 (i) enhance flexibility in the fuel dis-
10 tribution infrastructure and improve fuel
11 fungibility;

12 (ii) reduce price volatility and costs to
13 consumers and producers;

14 (iii) provide increased liquidity to the
15 gasoline market; and

16 (iv) enhance fuel quality, consistency,
17 and supply; and

18 (F) the feasibility of providing incentives,
19 and the need for the development of national
20 standards necessary, to promote cleaner burning
21 motor vehicle fuel.

22 (b) REPORT.—

23 (1) IN GENERAL.—Not later than June 1, 2006,
24 the Administrator of the Environmental Protection
25 Agency and the Secretary of Energy shall submit to

1 Congress a report on the results of the study con-
2 ducted under subsection (a).

3 (2) *RECOMMENDATIONS.*—

4 (A) *IN GENERAL.*—The report shall contain
5 recommendations for legislative and administra-
6 tive actions that may be taken—

7 (i) to improve air quality;

8 (ii) to reduce costs to consumers and
9 producers; and

10 (iii) to increase supply liquidity.

11 (B) *REQUIRED CONSIDERATIONS.*—The rec-
12 ommendations under subparagraph (A) shall
13 take into account the need to provide advance
14 notice of required modifications to refinery and
15 fuel distribution systems in order to ensure an
16 adequate supply of motor vehicle fuel in all
17 States.

18 (3) *CONSULTATION.*—In developing the report,
19 the Administrator of the Environmental Protection
20 Agency and the Secretary of Energy shall consult
21 with—

22 (A) the Governors of the States;

23 (B) automobile manufacturers;

24 (C) motor vehicle fuel producers and dis-
25 tributors; and

1 (D) the public.

2 **SEC. 840. REVIEW OF FEDERAL PROCUREMENT INITIATIVES**
3 **RELATING TO USE OF RECYCLED PRODUCTS**
4 **AND FLEET AND TRANSPORTATION EFFI-**
5 **CIENCY.**

6 Not later than 180 days after the date of enactment
7 of this Act, the Administrator of General Services shall sub-
8 mit to Congress a report that details efforts by each Federal
9 agency to implement the procurement policies specified in
10 Executive Order No. 13101 (63 Fed. Reg. 49643; relating
11 to governmental use of recycled products) and Executive
12 Order No. 13149 (65 Fed. Reg. 24607; relating to Federal
13 fleet and transportation efficiency).

14 **TITLE IX—ENERGY EFFICIENCY**
15 **AND ASSISTANCE TO LOW IN-**
16 **COME CONSUMERS**

17 **Subtitle A—Low Income Assistance**
18 **and State Energy Programs**

19 **SEC. 901. INCREASED FUNDING FOR LIHEAP, WEATHERIZA-**
20 **TION ASSISTANCE, AND STATE ENERGY**
21 **GRANTS.**

22 (a) LIHEAP.—(1) Section 2602(b) of the Low-Income
23 Home Energy Assistance Act of 1981 (42 U.S.C. 8621(b))
24 is amended by striking the first sentence and inserting the
25 following: “There are authorized to be appropriated to carry

1 *out the provisions of this title (other than section 2607A),*
2 *\$3,400,000,000 for each of fiscal years 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 by*
5 *striking “\$600,000,000” and inserting “\$1,000,000,000”.*

6 (3) *Section 2609A(a) of the Low-Income Energy As-*
7 *sistance Act of 1981 (42 U.S.C. 8628a(a)) is amended by*
8 *striking “not more than \$300,000” and inserting: “not*
9 *more than \$750,000”.*

10 (b) *WEATHERIZATION ASSISTANCE.—Section 422 of*
11 *the Energy Conservation and Production Act (42 U.S.C.*
12 *6872) is amended by striking “for fiscal years 1999 through*
13 *2003 such sums as may be necessary.” and inserting:*
14 *“\$325,000,000 for fiscal year 2003, \$400,000,000 for fiscal*
15 *year 2004, and \$500,000,000 for fiscal year 2005.”.*

16 **SEC. 902. STATE ENERGY PROGRAMS.**

17 (a) *STATE ENERGY CONSERVATION PLANS.—Section*
18 *362 of the Energy Policy and Conservation Act (42 U.S.C.*
19 *6322)) is amended by adding at the end the following:*

20 “(g) *The Secretary shall, at least once every 3 years,*
21 *invite the Governor of each State to review and, if nec-*
22 *essary, revise the energy conservation plan of the State sub-*
23 *mitted under subsection (b) or (e). Such reviews should con-*
24 *sider the energy conservation plans of other States within*
25 *the region, and identify opportunities and actions that may*

1 *be carried out in pursuit of common energy conservation*
2 *goals.”.*

3 (b) *STATE ENERGY CONSERVATION GOALS.*—Section
4 *364 of the Energy Policy and Conservation Act (42 U.S.C.*
5 *6324) is amended to read as follows:*

6 “*SEC. 364. Each State energy conservation plan with*
7 *respect to which assistance is made available under this*
8 *part on or after the date of enactment of the Energy Policy*
9 *Act of 2002 shall contain a goal, consisting of an improve-*
10 *ment of 25 percent or more in the efficiency of use of energy*
11 *in the State concerned in calendar year 2010 as compared*
12 *to calendar year 1990, and may contain interim goals.”.*

13 (c) *STATE ENERGY CONSERVATION GRANTS.*—Section
14 *365(f) of the Energy Policy and Conservation Act (42*
15 *U.S.C. 6325(f)) is amended by striking “for fiscal years*
16 *1999 through 2003 such sums as may be necessary.” and*
17 *inserting: “\$100,000,000 for each of fiscal years 2003 and*
18 *2004; \$125,000,000 for fiscal year 2005; and such sums as*
19 *may be necessary for each fiscal year thereafter.”.*

20 **SEC. 903. ENERGY EFFICIENT SCHOOLS.**

21 (a) *ESTABLISHMENT.*—*There is established in the De-*
22 *partment of Energy the High Performance Schools Program*
23 *(in this section referred to as the “Program”).*

24 (b) *GRANTS.*—*The Secretary of Energy may make*
25 *grants to a State energy office—*

1 (1) *to assist school districts in the State to im-*
2 *prove the energy efficiency of school buildings;*

3 (2) *to administer the Program; and*

4 (3) *to promote participation in the Program.*

5 (c) *GRANTS TO ASSIST SCHOOL DISTRICTS.—The Sec-*
6 *retary shall condition grants under subsection (b)(1) on the*
7 *State energy office using the grants to assist school districts*
8 *that have demonstrated—*

9 (1) *a need for the grants to build additional*
10 *school buildings to meet increasing elementary or sec-*
11 *ondary enrollments or to renovate existing school*
12 *buildings; and*

13 (2) *a commitment to use the grant funds to de-*
14 *velop high performance school buildings in accordance*
15 *with a plan that the State energy office, in consulta-*
16 *tion with the State educational agency, has deter-*
17 *mined is feasible and appropriate to achieve the pur-*
18 *poses for which the grant is made.*

19 (d) *GRANTS FOR ADMINISTRATION.—Grants under*
20 *subsection (b)(2) shall be used to—*

21 (1) *evaluate compliance by school districts with*
22 *requirements of this section;*

23 (2) *distribute information and materials to*
24 *clearly define and promote the development of high*

1 *performance school buildings for both new and exist-*
2 *ing facilities;*

3 *(3) organize and conduct programs for school*
4 *board members, school personnel, architects, engineers,*
5 *and others to advance the concepts of high perform-*
6 *ance school buildings;*

7 *(4) obtain technical services and assistance in*
8 *planning and designing high performance school*
9 *buildings; or*

10 *(5) collect and monitor data and information*
11 *pertaining to the high performance school building*
12 *projects.*

13 *(e) GRANTS TO PROMOTE PARTICIPATION.—Grants*
14 *under subsection (b)(3) shall be used for promotional and*
15 *marketing activities, including facilitating private and*
16 *public financing, promoting the use of energy savings per-*
17 *formance contracts, working with school administrations,*
18 *students, and communities, and coordinating public benefit*
19 *programs.*

20 *(f) SUPPLEMENTING GRANT FUNDS.—The State en-*
21 *ergy office shall encourage qualifying school districts to sup-*
22 *plement funds awarded pursuant to this section with funds*
23 *from other sources in the implementation of their plans.*

1 (g) *ALLOCATIONS.*—*Except as provided in subsection*
2 *(h), funds appropriated to carry out this section shall be*
3 *allocated as follows:*

4 (1) *70 percent shall be used to make grants*
5 *under subsection (b)(1).*

6 (2) *15 percent shall be used to make grants*
7 *under subsection (b)(2).*

8 (3) *15 percent shall be used to make grants*
9 *under subsection (b)(3).*

10 (h) *OTHER FUNDS.*—*The Secretary of Energy may re-*
11 *tain an amount, not to exceed \$300,000 per year, to assist*
12 *State energy offices in coordinating and implementing the*
13 *Program. Such funds may be used to develop reference ma-*
14 *terials to further define the principles and criteria to*
15 *achieve high performance school buildings.*

16 (i) *AUTHORIZATION OF APPROPRIATIONS.*—*For grants*
17 *under subsection (b) there are authorized to be*
18 *appropriated—*

19 (1) *\$200,000,000 for fiscal year 2003;*

20 (2) *\$210,000,000 for fiscal year 2004;*

21 (3) *\$220,000,000 for fiscal year 2005;*

22 (4) *\$230,000,000 for fiscal year 2006; and*

23 (5) *such sums as may be necessary for fiscal year*
24 *2007 and each fiscal year thereafter through fiscal*
25 *year 2012.*

1 (j) *DEFINITIONS.*—*For purposes of this section:*

2 (1) *HIGH PERFORMANCE SCHOOL BUILDING.*—

3 *The term “high performance school building” means*
4 *a school building that, in its design, construction, op-*
5 *eration, and maintenance—*

6 (A) *maximizes use of renewable energy and*
7 *energy-efficient technologies and systems;*

8 (B) *is cost-effective on a life-cycle basis;*

9 (C) *achieves either—*

10 (i) *the applicable Energy Star build-*
11 *ing energy performance ratings; or*

12 (ii) *energy consumption levels at least*
13 *30 percent below those of the most recent*
14 *version of ASHRAE Standard 90.1;*

15 (D) *uses affordable, environmentally pref-*
16 *erable, and durable materials;*

17 (E) *enhances indoor environmental quality;*

18 (F) *protects and conserves water; and*

19 (G) *optimizes site potential.*

20 (2) *RENEWABLE ENERGY.*—*The term “renewable*
21 *energy” means energy produced by solar, wind, bio-*
22 *mass, ocean, geothermal, or hydroelectric power.*

23 (3) *SCHOOL.*—*The term “school” means—*

24 (A) *an “elementary school” as that term is*
25 *defined in section 14101(14) of the Elementary*

1 *and Secondary Education Act of 1965 (20*
2 *U.S.C. 8801(14)),*

3 *(B) a “secondary school” as that term is de-*
4 *finied in section 14101(25) of the Elementary*
5 *and Secondary Education Act of 1965 (20*
6 *U.S.C. 8801(25)), or*

7 *(C) an elementary or secondary Indian*
8 *school funded by the Bureau of Indian Affairs.*

9 (4) *STATE EDUCATIONAL AGENCY.—The term*
10 *“State educational agency” has the same meaning*
11 *given such term in section 14101(28) of the Elemen-*
12 *tary and Secondary Education Act of 1965 (20*
13 *U.S.C. 8801(28)).*

14 (5) *STATE ENERGY OFFICE.—The term “State*
15 *energy office” means the State agency responsible for*
16 *developing State energy conservation plans under sec-*
17 *tion 362 of the Energy Policy and Conservation Act*
18 *(42 U.S.C. 6322), or, if no such agency exists, a State*
19 *agency designated by the Governor of the State.*

20 **SEC. 904. LOW INCOME COMMUNITY ENERGY EFFICIENCY**
21 **PILOT PROGRAM.**

22 (a) *GRANTS.—The Secretary of Energy is authorized*
23 *to make grants to units of local government, private, non-*
24 *profit community development organizations, and Indian*
25 *tribe economic development entities to improve energy effi-*

1 *ciency, identify and develop alternative renewable and dis-*
2 *tributed energy supplies, and increase energy conservation*
3 *in low income rural and urban communities.*

4 (b) *PURPOSE OF GRANTS.*—*The Secretary may make*
5 *grants on a competitive basis 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) *DEFINITION.*—*For purposes of this section, the*
21 *term “Indian tribe” means any Indian tribe, band, nation,*
22 *or other organized group or community, including any*
23 *Alaskan Native village or regional or village corporation*
24 *as defined in or established pursuant to the Alaska Native*
25 *Claims Settlement Act (43 U.S.C. 1601 et seq.), which is*

1 *recognized as eligible for the special programs and services*
2 *provided by the United States to Indians because of their*
3 *status as Indians.*

4 (d) *AUTHORIZATION OF APPROPRIATIONS.—For the*
5 *purposes of this section there are authorized to be appro-*
6 *priated to the Secretary of Energy an amount not to exceed*
7 *\$20,000,000 for fiscal year 2003 and each fiscal year there-*
8 *after through fiscal year 2005.*

9 **SEC. 905. ENERGY EFFICIENT APPLIANCE REBATE PRO-**
10 **GRAMS.**

11 (a) *DEFINITIONS.—In this section:*

12 (1) *ELIGIBLE STATE.—The term “eligible State”*
13 *means a State that meets the requirements of sub-*
14 *section (b).*

15 (2) *ENERGY STAR PROGRAM.—The term “Energy*
16 *Star program” means the program established by sec-*
17 *tion 324A of the Energy Policy and Conservation Act.*

18 (3) *RESIDENTIAL ENERGY STAR PRODUCT.—The*
19 *term “residential Energy Star product” means a*
20 *product for a residence that is rated for energy effi-*
21 *ciency under the Energy Star program.*

22 (4) *STATE ENERGY OFFICE.—The term “State*
23 *energy office” means the State agency responsible for*
24 *developing State energy conservation plans under sec-*

1 *tion 362 of the Energy Policy and Conservation Act*
2 *(42 U.S.C. 6322).*

3 (5) *STATE PROGRAM.*—*The term “State pro-*
4 *gram” means a State energy efficient appliance re-*
5 *bate program described in subsection (b)(1).*

6 (b) *ELIGIBLE STATES.*—*A State shall be eligible to re-*
7 *ceive an allocation under subsection (c) if the State—*

8 (1) *establishes (or has established) a State energy*
9 *efficient appliance rebate program to provide rebates*
10 *to residential consumers for the purchase of residen-*
11 *tial Energy Star products to replace used appliances*
12 *of the same type;*

13 (2) *submits an application for the allocation at*
14 *such time, in such form, and containing such infor-*
15 *mation as the Secretary may require; and*

16 (3) *provides assurances satisfactory to the Sec-*
17 *retary that the State will use the allocation to supple-*
18 *ment, but not supplant, funds made available to*
19 *carry out the State program.*

20 (c) *AMOUNT OF ALLOCATIONS.*—

21 (1) *IN GENERAL.*—*Subject to paragraph (2), for*
22 *each fiscal year, the Secretary shall allocate to the*
23 *State energy office of each eligible State to carry out*
24 *subsection (d) an amount equal to the product ob-*
25 *tained by multiplying the amount made available*

1 *under subsection (e) for the fiscal year by the ratio*
2 *that the population of the State in the most recent*
3 *calendar year for which data are available bears to*
4 *the total population of all eligible States in that cal-*
5 *endar year.*

6 (2) *MINIMUM ALLOCATIONS.—For each fiscal*
7 *year, the amounts allocated under this subsection*
8 *shall be adjusted proportionately so that no eligible*
9 *State is allocated a sum that is less than an amount*
10 *determined by the Secretary.*

11 (d) *USE OF ALLOCATED FUNDS.—The allocation to a*
12 *State energy office under subsection (c) may be used to pay*
13 *up to 50 percent of the cost of establishing and carrying*
14 *out a State program.*

15 (e) *ISSUANCE OF REBATES.—Rebates may be provided*
16 *to residential consumers that meet the requirements of the*
17 *State program. The amount of a rebate shall be determined*
18 *by the State energy office, taking into consideration—*

19 (1) *the amount of the allocation to the State en-*
20 *ergy office under subsection (c);*

21 (2) *the amount of any Federal or State tax in-*
22 *centive available for the purchase of the residential*
23 *Energy Star product; and*

24 (3) *the difference between the cost of the residen-*
25 *tial Energy Star product and the cost of an appliance*

1 *that is not a residential Energy Star product, but is*
2 *of the same type as, and is the nearest capacity, per-*
3 *formance, and other relevant characteristics (as deter-*
4 *mined by the State energy office) to the residential*
5 *Energy Star product.*

6 *(f) AUTHORIZATION OF APPROPRIATIONS.—There are*
7 *authorized to be appropriated to carry out this section such*
8 *sums as are necessary for fiscal year 2003 through fiscal*
9 *year 2012.*

10 ***Subtitle B—Federal Energy***
11 ***Efficiency***

12 **SEC. 911. ENERGY MANAGEMENT REQUIREMENTS.**

13 *(a) ENERGY REDUCTION GOALS.—Section 543(a)(1) of*
14 *the National Energy Conservation Policy Act (42 U.S.C.*
15 *8253(a)(1)) is amended to read as follows:*

16 *“(1) Subject to paragraph (2), each agency shall*
17 *apply energy conservation measures to, and shall im-*
18 *prove the design for the construction of, the Federal*
19 *buildings of the agency (including each industrial or*
20 *laboratory facility) so that the energy consumption*
21 *per gross square foot of the Federal buildings of the*
22 *agency in fiscal years 2002 through 2011 is reduced,*
23 *as compared with the energy consumption per gross*
24 *square foot of the Federal buildings of the agency in*

1 *fiscal year 2000, by the percentage specified in the*
 2 *following table:*

| “Fiscal Year | Percentage reduction |
|---------------------|-----------------------------|
| 2002 | 2 |
| 2003 | 4 |
| 2004 | 6 |
| 2005 | 8 |
| 2006 | 10 |
| 2007 | 12 |
| 2008 | 14 |
| 2009 | 16 |
| 2010 | 18 |
| 2011 | 20.”. |

3 **(b) REVIEW AND REVISION OF ENERGY PERFORMANCE**
 4 **REQUIREMENT.**—*Section 543(a) of the National Energy*
 5 *Conservation Policy Act (42 U.S.C. 8253(a)) is further*
 6 *amended by adding at the end the following:*

7 *“(3) Not later than December 31, 2010, the Sec-*
 8 *retary shall review the results of the implementation*
 9 *of the energy performance requirement established*
 10 *under paragraph (1) and submit to Congress rec-*
 11 *ommendations concerning energy performance re-*
 12 *quirements for calendar years 2012 through 2021.”.*

13 **(c) EXCLUSIONS.**—*Section 543(c)(1) of the National*
 14 *Energy Conservation Policy Act (42 U.S.C. 8253(c)(1)) is*
 15 *amended to read as follows:*

16 *“(1)(A) An agency may exclude, from the energy*
 17 *performance requirement for a calendar year estab-*
 18 *lished under subsection (a) and the energy manage-*
 19 *ment requirement established under subsection (b),*

1 *any Federal building or collection of Federal build-*
2 *ings, if the head of the agency finds that—*

3 *“(i) compliance with those requirements*
4 *would be impracticable;*

5 *“(ii) the agency has completed and sub-*
6 *mitted all federally required energy management*
7 *reports;*

8 *“(iii) the agency has achieved compliance*
9 *with the energy efficiency requirements of this*
10 *Act, the Energy Policy Act of 1992, Executives*
11 *Orders, and other Federal law; and*

12 *“(iv) the agency has implemented all prac-*
13 *ticable, life-cycle cost-effective projects with re-*
14 *spect to the Federal building or collection of Fed-*
15 *eral buildings to be excluded.*

16 *“(B) A finding of impracticability under sub-*
17 *paragraph (A)(i) shall be based on—*

18 *“(i) the energy intensiveness of activities*
19 *carried out in the Federal building or collection*
20 *of Federal buildings; or*

21 *“(ii) the fact that the Federal building or*
22 *collection of Federal buildings is used in the per-*
23 *formance of a national security function.”.*

1 (d) *REVIEW BY SECRETARY.*—Section 543(c)(2) of the
2 *National Energy Conservation Policy Act* (42 U.S.C.
3 8253(c)(2)) is amended—

4 (1) by striking “impracticability standards” and
5 inserting “standards for exclusion”; and

6 (2) by striking “a finding of impracticability”
7 and inserting “the exclusion”.

8 (e) *CRITERIA.*—Section 543(c) of the *National Energy*
9 *Conservation Policy Act* (42 U.S.C. 8253(c)) is further
10 amended by adding at the end the following:

11 “(3) Not later than 180 days after the date of en-
12 actment of this paragraph, the Secretary shall issue
13 guidelines that establish criteria for exclusions under
14 paragraph (1).”.

15 (f) *REPORTS.*—Section 548(b) of the *National Energy*
16 *Conservation Policy Act* (42 U.S.C. 8258(b)) is amended—

17 (1) in the subsection heading, by inserting “*THE*
18 *PRESIDENT AND*” before “*CONGRESS*”; and

19 (2) by inserting “*President and*” before “*Con-*
20 *gress*”.

21 (g) *CONFORMING AMENDMENT.*—Section 550(d) of the
22 *National Energy Conservation Policy Act* (42 U.S.C.
23 8258b(d)) is amended in the second sentence by striking
24 “the 20 percent reduction goal established under section
25 543(a) of the *National Energy Conservation Policy Act* (42

1 *U.S.C. 8253(a).*” and inserting “each of the energy reduc-
2 *tion goals established under section 543(a).*”.

3 **SEC. 912. ENERGY USE MEASUREMENT AND ACCOUNT-**
4 **ABILITY.**

5 *Section 543 of the National Energy Conservation Pol-*
6 *icy Act (42 U.S.C. 8253) is further amended by adding at*
7 *the end the following:*

8 “(e) *METERING OF ENERGY USE.*—

9 “(1) *DEADLINE.*—By October 1, 2004, all Fed-
10 *eral buildings shall, for the purposes of efficient use*
11 *of energy and reduction in the cost of electricity used*
12 *in such buildings, be metered or submetered in ac-*
13 *cordance with guidelines established by the Secretary*
14 *under paragraph (2). Each agency shall use, to the*
15 *maximum extent practicable, advanced meters or ad-*
16 *vanced metering devices that provide data at least*
17 *daily and that measure at least hourly consumption*
18 *of electricity in the Federal buildings of the agency.*
19 *Such data shall be incorporated into existing Federal*
20 *energy tracking systems and made available to Fed-*
21 *eral facility energy managers.*

22 “(2) *GUIDELINES.*—

23 “(A) *IN GENERAL.*—Not later than 180
24 *days after the date of enactment of this sub-*
25 *section, the Secretary, in consultation with the*

1 *Department of Defense, the General Services Ad-*
2 *ministration and representatives from the meter-*
3 *ing industry, utility industry, energy services*
4 *industry, energy efficiency industry, national*
5 *laboratories, universities and Federal facility en-*
6 *ergy managers, shall establish guidelines for*
7 *agencies to carry out paragraph (1).*

8 *“(B) REQUIREMENTS FOR GUIDELINES.—*

9 *The guidelines shall—*

10 *“(i) take into consideration—*

11 *“(I) the cost of metering and sub-*
12 *metering and the reduced cost of oper-*
13 *ation and maintenance expected to re-*
14 *sult from metering and submetering;*

15 *“(II) the extent to which metering*
16 *and submetering are expected to result*
17 *in increased potential for energy man-*
18 *agement, increased potential for energy*
19 *savings and energy efficiency improve-*
20 *ment, and cost and energy savings due*
21 *to utility contract aggregation; and*

22 *“(III) the measurement and*
23 *verification protocols of the Depart-*
24 *ment of Energy;*

1 “(ii) include recommendations con-
2 cerning the amount of funds and the num-
3 ber of trained personnel necessary to gather
4 and use the metering information to track
5 and reduce energy use;

6 “(iii) establish one or more dates, not
7 later than 1 year after the date of issuance
8 of the guidelines, on which the requirements
9 specified in paragraph (1) shall take effect;
10 and

11 “(iv) establish exclusions from the re-
12 quirements specified in paragraph (1) based
13 on the *de minimus* quantity of energy use
14 of a Federal building, industrial process, or
15 structure.

16 “(3) *PLAN*.—No later than 6 months after
17 the date guidelines are established under para-
18 graph (2), in a report submitted by the agency
19 under section 548(a), each agency shall submit to
20 the Secretary a plan describing how the agency
21 will implement the requirements of paragraph
22 (1), including (A) how the agency will designate
23 personnel primarily responsible for achieving the
24 requirements and (B) demonstration by the
25 agency, complete with documentation, of any

1 *finding that advanced meters or advanced meter-*
2 *ing devices, as defined in paragraph (1), are not*
3 *practicable.”.*

4 **SEC. 913. FEDERAL BUILDING PERFORMANCE STANDARDS.**

5 *(a) REVISED STANDARDS.—Section 305(a) of the En-*
6 *ergy Conservation and Production Act (42 U.S.C. 6834(a))*
7 *is amended—*

8 *(1) in paragraph (2)(A), by striking “CABO*
9 *Model Energy Code, 1992” and inserting “the 2000*
10 *International Energy Conservation Code”; and*

11 *(2) by adding at the end the following:*

12 *“(3) REVISED FEDERAL BUILDING ENERGY EFFI-*
13 *CIENCY PERFORMANCE STANDARDS.—*

14 *“(A) IN GENERAL.—Not later than 1 year*
15 *after the date of enactment of this paragraph, the*
16 *Secretary of Energy shall establish, by rule, re-*
17 *vised Federal building energy efficiency perform-*
18 *ance standards that require that, if cost-*
19 *effective—*

20 *“(i) new commercial buildings and*
21 *multifamily high rise residential buildings*
22 *be constructed so as to achieve the applica-*
23 *ble Energy Star building energy perform-*
24 *ance ratings or energy consumption levels*
25 *at least 30 percent below those of the most*

1 *recent ASHRAE Standard 90.1, whichever*
2 *results in the greater increase in energy effi-*
3 *ciency;*

4 “(ii) *new residential buildings (other*
5 *than those described in clause (i)) be con-*
6 *structed so as to achieve the applicable En-*
7 *ergy Star building energy performance rat-*
8 *ings or achieve energy consumption levels at*
9 *least 30 percent below the requirements of*
10 *the most recent version of the International*
11 *Energy Conservation Code, whichever re-*
12 *sults in the greater increase in energy effi-*
13 *ciency; and*

14 “(iii) *sustainable design principles are*
15 *applied to the siting, design, and construc-*
16 *tion of all new and replacement buildings.*

17 “(B) *ADDITIONAL REVISIONS.—Not later*
18 *than 1 year after the date of approval of amend-*
19 *ments to ASHRAE Standard 90.1 or the 2000*
20 *International Energy Conservation Code, the*
21 *Secretary of Energy shall determine, based on*
22 *the cost-effectiveness of the requirements under*
23 *the amendments, whether the revised standards*
24 *established under this paragraph should be up-*
25 *dated to reflect the amendments.*

1 “(C) *STATEMENT ON COMPLIANCE OF NEW*
2 *BUILDINGS.—In the budget request of the Federal*
3 *agency for each fiscal year and each report sub-*
4 *mitted by the Federal agency under section*
5 *548(a) of the National Energy Conservation Pol-*
6 *icy Act (42 U.S.C. 8258(a)), the head of each*
7 *Federal agency shall include—*

8 “(i) *a list of all new Federal buildings*
9 *of the Federal agency; and*

10 “(ii) *a statement concerning whether*
11 *the Federal buildings meet or exceed the re-*
12 *vised standards established under this para-*
13 *graph, including a monitoring and commis-*
14 *sioning report that is in compliance with*
15 *the measurement and verification protocols*
16 *of the Department of Energy.*

17 “(D) *AUTHORIZATION OF APPROPRIA-*
18 *TIONS.—There are authorized to be appropriated*
19 *such sums as are necessary to carry out this*
20 *paragraph and to implement the revised stand-*
21 *ards established under this paragraph.”.*

22 (b) *ENERGY LABELING PROGRAM.—Section 305(a) of*
23 *the Energy Conservation and Production Act (42 U.S.C.*
24 *6834(a)) is further amended by adding at the end the fol-*
25 *lowing:*

1 “(e) *ENERGY LABELING PROGRAM.*—*The Secretary of*
2 *Energy, in cooperation with the Administrator of the Envi-*
3 *ronmental Protection Agency, shall develop an energy label-*
4 *ing program for new Federal buildings that exceed the re-*
5 *vised standards established under subsection (a)(3) by 15*
6 *percent or more.*”.

7 **SEC. 914. PROCUREMENT OF ENERGY EFFICIENT PROD-**
8 **UCTS.**

9 (a) *REQUIREMENTS.*—*Part 3 of title V of the National*
10 *Energy Conservation Policy Act is amended by adding at*
11 *the end the following:*

12 **“SEC. 552. FEDERAL PROCUREMENT OF ENERGY EFFICIENT**
13 **PRODUCTS.**

14 “(a) *DEFINITIONS.*—*In this section:*

15 “(1) *ENERGY STAR PRODUCT.*—*The term ‘En-*
16 *ergy Star product’ means a product that is rated for*
17 *energy efficiency under an Energy Star program.*

18 “(2) *ENERGY STAR PROGRAM.*—*The term ‘En-*
19 *ergy Star program’ means the program established by*
20 *section 324A of the Energy Policy and Conservation*
21 *Act.*

22 “(3) *EXECUTIVE AGENCY.*—*The term ‘executive*
23 *agency’ has the meaning given the term in section 4*
24 *of the Office of Federal Procurement Policy Act (41*
25 *U.S.C. 403).*

1 “(4) *FEMP DESIGNATED PRODUCT*.—The term
2 ‘*FEMP designated product*’ means a product that is
3 designated under the *Federal Energy Management*
4 *Program of the Department of Energy* as being
5 among the highest 25 percent of equivalent products
6 for energy efficiency.

7 “(b) *PROCUREMENT OF ENERGY EFFICIENT PROD-*
8 *UCTS*.—

9 “(1) *REQUIREMENT*.—To meet the requirements
10 of an executive agency for an energy consuming prod-
11 uct, the head of the executive agency shall, except as
12 provided in paragraph (2), procure—

13 “(A) an *Energy Star* product; or

14 “(B) a *FEMP* designated product.

15 “(2) *EXCEPTIONS*.—The head of an executive
16 agency is not required to procure an *Energy Star*
17 product or *FEMP* designated product under para-
18 graph (1) if—

19 “(A) an *Energy Star* product or *FEMP* des-
20 ignated product is not cost effective over the life
21 cycle of the product; or

22 “(B) no *Energy Star* product or *FEMP* des-
23 ignated product is reasonably available that
24 meets the requirements of the executive agency.

1 “(3) *PROCUREMENT PLANNING.*—*The head of an*
2 *executive agency shall incorporate into the specifica-*
3 *tions for all procurements involving energy con-*
4 *suming products and systems, and into the factors for*
5 *the evaluation of offers received for the procurement,*
6 *criteria for energy efficiency that are consistent with*
7 *the criteria used for rating Energy Star products and*
8 *for rating FEMP designated products.*

9 “(c) *LISTING OF ENERGY EFFICIENT PRODUCTS IN*
10 *FEDERAL CATALOGS.*—*Energy Star and FEMP designated*
11 *products shall be clearly identified and prominently dis-*
12 *played in any inventory or listing of products by the Gen-*
13 *eral Services Administration or the Defense Logistics Agen-*
14 *cy.*

15 (b) *CONFORMING AMENDMENT.*—*The table of contents*
16 *in section 1(b) of the National Energy Conservation Policy*
17 *Act (42 U.S.C. 8201 note) is amended by inserting after*
18 *the item relating to section 551 the following:*

 “Sec. 552. *Federal Government procurement of energy efficient products.*”

19 (c) *REGULATIONS.*—*Not later than 180 days after the*
20 *effective date specified in subsection (f), the Secretary of En-*
21 *ergy shall issue guidelines to carry out section 552 of the*
22 *National Energy Conservation Policy Act (as added by sub-*
23 *section (a)).*

24 (d) *DESIGNATION OF ENERGY STAR PRODUCTS.*—*The*
25 *Administrator of the Environmental Protection Agency and*

1 *the Secretary of Energy shall expedite the process of desig-*
2 *nating products as Energy Star products (as defined in sec-*
3 *tion 552 of the National Energy Conservation Policy Act*
4 *(as added by subsection (a)).*

5 *(e) DESIGNATION OF ELECTRIC MOTORS.—In the case*
6 *of electric motors of 1 to 500 horsepower, agencies shall se-*
7 *lect only premium efficient motors that meet a standard*
8 *designated by the Secretary. The Secretary shall designate*
9 *such a standard within 120 days of the enactment of this*
10 *paragraph, after considering the recommendations of asso-*
11 *ciated electric motor manufacturers and energy efficiency*
12 *groups.*

13 *(f) EFFECTIVE DATE.—Subsection (a) and the amend-*
14 *ment made by that subsection take effect on the date that*
15 *is 180 days after the date of enactment of this Act.*

16 **SEC. 915. REPEAL OF ENERGY SAVINGS PERFORMANCE**
17 **CONTRACT SUNSET.**

18 *Section 801(c) of the National Energy Conservation*
19 *Policy Act (42 U.S.C. 8287(c)) is repealed.*

20 **SEC. 916. ENERGY SAVINGS PERFORMANCE CONTRACT**
21 **DEFINITIONS.**

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

1 “(2) *The term ‘energy savings’ means a reduc-*
2 *tion in the cost of energy or water, from a base cost*
3 *established through a methodology set forth in the con-*
4 *tract, used in an existing federally owned building or*
5 *buildings or other federally owned facilities as a re-*
6 *sult of—*

7 “(A) *the lease or purchase of operating*
8 *equipment, improvements, altered operation and*
9 *maintenance, or technical services;*

10 “(B) *the increased efficient use of existing*
11 *energy sources by cogeneration or heat recovery,*
12 *excluding any cogeneration process for other*
13 *than a federally owned building or buildings or*
14 *other federally owned facilities; or*

15 “(C) *the increased efficient use of existing*
16 *water sources.”.*

17 (b) *ENERGY SAVINGS CONTRACT.—Section 804(3) of*
18 *the National Energy Conservation Policy Act (42 U.S.C.*
19 *8287c(3)) is amended to read as follows:*

20 “(3) *The terms ‘energy savings contract’ and ‘en-*
21 *ergy savings performance contract’ mean a contract*
22 *which provides for the performance of services for the*
23 *design, acquisition, installation, testing, operation,*
24 *and, where appropriate, maintenance and repair, of*

1 *an identified energy or water conservation measure or*
2 *series of measures at one or more locations.”.*

3 (c) *ENERGY OR WATER CONSERVATION MEASURE.*—

4 *Section 804(4) of the National Energy Conservation Policy*
5 *Act (42 U.S.C. 8287c(4)) is amended to read as follows:*

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

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

10 *“(B) a water conservation measure that im-*
11 *proves water efficiency, is life cycle cost effective,*
12 *and involves water conservation, water recycling*
13 *or reuse, more efficient treatment of wastewater*
14 *or stormwater, improvements in operation or*
15 *maintenance efficiencies, retrofit activities or*
16 *other related activities, not at a Federal hydro-*
17 *electric facility.”.*

18 **SEC. 917. REVIEW OF ENERGY SAVINGS PERFORMANCE**

19 **CONTRACT PROGRAM.**

20 *Within 180 days after the date of the enactment of this*
21 *Act, the Secretary of Energy shall complete a review of the*
22 *Energy Savings Performance Contract program to identify*
23 *statutory, regulatory, and administrative obstacles that*
24 *prevent Federal agencies from fully utilizing the program.*
25 *In addition, this review shall identify all areas for increas-*

1 *ing program flexibility and effectiveness, including audit*
2 *and measurement verification requirements, accounting for*
3 *energy use in determining savings, contracting require-*
4 *ments, and energy efficiency services covered. The Secretary*
5 *shall report these findings to the Committee on Energy and*
6 *Commerce of the House of Representatives and the Com-*
7 *mittee on Energy and Natural Resources of the Senate, and*
8 *shall implement identified administrative and regulatory*
9 *changes to increase program flexibility and effectiveness to*
10 *the extent that such changes are consistent with statutory*
11 *authority.*

12 **SEC. 918. FEDERAL ENERGY BANK.**

13 *Part 3 of title V of the National Energy Conservation*
14 *Policy Act is amended by adding at the end the following:*

15 **“SEC. 553. FEDERAL ENERGY BANK.**

16 *“(a) DEFINITIONS.—In this section:*

17 *“(1) BANK.—The term ‘Bank’ means the Federal*
18 *Energy Bank established by subsection (b).*

19 *“(2) ENERGY OR WATER EFFICIENCY PROJECT.—*
20 *The term ‘energy or water efficiency project’ means a*
21 *project that assists a Federal agency in meeting or ex-*
22 *ceeding the energy or water efficiency requirements*
23 *of—*

24 *“(A) this part;*

25 *“(B) title VIII;*

1 “(C) subtitle F of title I of the Energy Pol-
2 icy Act of 1992 (42 U.S.C. 8262 et seq.); or

3 “(D) any applicable Executive order, in-
4 cluding Executive Order No. 13123.

5 “(3) FEDERAL AGENCY.—The term ‘Federal
6 agency’ means—

7 “(A) an Executive agency (as defined in
8 section 105 of title 5, United States Code);

9 “(B) the United States Postal Service;

10 “(C) Congress and any other entity in the
11 legislative branch; and

12 “(D) a Federal court and any other entity
13 in the judicial branch.

14 “(b) ESTABLISHMENT OF BANK.—

15 “(1) IN GENERAL.—There is established in the
16 Treasury of the United States a fund to be known as
17 the ‘Federal Energy Bank’, consisting of—

18 “(A) such amounts as are deposited in the
19 Bank under paragraph (2);

20 “(B) such amounts as are repaid to the
21 Bank under subsection (c)(2)(D); and

22 “(C) any interest earned on investment of
23 amounts in the Bank under paragraph (3).

24 “(2) DEPOSITS IN BANK.—

1 “(A) *IN GENERAL.*—Subject to the avail-
2 ability of appropriations and to subparagraph
3 (B), the Secretary of the Treasury shall deposit
4 in the Bank an amount equal to \$250,000,000 in
5 fiscal year 2003 and in each fiscal year there-
6 after.

7 “(B) *MAXIMUM AMOUNT IN BANK.*—Depos-
8 its under subparagraph (A) shall cease beginning
9 with the fiscal year following the fiscal year in
10 which the amounts in the Bank (including
11 amounts on loan from the Bank) become equal to
12 or exceed \$1,000,000,000.

13 “(3) *INVESTMENT OF AMOUNTS.*—The Secretary
14 of the Treasury shall invest such portion of the Bank
15 as is not, in the judgment of the Secretary, required
16 to meet current withdrawals. Investments may be
17 made only in interest-bearing obligations of the
18 United States.

19 “(c) *LOANS FROM THE BANK.*—

20 “(1) *IN GENERAL.*—The Secretary of the Treas-
21 ury shall transfer from the Bank to the Secretary
22 such amounts as are appropriated to carry out the
23 loan program under paragraph (2).

24 “(2) *LOAN PROGRAM.*—

25 “(A) *ESTABLISHMENT.*—

1 “(i) *IN GENERAL.*—*In accordance with*
2 *subsection (d), the Secretary, in consulta-*
3 *tion with the Secretary of Defense, the Ad-*
4 *ministrator of General Services, and the Di-*
5 *rector of the Office of Management and*
6 *Budget, shall establish a program to make*
7 *loans of amounts in the Bank to any Fed-*
8 *eral agency that submits an application*
9 *satisfactory to the Secretary in order to pay*
10 *the costs of a project described in subpara-*
11 *graph (C).*

12 “(ii) *COMMENCEMENT OF OPER-*
13 *ATIONS.*—*The Secretary may begin—*

14 “(I) *accepting applications for*
15 *loans from the Bank in fiscal year*
16 *2002; and*

17 “(II) *making loans from the Bank*
18 *in fiscal year 2003.*

19 “(B) *ENERGY SAVINGS PERFORMANCE CON-*
20 *TRACTING FUNDING.*—*To the extent practicable,*
21 *an agency shall not submit a project for which*
22 *energy performance contracting funding is avail-*
23 *able and is acceptable to the Federal agency*
24 *under title VIII.*

25 “(C) *PURPOSES OF LOAN.*—

1 “(i) *IN GENERAL.*—A loan from the
2 *Bank may be used to pay—*

3 “(I) *the costs of an energy or*
4 *water efficiency project, or a renewable*
5 *or alternative energy project, for a new*
6 *or existing Federal building (including*
7 *selection and design of the project);*

8 “(II) *the costs of an energy meter-*
9 *ing plan and metering equipment in-*
10 *stalled pursuant to section 543(e) or*
11 *for the purpose of verification of the*
12 *energy savings under an energy sav-*
13 *ings performance contract under title*
14 *VIII; or*

15 “(III) *at the time of contracting,*
16 *the costs of cofunding of an energy sav-*
17 *ings performance contract (including a*
18 *utility energy service agreement) in*
19 *order to shorten the payback period of*
20 *the project that is the subject of the en-*
21 *ergy savings performance contract.*

22 “(ii) *LIMITATION.*—A Federal agency
23 *may use not more than 10 percent of the*
24 *amount of a loan under subclause (I) or*
25 *(II) of clause (i) to pay the costs of admin-*

1 *istration and proposal development (includ-*
2 *ing data collection and energy surveys).*

3 *“(iii) RENEWABLE AND ALTERNATIVE*
4 *ENERGY PROJECTS.—Not more than 25 per-*
5 *cent of the amount on loan from the Bank*
6 *at any time may be loaned for renewable*
7 *energy and alternative energy projects (as*
8 *defined by the Secretary in accordance with*
9 *applicable law (including Executive Or-*
10 *ders)).*

11 *“(D) REPAYMENTS.—*

12 *“(i) IN GENERAL.—Subject to clauses*
13 *(ii) through (iv), a Federal agency shall*
14 *repay to the Bank the principal amount of*
15 *a loan plus interest at a rate determined by*
16 *the President, in consultation with the Sec-*
17 *retary and the Secretary of the Treasury.*

18 *“(ii) WAIVER OR REDUCTION OF IN-*
19 *TEREST.—The Secretary may waive or re-*
20 *duce the rate of interest required to be paid*
21 *under clause (i) if the Secretary determines*
22 *that payment of interest by a Federal agen-*
23 *cy at the rate determined under that clause*
24 *is not required to fund the operations of the*
25 *Bank.*

1 “(iii) *DETERMINATION OF INTEREST*
2 *RATE.*—*The interest rate determined under*
3 *clause (i) shall be at a rate that is sufficient*
4 *to ensure that, beginning not later than Oc-*
5 *tober 1, 2007, interest payments will be suf-*
6 *ficient to fully fund the operations of the*
7 *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 request*
15 *for such amounts as are necessary to*
16 *make such repayments as are expected*
17 *to become due in the fiscal year under*
18 *this subparagraph.*

19 “(II) *SUSPENSION OF REPAYMENT*
20 *REQUIREMENT.*—*If, for any fiscal*
21 *year, sufficient appropriations are not*
22 *made available to a Federal agency to*
23 *make repayments under this subpara-*
24 *graph, the Bank shall suspend the re-*
25 *quirement of repayment under this*

1 *subparagraph until such appropria-*
2 *tions 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 value*
7 *of energy savings accrued as a result of any en-*
8 *ergy conservation measure implemented using*
9 *amounts from the Bank.*

10 “(F) *NO RESCISSION OR REPROGRAM-*
11 *MING.—A Federal agency shall not rescind or re-*
12 *program loan amounts made available from the*
13 *Bank except as permitted under guidelines issued*
14 *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 establish*
22 *criteria for the selection of projects to be awarded*
23 *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 meas-*
10 *urement and verification protocols of the*
11 *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 Fed-*
16 *eral facilities; and*

17 “(III) *verify the energy savings*
18 *under an energy savings performance*
19 *contract under title VIII; and*

20 “(iv)(I) *in the case of a renewable en-*
21 *ergy or alternative energy project, has a*
22 *simple payback period of not more than 15*
23 *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, and
15 annually thereafter, a Federal agency shall submit to
16 the Secretary a report that—

17 “(A) states whether the project meets or fails
18 to meet the energy savings projections for the
19 project; and

20 “(B) for each project that fails to meet the
21 energy savings projections, states the reasons for
22 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*
 9 *the Bank to each Federal agency; and*

10 “(C) *the estimated cost and energy sav-*
 11 *ings resulting from projects funded with*
 12 *loans from the Bank.*

13 “(f) *AUTHORIZATION OF APPROPRIATIONS.*—*There are*
 14 *authorized to be appropriated such sums as are necessary*
 15 *to carry out this section.”*

16 **SEC. 919. 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 cost-*
 25 *effective energy conservation and management plan*

1 *(referred to in this section as the “plan”)* for all fa-
2 *cilities administered by the Congress (referred to in*
3 *this section as ‘congressional buildings’)* to meet the
4 *energy performance requirements for Federal build-*
5 *ings established under section 543(a)(1); and*

6 *“(2) shall submit the plan to Congress, not later*
7 *than 180 days after the date of enactment of this sec-*
8 *tion.*

9 *“(b) PLAN REQUIREMENTS.—The plan shall include—*

10 *“(1) a description of the life-cycle cost analysis*
11 *used to determine the cost-effectiveness of proposed en-*
12 *ergy efficiency projects;*

13 *“(2) a schedule of energy surveys to ensure com-*
14 *plete surveys of all congressional buildings every 5*
15 *years to determine the cost and payback period of en-*
16 *ergy and water conservation measures;*

17 *“(3) a strategy for installation of life cycle cost*
18 *effective energy and water conservation measures;*

19 *“(4) the results of a study of the costs and bene-*
20 *fits of installation of submetering in congressional*
21 *buildings; and*

22 *“(5) information packages and ‘how-to’ guides*
23 *for each Member and employing authority of Congress*
24 *that detail simple, cost-effective methods to save en-*
25 *ergy and taxpayer dollars in the workplace.*

1 “(c) *CONTRACTING AUTHORITY.—The Architect—*

2 “(1) *may contract with nongovernmental entities*
3 *and use private sector capital to finance energy con-*
4 *servation projects and meet energy performance re-*
5 *quirements; and*

6 “(2) *may use innovative contracting methods*
7 *that will attract private sector funding for the instal-*
8 *lation of energy efficient and renewable energy tech-*
9 *nology, such as energy savings performance contracts*
10 *described in title VIII.*

11 “(d) *CAPITOL VISITOR CENTER.—The Architect—*

12 “(1) *shall ensure that state-of-the-art energy effi-*
13 *ciency and renewable energy technologies are used in*
14 *the construction and design of the Visitor Center; and*

15 “(2) *shall include in the Visitor Center an ex-*
16 *hibit on the energy efficiency and renewable energy*
17 *measures used in congressional buildings.*

18 “(e) *ANNUAL REPORT.—The Architect shall submit to*
19 *Congress annually a report on congressional energy man-*
20 *agement and conservation programs required under this*
21 *section that describes in detail—*

22 “(1) *energy expenditures and savings estimates*
23 *for each facility;*

24 “(2) *energy management and conservation*
25 *projects; and*

1 “(3) future priorities to ensure compliance with
2 this section.”.

3 (b) *REPEAL*.—Section 310 of the Legislative Branch
4 Appropriations Act, 1999 (40 U.S.C. 166i), is repealed.

5 **SEC. 920. INCREASED USE OF RECOVERED MATERIAL IN**
6 **FEDERALLY FUNDED PROJECTS INVOLVING**
7 **PROCUREMENT OF CEMENT OR CONCRETE.**

8 (a) *DEFINITIONS*.—In this section:

9 (1) *ADMINISTRATOR*.—The term “Adminis-
10 trator” means the Administrator of the Environ-
11 mental Protection Agency.

12 (2) *AGENCY HEAD*.—The term “agency head”
13 means—

14 (A) the Secretary of Transportation; and

15 (B) the head of each other Federal agency
16 that on a regular basis procures, or provides
17 Federal funds to pay or assist in paying the cost
18 of procuring, material for cement or concrete
19 projects.

20 (3) *CEMENT OR CONCRETE PROJECT*.—The term
21 “cement or concrete project” means a project for the
22 construction or maintenance of a highway or other
23 transportation facility or a Federal, State, or local
24 government building or other public facility that—

1 (A) involves the procurement of cement or
2 concrete; and

3 (B) is carried out in whole or in part using
4 Federal funds.

5 (4) *RECOVERED MATERIAL*.—The term “recov-
6 ered material” means—

7 (A) ground granulated blast furnace slag;

8 (B) coal combustion fly ash; and

9 (C) any other waste material or byproduct
10 recovered or diverted from solid waste that the
11 Administrator, in consultation with an agency
12 head, determines should be treated as recovered
13 material under this section for use in cement or
14 concrete projects paid for, in whole or in part,
15 by the agency head.

16 (b) *IMPLEMENTATION OF REQUIREMENTS*.—

17 (1) *IN GENERAL*.—Not later than 1 year after
18 the date of enactment of this Act, the Administrator
19 and each agency head shall take such actions as are
20 necessary to implement fully all procurement require-
21 ments and incentives in effect as of the date of enact-
22 ment of this Act (including guidelines under section
23 6002 of the Solid Waste Disposal Act (42 U.S.C.
24 6963)) that provide for the use of cement and concrete

1 *incorporating recovered material in cement or con-*
2 *crete projects.*

3 (2) *PRIORITY.*—*In carrying out paragraph (1)*
4 *an agency head shall give priority to achieving great-*
5 *er use of recovered material in cement or concrete*
6 *projects for which recovered materials historically*
7 *have not been used or have been used only minimally.*

8 (c) *FULL IMPLEMENTATION STUDY.*—

9 (1) *IN GENERAL.*—*The Administrator and the*
10 *Secretary of Transportation, in cooperation with the*
11 *Secretary of Energy, shall conduct a study to deter-*
12 *mine the extent to which current procurement require-*
13 *ments, when fully implemented in accordance with*
14 *subsection (b), may realize energy savings and green-*
15 *house gas emission reduction benefits attainable with*
16 *substitution of recovered material in cement used in*
17 *cement or concrete projects.*

18 (2) *MATTERS TO BE ADDRESSED.*—*The study*
19 *shall—*

20 (A) *quantify the extent to which recovered*
21 *materials are being substituted for Portland ce-*
22 *ment, particularly as a result of current procure-*
23 *ment requirements, and the energy savings and*
24 *greenhouse gas emission reduction benefits asso-*
25 *ciated with that substitution;*

1 (B) identify all barriers in procurement re-
2 quirements to fuller realization of energy savings
3 and greenhouse gas emission reduction benefits,
4 including barriers resulting from exceptions from
5 current law; and

6 (C)(i) identify potential mechanisms to
7 achieve greater substitution of recovered material
8 in types of cement or concrete projects for which
9 recovered materials historically have not been
10 used or have been used only minimally;

11 (ii) evaluate the feasibility of establishing
12 guidelines or standards for optimized substi-
13 tution rates of recovered material in those ce-
14 ment or concrete projects; and

15 (iii) identify any potential environmental
16 or economic effects that may result from greater
17 substitution of recovered material in those ce-
18 ment or concrete projects.

19 (3) *REPORT.*—Not later than 30 months after the
20 date of enactment of this Act, the Secretary shall sub-
21 mit to the Committee on Appropriations and Com-
22 mittee on Environment and Public Works of the Sen-
23 ate and the Committee on Appropriations and Com-
24 mittee on Energy and Commerce of the House of Rep-
25 resentatives a report on the study.

1 (d) *ADDITIONAL PROCUREMENT REQUIREMENTS.*—
 2 *Within 1 year of the release of the report in accordance with*
 3 *subsection (c)(3), the Administrator and each agency head*
 4 *shall take additional actions authorized under the Solid*
 5 *Waste Disposal Act (42 U.S.C. 6901 et seq.) to establish*
 6 *procurement requirements and incentives that provide for*
 7 *the use of cement and concrete with increased substitution*
 8 *of recovered material in the construction and maintenance*
 9 *of cement or concrete projects, so as to—*

10 (1) *realize more fully the energy savings and*
 11 *greenhouse gas emission reduction benefits associated*
 12 *with increased substitution; and*

13 (2) *eliminate barriers identified under subsection*
 14 (i).

15 (e) *EFFECT OF SECTION.*—*Nothing in this section af-*
 16 *fects the requirements of section 6002 of the Solid Waste*
 17 *Disposal Act (42 U.S.C. 6962) (including the guidelines*
 18 *and specifications for implementing those requirements).*

19 ***Subtitle C—Industrial Efficiency***
 20 ***and Consumer Products***

21 ***SEC. 921. VOLUNTARY COMMITMENTS TO REDUCE INDUS-***
 22 ***TRIAL ENERGY INTENSITY.***

23 (a) *VOLUNTARY AGREEMENTS.*—*The Secretary of En-*
 24 *ergy shall enter into voluntary agreements with one or more*
 25 *persons in industrial sectors that consume significant*

1 *amounts of primary energy per unit of physical output to*
2 *reduce the energy intensity of their production activities.*

3 (b) *GOAL.—Voluntary agreements under this section*
4 *shall have a goal of reducing energy intensity by not less*
5 *than 2.5 percent each year from 2002 through 2012.*

6 (c) *RECOGNITION.—The Secretary of Energy, in co-*
7 *operation with the Administrator of the Environmental*
8 *Protection Agency and other appropriate Federal agencies,*
9 *shall develop mechanisms to recognize and publicize the*
10 *achievements of participants in voluntary agreements*
11 *under this section.*

12 (d) *DEFINITION.—In this section, the term “energy in-*
13 *tensity” means the primary energy consumed per unit of*
14 *physical output in an industrial process.*

15 (e) *TECHNICAL ASSISTANCE.—An entity that enters*
16 *into an agreement under this section and continues to make*
17 *a good faith effort to achieve the energy efficiency goals*
18 *specified in the agreement shall be eligible to receive from*
19 *the Secretary a grant or technical assistance as appropriate*
20 *to assist in the achievement of those goals.*

21 (f) *REPORT.—Not later than June 30, 2008 and June*
22 *30, 2012, the Secretary shall submit to Congress a report*
23 *that evaluates the success of the voluntary agreements, with*
24 *independent verification of a sample of the energy savings*
25 *estimates provided by participating firms.*

1 **SEC. 922. AUTHORITY TO SET STANDARDS FOR COMMER-**
2 **CIAL PRODUCTS.**

3 *Part B of title III of the Energy Policy and Conserva-*
4 *tion Act (42 U.S.C. 6291 et seq.) is amended as follows:*

5 *(1) In the heading for such part, by inserting*
6 *“AND COMMERCIAL” after “CONSUMER”.*

7 *(2) In section 321(2), by inserting “or commer-*
8 *cial” after “consumer”.*

9 *(3) In paragraphs (4), (5), and (15) of section*
10 *321, by striking “consumer” each place it appears*
11 *and inserting “covered”.*

12 *(4) In section 322(a), by inserting “or commer-*
13 *cial” after “consumer” the first place it appears in*
14 *the material preceding paragraph (1).*

15 *(5) In section 322(b), by inserting “or commer-*
16 *cial” after “consumer” each place it appears.*

17 *(6) In section 322 (b)(1)(B) and (b)(2)(A), by*
18 *inserting “or per-business in the case of a commercial*
19 *product” after “per-household” each place it appears.*

20 *(7) In section 322 (b)(2)(A), by inserting “or*
21 *businesses in the case of commercial products” after*
22 *“households” each place it appears.*

23 *(8) In section 322 (B)(2)(C)—*

24 *(A) by striking “term” and inserting*
25 *“terms”; and*

1 (B) by inserting “and ‘business’” after
2 “‘household’”.

3 (9) In section 323 (b)(1) (B) by inserting “or
4 commercial” after “consumer”.

5 **SEC. 923. ADDITIONAL DEFINITIONS.**

6 Section 321 of the Energy Policy and Conservation Act
7 (42 U.S.C. 6291) is amended by adding at the end the fol-
8 lowing:

9 “(32) The term ‘battery charger’ means a device
10 that charges batteries for consumer products.

11 “(33) The term ‘commercial refrigerator, freezer
12 and refrigerator-freezer’ means a refrigerator, freezer
13 or refrigerator-freezer that—

14 “(A) is not a consumer product regulated
15 under this Act; and

16 “(B) incorporates most components involved
17 in the vapor-compression cycle and the refriger-
18 erated compartment in a single package.

19 “(34) The term ‘external power supply’ means
20 an external power supply circuit that is used to con-
21 vert household electric current into either DC current
22 or lower-voltage AC current to operate a consumer
23 product.

24 “(35) The term ‘illuminated exit sign’ means a
25 sign that—

1 “(A) is designed to be permanently fixed in
2 place to identify an exit; and

3 “(B) consists of—

4 “(i) an electrically powered integral
5 light source that illuminates the legend
6 ‘EXIT’ and any directional indicators; and

7 “(ii) provides contrast between the leg-
8 end, any directional indicators, and the
9 background.

10 “(36)(A) Except as provided in subsection (B),
11 the term ‘low-voltage dry-type transformer’ means a
12 transformer that—

13 “(i) has an input voltage of 600 volts or
14 less;

15 “(ii) is air-cooled;

16 “(iii) does not use oil as a coolant; and

17 “(iv) is rated for operation at a frequency
18 of 60 Hertz.

19 “(B) The term ‘low-voltage dry-type transformer’
20 does not include—

21 “(i) transformers with multiple voltage
22 taps, with the highest voltage tap equaling at
23 least 20 percent more than the lowest voltage tap;

24 “(ii) transformers that are designed to be
25 used in a special purpose application, such as

1 *transformers commonly known as drive trans-*
2 *formers, rectifier transformers, autotransformers,*
3 *Uninterruptible Power System transformers, im-*
4 *pedance transformers, harmonic transformers,*
5 *regulating transformers, sealed and nonven-*
6 *tilating transformers, machine tool transformers,*
7 *welding transformers, grounding transformers, or*
8 *testing transformers; or*

9 “(iii) any transformer not listed in clause
10 (ii) that is excluded by the Secretary by rule be-
11 cause the transformer is designed for a special
12 application and the application of standards to
13 the transformer would not result in significant
14 energy savings.

15 “(37) The term ‘standby mode’ means the lowest
16 amount of electric power used by a household appli-
17 ance when not performing its active functions, as de-
18 fined on an individual product basis by the Sec-
19 retary.

20 “(38) The term ‘torchiere’ means a portable elec-
21 tric lamp with a reflector bowl that directs light up-
22 ward so as to give indirect illumination.

23 “(39) The term ‘transformer’ means a device
24 consisting of two or more coils of insulated wire that
25 transfers alternating current by electromagnetic in-

1 *duction from one coil to another to change the origi-*
2 *nal voltage or current value.*

3 *“(40) The term ‘unit heater’ means a self-con-*
4 *tained fan-type heater designed to be installed within*
5 *the heated space, except that such term does not in-*
6 *clude a warm air furnace.*

7 *“(41) The term ‘traffic signal module’ means a*
8 *standard 8-inch (200mm) or 12-inch (300mm) traffic*
9 *signal indication, consisting of a light source, a lens,*
10 *and all other parts necessary for operation, that com-*
11 *municates movement messages to drivers through red,*
12 *amber, and green colors.”.*

13 **SEC. 924. ADDITIONAL TEST PROCEDURES.**

14 *(a) EXIT SIGNS.—Section 323(b) of the Energy Policy*
15 *and Conservation Act (42 U.S.C. 6293) is amended by add-*
16 *ing at the end the following:*

17 *“(9) Test procedures for illuminated exit signs*
18 *shall be based on the test method used under the En-*
19 *ergy Star program of the Environmental Protection*
20 *Agency for illuminated exit signs, as in effect on the*
21 *date of enactment of this paragraph.*

22 *“(10) Test procedures for low voltage dry-type*
23 *distribution transformers shall be based on the*
24 *‘Standard Test Method for Measuring the Energy*
25 *Consumption of Distribution Transformers’ pre-*

1 scribed by the National Electrical Manufacturers As-
2 sociation (NEMA TP 2–1998). The Secretary may re-
3 view and revise this test procedure based on future re-
4 visions to such standard test method.

5 “(11) Test procedures for traffic signal modules
6 shall be based on the test method used under the En-
7 ergy Star program of the Environmental Protection
8 Agency for traffic signal modules, as in effect on the
9 date of enactment of this paragraph.”.

10 (b) *ADDITIONAL CONSUMER AND COMMERCIAL PROD-*
11 *UCTS.—Section 323 of the Energy Policy and Conservation*
12 *Act (42 U.S.C. 6293) is further amended by adding at the*
13 *end the following:*

14 “(f) *ADDITIONAL CONSUMER AND COMMERCIAL PROD-*
15 *UCTS.—The Secretary shall within 24 months after the date*
16 *of enactment of this subsection prescribe testing require-*
17 *ments for suspended ceiling fans, refrigerated bottled or*
18 *canned beverage vending machines, commercial unit heat-*
19 *ers, and commercial refrigerators, freezers and refrigerator-*
20 *freezers. Such testing requirements shall be based on exist-*
21 *ing test procedures used in industry to the extent practical*
22 *and reasonable. In the case of suspended ceiling fans, such*
23 *test procedures shall include efficiency at both maximum*
24 *output and at an output no more than 50 percent of the*
25 *maximum output.”.*

1 **SEC. 925. ENERGY LABELING.**

2 (a) *RULEMAKING ON EFFECTIVENESS OF CONSUMER*
3 *PRODUCT LABELING.*—Paragraph (2) of section 324(a) of
4 *the Energy Policy and Conservation Act (42 U.S.C.*
5 *6294(a)(2)) is amended by adding at the end the following:*

6 “(F) *Not later than 3 months after the date*
7 *of enactment of this subparagraph, the Commis-*
8 *sion shall initiate a rulemaking to consider the*
9 *effectiveness of the current consumer products la-*
10 *beling program in assisting consumers in mak-*
11 *ing purchasing decisions and improving energy*
12 *efficiency and to consider changes to the labeling*
13 *rules that would improve the effectiveness of con-*
14 *sumer product labels. Such rulemaking shall be*
15 *completed within 15 months of the date of enact-*
16 *ment of this subparagraph.”.*

17 (b) *RULEMAKING ON LABELING FOR ADDITIONAL*
18 *PRODUCTS.*—Section 324(a) of the *Energy Policy and Con-*
19 *servaion Act (42 U.S.C. 6294(a)) is further amended by*
20 *adding at the end the following:*

21 “(5) *The Secretary shall within 6 months after*
22 *the date on which energy conservation standards are*
23 *prescribed by the Secretary for covered products re-*
24 *ferred to in subsections (u) and (v) of section 325,*
25 *and within 18 months of enactment of this paragraph*
26 *for products referred to in subsections (w) through (y)*

1 of section 325, prescribe, by rule, labeling require-
2 ments for such products. Labeling requirements
3 adopted under this paragraph shall take effect on the
4 same date as the standards set pursuant to sections
5 325 (v) through (y).”.

6 **SEC. 926. ENERGY STAR PROGRAM.**

7 *The Energy Policy and Conservation Act (42 U.S.C.*
8 *6201 and following) is amended by inserting after section*
9 *324 the following:*

10 “ENERGY STAR PROGRAM

11 “SEC. 324A. *There is established at the Department*
12 *of Energy and the Environmental Protection Agency a pro-*
13 *gram to identify and promote energy-efficient products and*
14 *buildings in order to reduce energy consumption, improve*
15 *energy security, and reduce pollution through labeling of*
16 *products and buildings that meet the highest energy effi-*
17 *ciency standards. Responsibilities under the program shall*
18 *be divided between the Department of Energy and the Envi-*
19 *ronmental Protection Agency consistent with the terms of*
20 *agreements between the two agencies. The Administrator*
21 *and the Secretary shall—*

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

1 “(2) work to enhance public awareness of the
2 *Energy Star* label, including special outreach to small
3 businesses;

4 “(3) preserve the integrity of the *Energy Star*
5 label; and

6 “(4) solicit the comments of interested parties in
7 establishing a new *Energy Star* product category or
8 in revising a product category, and upon adoption of
9 a new or revised product category provide an expla-
10 nation of the decision that responds to significant
11 public comments.”.

12 **SEC. 927. ENERGY CONSERVATION STANDARDS FOR CEN-**
13 **TRAL AIR CONDITIONERS AND HEAT PUMPS.**

14 Section 325(d)(3) of the *Energy Policy and Conserva-*
15 *tion Act* (42 U.S.C. 6295(d)) is amended by adding at the
16 end the following:

17 “(C) *REVISION OF STANDARDS.*—Not later
18 than 60 days after the date of enactment of this
19 subparagraph, the Secretary shall amend the
20 standards established under paragraph (1).”.

1 **SEC. 928. ENERGY CONSERVATION STANDARDS FOR ADDI-**
2 **TIONAL CONSUMER AND COMMERCIAL PROD-**
3 **UCTS.**

4 *Section 325 of the Energy Policy and Conservation Act*
5 *(42 U.S.C. 6295) is amended by adding at the end the fol-*
6 *lowing:*

7 *“(u) STANDBY MODE ELECTRIC ENERGY CONSUMP-*
8 *TION.—*

9 *“(1) INITIAL RULEMAKING.—(A) The Secretary*
10 *shall, within 18 months after the date of enactment*
11 *of this subsection, prescribe by notice and comment,*
12 *definitions of standby mode and test procedures for*
13 *the standby mode power use of battery chargers and*
14 *external power supplies. In establishing these test pro-*
15 *cedures, the Secretary shall consider, among other fac-*
16 *tors, existing test procedures used for measuring en-*
17 *ergy consumption in standby mode and assess the*
18 *current and projected future market for battery char-*
19 *gers and external power supplies. This assessment*
20 *shall include estimates of the significance of potential*
21 *energy savings from technical improvements to these*
22 *products and suggested product classes for standards.*
23 *Prior to the end of this time period, the Secretary*
24 *shall hold a scoping workshop to discuss and receive*
25 *comments on plans for developing energy conservation*

1 standards for standby mode energy use for these prod-
2 ucts.

3 “(B) The Secretary shall, within 3 years after
4 the date of enactment of this subsection, issue a final
5 rule that determines whether energy conservation
6 standards shall be promulgated for battery chargers
7 and external power supplies or classes thereof. For
8 each product class, any such standards shall be set at
9 the lowest level of standby energy use that—

10 “(i) meets the criteria of subsections (o),
11 (p), (q), (r), (s) and (t); and

12 “(ii) will result in significant overall an-
13 nual energy savings, considering both standby
14 mode and other operating modes.

15 “(2) DESIGNATION OF ADDITIONAL COVERED
16 PRODUCTS.—(A) Not later than 180 days after the
17 date of enactment of this subsection, the Secretary
18 shall publish for public comment and public hearing
19 a notice to determine whether any noncovered prod-
20 ucts should be designated as covered products for the
21 purpose of instituting a rulemaking under this section
22 to determine whether an energy conservation standard
23 restricting standby mode energy consumption, should
24 be promulgated; providing that any restriction on

1 *standby mode energy consumption shall be limited to*
2 *major sources of such consumption.*

3 *“(B) In making the determinations pursuant to*
4 *subparagraph (A) of whether to designate new covered*
5 *products and institute rulemakings, the Secretary*
6 *shall, among other relevant factors and in addition to*
7 *the criteria in section 322(b), consider—*

8 *“(i) standby mode power consumption com-*
9 *pared to overall product energy consumption;*
10 *and*

11 *“(ii) the priority and energy savings poten-*
12 *tial of standards which may be promulgated*
13 *under this subsection compared to other required*
14 *rulemakings under this section and the available*
15 *resources of the Department to conduct such*
16 *rulemakings.*

17 *“(C) Not later than 1 year after the date of en-*
18 *actment of this subsection, the Secretary shall issue a*
19 *determination of any new covered products for which*
20 *he intends to institute rulemakings on standby mode*
21 *pursuant to this section and he shall state the dates*
22 *by which he intends to initiate those rulemakings.*

23 *“(3) REVIEW OF STANDBY ENERGY USE IN COV-*
24 *ERED PRODUCTS.—In determining pursuant to sec-*
25 *tion 323 whether test procedures and energy conserva-*

1 *tion standards pursuant to section 325 should be re-*
2 *vised, the Secretary shall consider for covered prod-*
3 *ucts which are major sources of standby mode energy*
4 *consumption whether to incorporate standby mode*
5 *into such test procedures and energy conservation*
6 *standards, taking into account, among other relevant*
7 *factors, the criteria for non-covered products in sub-*
8 *paragraph (B) of this subsection.*

9 *“(4) RULEMAKING FOR STANDBY MODE.—(A)*
10 *Any rulemaking instituted under this subsection or*
11 *for covered products under this section which restricts*
12 *standby mode power consumption shall be subject to*
13 *the criteria and procedures for issuing energy con-*
14 *servation standards set forth in section 325 and the*
15 *criteria set forth in paragraph 2(B) of this subsection.*

16 *“(B) No standard can be proposed for new cov-*
17 *ered products or covered products in a standby mode*
18 *unless the Secretary has promulgated applicable test*
19 *procedures for each product pursuant to section 323.*

20 *“(C) The provisions of section 327 shall apply to*
21 *new covered products which are subject to the*
22 *rulemakings for standby mode after a final rule has*
23 *been issued.*

24 *“(5) EFFECTIVE DATE.—Any standard promul-*
25 *gated under this subsection shall be applicable to*

1 *products manufactured or imported 3 years after the*
2 *date of promulgation.*

3 *“(6) VOLUNTARY PROGRAMS TO REDUCE STAND-*
4 *BY MODE ENERGY USE.—The Secretary and the Ad-*
5 *ministrator shall collaborate and develop programs,*
6 *including programs pursuant to section 324A and*
7 *other voluntary industry agreements or codes of con-*
8 *duct, which are designed to reduce standby mode en-*
9 *ergy use.*

10 *“(v) SUSPENDED CEILING FANS, VENDING MACHINES,*
11 *UNIT HEATERS, AND COMMERCIAL REFRIGERATORS,*
12 *FREEZERS AND REFRIGERATOR-FREEZERS.—The Sec-*
13 *retary shall within 24 months after the date on which test-*
14 *ing requirements are prescribed by the Secretary pursuant*
15 *to section 323(f), prescribe, by rule, energy conservation*
16 *standards for suspended ceiling fans, refrigerated bottled or*
17 *canned beverage vending machines, unit heaters, and com-*
18 *mercial refrigerators, freezers and refrigerator-freezers. In*
19 *establishing standards under this subsection, the Secretary*
20 *shall use the criteria and procedures contained in sub-*
21 *sections (l) and (m). Any standard prescribed under this*
22 *subsection shall apply to products manufactured 3 years*
23 *after the date of publication of a final rule establishing such*
24 *standard.*

1 “(w) *ILLUMINATED EXIT SIGNS.*—*Illuminated exit*
2 *signs manufactured on or after January 1, 2005 shall meet*
3 *the Energy Star Program performance requirements for il-*
4 *luminated exit signs prescribed by the Environmental Pro-*
5 *tection Agency as in effect on the date of enactment of this*
6 *subsection.*

7 “(x) *TORCHIERES.*—*Torchieres manufactured on or*
8 *after January 1, 2005—*

9 “(1) *shall consume not more than 190 watts of*
10 *power; and*

11 “(2) *shall not be capable of operating with lamps*
12 *that total more than 190 watts.*

13 “(y) *LOW VOLTAGE DRY-TYPE TRANSFORMERS.*—*The*
14 *efficiency of low voltage dry-type transformers manufac-*
15 *tured on or after January 1, 2005 shall be the Class I Effi-*
16 *ciency Levels for low voltage dry-type transformers specified*
17 *in Table 4–2 of the ‘Guide for Determining Energy Effi-*
18 *ciency for Distribution Transformers’ published by the Na-*
19 *tional Electrical Manufacturers Association (NEMA TP–*
20 *1–1996).*

21 “(z) *TRAFFIC SIGNAL MODULES.*—*Traffic signal mod-*
22 *ules manufactured on or after January 1, 2006 shall meet*
23 *the performance requirements used under the Energy Star*
24 *program of the Environmental Protection Agency for traffic*
25 *signals, as in effect on the date of enactment of this para-*

1 *graph, and shall be installed with compatible, electrically-*
2 *connected signal control interface devices and conflict moni-*
3 *toring systems.”.*

4 **SEC. 929. CONSUMER EDUCATION ON ENERGY EFFICIENCY**
5 **BENEFITS OF AIR CONDITIONING, HEATING,**
6 **AND VENTILATION MAINTENANCE.**

7 *Section 337 of the Energy Policy and Conservation Act*
8 *(42 U.S.C. 6307) is amended by adding at the end the fol-*
9 *lowing:*

10 *“(c) HVAC MAINTENANCE.—(1) For the purpose of en-*
11 *suring that installed air conditioning and heating systems*
12 *operate at their maximum rated efficiency levels, the Sec-*
13 *retary shall, within 180 days of the date of enactment of*
14 *this subsection, carry out a program to educate homeowners*
15 *and small business owners concerning the energy savings*
16 *resulting from properly conducted maintenance of air con-*
17 *ditioning, heating, and ventilating systems.*

18 *“(2) The Secretary may carry out the program in co-*
19 *operation with industry trade associations, industry mem-*
20 *bers, and energy efficiency organizations.*

21 *“(d) SMALL BUSINESS EDUCATION AND ASSIST-*
22 *ANCE.—The Administrator of the Small Business Adminis-*
23 *tration, in consultation with the Secretary of Energy and*
24 *the Administrator of the Environmental Protection Agency,*
25 *shall develop and coordinate a Government-wide program,*

1 *building on the existing Energy Star for Small Business*
2 *Program, to assist small business to become more energy*
3 *efficient, understand the cost savings obtainable through ef-*
4 *ficiencies, and identify financing options for energy effi-*
5 *ciency upgrades. The Secretary and the Administrator shall*
6 *make the program information available directly to small*
7 *businesses and through other Federal agencies, including the*
8 *Federal Emergency Management Agency, and the Depart-*
9 *ment of Agriculture.”.*

10 **SEC. 930. STUDY OF ENERGY EFFICIENCY STANDARDS.**

11 *The Secretary of Energy shall contract with the Na-*
12 *tional Academy of Sciences for a study, to be completed*
13 *within 1 year of enactment of this Act, to examine whether*
14 *the goals of energy efficiency standards are best served by*
15 *measurement of energy consumed, and efficiency improve-*
16 *ments, at the actual site of energy consumption, or through*
17 *the full fuel cycle, beginning at the source of energy produc-*
18 *tion. The Secretary shall submit the report to the Congress.*

19 ***Subtitle D—Housing Efficiency***

20 **SEC. 931. CAPACITY BUILDING FOR ENERGY EFFICIENT, AF-**
21 **FORDABLE HOUSING.**

22 *Section 4(b) of the HUD Demonstration Act of 1993*
23 *(42 U.S.C. 9816 note) is amended—*

24 *(1) in paragraph (1), by inserting before the*
25 *semicolon at the end the following: “, including capa-*

1 *bilities regarding the provision of energy efficient, af-*
 2 *fordable housing and residential energy conservation*
 3 *measures”; and*

4 (2) *in paragraph (2), by inserting before the*
 5 *semicolon the following: “, including such activities*
 6 *relating to the provision of energy efficient, affordable*
 7 *housing and residential energy conservation measures*
 8 *that benefit low-income families”.*

9 **SEC. 932. INCREASE OF CDBG PUBLIC SERVICES CAP FOR**
 10 **ENERGY CONSERVATION AND EFFICIENCY**
 11 **ACTIVITIES.**

12 *Section 105(a)(8) of the Housing and Community De-*
 13 *velopment Act of 1974 (42 U.S.C. 5305(a)(8)) is amended—*

14 (1) *by inserting “or efficiency” after “energy*
 15 *conservation”;*

16 (2) *by striking “, and except that” and inserting*
 17 *“; 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 by*
 23 *10 percent, but such percentage increase may be used*
 24 *only for the provision of public services concerning*
 25 *energy conservation or efficiency”.*

1 **SEC. 933. FHA MORTGAGE INSURANCE INCENTIVES FOR EN-**
2 **ERGY EFFICIENT HOUSING.**

3 (a) *SINGLE FAMILY HOUSING MORTGAGE INSUR-*
4 *ANCE.—Section 203(b)(2) of the National Housing Act (12*
5 *U.S.C. 1709(b)(2)) is amended, in the first undesignated*
6 *paragraph beginning after subparagraph (B)(iii) (relating*
7 *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 INSURANCE.—*
12 *Section 207(c) of the National Housing Act (12 U.S.C.*
13 *1713(c)) is amended, in the second undesignated paragraph*
14 *beginning after paragraph (3) (relating to solar energy sys-*
15 *tems and residential energy conservation measures), by*
16 *striking “20 percent” and inserting “30 percent”.*

17 (c) *COOPERATIVE HOUSING MORTGAGE INSURANCE.—*
18 *Section 213(p) of the National Housing Act (12 U.S.C.*
19 *1715e(p)) is amended by striking “20 per centum” and in-*
20 *serting “30 percent”.*

21 (d) *REHABILITATION AND NEIGHBORHOOD CONSERVA-*
22 *TION HOUSING MORTGAGE INSURANCE.—Section*
23 *220(d)(3)(B)(iii) of the National Housing Act (12 U.S.C.*
24 *1715k(d)(3)(B)(iii)) is amended by striking “20 per cen-*
25 *tum” and inserting “30 percent”.*

1 (e) *LOW-INCOME MULTIFAMILY HOUSING MORTGAGE*
2 *INSURANCE.*—Section 221(k) of the National Housing Act
3 (12 U.S.C. 1715l(k)) is amended by striking “20 per cen-
4 tum” and inserting “30 percent”.

5 (f) *ELDERLY HOUSING MORTGAGE INSURANCE.*—The
6 proviso at the end of section 213(c)(2) of the National Hous-
7 ing Act (12 U.S.C. 1715v(c)(2)) is amended by striking “20
8 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 A112.18.1–*
2 *2000, or any revision thereto, applicable at the*
3 *time of installation, and by increasing energy ef-*
4 *iciency and water conservation by such other*
5 *means as the Secretary determines are appro-*
6 *priate.”.*

7 **SEC. 935. GRANTS FOR ENERGY-CONSERVING IMPROVE-**
8 **MENTS FOR ASSISTED HOUSING.**

9 *Section 251(b)(1) of the National Energy Conservation*
10 *Policy Act (42 U.S.C. 8231(1)) is amended—*

11 *(1) by striking “financed with loans” and insert-*
12 *ing “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 Multifamily*
16 *Assisted Housing Reform and Affordability Act of*
17 *1997 (42 U.S.C. 1437f note) and are subject to a*
18 *mortgage restructuring and rental assistance suffi-*
19 *ciency plans under such Act,”; and*

20 *(3) by inserting after the period at the end of the*
21 *first sentence the following new sentence: “Such im-*
22 *provements may also include the installation of en-*
23 *ergy and water conserving fixtures and fittings that*
24 *conform to the American Society of Mechanical Engi-*
25 *neers/American National Standards Institute stand-*

1 *ards A112.19.2–1998 and A112.18.1–2000, or any re-*
2 *vision thereto, applicable at the time of installation.”.*

3 **SEC. 936. NORTH AMERICAN DEVELOPMENT BANK.**

4 *Part 2 of subtitle D of title V of the North American*
5 *Free Trade Agreement Implementation Act (22 U.S.C.*
6 *290m–290m–3) is amended by adding at the end the fol-*
7 *lowing:*

8 **“SEC. 545. SUPPORT FOR CERTAIN ENERGY POLICIES.**

9 *“Consistent with the focus of the Bank’s Charter on*
10 *environmental infrastructure projects, the Board members*
11 *representing the United States should use their voice and*
12 *vote to encourage the Bank to finance projects related to*
13 *clean and efficient energy, including energy conservation,*
14 *that prevent, control, or reduce environmental pollutants or*
15 *contaminants.”.*

16 **SEC. 937. CAPITAL FUND.**

17 *Section 9 of the United States Housing Act of 1937*
18 *(42 U.S.C. 1437g), as amended by section 934, is*
19 *amended—*

20 *(1) in subsection (d)(1)—*

21 *(A) in subparagraph (L), by striking the*
22 *period at the end and inserting “; and”;*

23 *(B) by redesignating subparagraph (L) as*
24 *subparagraph (K); and*

25 *(C) by adding at the end the following:*

1 “(L) *integrated utility management*
2 *and capital planning to maximize energy*
3 *conservation and efficiency measures.*”; and

4 (2) *in subsection (e)(2)(C)—*

5 (A) *by striking “The” and inserting the fol-*
6 *lowing:*

7 “(i) *IN GENERAL.—The*”; and

8 (B) *by adding at the end the following:*

9 “(ii) *THIRD PARTY CONTRACTS.—Con-*
10 *tracts described in clause (i) may include*
11 *contracts for equipment conversions to less*
12 *costly utility sources, projects with resident*
13 *paid utilities, adjustments to frozen base*
14 *year consumption, including systems re-*
15 *paired to meet applicable building and safe-*
16 *ty codes and adjustments for occupancy*
17 *rates increased by rehabilitation.*

18 “(iii) *TERM OF CONTRACT.—The total*
19 *term of a contract described in clause (i)*
20 *shall be for not more than 20 years to allow*
21 *longer payback periods for retrofits, includ-*
22 *ing but not limited to windows, heating sys-*
23 *tem replacements, wall insulation, site-*
24 *based generations, and advanced energy*

1 *savings technologies, including renewable*
2 *energy generation.”.*

3 **SEC. 938. ENERGY-EFFICIENT APPLIANCES.**

4 *A public housing agency shall purchase energy-effi-*
5 *cient appliances that are Energy Star products as defined*
6 *in section 552 of the National Energy Policy and Conserva-*
7 *tion Act (as amended by this Act) when the purchase of*
8 *energy-efficient appliances is cost-effective to the public*
9 *housing agency.*

10 **SEC. 939. ENERGY EFFICIENCY STANDARDS.**

11 *Section 109 of the Cranston-Gonzalez National Afford-*
12 *able Housing Act (42 U.S.C. 12709) is amended—*

13 *(1) in subsection (a)—*

14 *(A) in paragraph (1)—*

15 *(i) by striking “the date of the enact-*
16 *ment of the Energy Policy Act of 1992” and*
17 *inserting “September 30, 2002”;*

18 *(ii) in subparagraph (A), by striking*
19 *“and” at the end;*

20 *(iii) in subparagraph (B), by striking*
21 *the period at the end and inserting a semi-*
22 *colon; and*

23 *(iv) by adding at the end the following:*

24 *“(C) rehabilitation and new construction of*
25 *public and assisted housing funded by HOPE VI*

1 *revitalization grants, established under section*
2 *24 of the United States Housing Act of 1937 (42*
3 *U.S.C. 1437v), where such standards are deter-*
4 *mined to be cost effective by the Secretary of*
5 *Housing and Urban Development; and*

6 *(B) in paragraph (2), by striking “Council*
7 *of American” and all that follows through “life-*
8 *cycle cost basis” and inserting “2000 Inter-*
9 *national Energy Conservation Code”;*

10 *(2) in subsection (b)—*

11 *(A) by striking “the date of the enactment*
12 *of the Energy Policy Act of 1992” and inserting*
13 *“September 30, 2002”; and*

14 *(B) by striking “CABO” and all that fol-*
15 *lows through “1989” and inserting “the 2000*
16 *International Energy Conservation Code”; and*

17 *(3) in subsection (c)—*

18 *(A) in the heading, by striking “MODEL*
19 *ENERGY CODE” and inserting “THE INTER-*
20 *NATIONAL ENERGY CONSERVATION CODE”; and*

21 *(B) by striking “CABO” and all that fol-*
22 *lows through “1989” and inserting “the 2000*
23 *International Energy Conservation Code”.*

1 **SEC. 940. ENERGY STRATEGY FOR HUD.**

2 (a) *IN GENERAL.*—*The Secretary of Housing and*
3 *Urban Development shall develop and implement an inte-*
4 *grated strategy to reduce utility expenses through cost-effec-*
5 *tive energy conservation and efficiency measures, design*
6 *and construction in public and assisted housing.*

7 (b) *ENERGY MANAGEMENT OFFICE.*—*The Secretary of*
8 *Housing and Urban Development shall create an office at*
9 *the Department of Housing and Urban Development for*
10 *utility management, energy efficiency, and conservation,*
11 *with responsibility for implementing the strategy developed*
12 *under this section, including development of a centralized*
13 *database that monitors public housing energy usage, and*
14 *development of energy reduction goals and incentives for*
15 *public housing agencies. The Secretary shall submit an an-*
16 *nual report to Congress on the strategy.*

17 ***Subtitle E—Rural and Remote***
18 ***Communities***

19 **SEC. 941. SHORT TITLE.**

20 *This subtitle may be cited as the “Rural and Remote*
21 *Community Fairness Act”.*

22 **SEC. 942. FINDINGS AND PURPOSE.**

23 (a) *FINDINGS.*—*The Congress finds that—*

24 (1) *a modern infrastructure, including energy-ef-*
25 *ficient housing, electricity, telecommunications, bulk*
26 *fuel, wastewater and potable water service, is a nec-*

1 *essary ingredient of a modern society and develop-*
2 *ment of a prosperous economy;*

3 *(2) the Nation's rural and remote communities*
4 *face critical social, economic and environmental prob-*
5 *lems, arising in significant measure from the high*
6 *cost of infrastructure development in sparsely popu-*
7 *lated and remote areas, that are not adequately ad-*
8 *dressed by existing Federal assistance programs;*

9 *(3) in the past, Federal assistance has been in-*
10 *strumental in establishing electric and other utility*
11 *service in many developing regions of the Nation, and*
12 *that Federal assistance continues to be appropriate to*
13 *ensure that electric and other utility systems in rural*
14 *areas conform with modern standards of safety, reli-*
15 *ability, efficiency and environmental protection; and*

16 *(4) the future welfare of the Nation and the well-*
17 *being of its citizens depend on the establishment and*
18 *maintenance of viable rural and remote communities*
19 *as social, economic and political entities.*

20 *(b) PURPOSE.—The purpose of this subtitle is the de-*
21 *velopment and maintenance of viable rural and remote*
22 *communities through the provision of efficient housing, and*
23 *reasonably priced and environmentally sound energy,*
24 *water, wastewater, and bulk fuel, telecommunications and*
25 *utility services to those communities that do not have those*

1 *services or who currently bear costs of those services that*
2 *are significantly above the national average.*

3 **SEC. 943. DEFINITIONS.**

4 *As used in this subtitle:*

5 *(1) The term “unit of general local government”*
6 *means any city, county, town, township, parish, vil-*
7 *lage, borough (organized or unorganized) or other*
8 *general purpose political subdivision of a State,*
9 *Guam, the Commonwealth of the Northern Mariana*
10 *Islands, Puerto Rico, the Republic of the Marshall Is-*
11 *lands, the Federated States of Micronesia, the Repub-*
12 *lic of Palau, the Virgin Islands, and American*
13 *Samoa, a combination of such political subdivisions*
14 *that is recognized by the Secretary; and the District*
15 *of Columbia; or any other appropriate organization*
16 *of citizens of a rural and remote community that the*
17 *Secretary may identify.*

18 *(2) The term “population” means total resident*
19 *population based on data compiled by the United*
20 *States Bureau of the Census and referable to the same*
21 *point or period in time.*

22 *(3) The term “Native American group” means*
23 *any Indian tribe, band, group, and nation, including*
24 *Alaska Indians, Aleuts, and Eskimos, and any Alas-*
25 *kan Native village, of the United States, which is con-*

1 *sidered an eligible recipient under the Indian Self-De-*
2 *termination and Education Assistance Act (Public*
3 *Law 93–638) or was considered an eligible recipient*
4 *under chapter 67 of title 31, United States Code,*
5 *prior to the repeal of such chapter.*

6 (4) *The term “Secretary” means the Secretary of*
7 *Housing and Urban Development, the Secretary of*
8 *Agriculture, the Secretary of the Interior or the Sec-*
9 *retary of Energy, as appropriate.*

10 (5) *The term “rural and remote community”*
11 *means a unit of local general government or Native*
12 *American group which is served by an electric utility*
13 *that has 10,000 or less customers with an average re-*
14 *tail cost per kilowatt hour of electricity that is equal*
15 *to or greater than 150 percent of the average retail*
16 *cost per kilowatt hour of electricity for all consumers*
17 *in the United States, as determined by data provided*
18 *by the Energy Information Administration of the De-*
19 *partment of Energy.*

20 (6) *The term “alternative energy sources” in-*
21 *clude nontraditional means of providing electrical en-*
22 *ergy, including, but not limited to, wind, solar, bio-*
23 *mass, municipal solid waste, hydroelectric, geothermal*
24 *and tidal power.*

1 (7) *The term “average retail cost per kilowatt*
2 *hour of electricity” has the same meaning as “average*
3 *revenue per kilowatt hour of electricity” as defined by*
4 *the Energy Information Administration of the De-*
5 *partment of Energy.*

6 **SEC. 944. AUTHORIZATION OF APPROPRIATIONS.**

7 *The Secretary is authorized to make grants to rural*
8 *and remote communities to carry out activities in accord-*
9 *ance with the provisions of this subtitle. For purposes of*
10 *assistance under section 947, there are authorized to be ap-*
11 *propriated \$100,000,000 for each of fiscal years 2003*
12 *through 2009.*

13 **SEC. 945. STATEMENT OF ACTIVITIES AND REVIEW.**

14 (a) *STATEMENT OF OBJECTIVES AND PROJECTED*
15 *USE.—Prior to the receipt in any fiscal year of a grant*
16 *under section 947 by any rural and remote community, the*
17 *grantee shall have prepared and submitted to the Secretary*
18 *of the agency providing funding a final statement of rural*
19 *and remote community development objectives and pro-*
20 *jected use of funds.*

21 (b) *PUBLIC NOTICE.—In order to permit public exam-*
22 *ination and appraisal of such statements, to enhance the*
23 *public accountability of grantees, and to facilitate coordina-*
24 *tion of activities with different levels of government, the*
25 *grantee shall in a timely manner—*

1 (1) *furnish citizens information concerning the*
2 *amount of funds available for rural and remote com-*
3 *munity development activities and the range of ac-*
4 *tivities that may be undertaken;*

5 (2) *publish a proposed statement in such manner*
6 *to afford affected citizens an opportunity to examine*
7 *its content and to submit comments on the proposed*
8 *statement and on the community development per-*
9 *formance of the grantee;*

10 (3) *provide citizens with reasonable access to*
11 *records regarding the past use of funds received under*
12 *section 947 by the grantee; and*

13 (4) *provide citizens with reasonable notice of,*
14 *and opportunity to comment on, any substantial*
15 *change proposed to be made in the use of funds re-*
16 *ceived under section 947 from one eligible activity to*
17 *another.*

18 *The final statement shall be made available to the public,*
19 *and a copy shall be furnished to the appropriate Secretary.*
20 *Any final statement of activities may be modified or*
21 *amended from time to time by the grantee in accordance*
22 *with the same. Procedures required in this paragraph are*
23 *for the preparation and submission of such statement.*

24 (c) *PERFORMANCE AND EVALUATION REPORT.—Each*
25 *grantee shall submit to the appropriate Secretary, at a time*

1 *determined by the Secretary, a performance and evaluation*
2 *report, concerning the use of funds made available under*
3 *section 947, together with an assessment by the grantee of*
4 *the relationship of such use to the objectives identified in*
5 *the grantee's statement under subsection (a) and to the re-*
6 *quirements of subsection (b). The grantee's report shall indi-*
7 *cate its programmatic accomplishments, the nature of and*
8 *reasons for any changes in the grantee's program objectives,*
9 *and indications of how the grantee would change its pro-*
10 *grams as a result of its experiences.*

11 *(d) RETENTION OF INCOME.—*

12 *(1) IN GENERAL.—Any rural and remote com-*
13 *munity may retain any program income that is real-*
14 *ized from any grant made by the Secretary under sec-*
15 *tion 947 if—*

16 *(A) such income was realized after the ini-*
17 *tial disbursement of the funds received by such*
18 *unit of general local government under such sec-*
19 *tion; and*

20 *(B) such unit of general local government*
21 *has agreed that it will utilize the program in-*
22 *come for eligible rural and remote community*
23 *development activities in accordance with the*
24 *provisions of this title.*

1 (2) *EXCEPTION.*—*The Secretary may, by regula-*
2 *tion, exclude from consideration as program income*
3 *any amounts determined to be so small that compli-*
4 *ance with the subsection creates an unreasonable ad-*
5 *ministrative burden on the rural and remote commu-*
6 *nity.*

7 **SEC. 946. ELIGIBLE ACTIVITIES.**

8 (a) *ACTIVITIES INCLUDED.*—*Eligible activities as-*
9 *sisted under this subtitle may include only—*

10 (1) *weatherization and other cost-effective en-*
11 *ergy-related repairs of homes and other buildings;*

12 (2) *the acquisition, construction, repair, recon-*
13 *struction, or installation of reliable and cost-efficient*
14 *facilities for the generation, transmission or distribu-*
15 *tion of electricity, and telecommunications, for con-*
16 *sumption in a rural and remote community or com-*
17 *munities;*

18 (3) *the acquisition, construction, repair, recon-*
19 *struction, remediation or installation of facilities for*
20 *the safe storage and efficient management of bulk fuel*
21 *by rural and remote communities, and facilities for*
22 *the distribution of such fuel to consumers in a rural*
23 *or remote community;*

24 (4) *facilities and training to reduce costs of*
25 *maintaining and operating generation, distribution*

1 *or transmission systems to a rural and remote com-*
2 *munity or communities;*

3 *(5) the institution of professional management*
4 *and maintenance services for electricity generation,*
5 *transmission or distribution to a rural and remote*
6 *community or communities;*

7 *(6) the investigation of the feasibility of alternate*
8 *energy sources for a rural and remote community or*
9 *communities;*

10 *(7) acquisition, construction, repair, reconstruc-*
11 *tion, operation, maintenance, or installation of facili-*
12 *ties for water or wastewater service;*

13 *(8) the acquisition or disposition of real prop-*
14 *erty (including air rights, water rights, and other in-*
15 *terests therein) for eligible rural and remote commu-*
16 *nity development activities; and*

17 *(9) activities necessary to develop and implement*
18 *a comprehensive rural and remote development plan,*
19 *including payment of reasonable administrative costs*
20 *related to planning and execution of rural and remote*
21 *community development activities.*

22 *(b) ACTIVITIES UNDERTAKEN THROUGH ELECTRIC*
23 *UTILITIES.—Eligible activities may be undertaken either*
24 *directly by the rural and remote community, or by the rural*
25 *and remote community through local electric utilities.*

1 **SEC. 947. ALLOCATION AND DISTRIBUTION OF FUNDS.**

2 *For each fiscal year, of the amount approved in an*
3 *appropriation Act under section 903 for grants in any year,*
4 *the Secretary shall distribute to each rural and remote com-*
5 *munity which has filed a final statement of rural and re-*
6 *mote community development objectives and projected use*
7 *of funds under section 945, an amount which shall be allo-*
8 *cated among the rural and remote communities that filed*
9 *a final statement of rural and remote community develop-*
10 *ment objectives and projected use of funds under section 945*
11 *proportionate to the percentage that the average retail price*
12 *per kilowatt hour of electricity for all classes of consumers*
13 *in the rural and remote community exceeds the national*
14 *average retail price per kilowatt hour for electricity for all*
15 *consumers in the United States, as determined by data pro-*
16 *vided by the Department of Energy's Energy Information*
17 *Administration. In allocating funds under this section, the*
18 *Secretary shall give special consideration to those rural and*
19 *remote communities that increase economies of scale*
20 *through consolidation of services, affiliation and regional-*
21 *ization of eligible activities under this title.*

22 **SEC. 948. RURAL AND REMOTE COMMUNITY ELECTRIFICA-**
23 **TION GRANTS.**

24 *Section 313 of the Rural Electrification Act of 1936*
25 *(7 U.S.C. 940c) is amended by adding after subsection (b)*
26 *the following:*

1 “(c) *RURAL AND REMOTE COMMUNITIES ELEC-*
2 *TRIFICATION GRANTS.*—*The Secretary of Agriculture, in*
3 *consultation with the Secretary of Energy and the Secretary*
4 *of the Interior, may provide grants under this Act for the*
5 *purpose of increasing energy efficiency, siting or upgrading*
6 *transmission and distribution lines, or providing or mod-*
7 *ernizing electric facilities to—*

8 “(1) *a unit of local government of a State or ter-*
9 *ritory; or*

10 “(2) *an Indian tribe or Tribal College or Univer-*
11 *sity as defined in section 316(b)(3) of the Higher*
12 *Education Act (20 U.S.C. 1059c(b)(3)).*

13 “(d) *GRANT CRITERIA.*—*The Secretary shall make*
14 *grants based on a determination of cost-effectiveness and*
15 *most effective use of the funds to achieve the stated purposes*
16 *of this section.*

17 “(e) *PREFERENCE.*—*In making grants under this sec-*
18 *tion, the Secretary shall give a preference to renewable en-*
19 *ergy facilities.*

20 “(f) *DEFINITION.*—*For purposes of this section, the*
21 *term ‘Indian tribe’ means any Indian tribe, band, nation,*
22 *or other organized group or community, including any*
23 *Alaska Native village or regional or village corporation as*
24 *defined in or established pursuant to the Alaska Native*
25 *Claims Settlement Act (43 U.S.C. 1601 et seq.), which is*

1 *recognized as eligible for the special programs and services*
2 *provided by the United States to Indians because of their*
3 *status as Indians.*

4 “(e) *AUTHORIZATION.*—*For the purpose of carrying*
5 *out subsection (c), there are authorized to be appropriated*
6 *to the Secretary \$20,000,000 for each of the 7 fiscal years*
7 *following the date of enactment of this subsection.”.*

8 **SEC. 949. ADDITIONAL AUTHORIZATION OF APPROPRIA-**
9 **TIONS.**

10 *There is hereby authorized to be appropriated*
11 *\$5,000,000 for each of fiscal years 2003 through 2009 to*
12 *the Denali Commission established by the Denali Commis-*
13 *sion Act of 1998 (42 U.S.C. 3121 note) for the purposes*
14 *of funding the power cost equalization program.*

15 **SEC. 950. RURAL RECOVERY COMMUNITY DEVELOPMENT**
16 **BLOCK GRANTS.**

17 (a) *FINDINGS; PURPOSE.*—

18 (1) *FINDINGS.*—*Congress finds that—*

19 (A) *a modern infrastructure, including af-*
20 *fordable housing, wastewater and water service,*
21 *and advanced technology capabilities is a nec-*
22 *essary ingredient of a modern society and devel-*
23 *opment of a prosperous economy with minimal*
24 *environmental impacts;*

1 (B) the Nation’s rural areas face critical so-
2 cial, economic, and environmental problems,
3 arising in significant measure from the growing
4 cost of infrastructure development in rural areas
5 that suffer from low per capita income and high
6 rates of outmigration and are not adequately ad-
7 dressed by existing Federal assistance programs;
8 and

9 (C) the future welfare of the Nation and the
10 well-being of its citizens depend on the establish-
11 ment and maintenance of viable rural areas as
12 social, economic, and political entities.

13 (2) *PURPOSE.*—The purpose of this section is to
14 provide for the development and maintenance of via-
15 ble rural areas through the provision of affordable
16 housing and community development assistance to el-
17 igible units of general local government and eligible
18 Native American groups in rural areas with exces-
19 sively high rates of outmigration and low per capita
20 income levels.

21 (b) *DEFINITIONS.*—In this section:

22 (1) *ELIGIBLE UNIT OF GENERAL LOCAL GOVERN-*
23 *MENT.*—The term “eligible unit of general local gov-
24 ernment” means a unit of general local government
25 that is the governing body of a rural recovery area.

1 (2) *ELIGIBLE INDIAN TRIBE.*—The term “eligible
2 Indian tribe” means the governing body of an Indian
3 tribe that is located in a rural recovery area.

4 (3) *GRANTEE.*—The term “grantee” means an el-
5 igible unit of general local government or eligible In-
6 dian tribe that receives a grant under this section.

7 (4) *NATIVE AMERICAN GROUP.*—The term “Na-
8 tive American group” means any Indian tribe, band,
9 group, and nation, including Alaska Indians, Aleuts,
10 and Eskimos, and any Alaskan Native village, of the
11 United States, which is considered an eligible recipi-
12 ent under the Indian Self-Determination and Edu-
13 cation Assistance Act (Public Law 93–638) or was
14 considered an eligible recipient under chapter 67 of
15 title 31, United States Code, prior to the repeal of
16 such chapter.

17 (5) *RURAL RECOVERY AREA.*—The term “rural
18 recovery area” means any geographic area rep-
19 resented by a unit of general local government or a
20 Native American group—

21 (A) the borders of which are not adjacent to
22 a metropolitan area;

23 (B) in which—

24 (i) the population outmigration level
25 equals or exceeds 1 percent over the most re-

1 *cent 5 year period, as determined by the*
2 *Secretary of Housing and Urban Develop-*
3 *ment; and*

4 *(ii) the per capita income is less than*
5 *that of the national nonmetropolitan aver-*
6 *age; and*

7 *(C) that does not include a city with a pop-*
8 *ulation of more than 15,000.*

9 (6) *UNIT OF GENERAL LOCAL GOVERNMENT.—*

10 (A) *IN GENERAL.—The term “unit of gen-*
11 *eral local government” means any city, county,*
12 *town, township, parish, village, borough (orga-*
13 *nized or unorganized), or other general purpose*
14 *political subdivision of a State; Guam, the Com-*
15 *monwealth of the Northern Mariana Islands, the*
16 *Virgin Islands, Puerto Rico, and American*
17 *Samoa, or a general purpose political subdivi-*
18 *sion thereof; a combination of such political sub-*
19 *divisions that, except as provided in section*
20 *106(d)(4), is recognized by the Secretary; and the*
21 *District of Columbia.*

22 (B) *OTHER ENTITIES INCLUDED.—The term*
23 *also includes a State or a local public body or*
24 *agency, community association, or other entity,*
25 *that is approved by the Secretary for the purpose*

1 *of providing public facilities or services to a new*
2 *community.*

3 (7) *SECRETARY.*—*The term “Secretary” means*
4 *the Secretary of Housing and Urban Development,*
5 *the Secretary of Agriculture, the Secretary of the Inte-*
6 *rior or the Secretary of Energy, as appropriate.*

7 (c) *GRANT AUTHORITY.*—*The Secretary may make*
8 *grants in accordance with this section to eligible units of*
9 *general local government, Native American groups and eli-*
10 *gible Indian tribes that meet the requirements of subsection*
11 *(d) to carry out eligible activities described in subsection*
12 *(f).*

13 (d) *ELIGIBILITY REQUIREMENTS.*—

14 (1) *STATEMENT OF RURAL DEVELOPMENT OB-*
15 *JECTIVES.*—*In order to receive a grant under this sec-*
16 *tion for a fiscal year, an eligible unit of general local*
17 *government, Native American group or eligible In-*
18 *dian tribe—*

19 (A) *shall—*

20 (i) *publish a proposed statement of*
21 *rural development objectives and a descrip-*
22 *tion of the proposed eligible activities de-*
23 *scribed in subsection (f) for which the grant*
24 *will be used; and*

1 (ii) afford residents of the rural recov-
2 ery area served by the eligible unit of gen-
3 eral local government, Native American
4 groups or eligible Indian tribe with an op-
5 portunity to examine the contents of the
6 proposed statement and the proposed eligi-
7 ble activities published under clause (i), and
8 to submit comments to the eligible unit of
9 general local government, Native American
10 group or eligible Indian tribe, as applicable,
11 on the proposed statement and the proposed
12 eligible activities, and the overall commu-
13 nity development performance of the eligible
14 unit of general local government, Native
15 American groups or eligible Indian tribe, as
16 applicable; and

17 (B) based on any comments received under
18 subparagraph (A)(ii), prepare and submit to the
19 Secretary—

20 (i) a final statement of rural develop-
21 ment objectives;

22 (ii) a description of the eligible activi-
23 ties described in subsection (f) for which a
24 grant received under this section will be
25 used; and

1 (iii) a certification that the eligible
2 unit of general local government, Native
3 American groups or eligible Indian tribe, as
4 applicable, will comply with the require-
5 ments of paragraph (2).

6 (2) *PUBLIC NOTICE AND COMMENT.*—In order to
7 enhance public accountability and facilitate the co-
8 ordination of activities among different levels of gov-
9 ernment, an eligible unit of general local government,
10 Native American groups or eligible Indian tribe that
11 receives a grant under this section shall, as soon as
12 practicable after such receipt, provide the residents of
13 the rural recovery area served by the eligible unit of
14 general local government, Native American groups or
15 eligible Indian tribe, as applicable, with—

16 (A) a copy of the final statement submitted
17 under paragraph (1)(B);

18 (B) information concerning the amount
19 made available under this section and the eligi-
20 ble activities to be undertaken with that amount;

21 (C) reasonable access to records regarding
22 the use of any amounts received by the eligible
23 unit of general local government, Native Amer-
24 ican groups or eligible Indian tribe under this
25 section in any preceding fiscal year; and

1 (D) reasonable notice of, and opportunity to
2 comment on, any substantial change proposed to
3 be made in the use of amounts received under
4 this section from one eligible activity to another.

5 (e) *DISTRIBUTION OF GRANTS.*—

6 (1) *IN GENERAL.*—In each fiscal year, the Sec-
7 retary shall distribute to each eligible unit of general
8 local government, Native American groups and eligi-
9 ble Indian tribe that meets the requirements of sub-
10 section (d)(1) a grant in an amount described in
11 paragraph (2).

12 (2) *AMOUNT.*—Of the total amount made avail-
13 able to carry out this section in each fiscal year, the
14 Secretary shall distribute to each grantee the amount
15 equal to the greater of—

16 (A) the pro rata share of the grantee, as de-
17 termined by the Secretary, based on the com-
18 bined annual population outmigration level (as
19 determined by the Secretary of Housing and
20 Urban Development) and the per capita income
21 for the rural recovery area served by the grantee;
22 or

23 (B) \$200,000.

24 (f) *ELIGIBLE ACTIVITIES.*—Each grantee shall use
25 amounts received under this section for one or more of the

1 *following eligible activities, which may be undertaken either*
2 *directly by the grantee, or by any local economic develop-*
3 *ment corporation, regional planning district, nonprofit*
4 *community development corporation, or statewide develop-*
5 *ment organization authorized by the grantee—*

6 (1) *the acquisition, construction, repair, recon-*
7 *struction, operation, maintenance, or installation of*
8 *facilities for water and wastewater service or any*
9 *other infrastructure needs determined to be critical to*
10 *the further development or improvement of a des-*
11 *ignated industrial park;*

12 (2) *the acquisition or disposition of real prop-*
13 *erty (including air rights, water rights, and other in-*
14 *terests therein) for rural community development ac-*
15 *tivities;*

16 (3) *the development of telecommunications infra-*
17 *structure within a designated industrial park that en-*
18 *courages high technology business development in*
19 *rural areas;*

20 (4) *activities necessary to develop and implement*
21 *a comprehensive rural development plan, including*
22 *payment of reasonable administrative costs related to*
23 *planning and execution of rural development activi-*
24 *ties; or*

25 (5) *affordable housing initiatives.*

1 (g) *PERFORMANCE AND EVALUATION REPORT.*—

2 (1) *IN GENERAL.*—Each grantee shall annually
3 submit to the appropriate Secretary a performance
4 and evaluation report, concerning the use of amounts
5 received under this section.

6 (2) *CONTENTS.*—Each report submitted under
7 paragraph (1) shall include a description of—

8 (A) the eligible activities carried out by the
9 grantee with amounts received under this section,
10 and the degree to which the grantee has achieved
11 the rural development objectives included in the
12 final statement submitted under subsection
13 (d)(1);

14 (B) the nature of and reasons for any
15 change in the rural development objectives or the
16 eligible activities of the grantee after submission
17 of the final statement under subsection (d)(1);
18 and

19 (C) any manner in which the grantee would
20 change the rural development objectives of the
21 grantee as a result of the experience of the grant-
22 ee in administering amounts received under this
23 section.

24 (h) *RETENTION OF INCOME.*—A grantee may retain
25 any income that is realized from the grant, if—

1 (1) *the income was realized after the initial dis-*
2 *bursement of amounts to the grantee under this sec-*
3 *tion; and*

4 (2) *the—*

5 (A) *grantee agrees to utilize the income for*
6 *one or more eligible activities; or*

7 (B) *amount of the income is determined by*
8 *the Secretary to be so small that compliance with*
9 *subparagraph (A) would create an unreasonable*
10 *administrative burden on the grantee.*

11 (i) *AUTHORIZATION OF APPROPRIATIONS.—There is*
12 *authorized to be appropriated to carry out this section*
13 *\$100,000,000 for each of fiscal years 2003 through 2009.*

14 ***DIVISION D—INTEGRATION OF***
15 ***ENERGY POLICY AND CLI-***
16 ***MATE CHANGE POLICY***
17 ***TITLE X—NATIONAL CLIMATE***
18 ***CHANGE POLICY***

19 ***Subtitle A—Sense of Congress***

20 ***SEC. 1001. SENSE OF CONGRESS ON CLIMATE CHANGE.***

21 (a) *FINDINGS.—The Congress makes the following*
22 *findings:*

23 (1) *Evidence continues to build that increases in*
24 *atmospheric concentrations of man-made greenhouse*
25 *gases are contributing to global climate change.*

1 (2) *The Intergovernmental Panel on Climate*
2 *Change (IPCC) has concluded that “there is new and*
3 *stronger evidence that most of the warming observed*
4 *over the last 50 years is attributable to human activi-*
5 *ties” and that the Earth’s average temperature can be*
6 *expected to rise between 2.5 and 10.4 degrees Fahr-*
7 *enheit in this century.*

8 (3) *The National Academy of Sciences confirmed*
9 *the findings of the IPCC, stating that “the IPCC’s*
10 *conclusion that most of the observed warming of the*
11 *last 50 years is likely to have been due to the increase*
12 *of greenhouse gas concentrations accurately reflects*
13 *the current thinking of the scientific community on*
14 *this issue” and that “there is general agreement that*
15 *the observed warming is real and particularly strong*
16 *within the past twenty years”. The National Academy*
17 *of Sciences also noted that “because there is consider-*
18 *able uncertainty in current understanding of how the*
19 *climate system varies naturally and reacts to emis-*
20 *sions of greenhouse gases and aerosols, current esti-*
21 *mates of the magnitude of future warming should be*
22 *regarded as tentative and subject to future adjust-*
23 *ments upward or downward”.*

24 (4) *The IPCC has stated that in the last 40*
25 *years, the global average sea level has risen, ocean*

1 *heat content has increased, and snow cover and ice*
2 *extent have decreased, which threatens to inundate*
3 *low-lying island nations and coastal regions through-*
4 *out the world.*

5 *(5) In October 2000, a United States Govern-*
6 *ment report found that global climate change may*
7 *harm the United States by altering crop yields, accel-*
8 *erating sea-level rise, and increasing the spread of*
9 *tropical infectious diseases.*

10 *(6) In 1992, the United States ratified the*
11 *United Nations Framework Convention on Climate*
12 *Change (UNFCCC), the ultimate objective of which is*
13 *the “stabilization of greenhouse gas concentrations in*
14 *the atmosphere at a level that would prevent dan-*
15 *gerous anthropogenic interference with the climate*
16 *system. Such a level should be achieved within a*
17 *time-frame sufficient to allow ecosystems to adapt*
18 *naturally to climate change, to ensure that food pro-*
19 *duction is not threatened and to enable economic de-*
20 *velopment to proceed in a sustainable manner”.*

21 *(7) The UNFCCC stated in part that the Parties*
22 *to the Convention are to implement policies “with the*
23 *aim of returning . . . to their 1990 levels anthropo-*
24 *genic emissions of carbon dioxide and other green-*
25 *house gases” under the principle that “policies and*

1 *measures . . . should be appropriate for the specific*
2 *conditions of each Party and should be integrated*
3 *with national development programmes, taking into*
4 *account that economic development is essential for*
5 *adopting measures to address climate change”.*

6 *(8) There is a shared international responsibility*
7 *to address this problem, as industrial nations are the*
8 *largest historic and current emitters of greenhouse*
9 *gases and developing nations’ emissions will signifi-*
10 *cantly increase in the future.*

11 *(9) The UNFCCC further stated that “developed*
12 *country Parties should take the lead in combating cli-*
13 *mate change and the adverse effects thereof”, as these*
14 *nations are the largest historic and current emitters*
15 *of greenhouse gases. The UNFCCC also stated that*
16 *“steps required to understand and address climate*
17 *change will be environmentally, socially and economi-*
18 *cally most effective if they are based on relevant sci-*
19 *entific, technical and economic considerations and*
20 *continually re-evaluated in the light of new findings*
21 *in these areas”.*

22 *(10) Senate Resolution 98 of the One Hundred*
23 *Fifth Congress, which expressed that developing na-*
24 *tions must also be included in any future, binding*
25 *climate change treaty and such a treaty must not re-*

1 *sult in serious harm to the United States economy,*
2 *should not cause the United States to abandon its*
3 *shared responsibility to help reduce the risks of cli-*
4 *mate change and its impacts. Future international ef-*
5 *forts in this regard should focus on recognizing the eq-*
6 *uitable responsibilities for addressing climate change*
7 *by all nations, including commitments by the largest*
8 *developing country emitters in a future, binding cli-*
9 *mate change treaty.*

10 *(11) It is the position of the United States that*
11 *it will not interfere with the plans of any nation that*
12 *chooses to ratify and implement the Kyoto Protocol to*
13 *the UNFCCC.*

14 *(12) American businesses need to know how gov-*
15 *ernments worldwide will address the risks of climate*
16 *change.*

17 *(13) The United States benefits from investments*
18 *in the research, development and deployment of a*
19 *range of clean energy and efficiency technologies that*
20 *can reduce the risks of climate change and its impacts*
21 *and that can make the United States economy more*
22 *productive, bolster energy security, create jobs, and*
23 *protect the environment.*

24 *(b) SENSE OF CONGRESS.—It is the sense of the United*
25 *States Congress that the United States should demonstrate*

1 *international leadership and responsibility in reducing the*
2 *health, environmental, and economic risks posed by climate*
3 *change by—*

4 (1) *taking responsible action to ensure signifi-*
5 *cant and meaningful reductions in emissions of*
6 *greenhouse gases from all sectors;*

7 (2) *creating flexible international and domestic*
8 *mechanisms, including joint implementation, tech-*
9 *nology deployment, tradable credits for emissions re-*
10 *ductions and carbon sequestration projects that will*
11 *reduce, avoid, and sequester greenhouse gas emissions;*
12 *and*

13 (3) *participating in international negotiations,*
14 *including putting forth a proposal to the Conference*
15 *of the Parties, with the objective of securing United*
16 *States participation in a future binding climate*
17 *change Treaty in a manner that is consistent with the*
18 *environmental objectives of the UNFCCC, that pro-*
19 *tecs the economic interests of the United States, and*
20 *recognizes the shared international responsibility for*
21 *addressing climate change, including developing coun-*
22 *try participation.*

1 **Subtitle B—Climate Change**
2 **Strategy**

3 **SEC. 1011. SHORT TITLE.**

4 *This subtitle may be cited as the “Climate Change*
5 *Strategy and Technology Innovation Act of 2002”.*

6 **SEC. 1012. DEFINITIONS.**

7 *In this subtitle:*

8 (1) *CLIMATE-FRIENDLY TECHNOLOGY.*—*The term*
9 *“climate-friendly technology” means any energy sup-*
10 *ply or end-use technology that, over the life of the*
11 *technology and compared to similar technology in*
12 *commercial use as of the date of enactment of this*
13 *Act—*

14 (A) *results in reduced emissions of green-*
15 *house gases;*

16 (B) *may substantially lower emissions of*
17 *other pollutants; and*

18 (C) *may generate substantially smaller or*
19 *less hazardous quantities of solid or liquid waste.*

20 (2) *DEPARTMENT.*—*The term “Department”*
21 *means the Department of Energy.*

22 (3) *DEPARTMENT OFFICE.*—*The term “Depart-*
23 *ment Office” means the Office of Climate Change*
24 *Technology of the Department established by section*
25 *1015(a).*

1 (4) *FEDERAL AGENCY*.—The term “Federal agen-
2 cy” has the meaning given the term “agency” in sec-
3 tion 551 of title 5, United States Code.

4 (5) *GREENHOUSE GAS*.—The term “greenhouse
5 gas” means—

6 (A) an anthropogenic gaseous constituent of
7 the atmosphere (including carbon dioxide, meth-
8 ane, 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 black
14 soot) that absorbs solar radiation and influences
15 climate.

16 (6) *INTERAGENCY TASK FORCE*.—The term
17 “Interagency Task Force” means the Interagency
18 Task Force established under section 1014(e).

19 (7) *KEY ELEMENT*.—The term “key element”,
20 with respect to the Strategy, means—

21 (A) definition of interim emission mitiga-
22 tion levels, that, coupled with specific mitigation
23 approaches and after taking into account actions
24 by other nations (if any), would result in sta-
25 bilization of greenhouse gas concentrations;

1 (B) *technology development, including—*

2 (i) *a national commitment to double*
3 *energy research and development by the*
4 *United States public and private sectors;*
5 *and*

6 (ii) *in carrying out such research and*
7 *development, a national commitment to*
8 *provide a high degree of emphasis on bold,*
9 *breakthrough technologies that will make*
10 *possible a profound transformation of the*
11 *energy, transportation, industrial, agricul-*
12 *tural, and building sectors of the United*
13 *States;*

14 (C) *climate adaptation research that focuses*
15 *on actions necessary to adapt to climate*
16 *change—*

17 (i) *that may have already occurred; or*

18 (ii) *that may occur under future cli-*
19 *mate change scenarios;*

20 (D) *climate science research that—*

21 (i) *builds on the substantial scientific*
22 *understanding of climate change that exists*
23 *as of the date of enactment of this subtitle;*
24 *and*

1 (ii) focuses on reducing the remaining
2 scientific, technical, and economic uncer-
3 tainties to aid in the development of sound
4 response strategies.

5 (8) *LONG-TERM GOAL OF THE STRATEGY.*—The
6 term “long-term goal of the Strategy” means the long-
7 term goal in section 1013(a)(1).

8 (9) *MITIGATION.*—The term “mitigation” means
9 actions that reduce, avoid, or sequester greenhouse
10 gases.

11 (10) *NATIONAL ACADEMY OF SCIENCES.*—The
12 term “National Academy of Sciences” means the Na-
13 tional Academy of Sciences, the National Academy of
14 Engineering, the Institute of Medicine, and the Na-
15 tional Research Council.

16 (11) *QUALIFIED INDIVIDUAL.*—

17 (A) *IN GENERAL.*—The term “qualified in-
18 dividual” means an individual who has dem-
19 onstrated expertise and leadership skills to draw
20 on other experts in diverse fields of knowledge
21 that are relevant to addressing the climate
22 change challenge.

23 (B) *FIELDS OF KNOWLEDGE.*—The fields of
24 knowledge referred to in subparagraph (A) are—

- 1 (i) *the science of climate change and*
2 *its impacts;*
- 3 (ii) *energy and environmental econom-*
4 *ics;*
- 5 (iii) *technology transfer and diffusion;*
- 6 (iv) *the social dimensions of climate*
7 *change;*
- 8 (v) *climate change adaptation strate-*
9 *gies;*
- 10 (vi) *fossil, nuclear, and renewable en-*
11 *ergy technology;*
- 12 (vii) *energy efficiency and energy con-*
13 *servation;*
- 14 (viii) *energy systems integration;*
- 15 (ix) *engineered and terrestrial carbon*
16 *sequestration;*
- 17 (x) *transportation, industrial, and*
18 *building sector concerns;*
- 19 (xi) *regulatory and market-based*
20 *mechanisms for addressing climate change;*
- 21 (xii) *risk and decision analysis;*
- 22 (xiii) *strategic planning; and*
- 23 (xiv) *the international implications of*
24 *climate change strategies.*

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

3 (13) *STABILIZATION OF GREENHOUSE GAS CON-*
4 *CENTRATIONS.*—*The term “stabilization of greenhouse*
5 *gas concentrations” means the stabilization of green-*
6 *house gas concentrations in the atmosphere at a level*
7 *that would prevent dangerous anthropogenic inter-*
8 *ference with the climate system, recognizing that such*
9 *a level should be achieved within a time frame suffi-*
10 *cient to allow ecosystems to adapt naturally to cli-*
11 *mate change, to ensure that food production is not*
12 *threatened and to enable economic development to*
13 *proceed in a sustainable manner, as contemplated by*
14 *the United Nations Framework Convention on Cli-*
15 *mate Change, done at New York on May 9, 1992.*

16 (14) *STRATEGY.*—*The term “Strategy” means*
17 *the National Climate Change Strategy developed*
18 *under section 1013.*

19 (15) *WHITE HOUSE OFFICE.*—*The term “White*
20 *House Office” means the Office of National Climate*
21 *Change Policy established by section 1014(a).*

22 **SEC. 1013. NATIONAL CLIMATE CHANGE STRATEGY.**

23 (a) *IN GENERAL.*—*The President, through the director*
24 *of the White House Office and in consultation with the*

1 *Interagency Task Force, shall develop a National Climate*
2 *Change Strategy, which shall—*

3 (1) *have the long-term goal of stabilization of*
4 *greenhouse gas concentrations through actions taken*
5 *by the United States and other nations;*

6 (2) *recognize that accomplishing the long-term*
7 *goal of the Strategy will take from many decades to*
8 *more than a century, but acknowledging that signifi-*
9 *cant actions must begin in the near term;*

10 (3) *incorporate the four key elements;*

11 (4) *be developed on the basis of an examination*
12 *of a broad range of emissions levels and dates for*
13 *achievement of those levels (including those evaluated*
14 *by the Intergovernmental Panel on Climate Change*
15 *and those consistent with United States treaty com-*
16 *mitments) that, after taking into account actions by*
17 *other nations, would achieve the long-term goal of the*
18 *Strategy;*

19 (5) *consider the broad range of activities and ac-*
20 *tions that can be taken by United States entities to*
21 *reduce, avoid, or sequester greenhouse gas emissions*
22 *both within the United States and in other nations*
23 *through the use of market mechanisms, which may in-*
24 *clude, but not be limited to, mitigation activities, ter-*
25 *restrial sequestration, earning offsets through carbon*

1 *capture or project-based activities, trading of emis-*
2 *sions credits in domestic and international markets,*
3 *and the application of the resulting credits from any*
4 *of the above within the United States;*

5 *(6) minimize any adverse short-term and long-*
6 *term social, economic, national security, and environ-*
7 *mental impacts, including ensuring that the strategy*
8 *is developed in an economically and environmentally*
9 *sound manner;*

10 *(7) incorporate mitigation approaches leading to*
11 *the development and deployment of advanced tech-*
12 *nologies and practices that will reduce, avoid, or se-*
13 *quester greenhouse gas emissions;*

14 *(8) be consistent with the goals of energy, trans-*
15 *portation, industrial, agricultural, forestry, environ-*
16 *mental, economic, and other relevant policies of the*
17 *United States;*

18 *(9) take into account—*

19 *(A) the diversity of energy sources and tech-*
20 *nologies;*

21 *(B) supply-side and demand-side solutions;*

22 *and*

23 *(C) national infrastructure, energy distribu-*
24 *tion, and transportation systems;*

1 (10) be based on an evaluation of a wide range
2 of approaches for achieving the long-term goal of the
3 Strategy, including evaluation of—

4 (A) a variety of cost-effective Federal and
5 State policies, programs, standards, and incen-
6 tives;

7 (B) policies that integrate and promote in-
8 novative, market-based solutions in the United
9 States and in foreign countries; and

10 (C) participation in other international in-
11 stitutions, or in the support of international ac-
12 tivities, that are established or conducted to
13 achieve the long-term goal of the Strategy;

14 (11) in the final recommendations of the
15 Strategy—

16 (A) emphasize policies and actions that
17 achieve the long-term goal of the Strategy; and

18 (B) provide specific recommendations
19 concerning—

20 (i) measures determined to be appro-
21 priate for short-term implementation, giv-
22 ing preference to cost-effective and techno-
23 logically feasible measures that will—

24 (I) produce measurable net reduc-
25 tions in United States emissions, com-

1 *pared to expected trends, that lead to-*
2 *ward achievement of the long-term goal*
3 *of the Strategy; and*

4 *(II) minimize any adverse short-*
5 *term and long-term economic, environ-*
6 *mental, national security, and social*
7 *impacts on the United States;*

8 *(ii) the development of technologies*
9 *that have the potential for long-term*
10 *implementation—*

11 *(I) giving preference to tech-*
12 *nologies that have the potential to re-*
13 *duce significantly the overall cost of*
14 *achieving the long-term goal of the*
15 *Strategy; and*

16 *(II) considering a full range of*
17 *energy sources, energy conversion and*
18 *use technologies, and efficiency options;*

19 *(iii) such changes in institutional and*
20 *technology systems are necessary to adapt to*
21 *climate change in the short-term and the*
22 *long-term;*

23 *(iv) such review, modification, and en-*
24 *hancement of the scientific, technical, and*
25 *economic research efforts of the United*

1 *States, and improvements to the data re-*
2 *sulting from research, as are appropriate to*
3 *improve the accuracy of predictions con-*
4 *cerning climate change and the economic*
5 *and social costs and opportunities relating*
6 *to climate change; and*

7 *(v) changes that should be made to*
8 *project and grant evaluation criteria under*
9 *other Federal research and development pro-*
10 *grams so that those criteria do not inhibit*
11 *development of climate-friendly technologies;*

12 *(12) recognize that the Strategy is intended to*
13 *guide the Nation's effort to address climate change,*
14 *but it shall not create a legal obligation on the part*
15 *of any person or entity other than the duties of the*
16 *Director of the White House Office and Interagency*
17 *Task Force in the development of the Strategy;*

18 *(13) have a scope that considers the totality of*
19 *United States public, private, and public-private sec-*
20 *tor actions that bear on the long-term goal;*

21 *(14) be developed in a manner that provides for*
22 *meaningful participation by, and consultation*
23 *among, Federal, State, tribal, and local government*
24 *agencies, nongovernmental organizations, academia,*
25 *scientific bodies, industry, the public, and other inter-*

1 *ested parties in accordance with subsections*
2 *(b)(3)(C)(iv)(II) and (e)(3)(B)(ii) of section 1014;*

3 *(15) address how the United States should en-*
4 *gage State, tribal, and local governments in devel-*
5 *oping and carrying out a response to climate change;*

6 *(16) promote, to the maximum extent prac-*
7 *ticable, public awareness, outreach, and information-*
8 *sharing to further the understanding of the full range*
9 *of climate change-related issues;*

10 *(17) provide a detailed explanation of how the*
11 *measures recommended by the Strategy will ensure*
12 *that they do not result in serious harm to the econ-*
13 *omy of the United States;*

14 *(18) provide a detailed explanation of how the*
15 *measures recommended by the Strategy will achieve*
16 *its long-term goal;*

17 *(19) include any recommendations for legislative*
18 *and administrative actions necessary to implement*
19 *the Strategy;*

20 *(20) serve as a framework for climate change ac-*
21 *tions by all Federal agencies;*

22 *(21) recommend which Federal agencies are, or*
23 *should be, responsible for the various aspects of imple-*
24 *mentation of the Strategy and any budgetary impli-*
25 *cations;*

1 (22) *address how the United States should en-*
2 *gage foreign governments in developing an inter-*
3 *national response to climate change; and*

4 (23) *incorporate initiatives to open markets and*
5 *promote the deployment of a range of climate-friendly*
6 *technologies developed in the United States and*
7 *abroad.*

8 (b) *SUBMISSION TO CONGRESS.*—*Not later than 1 year*
9 *after the date of enactment of this section, the President,*
10 *through the Interagency Task Force and the Director, shall*
11 *submit to Congress the Strategy, in the form of a report*
12 *that includes—*

13 (1) *a description of the Strategy and its goals,*
14 *including how the Strategy addresses each of the 4*
15 *key elements;*

16 (2) *an inventory and evaluation of Federal pro-*
17 *grams and activities intended to carry out the Strat-*
18 *egy;*

19 (3) *a description of how the Strategy will serve*
20 *as a framework of climate change response actions by*
21 *all Federal agencies, including a description of co-*
22 *ordination mechanisms and interagency activities;*

23 (4) *evidence that the Strategy is consistent with*
24 *other energy, transportation, industrial, agricultural,*

1 *forestry, environmental, economic, and other relevant*
2 *policies of the United States;*

3 *(5) a description of provisions in the Strategy*
4 *that ensure that it minimizes any adverse short-term*
5 *and long-term social, economic, national security,*
6 *and environmental impacts, including ensuring that*
7 *the Strategy is developed in an economically and en-*
8 *vironmentally sound manner;*

9 *(6) evidence that the Strategy has been developed*
10 *in a manner that provides for participation by, and*
11 *consultation among, Federal, State, tribal, and local*
12 *government agencies, nongovernmental organizations,*
13 *academia, scientific bodies, industry, the public, and*
14 *other interested parties;*

15 *(7) a description of Federal activities that pro-*
16 *mote, to the maximum extent practicable, public*
17 *awareness, outreach, and information-sharing to fur-*
18 *ther the understanding of the full range of climate*
19 *change-related issues; and*

20 *(8) recommendations for legislative or adminis-*
21 *trative changes to Federal programs or activities im-*
22 *plemented to carry out this Strategy, in light of new*
23 *knowledge of climate change and its impacts and*
24 *costs or benefits, or technological capacity to improve*
25 *mitigation or adaption activities.*

1 (c) *UPDATES.*—Not later than 4 years after the date
2 of submission of the Strategy to Congress under subsection
3 (b), and at the end of each 4-year period thereafter, the
4 President shall submit to Congress an updated version of
5 the Strategy.

6 (d) *PROGRESS REPORTS.*—Not later than 1 year after
7 the date of submission of the Strategy to Congress under
8 subsection (b), and annually thereafter at the time that the
9 President submits to the Congress the budget of the United
10 States Government under section 1105 of title 31, United
11 States Code, the President shall submit to Congress a report
12 that—

13 (1) describes the Strategy, its goals, and the Fed-
14 eral programs and activities intended to carry out the
15 Strategy through technological, scientific, mitigation,
16 and adaptation activities;

17 (2) evaluates the Federal programs and activities
18 implemented as part of this Strategy against the
19 goals and implementation dates outlined in the Strat-
20 egy;

21 (3) assesses the progress in implementation of the
22 Strategy;

23 (4) incorporates the technology program reports
24 required pursuant to section 1015(a)(3) and sub-
25 sections (d) and (e) of section 1321;

1 (5) describes any changes to Federal programs or
2 activities implemented to carry out this Strategy, in
3 light of new knowledge of climate change and its im-
4 pacts and costs or benefits, or technological capacity
5 to improve mitigation or adaptation activities;

6 (6) describes all Federal spending on climate
7 change for the current fiscal year and each of the 5
8 years previous; categorized by Federal agency and
9 program function (including scientific research, en-
10 ergy research and development, regulation, education,
11 and other activities);

12 (7) estimates the budgetary impact for the cur-
13 rent fiscal year and each of the 5 years previous of
14 any Federal tax credits, tax deductions or other in-
15 centives claimed by taxpayers that are directly or in-
16 directly attributable to greenhouse gas emissions re-
17 duction activities;

18 (8) estimates the amount, in metric tons, of net
19 greenhouse gas emissions reduced, avoided, or seques-
20 tered directly or indirectly as a result of the imple-
21 mentation of the Strategy;

22 (9) evaluates international research and develop-
23 ment and market-based activities and the mitigation
24 actions taken by the United States and other nations
25 to achieve the long-term goal of the Strategy; and

1 (10) *makes recommendations for legislative or*
2 *administrative actions or adjustments that will accel-*
3 *erate progress towards meeting the near-term and*
4 *long-term goals contained in the Strategy.*

5 *(e) NATIONAL ACADEMY OF SCIENCES REVIEW.—*

6 (1) *IN GENERAL.—Not later than 90 days after*
7 *the date of publication of the Strategy under sub-*
8 *section (b) and each update under subsection (c), the*
9 *Director of the National Science Foundation, on be-*
10 *half of the Director of the White House Office and the*
11 *Interagency Task Force, shall enter into appropriate*
12 *arrangements with the National Academy of Sciences*
13 *to conduct a review of the Strategy or update.*

14 (2) *CRITERIA.—The review by the National*
15 *Academy of Sciences shall evaluate the goals and rec-*
16 *ommendations contained in the Strategy or update,*
17 *taking into consideration—*

18 (A) *the adequacy of effort and the appro-*
19 *priateness of focus of the totality of all public,*
20 *private, and public-private sector actions of the*
21 *United States with respect to the Strategy, in-*
22 *cluding the four key elements;*

23 (B) *the adequacy of the budget and the effec-*
24 *tiveness with which each Federal agency is car-*
25 *rying out its responsibilities;*

1 (C) current scientific knowledge regarding
2 climate change and its impacts;

3 (D) current understanding of human social
4 and economic responses to climate change, and
5 responses of natural ecosystems to climate
6 change;

7 (E) advancements in energy technologies
8 that reduce, avoid, or sequester greenhouse gases
9 or otherwise mitigate the risks of climate change;

10 (F) current understanding of economic costs
11 and benefits of mitigation or adaptation activi-
12 ties;

13 (G) the existence of alternative policy op-
14 tions that could achieve the Strategy goals at
15 lower economic, environmental, or social cost;
16 and

17 (H) international activities and the actions
18 taken by the United States and other nations to
19 achieve the long-term goal of the Strategy.

20 (3) *REPORT.*—Not later than 1 year after the
21 date of submittal to the Congress of the Strategy or
22 update, as appropriate, the National Academy of
23 Sciences shall prepare and submit to the Congress
24 and the President a report concerning the results of
25 its review, along with any recommendations as ap-

1 *appropriate. Such report shall also be made available to*
2 *the public.*

3 (4) *AUTHORIZATION OF APPROPRIATIONS.—For*
4 *the purposes of this subsection, there are authorized to*
5 *be appropriated to the National Science Foundation*
6 *such sums as may be necessary.*

7 **SEC. 1014. OFFICE OF NATIONAL CLIMATE CHANGE POLICY.**

8 (a) *ESTABLISHMENT.—*

9 (1) *IN GENERAL.—There is established, within*
10 *the Executive Office of the President, the Office of Na-*
11 *tional Climate Change Policy.*

12 (2) *FOCUS.—The White House Office shall have*
13 *the focus of achieving the long-term goal of the Strat-*
14 *egy while minimizing adverse short-term and long-*
15 *term economic and social impacts.*

16 (3) *DUTIES.—Consistent with paragraph (2), the*
17 *White House Office shall—*

18 (A) *establish policies, objectives, and prior-*
19 *ities for the Strategy;*

20 (B) *in accordance with subsection (d), es-*
21 *tablish the Interagency Task Force to serve as the*
22 *primary mechanism through which the heads of*
23 *Federal agencies shall assist the Director of the*
24 *White House Office in developing and imple-*
25 *menting the Strategy;*

1 (C) to the maximum extent practicable, en-
2 sure that the Strategy is based on objective,
3 quantitative analysis, drawing on the analytical
4 capabilities of Federal and State agencies, espe-
5 cially the Department Office;

6 (D) advise the President concerning nec-
7 essary changes in organization, management,
8 budgeting, and personnel allocation of Federal
9 agencies involved in climate change response ac-
10 tivities; and

11 (E) advise the President and notify a Fed-
12 eral agency if the policies and discretionary pro-
13 grams of the agency are not well aligned with,
14 or are not contributing effectively to, the long-
15 term goal of the Strategy.

16 (b) *DIRECTOR OF THE WHITE HOUSE OFFICE.*—

17 (1) *IN GENERAL.*—*The White House Office shall*
18 *be headed by a Director, who shall report directly to*
19 *the President, and shall consult with the appropriate*
20 *economic, environmental, national security, domestic*
21 *policy, science and technology and other offices with*
22 *the Executive Office of 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 section*
6 *1013, the Director of the White House Office*
7 *shall coordinate the development and updating of*
8 *the Strategy.*

9 (B) *INTERAGENCY TASK FORCE.—The Di-*
10 *rector of the White House Office shall serve as*
11 *Chair of the Interagency Task Force.*

12 (C) *ADVISORY DUTIES.—*

13 (i) *ENERGY, ECONOMIC, ENVIRON-*
14 *MENTAL, TRANSPORTATION, INDUSTRIAL,*
15 *AGRICULTURAL, BUILDING, FORESTRY, AND*
16 *OTHER PROGRAMS.—The Director of the*
17 *White House Office, using an integrated*
18 *perspective considering the totality of ac-*
19 *tions in the United States, shall advise the*
20 *President and the heads of Federal agencies*
21 *on—*

22 (I) *the extent to which United*
23 *States energy, economic, environ-*
24 *mental, transportation, industrial, ag-*
25 *ricultural, forestry, building, and other*

1 *relevant programs are capable of pro-*
2 *ducing progress on the long-term goal*
3 *of the Strategy; and*

4 *(II) the extent to which proposed*
5 *or newly created energy, economic, en-*
6 *vironmental, transportation, indus-*
7 *trial, agricultural, forestry, building,*
8 *and other relevant programs positively*
9 *or negatively affect the ability of the*
10 *United States to achieve the long-term*
11 *goal of the Strategy.*

12 *(ii) TAX, TRADE, AND FOREIGN POLI-*
13 *CIES.—The Director of the White House Of-*
14 *fice, using an integrated perspective consid-*
15 *ering the totality of actions in the United*
16 *States, shall advise the President and the*
17 *heads of Federal agencies on—*

18 *(I) the extent to which the United*
19 *States tax policy, trade policy, and*
20 *foreign policy are capable of producing*
21 *progress on the long-term goal of the*
22 *Strategy; and*

23 *(II) the extent to which proposed*
24 *or newly created tax policy, trade pol-*
25 *icy, and foreign policy positively or*

1 *negatively affect the ability of the*
2 *United States to achieve the long-term*
3 *goal of the Strategy.*

4 *(iii) INTERNATIONAL TREATIES.—The*
5 *Secretary of State, acting in conjunction*
6 *with the Interagency Task Force and using*
7 *the analytical tools available to the White*
8 *House Office, shall provide to the Director*
9 *of the White House Office an opinion that—*

10 *(I) specifies, to the maximum ex-*
11 *tent practicable, the economic and en-*
12 *vironmental costs and benefits of any*
13 *proposed international treaties or com-*
14 *ponents of treaties that have an influ-*
15 *ence on greenhouse gas management;*
16 *and*

17 *(II) assesses the extent to which*
18 *the treaties advance the long-term goal*
19 *of the Strategy, while minimizing ad-*
20 *verse short-term and long-term eco-*
21 *nomical and social impacts and consid-*
22 *ering other impacts.*

23 *(iv) CONSULTATION.—*

24 *(I) WITH MEMBERS OF INTER-*
25 *AGENCY TASK FORCE.—To the extent*

1 *practicable and appropriate, the Direc-*
2 *tor of the White House Office shall con-*
3 *sult with all members of the Inter-*
4 *agency Task Force before providing ad-*
5 *vice to the President.*

6 (II) *WITH OTHER INTERESTED*
7 *PARTIES.—The Director of the White*
8 *House Office shall establish a process*
9 *for obtaining the meaningful partici-*
10 *pation of Federal, State, tribal, and*
11 *local government agencies, nongovern-*
12 *mental organizations, academia, sci-*
13 *entific bodies, industry, the public, and*
14 *other interested parties in the develop-*
15 *ment and updating of the Strategy.*

16 (D) *PUBLIC EDUCATION, AWARENESS, OUT-*
17 *REACH, AND INFORMATION-SHARING.—The Di-*
18 *rector of the White House Office, to the max-*
19 *imum extent practicable, shall promote public*
20 *awareness, outreach, and information-sharing to*
21 *further the understanding of the full range of cli-*
22 *mate change-related issues.*

23 (4) *ANNUAL REPORTS.—The Director of the*
24 *White House Office, in consultation with the Inter-*
25 *agency Task Force and other interested parties, shall*

1 prepare the annual reports for submission by the
2 President to Congress under section 1013(d).

3 (5) ANALYSIS.—During development of the
4 Strategy, preparation of the annual reports submitted
5 under paragraph (4), and provision of advice to the
6 President and the heads of Federal agencies, the Di-
7 rector of the White House Office shall place signifi-
8 cant emphasis on the use of objective, quantitative
9 analysis, taking into consideration any uncertainties
10 associated with the analysis.

11 (c) STAFF.—

12 (1) IN GENERAL.—The Director of the White
13 House Office shall employ a professional staff, includ-
14 ing the staff appointed under paragraph (2), of not
15 more than 25 individuals to carry out the duties of
16 the White House Office.

17 (2) INTERGOVERNMENTAL PERSONNEL AND FEL-
18 LOWSHIPS.—The Director of the White House Office
19 may use the authority provided by the Intergovern-
20 mental Personnel Act of 1970 (42 U.S.C. 4701 et seq.)
21 and subchapter VI of chapter 33 of title 5, United
22 States Code, and fellowships, to obtain staff from Fed-
23 eral agencies, academia, scientific bodies, or a Na-
24 tional Laboratory (as that term is defined in section
25 1203), for appointments of a limited term.

1 (d) *AUTHORIZATION OF APPROPRIATIONS.*—

2 (1) *USE OF AVAILABLE APPROPRIATIONS.*—*From*
3 *funds made available to Federal agencies for the fiscal*
4 *year in which this title is enacted, the President shall*
5 *provide such sums as are necessary to carry out the*
6 *duties of the White House Office under this title until*
7 *the date on which funds are made available under*
8 *paragraph (2).*

9 (2) *AUTHORIZATION OF APPROPRIATIONS.*—
10 *There is authorized to be appropriated to the Execu-*
11 *tive Office of the President to carry out the duties of*
12 *the White House Office under this subtitle, \$5,000,000*
13 *for each of fiscal years 2003 through 2011, to remain*
14 *available through September 30, 2011.*

15 (e) *INTERAGENCY TASK FORCE.*—

16 (1) *IN GENERAL.*—*The Director of the White*
17 *House Office shall establish the Interagency Task*
18 *Force.*

19 (2) *COMPOSITION.*—*The Interagency Task Force*
20 *shall be composed of—*

21 (A) *the Director of the White House Office,*
22 *who shall serve as Chair;*

23 (B) *the Secretary of State;*

24 (C) *the Secretary of Energy;*

25 (D) *the Secretary of Commerce;*

- 1 (E) the Secretary of Transportation;
- 2 (F) the Secretary of Agriculture;
- 3 (G) the Administrator of the Environmental
- 4 Protection Agency;
- 5 (H) the Chairman of the Council of Eco-
- 6 nomic Advisers;
- 7 (I) the Chairman of the Council on Envi-
- 8 ronmental Quality;
- 9 (J) the Director of the Office of Science and
- 10 Technology Policy;
- 11 (K) the Director of the Office of Manage-
- 12 ment and Budget; and
- 13 (L) the heads of such other Federal agencies
- 14 as the President considers appropriate.

15 (3) STRATEGY.—

16 (A) IN GENERAL.—The Interagency Task

17 Force shall serve as the primary forum through

18 which the Federal agencies represented on the

19 Interagency Task Force jointly assist the Direc-

20 tor of the White House Office in—

21 (i) developing and updating the Strat-

22 egy; and

23 (ii) preparing annual reports under

24 section 1013(d).

1 (B) *REQUIRED ELEMENTS.*—*In carrying*
2 *out subparagraph (A), the Interagency Task*
3 *Force shall—*

4 (i) *take into account the long-term goal*
5 *and other requirements of the Strategy spec-*
6 *ified in section 1013(a);*

7 (ii) *consult with State, tribal, and*
8 *local government agencies, nongovernmental*
9 *organizations, academia, scientific bodies,*
10 *industry, the public, and other interested*
11 *parties; and*

12 (iii) *build consensus around a Strategy*
13 *that is based on strong scientific, technical,*
14 *and economic analyses.*

15 (4) *WORKING GROUPS.*—*The Chair, in consulta-*
16 *tion with the members of the Interagency Task Force,*
17 *may establish such topical working groups as are nec-*
18 *essary to carry out the duties of the Interagency Task*
19 *Force and implement the Strategy, taking into con-*
20 *sideration the key elements of the Strategy. Such*
21 *working groups may be comprised of members of the*
22 *Interagency Task Force or their designees.*

23 (f) *STAFF.*—*In accordance with procedures established*
24 *by the Chair of the Interagency Task Force, the Federal*
25 *agencies represented on the Interagency Task Force shall*

1 *provide staff from the agencies to support information, data*
2 *collection, and analyses required by the Interagency Task*
3 *Force.*

4 *(g) HEARINGS.—Upon request of the Chair, the Inter-*
5 *agency Task Force may hold such hearings, meet and act*
6 *at such times and places, take such testimony, and receive*
7 *such evidence as the Interagency Task Force considers to*
8 *be appropriate.*

9 **SEC. 1015. OFFICE OF CLIMATE CHANGE TECHNOLOGY.**

10 *(a) ESTABLISHMENT.—*

11 *(1) IN GENERAL.—There is established, within*
12 *the Department, the Office of Climate Change Tech-*
13 *nology.*

14 *(2) DUTIES.—The Department Office shall—*

15 *(A) manage an energy technology research*
16 *and development program that directly supports*
17 *the Strategy by—*

18 *(i) focusing on high-risk, bold, break-*
19 *through technologies that—*

20 *(I) have significant promise of*
21 *contributing to the long-term goal of*
22 *the Strategy by—*

23 *(aa) mitigating the emissions*
24 *of greenhouse gases;*

1 *(bb) removing and seques-*
2 *tering greenhouse gases from emis-*
3 *sion 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 *subtitle;*

14 *(ii) forging fundamentally new re-*
15 *search and development partnerships among*
16 *various Department, other Federal, and*
17 *State programs, particularly between basic*
18 *science and energy technology programs, in*
19 *cases in which such partnerships have sig-*
20 *nificant potential to affect the ability of the*
21 *United States to achieve the long-term goal*
22 *of the Strategy at the lowest possible cost;*

23 *(iii) forging international research and*
24 *development partnerships that are in the*
25 *interests of the United States and make*

1 *progress on achieving the long-term goal of*
2 *the Strategy;*

3 *(iv) making available, through moni-*
4 *toring, experimentation, and analysis, data*
5 *that are essential to proving the technical*
6 *and economic viability of technology central*
7 *to addressing climate change; and*

8 *(v) transferring research and develop-*
9 *ment programs to other program offices of*
10 *the Department once such a research and*
11 *development program crosses the threshold*
12 *of high-risk research and moves into the*
13 *realm of more conventional technology de-*
14 *velopment;*

15 *(B) through active participation in the*
16 *Interagency Task Force and utilization of the*
17 *analytical capabilities of the Department Office,*
18 *share analyses of alternative climate change*
19 *strategies with other agencies represented on the*
20 *Interagency Task Force to assist them in*
21 *understanding—*

22 *(i) the scale of the climate change chal-*
23 *lenge; and*

24 *(ii) how actions of the Federal agencies*
25 *on the Interagency Task Force positively or*

1 *negatively contribute to climate change so-*
2 *lutions;*

3 *(C) provide analytical support to the White*
4 *House Office, particularly in support of the de-*
5 *velopment of the Strategy and associated*
6 *progress reporting;*

7 *(D) foster the development of tools, data,*
8 *and capabilities 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) identify the total contribution of all De-*
16 *partment programs to the Strategy; and*

17 *(F) advise the Secretary on all aspects of*
18 *climate change-related issues, including nec-*
19 *essary changes in Department organization,*
20 *management, budgeting, and personnel alloca-*
21 *tion in the programs involved in climate change*
22 *response-related activities.*

23 *(3) ANNUAL REPORTS.—The Department Office*
24 *shall prepare an annual report for submission by the*

1 *Secretary to Congress and the White House Office*
2 *that—*

3 *(A) assesses progress toward meeting the*
4 *goals of the energy technology research and devel-*
5 *opment program described in this section;*

6 *(B) assesses the activities of the Department*
7 *Office;*

8 *(C) assesses the contributions of all energy*
9 *technology research and development programs of*
10 *the Department (including science programs) to*
11 *the long-term goal and other requirements of the*
12 *Strategy; and*

13 *(D) make recommendations for actions by*
14 *the Department and other Federal agencies to*
15 *address the components of technology develop-*
16 *ment that are necessary to support the Strategy.*

17 *(b) DIRECTOR OF THE DEPARTMENT OFFICE.—*

18 *(1) IN GENERAL.—The Department Office shall*
19 *be headed by a Director, who shall be a qualified in-*
20 *dividual appointed by the President, and who shall be*
21 *compensated at a rate provided for level IV of the Ex-*
22 *ecutive Schedule under section 5315 of title 5, United*
23 *States Code.*

1 (2) *REPORTING.*—*The Director of the Department Office shall report directly to the Under Secretary for Energy and Science.*

4 (3) *VACANCIES.*—*A vacancy in the position of the Director of the Department Office shall be filled in the same manner as the original appointment was made.*

8 (c) *INTERGOVERNMENTAL PERSONNEL.*—*The Department Office may use the authority provided by the Intergovernmental Personnel Act of 1970 (42 U.S.C. 4701 et seq.), subchapter VI of chapter 33 of title 5, United States Code, and other departmental personnel authorities, to obtain staff for appointments of a limited term.*

14 (d) *RELATIONSHIP TO OTHER DEPARTMENT PROGRAMS.*—*Each project carried out by the Department Office shall be—*

17 (1) *initiated only after consultation with one or more other appropriate program offices of the Department that support research and development in the areas relating to the project;*

21 (2) *managed by the Department Office; and*

22 (3) *in the case of a project that reaches a sufficient level of maturity, with the concurrence of the Department Office and the appropriate office described in paragraph (1), transferred to the appro-*

1 *appropriate office, along with the funds necessary to con-*
2 *tinue the project to the point at which non-Federal*
3 *funding can provide substantial support for the*
4 *project.*

5 *(e) COLLABORATION AND COST SHARING.—*

6 *(1) WITH OTHER FEDERAL AGENCIES.—Projects*
7 *supported by the Department Office may include par-*
8 *ticipation of, and be supported by, other Federal*
9 *agencies that have a role in the development, commer-*
10 *cialization, or transfer of energy, transportation, in-*
11 *dustrial, agricultural, forestry, or other climate*
12 *change-related technology.*

13 *(2) WITH THE PRIVATE SECTOR.—*

14 *(A) IN GENERAL.—Notwithstanding section*
15 *1403, the Department Office shall create an oper-*
16 *ating model that allows for collaboration, divi-*
17 *sion of effort, and cost sharing with industry on*
18 *individual climate change response projects.*

19 *(B) REQUIREMENTS.—Although cost shar-*
20 *ing in some cases may be appropriate, the De-*
21 *partment Office shall focus on long-term high-*
22 *risk research and development and should not*
23 *make industrial partnerships or cost sharing a*
24 *requirement, if such a requirement would bias*

1 *the activities of the Department Office toward*
2 *incremental innovations.*

3 (C) *REEVALUATION ON TRANSFER.*—*At such*
4 *time as any bold, breakthrough research and de-*
5 *velopment program reaches a sufficient level of*
6 *technological maturity such that the program is*
7 *transferred to a program office of the Depart-*
8 *ment other than the Department Office, the cost-*
9 *sharing requirements and criteria applicable to*
10 *the program shall be reevaluated.*

11 (D) *PUBLICATION IN FEDERAL REGISTER.*—
12 *Each cost-sharing agreement entered into under*
13 *this paragraph shall be published in the Federal*
14 *Register.*

15 (f) *ANALYSIS OF CLIMATE CHANGE STRATEGY.*—

16 (1) *IN GENERAL.*—*The Department Office shall*
17 *foster the development and application of advanced*
18 *computational tools, data, and capabilities that, to-*
19 *gether with the capabilities of other Federal agencies,*
20 *support integrated assessment of alternative climate*
21 *change response scenarios and implementation of the*
22 *Strategy.*

23 (2) *PROGRAMS.*—

24 (A) *IN GENERAL.*—*The Department Office*
25 *shall—*

1 (i) develop and maintain core analyt-
2 ical competencies and complex, integrated
3 computational modeling capabilities that,
4 together with the capabilities of other Fed-
5 eral agencies, are necessary to support the
6 design and implementation of the Strategy;
7 and

8 (ii) track United States and inter-
9 national progress toward the long-term goal
10 of the Strategy.

11 (B) *INTERNATIONAL CARBON DIOXIDE SE-*
12 *QUESTRATION MONITORING AND DATA PRO-*
13 *GRAM.—In consultation with Federal, State,*
14 *academic, scientific, private sector, nongovern-*
15 *mental, tribal, and international carbon capture*
16 *and sequestration technology programs, the De-*
17 *partment Office shall design and carry out an*
18 *international carbon dioxide sequestration moni-*
19 *toring and data program to collect, analyze, and*
20 *make available the technical and economic data*
21 *to ascertain—*

22 (i) whether engineered sequestration
23 and terrestrial sequestration will be accept-
24 able technologies from regulatory, economic,
25 and international perspectives;

1 (ii) whether carbon dioxide sequestered
2 in geological formations or ocean systems is
3 stable and has inconsequential leakage rates
4 on a geologic time-scale; and

5 (iii) the extent to which forest, agricul-
6 tural, and other terrestrial systems are suit-
7 able carbon sinks.

8 (3) AREAS OF EXPERTISE.—

9 (A) IN GENERAL.—The Department Office
10 shall develop and maintain expertise in inte-
11 grated assessment, modeling, and related capa-
12 bilities necessary—

13 (i) to understand the relationship be-
14 tween natural, agricultural, industrial, en-
15 ergy, and economic systems;

16 (ii) to design effective research and de-
17 velopment programs; and

18 (iii) to assist with the development and
19 implementation of the Strategy.

20 (B) TECHNOLOGY TRANSFER AND DIFFU-
21 SION.—The expertise described in clause (i) shall
22 include knowledge of technology transfer and
23 technology diffusion in United States and for-
24 eign markets.

1 (4) *DISSEMINATION OF INFORMATION.*—*The De-*
2 *partment Office shall ensure, to the maximum extent*
3 *practicable, that technical and scientific knowledge re-*
4 *lating to greenhouse gas emission reduction, avoid-*
5 *ance, and sequestration is broadly disseminated*
6 *through publications, fellowships, and training pro-*
7 *grams.*

8 (5) *ASSESSMENTS.*—*In a manner consistent*
9 *with the Strategy, the Department shall conduct as-*
10 *sessments of deployment of climate-friendly tech-*
11 *nology.*

12 (6) *ANALYSIS.*—*During development of the*
13 *Strategy, annual reports submitted under subsection*
14 *(a)(3), and advice to the Secretary, the Director of the*
15 *Department Office shall place significant emphasis on*
16 *the use of objective, quantitative analysis, taking into*
17 *consideration any associated uncertainties.*

18 (7) *AUTHORIZATION OF APPROPRIATIONS.*—

19 (1) *USE OF AVAILABLE APPROPRIATIONS.*—*From*
20 *funds made available to Federal agencies for the fiscal*
21 *year in which this subtitle is enacted, the President*
22 *shall provide such sums as are necessary to carry out*
23 *the duties of the Department Office under this subtitle*
24 *until the date on which funds are made available*
25 *under paragraph (2).*

1 (2) *AUTHORIZATION OF APPROPRIATIONS.—*
2 *There is authorized to be appropriated to the Sec-*
3 *retary, to carry out the duties of the Department Of-*
4 *ice under this subtitle, \$4,750,000,000 for the period*
5 *of fiscal years 2003 through 2011, to remain available*
6 *through September 30, 2011.*

7 (3) *ADDITIONAL AMOUNTS.—Amounts authorized*
8 *to be appropriated under this section shall be in addi-*
9 *tion to—*

10 (A) *amounts made available to carry out*
11 *the United States Global Change Research Pro-*
12 *gram under the Global Change Research Act of*
13 *1990 (15 U.S.C. 2921 et seq.); and*

14 (B) *amounts made available under other*
15 *provisions of law for energy research and devel-*
16 *opment.*

17 **SEC. 1016. ADDITIONAL OFFICES AND ACTIVITIES.**

18 *The Secretary of Agriculture, the Secretary of Trans-*
19 *portation, the Secretary of Commerce, the Administrator of*
20 *the Environmental Protection Agency, and the heads of*
21 *other Federal agencies may establish such offices and carry*
22 *out such activities, in addition to those established or au-*
23 *thorized by this Act, as are necessary to carry out this Act.*

1 ***Subtitle C—Science and Technology***
2 ***Policy***

3 ***SEC. 1021. GLOBAL CLIMATE CHANGE IN THE OFFICE OF***
4 ***SCIENCE AND TECHNOLOGY POLICY.***

5 *Section 101(b) of the National Science and Technology*
6 *Policy, Organization, and Priorities Act of 1976 (42 U.S.C.*
7 *6601(b)) is amended—*

8 *(1) by redesignating paragraphs (7) through (13)*
9 *as paragraphs (8) through (14), respectively; and*

10 *(2) by inserting after paragraph (6) the fol-*
11 *lowing:*

12 *“(7) improving efforts to understand, assess, pre-*
13 *dict, mitigate, and respond to global climate change;”.*

14 ***SEC. 1022. DIRECTOR OF OFFICE OF SCIENCE AND TECH-***
15 ***NOLOGY POLICY FUNCTIONS.***

16 *(a) ADVISE PRESIDENT ON GLOBAL CLIMATE*
17 *CHANGE.—Section 204(b)(1) of the National Science and*
18 *Technology Policy, Organization, and Priorities Act of*
19 *1976 (42 U.S.C. 6613(b)(1)) is amended by inserting “glob-*
20 *al climate change,” after “to.”.*

21 *(b) ADVISE DIRECTOR OF OFFICE OF NATIONAL CLI-*
22 *MATE CHANGE POLICY.—Section 207 of that Act (42 U.S.C.*
23 *6616) is amended—*

24 *(1) by redesignating subsections (b) and (c) as*
25 *subsections (c) and (d), respectively; and*

1 (2) *by inserting after subsection (a) the fol-*
2 *lowing:*

3 “(b) *ADVISE DIRECTOR OF OFFICE OF NATIONAL CLI-*
4 *MATE CHANGE POLICY.—In carrying out this Act, the Di-*
5 *rector shall advise the Director of the Office of National Cli-*
6 *mate Change Policy on matters concerning science and tech-*
7 *nology as they relate to global climate change.”.*

8 ***Subtitle D—Miscellaneous***
9 ***Provisions***

10 ***SEC. 1031. ADDITIONAL INFORMATION FOR REGULATORY***
11 ***REVIEW.***

12 *In each case that an agency prepares and submits a*
13 *Statement of Energy Effects pursuant to Executive Order*
14 *13211 of May 18, 2001 (relating to actions concerning regu-*
15 *lations that significantly affect energy supply, distribution,*
16 *or use), the agency shall also submit an estimate of the*
17 *change in net annual greenhouse gas emissions resulting*
18 *from the proposed significant energy action and any rea-*
19 *sonable alternatives to the action.*

20 ***SEC. 1032. GREENHOUSE GAS EMISSIONS FROM FEDERAL***
21 ***FACILITIES.***

22 (i) *METHODOLOGY.—Not later than 1 year after the*
23 *date of enactment of this section, the Secretary of Energy,*
24 *Secretary of Agriculture, Secretary of Commerce, and Ad-*
25 *ministrator of the Environmental Protection Agency shall*

1 *publish a jointly developed methodology for preparing esti-*
2 *mates of annual net greenhouse gas emissions from all fed-*
3 *erally owned, leased, or operated facilities and emission*
4 *sources, including stationary, mobile, and indirect emis-*
5 *sions as may be determined to be feasible.*

6 (b) *PUBLICATION.*—*Not later than 18 months after the*
7 *date of enactment of this section, and annually thereafter,*
8 *the Secretary of Energy shall publish an estimate of annual*
9 *net greenhouse gas emissions from all federally owned,*
10 *leased, or operated facilities and emission sources, using the*
11 *methodology published under subsection (a).*

12 ***TITLE XI—NATIONAL***
13 ***GREENHOUSE GAS DATABASE***

14 ***SEC. 1101. PURPOSE.***

15 *The purpose of this title is to establish a greenhouse*
16 *gas inventory, reductions registry, and information system*
17 *that—*

18 (1) *are complete, consistent, transparent, and ac-*
19 *curate;*

20 (2) *will create reliable and accurate data that*
21 *can be used by public and private entities to design*
22 *efficient and effective greenhouse gas emission reduc-*
23 *tion strategies; and*

24 (3) *will acknowledge and encourage greenhouse*
25 *gas emission reductions.*

1 **SEC. 1102. DEFINITIONS.**

2 *In this title:*

3 (1) *ADMINISTRATOR.*—*The term “Adminis-*
4 *trator” means the Administrator of the Environ-*
5 *mental Protection Agency.*

6 (2) *BASELINE.*—*The term “baseline” means the*
7 *historic greenhouse gas emission levels of an entity, as*
8 *adjusted upward by the designated agency to reflect*
9 *actual reductions that are verified in accordance*
10 *with—*

11 (A) *regulations promulgated under section*
12 *1104(c)(1); and*

13 (B) *relevant standards and methods devel-*
14 *oped under this title.*

15 (3) *DATABASE.*—*The term “database” means the*
16 *National Greenhouse Gas Database established under*
17 *section 1104.*

18 (4) *DESIGNATED AGENCY.*—*The term “des-*
19 *ignated agency” means a department or agency to*
20 *which responsibility for a function or program is as-*
21 *signed under the memorandum of agreement entered*
22 *into under section 1103(a).*

23 (5) *DIRECT EMISSIONS.*—*The term “direct emis-*
24 *sions” means greenhouse gas emissions by an entity*
25 *from a facility that is owned or controlled by that en-*
26 *tity.*

1 (6) *ENTITY*.—The term “entity” means—

2 (A) a person located in the United States;

3 or

4 (B) a public or private entity, to the extent
5 that the entity operates in the United States.

6 (7) *FACILITY*.—The term “facility” means—

7 (A) all buildings, structures, or installations
8 located on any 1 or more contiguous or adjacent
9 properties of an entity in the United States; and

10 (B) a fleet of 20 or more motor vehicles
11 under the common control of an entity.

12 (8) *GREENHOUSE GAS*.—The term “greenhouse
13 gas” means—

14 (A) carbon dioxide;

15 (B) methane;

16 (C) nitrous oxide;

17 (D) hydrofluorocarbons;

18 (E) perfluorocarbons;

19 (F) sulfur hexafluoride; and

20 (G) any other anthropogenic climate-forcing
21 emissions with significant ascertainable global
22 warming potential, as—

23 (i) recommended by the National Acad-
24 emy of Sciences under section 1107(b)(3);

25 and

1 (ii) determined in regulations promul-
2 gated under section 1104(c)(1) (or revisions
3 to the regulations) to be appropriate and
4 practicable for coverage under this title.

5 (9) *INDIRECT EMISSIONS.*—The term “indirect
6 emissions” means greenhouse gas emissions that—

7 (A) are a result of the activities of an enti-
8 ty; but

9 (B)(i) are emitted from a facility owned or
10 controlled by another entity; and

11 (ii) are not reported as direct emissions by
12 the entity the activities of which resulted in the
13 emissions.

14 (10) *REGISTRY.*—The term “registry” means the
15 registry of greenhouse gas emission reductions estab-
16 lished as a component of the database under section
17 1104(b)(2).

18 (11) *SEQUESTRATION.*—

19 (A) *IN GENERAL.*—The term “sequestra-
20 tion” means the capture, long-term separation,
21 isolation, or removal of greenhouse gases from the
22 atmosphere.

23 (B) *INCLUSIONS.*—The term “sequestration”
24 includes—

25 (i) soil carbon sequestration;

- 1 (ii) agricultural and conservation
2 practices;
3 (iii) reforestation;
4 (iv) forest preservation;
5 (v) maintenance of an underground
6 reservoir; and
7 (vi) any other appropriate biological
8 or geological method of capture, isolation, or
9 removal of greenhouse gases from the atmos-
10 phere, as determined by the Administrator.

11 **SEC. 1103. ESTABLISHMENT OF MEMORANDUM OF AGREE-**
12 **MENT.**

13 (a) *IN GENERAL.*—Not later than 1 year after the date
14 of enactment of this Act, the President, acting through the
15 Director of the Office of National Climate Change Policy,
16 shall direct the Secretary of Energy, the Secretary of Com-
17 merce, the Secretary of Agriculture, the Secretary of Trans-
18 portation, and the Administrator to enter into a memo-
19 randum of agreement under which those heads of Federal
20 agencies will—

21 (1) recognize and maintain statutory and regu-
22 latory authorities, functions, and programs that—

23 (A) are established as of the date of enact-
24 ment of this Act under other law;

1 (B) provide for the collection of data relat-
2 ing to greenhouse gas emissions and effects; and

3 (C) are necessary for the operation of the
4 database;

5 (2)(A) distribute additional responsibilities and
6 activities identified under this title to Federal depart-
7 ments or agencies in accordance with the missions
8 and expertise of those departments and agencies; and

9 (B) maximize the use of available resources of
10 those departments and agencies; and

11 (3) provide for the comprehensive collection and
12 analysis of data on greenhouse gas emissions relating
13 to product use (including the use of fossil fuels and
14 energy-consuming appliances and vehicles).

15 (b) *MINIMUM REQUIREMENTS.*—The memorandum of
16 agreement entered into under subsection (a) shall, at a min-
17 imum, retain the following functions for the designated
18 agencies:

19 (1) *DEPARTMENT OF ENERGY.*—The Secretary of
20 Energy shall be primarily responsible for developing,
21 maintaining, and verifying the registry and the emis-
22 sion reductions reported under section 1605(b) of the
23 Energy Policy Act of 1992 (42 U.S.C. 13385(b)).

1 (2) *DEPARTMENT OF COMMERCE.*—*The Secretary*
2 *of Commerce shall be primarily responsible for the de-*
3 *velopment of—*

4 (A) *measurement standards for the moni-*
5 *toring of emissions; and*

6 (B) *verification technologies and methods to*
7 *ensure the maintenance of a consistent and tech-*
8 *nically accurate record of emissions, emission re-*
9 *ductions, and atmospheric concentrations of*
10 *greenhouse gases for the database.*

11 (3) *ENVIRONMENTAL PROTECTION AGENCY.*—*The*
12 *Administrator shall be primarily responsible for—*

13 (A) *emissions monitoring, measurement,*
14 *verification, and data collection under this title*
15 *and title IV (relating to acid deposition control)*
16 *and title VIII of the Clean Air Act (42 U.S.C.*
17 *7651 et seq.), including mobile source emissions*
18 *information from implementation of the cor-*
19 *porate average fuel economy program under*
20 *chapter 329 of title 49, United States Code; and*

21 (B) *responsibilities of the Environmental*
22 *Protection Agency relating to completion of the*
23 *national inventory for compliance with the*
24 *United Nations Framework Convention on Cli-*
25 *mate Change, done at New York on May 9, 1992.*

1 (4) *DEPARTMENT OF AGRICULTURE.—The Sec-*
2 *retary of Agriculture shall be primarily responsible*
3 *for—*

4 (A) *developing measurement techniques*
5 *for—*

6 (i) *soil carbon sequestration; and*

7 (ii) *forest preservation and reforest-*
8 *ation activities; and*

9 (B) *providing technical advice relating to*
10 *biological carbon sequestration measurement and*
11 *verification standards for measuring greenhouse*
12 *gas emission reductions or offsets.*

13 (c) *DRAFT MEMORANDUM OF AGREEMENT.—Not later*
14 *than 15 months after the date of enactment of this Act, the*
15 *President, acting through the Director of the Office of Na-*
16 *tional Climate Change Policy, shall publish in the Federal*
17 *Register, and solicit comments on, a draft version of the*
18 *memorandum of agreement described in subsection (a).*

19 (d) *NO JUDICIAL REVIEW.—The final version of the*
20 *memorandum of agreement shall not be subject to judicial*
21 *review.*

22 **SEC. 1104. NATIONAL GREENHOUSE GAS DATABASE.**

23 (a) *ESTABLISHMENT.—As soon as practicable after the*
24 *date of enactment of this Act, the designated agencies, in*
25 *consultation with the private sector and nongovernmental*

1 organizations, shall jointly establish, operate, and maintain
2 a database, to be known as the “National Greenhouse Gas
3 Database”, to collect, verify, and analyze information on
4 greenhouse gas emissions by entities.

5 (b) NATIONAL GREENHOUSE GAS DATABASE COMPO-
6 NENTS.—The database shall consist of—

7 (1) an inventory of greenhouse gas emissions;

8 and

9 (2) a registry of greenhouse gas emission reduc-
10 tions.

11 (c) COMPREHENSIVE SYSTEM.—

12 (1) IN GENERAL.—Not later than 2 years after
13 the date of enactment of this Act, the designated agen-
14 cies shall jointly promulgate regulations to implement
15 a comprehensive system for greenhouse gas emissions
16 reporting, inventorying, and reductions registration.

17 (2) REQUIREMENTS.—The designated agencies
18 shall ensure, to the maximum extent practicable,
19 that—

20 (A) the comprehensive system described in
21 paragraph (1) is designed to—

22 (i) maximize completeness, trans-
23 parency, and accuracy of information re-
24 ported; and

1 (ii) minimize costs incurred by entities
2 in measuring and reporting greenhouse gas
3 emissions; and

4 (B) the regulations promulgated under
5 paragraph (1) establish procedures and protocols
6 necessary—

7 (i) to prevent the reporting of some or
8 all of the same greenhouse gas emissions or
9 emission reductions by more than 1 report-
10 ing entity;

11 (ii) to provide for corrections to errors
12 in data submitted to the database;

13 (iii) to provide for adjustment to data
14 by reporting entities that have had a sig-
15 nificant organizational change (including
16 mergers, acquisitions, and divestiture), in
17 order to maintain comparability among
18 data in the database over time;

19 (iv) to provide for adjustments to re-
20 flect new technologies or methods for meas-
21 uring or calculating greenhouse gas emis-
22 sions; and

23 (v) to account for changes in registra-
24 tion of ownership of emission reductions re-

1 *sulting from a voluntary private trans-*
2 *action between reporting entities.*

3 (3) *BASELINE IDENTIFICATION AND PROTEC-*
4 *TION.—Through regulations promulgated under para-*
5 *graph (1), the designated agencies shall develop and*
6 *implement a system that provides—*

7 (A) *for the provision of unique serial num-*
8 *bers to identify the verified emission reductions*
9 *made by an entity relative to the baseline of the*
10 *entity;*

11 (B) *for the tracking of the reductions associ-*
12 *ated with the serial numbers; and*

13 (C) *that the reductions may be applied, as*
14 *determined to be appropriate by any Act of Con-*
15 *gress enacted after the date of enactment of this*
16 *Act, toward a Federal requirement under such*
17 *an Act that is imposed on the entity for the pur-*
18 *pose of reducing greenhouse gas emissions.*

19 **SEC. 1105. GREENHOUSE GAS REDUCTION REPORTING.**

20 (a) *IN GENERAL.—An entity that participates in the*
21 *registry shall meet the requirements described in subsection*

22 (b).

23 (b) *REQUIREMENTS.—*

1 (1) *IN GENERAL.*—*The requirements referred to*
2 *in subsection (a) are that an entity (other than an*
3 *entity described in paragraph (2)) shall—*

4 (A) *establish a baseline (including all of the*
5 *entity’s greenhouse gas emissions on an entity-*
6 *wide basis); and*

7 (B) *submit the report described in sub-*
8 *section (c)(1).*

9 (2) *REQUIREMENTS APPLICABLE TO ENTITIES*
10 *ENTERING INTO CERTAIN AGREEMENTS.*—*An entity*
11 *that enters into an agreement with a participant in*
12 *the registry for the purpose of a carbon sequestration*
13 *project shall not be required to comply with the re-*
14 *quirements specified in paragraph (1) unless that en-*
15 *tity is required to comply with the requirements by*
16 *reason of an activity other than the agreement.*

17 (c) *REPORTS.*—

18 (1) *REQUIRED REPORT.*—*Not later than April 1*
19 *of the third calendar year that begins after the date*
20 *of enactment of this Act, and not later than April 1*
21 *of each calendar year thereafter, subject to paragraph*
22 *(3), an entity described in subsection (a) shall submit*
23 *to each appropriate designated agency a report that*
24 *describes, for the preceding calendar year, the entity-*

1 *wide greenhouse gas emissions (as reported at the fa-*
2 *cility level), including—*

3 *(A) the total quantity of each greenhouse*
4 *gas emitted, expressed in terms of mass and in*
5 *terms of the quantity of carbon dioxide equiva-*
6 *lent;*

7 *(B) an estimate of the greenhouse gas emis-*
8 *sions from fossil fuel combusted by products*
9 *manufactured and sold by the entity in the pre-*
10 *vious calendar year, determined over the average*
11 *lifetime of those products; and*

12 *(C) such other categories of emissions as the*
13 *designated agency determines in the regulations*
14 *promulgated under section 1104(c)(1) may be*
15 *practicable and useful for the purposes of this*
16 *title, such as—*

17 *(i) direct emissions from stationary*
18 *sources;*

19 *(ii) indirect emissions from imported*
20 *electricity, heat, and steam;*

21 *(iii) process and fugitive emissions;*
22 *and*

23 *(iv) production or importation of*
24 *greenhouse gases.*

1 (2) *VOLUNTARY REPORTING.*—*An entity de-*
2 *scribed in subsection (a) may (along with establishing*
3 *a baseline and reporting reductions under this sec-*
4 *tion)—*

5 (A) *submit a report described in paragraph*
6 *(1) before the date specified in that paragraph*
7 *for the purposes of achieving and commoditizing*
8 *greenhouse gas reductions through use of the reg-*
9 *istry; and*

10 (B) *submit to any designated agency, for*
11 *inclusion in the registry, information that has*
12 *been verified in accordance with regulations pro-*
13 *mulgated under section 1104(c)(1) and that re-*
14 *lates to—*

15 (i) *with respect to the calendar year*
16 *preceding the calendar year in which the*
17 *information is submitted, and with respect*
18 *to any greenhouse gas emitted by the*
19 *entity—*

20 (I) *project reductions from facili-*
21 *ties owned or controlled by the report-*
22 *ing entity in the United States;*

23 (II) *transfers of project reductions*
24 *to and from any other entity;*

1 (III) project reductions and trans-
2 fers of project reductions outside the
3 United States;

4 (IV) other indirect emissions that
5 are not required to be reported under
6 paragraph (1); and

7 (V) product use phase emissions;

8 (ii) with respect to greenhouse gas
9 emission reductions activities of the entity
10 that have been carried out during or after
11 1990, verified in accordance with regula-
12 tions promulgated under section 1104(c)(1),
13 and submitted to 1 or more designated
14 agencies before the date that is 4 years after
15 the date of enactment of this Act, any green-
16 house gas emission reductions that have
17 been reported or submitted by an entity
18 under—

19 (I) section 1605(b) of the *Energy*
20 *Policy Act of 1992* (42 U.S.C.
21 13385(b)); or

22 (II) any other Federal or State
23 voluntary greenhouse gas reduction
24 program; and

1 (iii) any project or activity for the re-
2 duction of greenhouse gas emissions or se-
3 questration of a greenhouse gas that is car-
4 ried out by the entity, including a project
5 or activity relating to—

6 (I) fuel switching;

7 (II) energy efficiency improve-
8 ments;

9 (III) use of renewable energy;

10 (IV) use of combined heat and
11 power systems;

12 (V) management of cropland,
13 grassland, or grazing land;

14 (VI) a forestry activity that in-
15 creases forest carbon stocks or reduces
16 forest carbon emissions;

17 (VII) carbon capture and storage;

18 (VIII) methane recovery;

19 (IX) greenhouse gas offset invest-
20 ment; and

21 (X) any other practice for achiev-
22 ing greenhouse gas reductions as recog-
23 nized by 1 or more designated agencies.

24 (3) *EXEMPTIONS FROM REPORTING.*—

1 (A) *IN GENERAL.*—*If the Director of the Of-*
2 *fice of National Climate Change Policy deter-*
3 *mines under section 1108(b) that the reporting*
4 *requirements under paragraph (1) shall apply to*
5 *all entities (other than entities exempted by this*
6 *paragraph), regardless of participation or non-*
7 *participation in the registry, an entity shall be*
8 *required to submit reports under paragraph (1)*
9 *only if, in any calendar year after the date of*
10 *enactment of this Act—*

11 (i) *the total greenhouse gas emissions*
12 *of at least 1 facility owned by the entity ex-*
13 *ceeds 10,000 metric tons of carbon dioxide*
14 *equivalent (or such greater quantity as may*
15 *be established by a designated agency by*
16 *regulation); or*

17 (ii)(I) *the total quantity of greenhouse*
18 *gases produced, distributed, or imported by*
19 *the entity exceeds 10,000 metric tons of car-*
20 *bon dioxide equivalent (or such greater*
21 *quantity as may be established by a des-*
22 *ignated agency by regulation); and*

23 (II) *the entity is not a feedlot or other*
24 *farming operation (as defined in section*
25 *101 of title 11, United States Code).*

1 (B) *ENTITIES ALREADY REPORTING.*—

2 (i) *IN GENERAL.*—An entity that, as of
3 the date of enactment of this Act, is re-
4 quired to report carbon dioxide emissions
5 data to a Federal agency shall not be re-
6 quired to re-report that data for the pur-
7 poses of this title.

8 (ii) *REVIEW OF PARTICIPATION.*—For
9 the purpose of section 1108, emissions re-
10 ported under clause (i) shall be considered
11 to be reported by the entity to the registry.

12 (4) *PROVISION OF VERIFICATION INFORMATION*
13 *BY REPORTING ENTITIES.*—Each entity that submits
14 a report under this subsection shall provide informa-
15 tion sufficient for each designated agency to which the
16 report is submitted to verify, in accordance with
17 measurement and verification methods and standards
18 developed under section 1106, that the greenhouse gas
19 report of the reporting entity—

20 (A) has been accurately reported; and

21 (B) in the case of each voluntary report
22 under paragraph (2), represents—

23 (i) actual reductions in direct green-
24 house gas emissions—

1 (I) relative to historic emission
2 levels of the entity; and

3 (II) net of any increases in—
4 (aa) direct emissions; and
5 (bb) indirect emissions de-
6 scribed in paragraph (1)(C)(ii);
7 or
8 (ii) actual increases in net sequestra-
9 tion.

10 (5) *FAILURE TO SUBMIT REPORT.*—An entity
11 that participates or has participated in the registry
12 and that fails to submit a report required under this
13 subsection shall be prohibited from including emission
14 reductions reported to the registry in the calculation
15 of the baseline of the entity in future years.

16 (6) *INDEPENDENT THIRD-PARTY VERIFICA-*
17 *TION.*—To meet the requirements of this section and
18 section 1106, a entity that is required to submit a re-
19 port under this section may—

20 (A) obtain independent third-party
21 verification; and

22 (B) present the results of the third-party
23 verification to each appropriate designated agen-
24 cy.

25 (7) *AVAILABILITY OF DATA.*—

1 (A) *IN GENERAL.*—*The designated agencies*
2 *shall ensure, to the maximum extent practicable,*
3 *that information in the database is—*

4 (i) *published;*

5 (ii) *accessible to the public; and*

6 (iii) *made available in electronic for-*
7 *mat on the Internet.*

8 (B) *EXCEPTION.*—*Subparagraph (A) shall*
9 *not apply in any case in which the designated*
10 *agencies determine that publishing or otherwise*
11 *making available information described in that*
12 *subparagraph poses a risk to national security.*

13 (8) *DATA INFRASTRUCTURE.*—*The designated*
14 *agencies shall ensure, to the maximum extent prac-*
15 *ticable, that the database uses, and is integrated with,*
16 *Federal, State, and regional greenhouse gas data col-*
17 *lection and reporting systems in effect as of the date*
18 *of enactment of this Act.*

19 (9) *ADDITIONAL ISSUES TO BE CONSIDERED.*—
20 *In promulgating the regulations under section*
21 *1104(c)(1) and implementing the database, the des-*
22 *ignated agencies shall take into consideration a broad*
23 *range of issues involved in establishing an effective*
24 *database, including—*

1 (A) the appropriate units for reporting each
2 greenhouse gas;

3 (B) the data and information systems and
4 measures necessary to identify, track, and verify
5 greenhouse gas emission reductions in a manner
6 that will encourage the development of private
7 sector trading and exchanges;

8 (C) the greenhouse gas reduction and se-
9 questration methods and standards applied in
10 other countries, as applicable or relevant;

11 (D) the extent to which available fossil fuels,
12 greenhouse gas emissions, and greenhouse gas
13 production and importation data are adequate
14 to implement the database;

15 (E) the differences in, and potential unique-
16 ness of, the facilities, operations, and business
17 and other relevant practices of persons and enti-
18 ties in the private and public sectors that may
19 be expected to participate in the registry; and

20 (F) the need of the registry to maintain
21 valid and reliable information on baselines of en-
22 tities so that, in the event of any future action
23 by Congress to require entities, individually or
24 collectively, to reduce greenhouse gas emissions,
25 Congress will be able—

1 (i) to take into account that informa-
2 tion; and

3 (ii) to avoid enacting legislation that
4 penalizes entities for achieving and report-
5 ing reductions.

6 (d) *ANNUAL REPORT.*—The designated agencies shall
7 jointly publish an annual report that—

8 (1) describes the total greenhouse gas emissions
9 and emission reductions reported to the database dur-
10 ing the year covered by the report;

11 (2) provides entity-by-entity and sector-by-sector
12 analyses of the emissions and emission reductions re-
13 ported;

14 (3) describes the atmospheric concentrations of
15 greenhouse gases; and

16 (4) provides a comparison of current and past
17 atmospheric concentrations of greenhouse gases.

18 **SEC. 1106. MEASUREMENT AND VERIFICATION.**

19 (a) *STANDARDS.*—

20 (1) *IN GENERAL.*—Not later than 1 year after
21 the date of enactment of this Act, the designated agen-
22 cies shall jointly develop comprehensive measurement
23 and verification methods and standards to ensure a
24 consistent and technically accurate record of green-
25 house gas emissions, emission reductions, sequestra-

1 *tion, and atmospheric concentrations for use in the*
2 *registry.*

3 (2) *REQUIREMENTS.—The methods and stand-*
4 *ards developed under paragraph (1) shall address the*
5 *need for—*

6 (A) *standardized measurement and*
7 *verification practices for reports made by all en-*
8 *tities participating in the registry, taking into*
9 *account—*

10 (i) *protocols and standards in use by*
11 *entities desiring to participate in the reg-*
12 *istry as of the date of development of the*
13 *methods and standards under paragraph*
14 *(1);*

15 (ii) *boundary issues, such as leakage*
16 *and shifted use;*

17 (iii) *avoidance of double counting of*
18 *greenhouse gas emissions and emission re-*
19 *ductions; and*

20 (iv) *such other factors as the des-*
21 *ignated agencies determine to be appro-*
22 *priate;*

23 (B) *measurement and verification of actions*
24 *taken to reduce, avoid, or sequester greenhouse*
25 *gas emissions;*

1 (C) *in coordination with the Secretary of*
2 *Agriculture, measurement of the results of the use*
3 *of carbon sequestration and carbon recapture*
4 *technologies, including—*

5 (i) *organic soil carbon sequestration*
6 *practices; and*

7 (ii) *forest preservation and reforest-*
8 *ation activities that adequately address the*
9 *issues of permanence, leakage, and*
10 *verification;*

11 (D) *such other measurement and*
12 *verification standards as the Secretary of Com-*
13 *merce, the Secretary of Agriculture, the Adminis-*
14 *trator, and the Secretary of Energy determine to*
15 *be appropriate; and*

16 (E) *other factors that, as determined by the*
17 *designated agencies, will allow entities to ade-*
18 *quately establish a fair and reliable measure-*
19 *ment and reporting system.*

20 (b) *REVIEW AND REVISION.—The designated agencies*
21 *shall periodically review, and revise as necessary, the meth-*
22 *ods and standards developed under subsection (a).*

23 (c) *PUBLIC PARTICIPATION.—The Secretary of Com-*
24 *merce shall—*

1 (1) *make available to the public for comment, in*
2 *draft form and for a period of at least 90 days, the*
3 *methods and standards developed under subsection*
4 *(a); and*

5 (2) *after the 90-day period referred to in para-*
6 *graph (1), in coordination with the Secretary of En-*
7 *ergy, the Secretary of Agriculture, and the Adminis-*
8 *trator, adopt the methods and standards developed*
9 *under subsection (a) for use in implementing the*
10 *database.*

11 *(d) EXPERTS AND CONSULTANTS.—*

12 (1) *IN GENERAL.—The designated agencies may*
13 *obtain the services of experts and consultants in the*
14 *private and nonprofit sectors in accordance with sec-*
15 *tion 3109 of title 5, United States Code, in the areas*
16 *of greenhouse gas measurement, certification, and*
17 *emission trading.*

18 (2) *AVAILABLE ARRANGEMENTS.—In obtaining*
19 *any service described in paragraph (1), the designated*
20 *agencies may use any available grant, contract, coop-*
21 *erative agreement, or other arrangement authorized*
22 *by law.*

23 **SEC. 1107. INDEPENDENT REVIEWS.**

24 (a) *IN GENERAL.—Not later than 5 years after the*
25 *date of enactment of this Act, and every 3 years thereafter,*

1 *the Comptroller General of the United States shall submit*
2 *to Congress a report that—*

3 (1) *describes the efficacy of the implementation*
4 *and operation of the database; and*

5 (2) *includes any recommendations for improve-*
6 *ments to this title and programs carried out under*
7 *this title—*

8 (A) *to achieve a consistent and technically*
9 *accurate record of greenhouse gas emissions,*
10 *emission reductions, and atmospheric concentra-*
11 *tions; and*

12 (B) *to achieve the purposes of this title.*

13 (b) *REVIEW OF SCIENTIFIC METHODS.—The des-*
14 *ignated agencies shall enter into an agreement with the Na-*
15 *tional Academy of Sciences under which the National Acad-*
16 *emy of Sciences shall—*

17 (1) *review the scientific methods, assumptions,*
18 *and standards used by the designated agencies in im-*
19 *plementing this title;*

20 (2) *not later than 4 years after the date of enact-*
21 *ment of this Act, submit to Congress a report that de-*
22 *scribes any recommendations for improving—*

23 (A) *those methods and standards; and*

1 (B) related elements of the programs, and
2 structure of the database, established by this title;
3 and

4 (3) regularly review and update as appropriate
5 the list of anthropogenic climate-forcing emissions
6 with significant global warming potential described
7 in section 1102(8)(G).

8 **SEC. 1108. REVIEW OF PARTICIPATION.**

9 (a) *IN GENERAL.*—Not later than 5 years after the
10 date of enactment of this Act, the Director of the Office of
11 National Climate Change Policy shall determine whether
12 the reports submitted to the registry under section
13 1105(c)(1) represent less than 60 percent of the national
14 aggregate anthropogenic greenhouse gas emissions.

15 (b) *INCREASED APPLICABILITY OF REQUIREMENTS.*—
16 If the Director of the Office of National Climate Change
17 Policy determines under subsection (a) that less than 60
18 percent of the aggregate national anthropogenic greenhouse
19 gas emissions are being reported to the registry—

20 (1) the reporting requirements under section
21 1105(c)(1) shall apply to all entities (except entities
22 exempted under section 1105(c)(3)), regardless of any
23 participation or nonparticipation by the entities in
24 the registry; and

1 (2) *each entity shall submit a report described in*
2 *section 1105(c)(1)—*

3 (A) *not later than the earlier of—*

4 (i) *April 30 of the calendar year im-*
5 *mediately following the year in which the*
6 *Director of the Office of National Climate*
7 *Change Policy makes the determination*
8 *under subsection (a); or*

9 (ii) *the date that is 1 year after the*
10 *date on which the Director of the Office of*
11 *National Climate Change Policy makes the*
12 *determination under subsection (a); and*

13 (B) *annually thereafter.*

14 (c) *RESOLUTION OF DISAPPROVAL.—For the purposes*
15 *of this section, the determination of the Director of the Of-*
16 *fice of National Climate Change Policy under subsection (a)*
17 *shall be considered to be a major rule (as defined in section*
18 *804(2) of title 5, United States Code) subject to the congres-*
19 *sional disapproval procedure under section 802 of title 5,*
20 *United States Code.*

21 **SEC. 1109. ENFORCEMENT.**

22 *If an entity that is required to report greenhouse gas*
23 *emissions under section 1105(c)(1) or 1108 fails to comply*
24 *with that requirement, the Attorney General may, at the*
25 *request of the designated agencies, bring a civil action in*

1 *United States district court against the entity to impose*
2 *on the entity a civil penalty of not more than \$25,000 for*
3 *each day for which the entity fails to comply with that re-*
4 *quirement.*

5 **SEC. 1110. REPORT ON STATUTORY CHANGES AND HARMO-**
6 **NIZATION.**

7 *Not later than 3 years after the date of enactment of*
8 *this Act, the President shall submit to Congress a report*
9 *that describes any modifications to this title or any other*
10 *provision of law that are necessary to improve the accuracy*
11 *or operation of the database and related programs under*
12 *this title.*

13 **SEC. 1111. AUTHORIZATION OF APPROPRIATIONS.**

14 *There are authorized to be appropriated such sums as*
15 *are necessary to carry out this title.*

16 **DIVISION E—ENHANCING RE-**
17 **SEARCH, DEVELOPMENT, AND**
18 **TRAINING**

19 **TITLE XII—ENERGY RESEARCH**
20 **AND DEVELOPMENT PROGRAMS**

21 **SEC. 1201. SHORT TITLE.**

22 *This division may be cited as the “Energy Science and*
23 *Technology Enhancement Act of 2002”.*

24 **SEC. 1202. FINDINGS.**

25 *The Congress finds the following:*

1 (1) *A coherent national energy strategy requires*
2 *an energy research and development program that*
3 *supports basic energy research and provides mecha-*
4 *nisms to develop, demonstrate, and deploy new energy*
5 *technologies in partnership with industry.*

6 (2) *An aggressive national energy research, de-*
7 *velopment, demonstration, and technology deployment*
8 *program is an integral part of a national climate*
9 *change strategy, because it can reduce—*

10 (A) *United States energy intensity by 1.9*
11 *percent per year from 1999 to 2020;*

12 (B) *United States energy consumption in*
13 *2020 by 8 quadrillion Btu from otherwise ex-*
14 *pected levels; and*

15 (C) *United States carbon dioxide emissions*
16 *from expected levels by 166 million metric tons*
17 *in carbon equivalent in 2020.*

18 (3) *An aggressive national energy research, de-*
19 *velopment, demonstration, and technology deployment*
20 *program can help maintain domestic United States*
21 *production of energy, increase United States hydro-*
22 *carbon reserves by 14 percent, and lower natural gas*
23 *prices by 20 percent, compared to estimates for 2020.*

24 (4) *An aggressive national energy research, de-*
25 *velopment, demonstration, and technology deployment*

1 *program is needed if United States suppliers and*
2 *manufacturers are to compete in future markets for*
3 *advanced energy technologies.*

4 **SEC. 1203. DEFINITIONS.**

5 *In this title:*

6 (1) *DEPARTMENT.*—*The term “Department”*
7 *means the Department of Energy.*

8 (2) *DEPARTMENTAL MISSION.*—*The term “de-*
9 *partmental mission” means any of the functions vest-*
10 *ed in the Secretary of Energy by the Department of*
11 *Energy Organization Act (42 U.S.C. 7101 et seq.) or*
12 *other law.*

13 (3) *INSTITUTION OF HIGHER EDUCATION.*—*The*
14 *term “institution of higher education” has the mean-*
15 *ing given that term in section 1201(a) of the Higher*
16 *Education Act of 1965 (20 U.S.C. 1141(a));*

17 (4) *NATIONAL LABORATORY.*—*The term “Na-*
18 *tional Laboratory” means any of the following multi-*
19 *purpose laboratories owned by the Department of*
20 *Energy—*

21 (A) *Argonne National Laboratory;*

22 (B) *Brookhaven National Laboratory;*

23 (C) *Idaho National Engineering and Envi-*
24 *ronmental Laboratory;*

1 (D) *Lawrence Berkeley National Labora-*
2 *tory;*

3 (E) *Lawrence Livermore National Labora-*
4 *tory;*

5 (F) *Los Alamos National Laboratory;*

6 (G) *National Energy Technology Labora-*
7 *tory;*

8 (H) *National Renewable Energy Labora-*
9 *tory;*

10 (I) *Oak Ridge National Laboratory;*

11 (J) *Pacific Northwest National Laboratory;*

12 *or*

13 (K) *Sandia National Laboratory.*

14 (5) *SECRETARY.*—*The term “Secretary” means*
15 *the Secretary of Energy.*

16 (6) *TECHNOLOGY DEPLOYMENT.*—*The term*
17 *“technology deployment” means activities to promote*
18 *acceptance and utilization of technologies in commer-*
19 *cial application, including activities undertaken pur-*
20 *suant to section 7 of the Federal Nonnuclear Energy*
21 *Research and Development Act of 1974 (42 U.S.C.*
22 *5906) or section 6 of the Renewable Energy and En-*
23 *ergy Efficiency Technology Competitiveness Act of*
24 *1989 (42 U.S.C. 12007).*

1 **SEC. 1204. CONSTRUCTION WITH OTHER LAWS.**

2 *Except as otherwise provided in this title and title*
3 *XIV, the Secretary shall carry out the research, develop-*
4 *ment, demonstration, and technology deployment programs*
5 *authorized by this title in accordance with the Atomic En-*
6 *ergy Act of 1954 (42 U.S.C. 2011 et seq.), the Federal Non-*
7 *nuclear Research and Development Act of 1974 (42 U.S.C.*
8 *5901 et seq.), the Energy Policy Act of 1992 (42 U.S.C.*
9 *13201 et seq.), or any other Act under which the Secretary*
10 *is authorized to carry out such activities.*

11 **Subtitle A—Energy Efficiency**

12 **SEC. 1211. ENHANCED ENERGY EFFICIENCY RESEARCH AND**
13 **DEVELOPMENT.**

14 (a) *PROGRAM DIRECTION.*—*The Secretary shall con-*
15 *duct balanced energy research, development, demonstration,*
16 *and technology deployment programs to enhance energy ef-*
17 *iciency in buildings, industry, power technologies, and*
18 *transportation.*

19 (b) *PROGRAM GOALS.*—

20 (1) *ENERGY-EFFICIENT HOUSING.*—*The goal of*
21 *the energy-efficient housing program shall be to de-*
22 *velop, in partnership with industry, enabling tech-*
23 *nologies (including lighting technologies), designs,*
24 *production methods, and supporting activities that*
25 *will, by 2010—*

1 (A) cut the energy use of new housing by 50
2 percent, and

3 (B) reduce energy use in existing homes by
4 30 percent.

5 (2) *INDUSTRIAL ENERGY EFFICIENCY.*—*The goal*
6 *of the industrial energy efficiency program shall be to*
7 *develop, in partnership with industry, enabling tech-*
8 *nologies, designs, production methods, and supporting*
9 *activities that will, by 2010, enable energy-intensive*
10 *industries such as the following industries to reduce*
11 *their energy intensity by at least 25 percent—*

12 (A) *the wood product manufacturing indus-*
13 *try;*

14 (B) *the pulp and paper industry;*

15 (C) *the petroleum and coal products manu-*
16 *facturing industry;*

17 (D) *the mining industry;*

18 (E) *the chemical manufacturing industry;*

19 (F) *the glass and glass product manufac-*
20 *turing industry;*

21 (G) *the iron and steel mills and ferroalloy*
22 *manufacturing industry;*

23 (H) *the primary aluminum production in-*
24 *dustry;*

25 (I) *the foundries industry; and*

1 *(J) United States agriculture.*

2 (3) *TRANSPORTATION ENERGY EFFICIENCY.—The*
3 *goal of the transportation energy efficiency program*
4 *shall be to develop, in partnership with industry,*
5 *technologies that will enable the achievement—*

6 (A) *by 2010, passenger automobiles with a*
7 *fuel economy of 80 miles per gallon;*

8 (B) *by 2010, light trucks (classes 1 and 2a)*
9 *with a fuel economy of 60 miles per gallon;*

10 (C) *by 2010, medium trucks and buses*
11 *(classes 2b through 6 and class 8 transit buses)*
12 *with a fuel economy, in ton-miles per gallon,*
13 *that is three times that of year 2000 equivalent*
14 *vehicles;*

15 (D) *by 2010, heavy trucks (classes 7 and 8)*
16 *with a fuel economy, in ton-miles per gallon,*
17 *that is two times that of year 2000 equivalent*
18 *vehicles; and*

19 (E) *by 2015, the production of fuel-cell pow-*
20 *ered passenger vehicles with a fuel economy of*
21 *110 miles per gallon.*

22 (4) *ENERGY EFFICIENT DISTRIBUTED GENERA-*
23 *TION.—The goals of the energy efficient on-site gen-*
24 *eration program shall be to help remove environ-*
25 *mental and regulatory barriers to on-site, or distrib-*

1 *uted, generation and combined heat and power by de-*
2 *veloping technologies by 2015 that achieve—*

3 *(A) electricity generating efficiencies greater*
4 *than 40 percent for on-site generation tech-*
5 *nologies based upon natural gas, including fuel*
6 *cells, microturbines, reciprocating engines and*
7 *industrial gas turbines;*

8 *(B) combined heat and power total (electric*
9 *and thermal) efficiencies of more than 85 per-*
10 *cent;*

11 *(C) fuel flexibility to include hydrogen,*
12 *biofuels and natural gas;*

13 *(D) near zero emissions of pollutants that*
14 *form smog and acid rain;*

15 *(E) reduction of carbon dioxide emissions*
16 *by at least 40 percent;*

17 *(F) packaged system integration at end user*
18 *facilities providing complete services in heating,*
19 *cooling, electricity and air quality; and*

20 *(G) increased reliability for the consumer*
21 *and greater stability for the national electricity*
22 *grid.*

23 *(c) AUTHORIZATION OF APPROPRIATIONS.—There are*
24 *authorized to be appropriated to the Secretary for carrying*

1 *out research, development, demonstration, and technology*
2 *deployment activities under this subtitle—*

3 (1) \$700,000,000 for fiscal year 2003;

4 (2) \$784,000,000 for fiscal year 2004;

5 (3) \$878,000,000 for fiscal year 2005; and

6 (4) \$983,000,000 for fiscal year 2006.

7 (d) *LIMITATION ON USE OF FUNDS.—None of the*
8 *funds authorized to be appropriated in subsection (c) may*
9 *be used for the following programs of the Department—*

10 (1) *Weatherization Assistance Program;*

11 (2) *State Energy Program; or*

12 (3) *Federal Energy Management Program.*

13 **SEC. 1212. ENERGY EFFICIENCY SCIENCE INITIATIVE.**

14 (a) *ESTABLISHMENT AND AUTHORIZATION OF APPRO-*
15 *PRIATIONS.—From amounts authorized under section*
16 *1211(c), there are authorized to be appropriated not more*
17 *than \$50,000,000 in any fiscal year, for an Energy Effi-*
18 *ciency Science Initiative to be managed by the Assistant*
19 *Secretary in the Department with responsibility for energy*
20 *conservation under section 203(a)(9) of the Department of*
21 *Energy Organization Act (42 U.S.C. 7133(a)(9)), in con-*
22 *sultation with the Director of the Office of Science, for*
23 *grants to be competitively awarded and subject to peer re-*
24 *view for research relating to energy efficiency.*

1 (b) *REPORT.*—*The Secretary of Energy shall submit*
2 *to the Committee on Science and the Committee on Appro-*
3 *priations of the United States House of Representatives,*
4 *and to the Committee on Energy and Natural Resources*
5 *and the Committee on Appropriations of the United States*
6 *Senate, an annual report on the activities of the Energy*
7 *Efficiency Science Initiative, including a description of the*
8 *process used to award the funds and an explanation of how*
9 *the research relates to energy efficiency.*

10 **SEC. 1213. NEXT GENERATION LIGHTING INITIATIVE.**

11 (a) *ESTABLISHMENT.*—*There is established in the De-*
12 *partment a Next Generation Lighting Initiative to research,*
13 *develop, and conduct demonstration activities on advanced*
14 *solid-state lighting technologies based on white light emit-*
15 *ting diodes.*

16 (b) *OBJECTIVES.*—

17 (1) *IN GENERAL.*—*The objectives of the initiative*
18 *shall be to develop, by 2011, advanced solid-state*
19 *lighting technologies based on white light emitting di-*
20 *odes that, compared to incandescent and fluorescent*
21 *lighting technologies, are—*

22 (A) *longer lasting;*

23 (B) *more energy-efficient; and*

24 (C) *cost-competitive.*

1 (2) *INORGANIC WHITE LIGHT EMITTING DIODE.*—

2 *The objective of the initiative with respect to inor-*
3 *ganic white light emitting diodes shall be to develop*
4 *an inorganic white light emitting diode that has an*
5 *efficiency of 160 lumens per watt and a 10-year life-*
6 *time.*

7 (3) *ORGANIC WHITE LIGHT EMITTING DIODE.*—

8 *The objective of the initiative with respect to organic*
9 *white light emitting diodes shall be to develop an or-*
10 *ganic white light emitting diode with an efficiency of*
11 *100 lumens per watt with a 5-year lifetime that—*

12 (A) *illuminates over a full color spectrum;*

13 (B) *covers large areas over flexible surfaces;*

14 *and*

15 (C) *does not contain harmful pollutants*
16 *typical of fluorescent lamps such as mercury.*

17 (c) *CONSORTIUM.*—

18 (1) *IN GENERAL.*—*The Secretary shall initiate*
19 *and manage basic and manufacturing-related re-*
20 *search on advanced solid-state lighting technologies*
21 *based on white light emitting diodes for the initiative,*
22 *in cooperation with the Next Generation Lighting*
23 *Initiative Consortium.*

24 (2) *COMPOSITION.*—*The consortium shall be*
25 *composed of firms, national laboratories, and other*

1 *entities so that the consortium is representative of the*
2 *United States solid-state lighting research, develop-*
3 *ment, and manufacturing expertise as a whole.*

4 (3) *FUNDING.*—*The consortium shall be funded*
5 *by—*

6 (A) *participation fees; and*

7 (B) *grants provided under subsection (e)(1).*

8 (4) *ELIGIBILITY.*—*To be eligible to receive a*
9 *grant under subsection (e)(1), the consortium shall—*

10 (A) *enter into a consortium participation*
11 *agreement that—*

12 (i) *is agreed to by all participants;*

13 *and*

14 (ii) *describes the responsibilities of*
15 *participants, participation fees, and the*
16 *scope of research activities; and*

17 (B) *develop an annual program plan.*

18 (5) *INTELLECTUAL PROPERTY.*—*Participants in*
19 *the consortium shall have royalty-free nonexclusive*
20 *rights to use intellectual property derived from con-*
21 *sortium research conducted under subsection (e)(1).*

22 (d) *PLANNING BOARD.*—

23 (1) *IN GENERAL.*—*Not later than 90 days after*
24 *the establishment of the consortium, the Secretary*
25 *shall establish and appoint the members of a plan-*

1 *ning board, to be known as the “Next Generation*
2 *Lighting Initiative Planning Board”, to assist the*
3 *Secretary in carrying out this section.*

4 (2) *COMPOSITION.—The planning board shall be*
5 *composed of—*

6 (A) *four members from universities, na-*
7 *tional laboratories, and other individuals with*
8 *expertise in advanced solid-state lighting and*
9 *technologies based on white light emitting diodes;*
10 *and*

11 (B) *three members from a list of not less*
12 *than six nominees from industry submitted by*
13 *the consortium.*

14 (3) *STUDY.—*

15 (A) *IN GENERAL.—Not later than 90 days*
16 *after the date on which the Secretary appoints*
17 *members to the planning board, the planning*
18 *board shall complete a study on strategies for the*
19 *development and implementation of advanced*
20 *solid-state lighting technologies based on white*
21 *light emitting diodes.*

22 (B) *REQUIREMENTS.—The study shall de-*
23 *velop a comprehensive strategy to implement,*
24 *through the initiative, the use of white light*

1 *emitting diodes to increase energy efficiency and*
2 *enhance United States competitiveness.*

3 (C) *IMPLEMENTATION.*—*As soon as prac-*
4 *ticable after the study is submitted to the Sec-*
5 *retary, the Secretary shall implement the initia-*
6 *tive in accordance with the recommendations of*
7 *the planning board.*

8 (4) *TERMINATION.*—*The planning board shall*
9 *terminate upon completion of the study under para-*
10 *graph (3).*

11 (e) *GRANTS.*—

12 (1) *FUNDAMENTAL RESEARCH.*—*The Secretary,*
13 *through the consortium, shall make grants to conduct*
14 *basic and manufacturing-related research related to*
15 *advanced solid-state lighting technologies based on*
16 *white light emitting diode technologies.*

17 (2) *TECHNOLOGY DEVELOPMENT AND DEM-*
18 *ONSTRATION.*—*The Secretary shall enter into grants,*
19 *contracts, and cooperative agreements to conduct or*
20 *promote technology research, development, or dem-*
21 *onstration activities. In providing funding under this*
22 *paragraph, the Secretary shall give preference to par-*
23 *ticipants in the consortium.*

24 (3) *CONTINUING ASSESSMENT.*—*The consortium,*
25 *in collaboration with the Secretary, shall formulate*

1 *annual operating and performance objectives, develop*
2 *technology roadmaps, and recommend research and*
3 *development priorities for the initiative. The Sec-*
4 *retary may also establish or utilize advisory commit-*
5 *tees, or enter into appropriate arrangements with the*
6 *National Academy of Sciences, to conduct periodic re-*
7 *views of the initiative. The Secretary shall consider*
8 *the results of such assessment and review activities in*
9 *making funding decisions under paragraphs (1) and*
10 *(2) of this subsection.*

11 (4) *TECHNICAL ASSISTANCE.—The National*
12 *Laboratories shall cooperate with and provide tech-*
13 *nical assistance to persons carrying out projects*
14 *under the initiative.*

15 (5) *AUDITS.—*

16 (A) *IN GENERAL.—The Secretary shall re-*
17 *tain an independent, commercial auditor to de-*
18 *termine the extent to which funds made available*
19 *under this section have been expended in a man-*
20 *ner that is consistent with the objectives under*
21 *subsection (b) and, in the case of funds made*
22 *available to the consortium, the annual program*
23 *plan of the consortium under subsection*
24 *(c)(4)(B).*

1 (B) *REPORTS.*—*The auditor shall submit to*
2 *Congress, the Secretary, and the Comptroller*
3 *General of the United States an annual report*
4 *containing the results of the audit.*

5 (6) *APPLICABLE LAW.*—*Grants, contracts, and*
6 *cooperative agreements under this section shall not be*
7 *subject to the Federal Acquisition Regulation.*

8 (f) *PROTECTION OF INFORMATION.*—*Information ob-*
9 *tained by the Federal Government on a confidential basis*
10 *under this section shall be considered to constitute trade se-*
11 *crets and commercial or financial information obtained*
12 *from a person and privileged or confidential under section*
13 *552(b)(4) of title 5, United States Code.*

14 (g) *AUTHORIZATION OF APPROPRIATIONS.*—*In addi-*
15 *tion to amounts authorized under section 1211(c), there are*
16 *authorized to be appropriated for activities under this sec-*
17 *tion \$50,000,000 for each of fiscal years 2003 through 2011.*

18 (h) *DEFINITIONS.*—*In this section:*

19 (1) *ADVANCED SOLID-STATE LIGHTING.*—*The*
20 *term “advanced solid-state lighting” means a*
21 *semiconducting device package and delivery system*
22 *that produces white light using externally applied*
23 *voltage.*

1 (2) *CONSORTIUM.*—The term “consortium”
2 means the Next Generation Lighting Initiative Con-
3 sortium under subsection (c).

4 (3) *INITIATIVE.*—The term “initiative” means
5 the Next Generation Lighting Initiative established
6 under subsection (a).

7 (4) *INORGANIC WHITE LIGHT EMITTING DIODE.*—
8 The term “inorganic white light emitting diode”
9 means an inorganic semiconducting package that pro-
10 duces white light using externally applied voltage.

11 (5) *ORGANIC WHITE LIGHT EMITTING DIODE.*—
12 The term “organic white light emitting diode” means
13 an organic semiconducting compound that produces
14 white light using externally applied voltage.

15 (6) *WHITE LIGHT EMITTING DIODE.*—The term
16 “white light emitting diode” means—

17 (A) an inorganic white light emitting diode;

18 or

19 (B) an organic white light emitting diode.

20 **SEC. 1214. RAILROAD EFFICIENCY.**

21 (a) *ESTABLISHMENT.*—The Secretary shall, in co-
22 operation with the Secretaries of Transportation and De-
23 fense, and the Administrator of the Environmental Protec-
24 tion Agency, establish a public-private research partnership
25 involving the Federal Government, railroad carriers, loco-

1 *motive manufacturers, and the Association of American*
2 *Railroads. The goal of the initiative shall include devel-*
3 *oping and demonstrating locomotive technologies that in-*
4 *crease fuel economy, reduce emissions, improve safety, and*
5 *lower costs.*

6 (b) *AUTHORIZATION OF APPROPRIATIONS.—There are*
7 *authorized to be appropriated to carry out the requirements*
8 *of this section \$60,000,000 for fiscal year 2003 and*
9 *\$70,000,000 for fiscal year 2004.*

10 **SEC. 1215. HIGH POWER DENSITY INDUSTRY PROGRAM.**

11 *The Secretary shall establish a comprehensive research,*
12 *development, demonstration and deployment program to*
13 *improve energy efficiency of high power density facilities,*
14 *including data centers, server farms, and telecommuni-*
15 *cations facilities. Such program shall consider technologies*
16 *that provide significant improvement in thermal controls,*
17 *metering, load management, peak load reduction, or the ef-*
18 *ficient cooling of electronics.*

19 **SEC. 1216. RESEARCH REGARDING PRECIOUS METAL CA-**
20 **TALYSIS.**

21 *The Secretary of Energy may, for the purpose of devel-*
22 *oping improved industrial and automotive catalysts, carry*
23 *out research in the use of precious metals (excluding plat-*
24 *inum, palladium, and rhodium) in catalysis directly,*
25 *through national laboratories, or through grants to or coop-*

1 *erative agreements or contracts with public or nonprofit en-*
2 *tities. There are authorized to be appropriated to carry out*
3 *this section such sums as are necessary for fiscal years 2003*
4 *through 2006.*

5 ***Subtitle B—Renewable Energy***

6 ***SEC. 1221. ENHANCED RENEWABLE ENERGY RESEARCH*** 7 ***AND DEVELOPMENT.***

8 (a) *PROGRAM DIRECTION.*—*The Secretary shall con-*
9 *duct balanced energy research, development, demonstration,*
10 *and technology deployment programs to enhance the use of*
11 *renewable energy.*

12 (b) *PROGRAM GOALS.*—

13 (1) *WIND POWER.*—*The goals of the wind power*
14 *program shall be to develop, in partnership with in-*
15 *dustry, a variety of advanced wind turbine designs*
16 *and manufacturing technologies that are cost-competi-*
17 *tive with fossil-fuel generated electricity, with a focus*
18 *on developing advanced low wind speed technologies*
19 *that, by 2007, will enable the expanding utilization*
20 *of widespread class 3 and 4 winds.*

21 (2) *PHOTOVOLTAICS.*—*The goal of the photo-*
22 *voltaic program shall be to develop, in partnership*
23 *with industry, total photovoltaic systems with in-*
24 *stalled costs of \$4,000 per peak kilowatt by 2005 and*
25 *\$2,000 per peak kilowatt by 2015.*

1 (3) *SOLAR THERMAL ELECTRIC SYSTEMS.*—*The*
2 *goal of the solar thermal electric systems program*
3 *shall be to develop, in partnership with industry,*
4 *solar power technologies (including baseload solar*
5 *power) that are competitive with fossil-fuel generated*
6 *electricity by 2015, by combining high-efficiency and*
7 *high-temperature receivers with advanced thermal*
8 *storage and power cycles.*

9 (4) *BIOMASS-BASED POWER SYSTEMS.*—*The goal*
10 *of the biomass program shall be to develop, in part-*
11 *nership with industry, integrated power-generating*
12 *systems, advanced conversion, and feedstock tech-*
13 *nologies capable of producing electric power that is*
14 *cost-competitive with fossil-fuel generated electricity*
15 *by 2010, together with the production of fuels, chemi-*
16 *cals, and other products under paragraph (6).*

17 (5) *GEOTHERMAL ENERGY.*—*The goal of the geo-*
18 *thermal program shall be to develop, in partnership*
19 *with industry, technologies and processes based on ad-*
20 *vanced hydrothermal systems and advanced heat and*
21 *power systems, including geothermal heat pump tech-*
22 *nology, with a specific focus on—*

23 (A) *improving exploration and character-*
24 *ization technology to increase the probability of*

1 *drilling successful wells from 20 percent to 40*
2 *percent by 2006;*

3 *(B) reducing the cost of drilling by 2008 to*
4 *an average cost of \$150 per foot; and*

5 *(C) developing enhanced geothermal systems*
6 *technology with the potential to double the use-*
7 *able geothermal resource base.*

8 *(6) BIOFUELS.—The goal of the biofuels program*
9 *shall be to develop, in partnership with industry—*

10 *(A) advanced biochemical and thermo-*
11 *chemical conversion technologies capable of mak-*
12 *ing liquid and gaseous fuels from cellulosic feed-*
13 *stocks that are price-competitive with gasoline or*
14 *diesel in either internal combustion engines or*
15 *fuel cell vehicles by 2010; and*

16 *(B) advanced biotechnology processes capa-*
17 *ble of making biofuels, biobased polymers, and*
18 *chemicals, with particular emphasis on the de-*
19 *velopment of biorefineries that use enzyme based*
20 *processing systems.*

21 *For purposes of this paragraph, the term “cellulosic*
22 *feedstock” means any portion of a food crop not nor-*
23 *mally used in food production or any nonfood crop*
24 *grown for the purpose of producing biomass feedstock.*

1 (7) *HYDROGEN-BASED ENERGY SYSTEMS.*—*The*
2 *goals of the hydrogen program shall be to support re-*
3 *search and development on technologies for produc-*
4 *tion, storage, and use of hydrogen, including fuel cells*
5 *and, specifically, fuel-cell vehicle development activi-*
6 *ties under section 1211.*

7 (8) *HYDROPOWER.*—*The goal of the hydropower*
8 *program shall be to develop, in partnership with in-*
9 *dustry, a new generation of turbine technologies that*
10 *are less damaging to fish and aquatic ecosystems.*

11 (9) *ELECTRIC ENERGY SYSTEMS AND STOR-*
12 *AGE.*—*The goals of the electric energy and storage*
13 *program shall be to develop, in partnership with*
14 *industry—*

15 (A) *generators and transmission, distribu-*
16 *tion, and storage systems that combine high ca-*
17 *capacity with high efficiency;*

18 (B) *technologies to interconnect distributed*
19 *energy resources with electric power systems,*
20 *comply with any national interconnection stand-*
21 *ards, have a minimum 10-year useful life;*

22 (C) *advanced technologies to increase the*
23 *average efficiency of electric transmission facili-*
24 *ties in rural and remote areas, giving priority*
25 *for demonstrations to advanced transmission*

1 *technologies that are being or have been field*
2 *tested;*

3 *(D) the use of new transmission tech-*
4 *nologies, including flexible alternating current*
5 *transmission systems, composite conductor mate-*
6 *rials, advanced protection devices, controllers,*
7 *and other cost-effective methods and technologies;*

8 *(E) the use of superconducting materials in*
9 *power delivery equipment such as transmission*
10 *and distribution cables, transformers, and gen-*
11 *erators;*

12 *(F) energy management technologies for en-*
13 *terprises with aggregated loads and distributed*
14 *generation, such as power parks;*

15 *(G) economic and system models to measure*
16 *the costs and benefits of improved system per-*
17 *formance;*

18 *(H) hybrid distributed energy systems to*
19 *optimize two or more distributed or on-site gen-*
20 *eration technologies; and*

21 *(I) real-time transmission and distribution*
22 *system control technologies that provide for con-*
23 *tinual exchange of information between genera-*
24 *tion, transmission, distribution, and end-user fa-*
25 *cilities.*

1 (c) *SPECIAL PROJECTS.*—*In carrying out this section,*
2 *the Secretary shall demonstrate—*

3 (1) *the use of advanced wind power technology,*
4 *biomass, geothermal energy systems, and other renew-*
5 *able energy technologies to assist in delivering elec-*
6 *tricity to rural and remote locations;*

7 (2) *the combined use of wind power and coal*
8 *gasification technologies; and*

9 (3) *the use of high temperature superconducting*
10 *technology in projects to demonstrate the development*
11 *of superconductors that enhance the reliability, oper-*
12 *ational flexibility, or power-carrying capability of*
13 *electric transmission systems or increase the electrical*
14 *or operational efficiency of electric energy generation,*
15 *transmission, distribution and storage systems.*

16 (d) *FINANCIAL ASSISTANCE TO RURAL AREAS.*—*In*
17 *carrying out special projects under subsection (c), the Sec-*
18 *retary may provide financial assistance to rural electric co-*
19 *operatives and other rural entities.*

20 (e) *AUTHORIZATION OF APPROPRIATIONS.*—*There are*
21 *authorized to be appropriated to the Secretary for carrying*
22 *out research, development, demonstration, and technology*
23 *deployment activities under this subtitle—*

24 (1) *\$500,000,000 for fiscal year 2003;*

25 (2) *\$595,000,000 for fiscal year 2004;*

1 (3) \$683,000,000 for fiscal year 2005; and

2 (4) \$733,000,000 for fiscal year 2006, of which
3 \$100,000,000 may be allocated to meet the goals of
4 subsection (b)(1).

5 **SEC. 1222. BIOENERGY PROGRAMS.**

6 (a) *PROGRAM DIRECTION.*—The Secretary shall carry
7 out research, development, demonstration, and technology
8 development activities related to bioenergy, including pro-
9 grams under paragraphs (4) and (6) of section 1221(b).

10 (b) *AUTHORIZATION OF APPROPRIATIONS.*—

11 (1) *BIOPOWER ENERGY SYSTEMS.*—From
12 amounts authorized under section 1221(e), there are
13 authorized to be appropriated to the Secretary for
14 biopower energy systems—

15 (A) \$60,300,000 for fiscal year 2003;

16 (B) \$69,300,000 for fiscal year 2004;

17 (C) \$79,600,000 for fiscal year 2005; and

18 (D) \$86,250,000 for fiscal year 2006.

19 (2) *BIOFUELS ENERGY SYSTEMS.*—From
20 amounts authorized under section 1221(e), there are
21 authorized to be appropriated to the Secretary for
22 biofuels energy systems—

23 (A) \$57,500,000 for fiscal year 2003;

24 (B) \$66,125,000 for fiscal year 2004;

25 (C) \$76,000,000 for fiscal year 2005; and

1 (D) \$81,400,000 for fiscal year 2006.

2 (3) *INTEGRATED BIOENERGY RESEARCH AND DE-*
3 *VELOPMENT.*—*The Secretary may use funds author-*
4 *ized under paragraph (1) or (2) for programs,*
5 *projects, or activities that integrate applications for*
6 *both biopower and biofuels, including cross-cutting re-*
7 *search and development in feedstocks and economic*
8 *analysis.*

9 **SEC. 1223. HYDROGEN RESEARCH AND DEVELOPMENT.**

10 (a) *SHORT TITLE.*—*This section may be cited as the*
11 *“Hydrogen Future Act of 2002”.*

12 (b) *PURPOSES.*—*Section 102(b) of the Spark M. Mat-*
13 *sunaga Hydrogen Research, Development, and Demonstra-*
14 *tion Act of 1990 (42 U.S.C. 12401(b)) is amended by strik-*
15 *ing paragraphs (2) and (3) and inserting the following:*

16 “(2) to direct the Secretary to develop a program
17 of technology assessment, information transfer, and
18 education in which Federal agencies, members of the
19 transportation, energy, and other industries, and
20 other entities may participate;

21 “(3) to develop methods of hydrogen production
22 that minimize production of greenhouse gases, includ-
23 ing developing—

24 “(A) efficient production from nonrenewable
25 resources; and

1 “(B) cost-effective production from renew-
2 able resources such as biomass, geothermal, wind,
3 and solar energy; and

4 “(4) to foster the use of hydrogen as a major en-
5 ergy source, including developing the use of hydrogen
6 in—

7 “(A) isolated villages, islands, and commu-
8 nities in which other energy sources are not
9 available or are very expensive; and

10 “(B) foreign economic development, to avoid
11 environmental damage from increased fossil fuel
12 use.”.

13 (c) *REPORT TO CONGRESS*.—Section 103 of the Spark
14 *M. Matsunaga Hydrogen Research, Development, and Dem-*
15 *onstration Act of 1990 (42 U.S.C. 12402) is amended—*

16 (1) in subsection (a), by striking “January 1,
17 1999,” and inserting “1 year after the date of enact-
18 ment of the *Hydrogen Future Act of 2002*, and bien-
19 nially thereafter;”;

20 (2) in subsection (b), by striking paragraphs (1)
21 and (2) and inserting the following:

22 “(1) an analysis of hydrogen-related activities
23 throughout the United States Government to identify
24 productive areas for increased intragovernmental col-
25 laboration;

1 “(2) recommendations of the Hydrogen Technical
2 Advisory Panel established by section 108 for any im-
3 provements in the program that are needed, including
4 recommendations for additional legislation; and

5 “(3) to the extent practicable, an analysis of
6 State and local hydrogen-related activities.”; and

7 (3) by adding at the end the following:

8 “(c) COORDINATION PLAN.—The report under sub-
9 section (a) shall be based on a comprehensive coordination
10 plan for hydrogen energy prepared by the Secretary in con-
11 sultation with other Federal agencies.”.

12 (d) HYDROGEN RESEARCH AND DEVELOPMENT.—Sec-
13 tion 104 of the Spark M. Matsunaga Hydrogen Research,
14 Development, and Demonstration Act of 1990 (42 U.S.C.
15 12403) is amended—

16 (1) in subsection (b)(1), by striking “market-
17 place;” and inserting “marketplace, including foreign
18 markets, particularly where an energy infrastructure
19 is not well developed;”;

20 (2) in subsection (e), by striking “this chapter”
21 and inserting “this Act”;

22 (3) by striking subsection (g) and inserting the
23 following:

24 “(g) COST SHARING.—

1 “(1) *INABILITY TO FUND ENTIRE COST.*—*The*
2 *Secretary shall not consider a proposal submitted by*
3 *a person from industry unless the proposal contains*
4 *a certification that—*

5 “(A) *reasonable efforts to obtain non-Fed-*
6 *eral funding in the amount necessary to pay 100*
7 *percent of the cost of the project have been made;*
8 *and*

9 “(B) *non-Federal funding in that amount*
10 *could not reasonably be obtained.*

11 “(2) *NON-FEDERAL SHARE.*—

12 “(A) *IN GENERAL.*—*The Secretary shall re-*
13 *quire a commitment from non-Federal sources of*
14 *at least 25 percent of the cost of the project.*

15 “(B) *REDUCTION OR ELIMINATION.*—*The*
16 *Secretary may reduce or eliminate the cost-shar-*
17 *ing requirement under subparagraph (A) for the*
18 *proposed research and development project, in-*
19 *cluding for technical analyses, economic anal-*
20 *yses, outreach activities, and educational pro-*
21 *grams, if the Secretary determines that reduction*
22 *or elimination is necessary to achieve the objec-*
23 *tives of this Act.”;*

24 (4) *in subsection (i), by striking “this chapter”*
25 *and inserting “this Act”.*

1 (e) *DEMONSTRATIONS.*—Section 105 of the Spark M.
2 *Matsunaga Hydrogen Research, Development, and Dem-*
3 *onstration Act of 1990 (42 U.S.C. 12404) is amended by*
4 *striking subsection (c) and inserting the following:*

5 “(c) *NON-FEDERAL SHARE.*—

6 “(1) *IN GENERAL.*—Except as provided in para-
7 *graph (2), the Secretary shall require a commitment*
8 *from non-Federal sources of at least 50 percent of the*
9 *costs directly relating to a demonstration project*
10 *under this section.*

11 “(2) *REDUCTION.*—The Secretary may reduce
12 *the non-Federal requirement under paragraph (1) if*
13 *the Secretary determines that the reduction is appro-*
14 *priate considering the technological risks involved in*
15 *the project and is necessary to meet the objectives of*
16 *this Act.”.*

17 (f) *TECHNOLOGY TRANSFER.*—Section 106 of the
18 *Spark M. Matsunaga Hydrogen Research, Development,*
19 *and Demonstration Act of 1990 (42 U.S.C. 12405) is*
20 *amended—*

21 (1) *in subsection (a)—*

22 (A) *in the first sentence—*

23 (i) *by striking “The Secretary shall*
24 *conduct a program designed to accelerate*

1 wider application” and inserting the fol-
2 lowing:

3 “(1) *IN GENERAL.*—*The Secretary shall conduct*
4 *a program designed to—*

5 “(A) *accelerate wider application*”; and

6 (ii) *by striking “private sector” and*
7 *inserting “private sector; and*

8 “(B) *accelerate wider application of hydro-*
9 *gen technologies in foreign countries to increase*
10 *the global market for the technologies and foster*
11 *global economic development without harmful en-*
12 *vironmental effects.*”; and

13 (B) *in the second sentence, by striking “The*
14 *Secretary” and inserting the following:*

15 “(2) *ADVICE AND ASSISTANCE.*—*The Secretary*”;

16 and

17 (2) *in subsection (b)—*

18 (A) *in paragraph (2), by redesignating sub-*
19 *paragraphs (A) through (D) as clauses (i)*
20 *through (iv), respectively, and indenting appro-*
21 *priately;*

22 (B) *by redesignating paragraphs (1) and*
23 *(2) as subparagraphs (A) and (B), respectively,*
24 *and indenting appropriately;*

1 (C) by striking “The Secretary, in” and in-
2 serting the following:

3 “(1) *IN GENERAL.*—*The Secretary, in*”;

4 (D) by striking “The information” and in-
5 serting the following:

6 “(2) *ACTIVITIES.*—*The information*”; and

7 (E) in paragraph (1) (as designated by sub-
8 paragraph (C))—

9 (i) in subparagraph (A) (as redesign-
10 ated by subparagraph (B)), by striking
11 “an inventory” and inserting “an update of
12 the inventory”; and

13 (ii) in subparagraph (B) (as redesign-
14 ated by subparagraph (B)), by striking
15 “develop” and all that follows through “to
16 improve” and inserting “develop with the
17 National Aeronautics and Space Adminis-
18 tration, the Department of Energy, other
19 Federal agencies as appropriate, and indus-
20 try, an information exchange program to
21 improve”.

22 (g) *TECHNICAL PANEL REVIEW.*—

23 (1) *IN GENERAL.*—*Section 108 of the Spark M.*
24 *Matsunaga Hydrogen Research, Development, and*

1 *Demonstration Act of 1990 (42 U.S.C. 12407) is*
2 *amended—*

3 *(A) in subsection (b)—*

4 *(i) by striking “(b) MEMBERSHIP.—*

5 *The technical panel shall be appointed” and*
6 *inserting the following:*

7 “*(b) MEMBERSHIP.—*

8 “*(1) IN GENERAL.—The technical panel shall be*
9 *comprised of not fewer than 9 nor more than 15*
10 *members appointed”;*

11 *(ii) by striking the second sentence and*
12 *inserting the following:*

13 “*(2) TERMS.—*

14 “*(A) IN GENERAL.—The term of a member*
15 *of the technical panel shall be not more than 3*
16 *years.*

17 “*(B) STAGGERED TERMS.—The Secretary*
18 *may appoint members of the technical panel in*
19 *a manner that allows the terms of the members*
20 *-serving at any time to expire at spaced intervals*
21 *so as to ensure continuity in the functioning of*
22 *the technical panel.*

23 “*(C) REAPPOINTMENT.—A member of the*
24 *technical panel whose term expires may be re-*
25 *appointed.”; and*

1 (iii) by striking “The technical panel
2 shall have a chairman,” and inserting the
3 following:

4 “(3) CHAIRPERSON.—The technical panel shall
5 have a chairperson,”; and

6 (B) in subsection (d)—

7 (i) in the matter preceding paragraph
8 (1), by striking “the following items”;

9 (ii) in paragraph (1), by striking
10 “and” at the end;

11 (iii) in paragraph (2), by striking the
12 period at the end and inserting “; and”;

13 and

14 (iv) by adding at the end the following:

15 “(3) the plan developed by the interagency task
16 force under section 202(b) of the Hydrogen Future Act
17 of 1996.”.

18 (2) NEW APPOINTMENTS.—Not later than 180
19 days after the date of enactment of this Act, the
20 Secretary—

21 (A) shall review the membership composi-
22 tion of the Hydrogen Technical Advisory Panel;
23 and

24 (B) may appoint new members consistent
25 with the amendments made by subsection (a).

1 (h) *AUTHORIZATION OF APPROPRIATIONS.*—Section
2 *109 of the Spark M. Matsunaga Hydrogen Research, Devel-*
3 *opment, and Demonstration Act of 1990 (42 U.S.C. 12408)*
4 *is amended—*

5 (1) *in paragraph (8), by striking “and”;*

6 (2) *in paragraph (9), by striking the period and*
7 *inserting a semicolon; and*

8 (3) *by adding at the end the following:*

9 “(10) \$65,000,000 for fiscal year 2003;

10 “(11) \$70,000,000 for fiscal year 2004;

11 “(12) \$75,000,000 for fiscal year 2005; and

12 “(13) \$80,000,000 for fiscal year 2006.”.

13 (i) *FUEL CELLS.*—

14 (1) *INTEGRATION OF FUEL CELLS WITH HYDRO-*
15 *GEN PRODUCTION SYSTEMS.*—Section 201 of the *Hy-*
16 *drogen Future Act of 1996 is amended—*

17 (A) *in subsection (a) by striking “(a) Not*
18 *later than 180 days after the date of enactment*
19 *of this section, and subject” and inserting “(a)*
20 *IN GENERAL.—Subject”;*

21 (B) *by striking “with—” and all that fol-*
22 *lows and inserting “into Federal, State, and*
23 *local government facilities for stationary and*
24 *transportation applications.”;*

1 (C) in subsection (b), by striking “gas is”
2 and inserting “basis”;

3 (D) in subsection (c)(2), by striking “sys-
4 tems described in subsections (a)(1) and (a)(2)”
5 and inserting “projects proposed”; and

6 (E) by striking subsection (d) and inserting
7 the following:

8 “(d) *NON-FEDERAL SHARE.*—

9 “(1) *IN GENERAL.*—Except as provided in para-
10 graph (2), the Secretary shall require a commitment
11 from non-Federal sources of at least 50 percent of the
12 costs directly relating to a demonstration project
13 under this section.

14 “(2) *REDUCTION.*—The Secretary may reduce
15 the non-Federal requirement under paragraph (1) if
16 the Secretary determines that the reduction is appro-
17 priate considering the technological risks involved in
18 the project and is necessary to meet the objectives of
19 this Act.”.

20 (2) *COOPERATIVE AND COST-SHARING AGREE-*
21 *MENTS; INTEGRATION OF TECHNICAL INFORMATION.*—
22 Title II of the Hydrogen Future Act of 1996 (42
23 U.S.C. 12403 note; Public Law 104–271) is amended
24 by striking section 202 and inserting the following:

1 **“SEC. 202. INTERAGENCY TASK FORCE.**

2 “(a) *ESTABLISHMENT.*—Not later than 120 days after
3 the date of enactment of this section, the Secretary shall
4 establish an interagency task force led by a Deputy Assist-
5 ant Secretary of the Department of Energy and comprised
6 of representatives of—

7 “(1) the Office of Science and Technology Policy;

8 “(2) the Department of Transportation;

9 “(3) the Department of Defense;

10 “(4) the Department of Commerce (including the
11 National Institute for Standards and Technology);

12 “(5) the Environmental Protection Agency;

13 “(6) the National Aeronautics and Space Ad-
14 ministration; and

15 “(7) other agencies as appropriate.

16 “(b) *DUTIES.*—

17 “(1) *IN GENERAL.*—The task force shall develop
18 a plan for carrying out this title.

19 “(2) *FOCUS OF PLAN.*—The plan shall focus on
20 development and demonstration of integrated systems
21 and components for—

22 “(A) hydrogen production, storage, and use
23 in Federal, State, and local government build-
24 ings and vehicles;

1 “(B) hydrogen-based infrastructure for buses
2 and other fleet transportation systems that in-
3 clude zero-emission vehicles; and

4 “(C) hydrogen-based distributed power gen-
5 eration, including the generation of combined
6 heat, power, and hydrogen.

7 **“SEC. 203. COOPERATIVE AND COST-SHARING AGREE-**
8 **MENTS.**

9 “The Secretary shall enter into cooperative and cost-
10 sharing agreements with Federal, State, and local agencies
11 for participation by the agencies in demonstrations at fa-
12 cilities administered by the agencies, with the aim of inte-
13 grating high efficiency hydrogen systems using fuel cells
14 into the facilities to provide immediate benefits and pro-
15 mote a smooth transition to hydrogen as an energy source.

16 **“SEC. 204. INTEGRATION AND DISSEMINATION OF TECH-**
17 **NICAL INFORMATION.**

18 “The Secretary shall—

19 “(1) integrate all the technical information that
20 becomes available as a result of development and dem-
21 onstration projects under this title;

22 “(2) make the information available to all Fed-
23 eral and State agencies for dissemination to all inter-
24 ested persons; and

1 “(3) foster the exchange of generic, nonproprietary information and technology developed under
2 this title among industry, academia, and Federal,
3 State, and local governments, to help the United
4 States economy attain the economic benefits of the in-
5 formation and technology.
6

7 **“SEC. 205. AUTHORIZATION OF APPROPRIATIONS.**

8 “*There are authorized to be appropriated, for activities*
9 *under this title—*

10 “(1) \$25,000,000 for fiscal year 2003;

11 “(2) \$30,000,000 for fiscal year 2004;

12 “(3) \$35,000,000 for fiscal year 2005; and

13 “(4) \$40,000,000 for fiscal year 2006.”.

14 ***Subtitle C—Fossil Energy***

15 **SEC. 1231. ENHANCED FOSSIL ENERGY RESEARCH AND DE-**
16 **VELOPMENT.**

17 (a) *PROGRAM DIRECTION.*—*The Secretary shall con-*
18 *duct a balanced energy research, development, demonstra-*
19 *tion, and technology deployment program to enhance fossil*
20 *energy.*

21 (b) *PROGRAM GOALS.*—

22 (1) *CORE FOSSIL RESEARCH AND DEVELOP-*
23 *MENT.*—*The goals of the core fossil research and devel-*
24 *opment program shall be to reduce emissions from fos-*
25 *sil fuel use by developing technologies, including*

1 *precombustion technologies, by 2015 with the capa-*
2 *bility of realizing—*

3 *(A) electricity generating efficiencies of 60*
4 *percent for coal and 75 percent for natural gas;*

5 *(B) combined heat and power thermal effi-*
6 *ciencies of more than 85 percent;*

7 *(C) fuels utilization efficiency of 75 percent*
8 *for the production of liquid transportation fuels*
9 *from coal;*

10 *(D) near zero emissions of mercury and of*
11 *emissions that form fine particles, smog, and*
12 *acid rain;*

13 *(E) reduction of carbon dioxide emissions*
14 *by at least 40 percent through efficiency im-*
15 *provements and 100 percent with sequestration;*
16 *and*

17 *(F) improved reliability, efficiency, reduc-*
18 *tions of air pollutant emissions, or reductions in*
19 *solid waste disposal requirements.*

20 *(2) OFFSHORE OIL AND NATURAL GAS RE-*
21 *SOURCES.—The goal of the offshore oil and natural*
22 *gas resources program shall be to develop technologies*
23 *to—*

24 *(A) extract methane hydrates in coastal wa-*
25 *ters 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 science
7 and technology available to domestic onshore petro-
8 leum producers, particularly independent operators,
9 through—

10 (A) advances in technology for exploration
11 and production of domestic petroleum resources,
12 particularly those not accessible with current
13 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 com-
21 pliance.

22 (4) *TRANSPORTATION FUELS.*—The goals of the
23 transportation fuels program shall be to increase the
24 price elasticity of oil supply and demand by focusing
25 research on—

1 (A) *reducing the cost of producing transpor-*
2 *tation 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 ap-*
7 *propriated to the Secretary for carrying out research,*
8 *development, demonstration, and technology deploy-*
9 *ment 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.—None of the*
15 *funds authorized in paragraph (1) may be used for—*

16 (A) *fossil energy environmental restoration;*

17 (B) *import/export authorization;*

18 (C) *program direction; or*

19 (D) *general plant projects.*

20 (3) *COAL-BASED PROJECTS.—The coal-based*
21 *projects funded under this section shall be consistent*
22 *with the goals in subsection (b). The program shall*
23 *emphasize carbon capture and sequestration tech-*
24 *nologies and gasification technologies, including gasi-*
25 *fication combined cycle, gasification fuel cells, gasifi-*

1 *ation co-production, hybrid gasification/combustion,*
2 *or other technology with the potential to address the*
3 *goals in subparagraphs (D) or (E) of subsection*
4 *(b)(1).*

5 **SEC. 1232. POWER PLANT IMPROVEMENT INITIATIVE.**

6 *(a) PROGRAM DIRECTION.—The Secretary shall con-*
7 *duct a balanced energy research, development, demonstra-*
8 *tion, and technology deployment program to demonstrate*
9 *commercial applications of advanced lignite and coal-based*
10 *technologies applicable to new or existing power plants (in-*
11 *cluding co-production plants) that advance the efficiency,*
12 *environmental performance, and cost-competitiveness sub-*
13 *stantially beyond technologies that are in operation or have*
14 *been demonstrated by the date of enactment of this subtitle.*

15 *(b) TECHNICAL MILESTONES.—*

16 *(1) IN GENERAL.—The Secretary shall set tech-*
17 *nical milestones specifying efficiency and emissions*
18 *levels that projects shall be designed to achieve. The*
19 *milestones shall become more restrictive over the life*
20 *of the program.*

21 *(2) 2010 EFFICIENCY MILESTONES.—The mile-*
22 *stones shall be designed to achieve by 2010 interim*
23 *thermal efficiency of—*

24 *(A) forty-five percent for coal of more than*
25 *9,000 Btu;*

1 (B) *forty-four percent for coal of 7,000 to*
2 9,000 Btu; and

3 (C) *forty-two percent for coal of less than*
4 7,000 Btu.

5 (3) *2020 EFFICIENCY MILESTONES.—The mile-*
6 *stones shall be designed to achieve by 2020 thermal ef-*
7 *iciency of—*

8 (A) *sixty percent for coal of more than*
9 9,000 Btu;

10 (B) *fifty-nine percent for coal of 7,000 to*
11 9,000 Btu; and

12 (C) *fifty-seven percent for coal of less than*
13 7,000 Btu.

14 (4) *EMISSIONS MILESTONES.—The milestones*
15 *shall include near zero emissions of mercury and*
16 *greenhouse gases and of emissions that form fine par-*
17 *ticles, smog, and acid rain.*

18 (5) *REGIONAL AND QUALITY DIFFERENCES.—The*
19 *Secretary may consider regional and quality dif-*
20 *ferences in developing the efficiency milestones.*

21 (c) *PROJECT CRITERIA.—The demonstration activities*
22 *proposed to be conducted at a new or existing coal-based*
23 *electric generation unit having a nameplate rating of not*
24 *less than 100 megawatts, excluding a co-production plant,*
25 *shall include at least one of the following—*

1 (1) *a means of recycling or reusing a significant*
2 *portion of coal combustion wastes produced by coal-*
3 *based generating units, excluding practices that are*
4 *commercially available by the date of enactment of*
5 *this subtitle;*

6 (2) *a means of capture and sequestering emis-*
7 *sions, including greenhouse gases, in a manner that*
8 *is more effective and substantially below the cost of*
9 *technologies that are in operation or that have been*
10 *demonstrated by the date of enactment of this subtitle;*

11 (3) *a means of controlling sulfur dioxide and ni-*
12 *trogen oxide or mercury in a manner that improves*
13 *environmental performance beyond technologies that*
14 *are in operation or that have been demonstrated by*
15 *the date of enactment of this subtitle—*

16 (A) *in the case of an existing unit, achieve*
17 *an overall thermal design efficiency improvement*
18 *compared to the efficiency of the unit as oper-*
19 *ated, of not less than—*

20 (i) *7 percent for coal of more than*
21 *9,000 Btu;*

22 (ii) *6 percent for coal of 7,000 to 9,000*
23 *Btu; or*

24 (iii) *4 percent for coal of less than*
25 *7,000 Btu; or*

1 (B) *in the case of a new unit, achieve the*
2 *efficiency milestones set for in subsection (b)*
3 *compared to the efficiency of a typical unit as*
4 *operated on the date of enactment of this subtitle,*
5 *before any retrofit, repowering, replacement, or*
6 *installation.*

7 (d) *STUDY.—The Secretary, in consultation with the*
8 *Administrator of the Environmental Protection Agency, the*
9 *Secretary of the Interior, and interested entities (including*
10 *coal producers, industries using coal, organizations to pro-*
11 *mote coal or advanced coal technologies, environmental or-*
12 *ganizations, and organizations representing workers), shall*
13 *conduct an assessment that identifies performance criteria*
14 *that would be necessary for coal-based technologies to meet,*
15 *to enable future reliance on coal in an environmentally sus-*
16 *tainable manner for electricity generation, use as a chem-*
17 *ical feedstock, and use as a transportation fuel.*

18 (e) *AUTHORIZATION OF APPROPRIATIONS.—*

19 (1) *IN GENERAL.—There are authorized to be ap-*
20 *propriated to the Secretary for carrying out activities*
21 *under this section \$200,000,000 for each of fiscal*
22 *years 2003 through 2011.*

23 (2) *LIMITATION ON FUNDING OF PROJECTS.—*
24 *Eighty percent of the funding under this section shall*
25 *be limited to—*

1 (A) carbon capture and sequestration tech-
2 nologies;

3 (B) gasification technologies, including gas-
4 ification combined cycle, gasification fuel cells,
5 gasification co-production, or hybrid gasifi-
6 cation/combustion; or

7 (C) other technology either by itself or in
8 conjunction with other technologies that has the
9 potential to achieve near zero emissions.

10 **SEC. 1233. RESEARCH AND DEVELOPMENT FOR ADVANCED**
11 **SAFE AND EFFICIENT COAL MINING TECH-**
12 **NOLOGIES.**

13 (a) *ESTABLISHMENT.*—The Secretary of Energy shall
14 establish a cooperative research partnership involving ap-
15 propriate Federal agencies, coal producers, including asso-
16 ciations, equipment manufacturers, universities with min-
17 ing engineering departments, and other relevant entities
18 to—

19 (1) develop mining research priorities identified
20 by the Mining Industry of the Future Program and
21 in the recommendations from relevant reports of the
22 National Academy of Sciences on mining technologies;

23 (2) establish a process for conducting joint in-
24 dustry-Government research and development; and

1 (3) *expand mining research capabilities at insti-*
2 *tutions of higher education.*

3 (b) *AUTHORIZATION OF APPROPRIATIONS.—*

4 (1) *IN GENERAL.—There are authorized to be ap-*
5 *propriated to carry out activities under this section,*
6 *\$12,000,000 in fiscal year 2003 and \$15,000,000 in*
7 *fiscal year 2004.*

8 (2) *LIMIT ON USE OF FUNDS.—Not less than 20*
9 *percent of any funds appropriated in a given fiscal*
10 *year under this subsection shall be dedicated to re-*
11 *search carried out at institutions of higher education.*

12 **SEC. 1234. ULTRA-DEEPWATER AND UNCONVENTIONAL RE-**
13 **SOURCE EXPLORATION AND PRODUCTION**
14 **TECHNOLOGIES.**

15 (a) *DEFINITIONS.—In this section:*

16 (1) *ADVISORY COMMITTEE.—The term “Advisory*
17 *Committee” means the Ultra-Deepwater and Uncon-*
18 *ventional Resource Technology Advisory Committee*
19 *established under subsection (c).*

20 (2) *AWARD.—The term “award” means a cooper-*
21 *ative agreement, contract, award or other types of*
22 *agreement as appropriate.*

23 (3) *DEEPWATER.—The term “deepwater” means*
24 *a water depth that is greater than 200 but less than*
25 *1,500 meters.*

1 (4) *ELIGIBLE AWARD RECIPIENT.*—The term “el-
2 igible award recipient” includes—

3 (A) a research institution;

4 (B) an institution of higher education;

5 (C) a corporation; and

6 (D) a managing consortium formed among
7 entities described in subparagraphs (A) through
8 (C).

9 (5) *INSTITUTION OF HIGHER EDUCATION.*—The
10 term “institution of higher education” has the mean-
11 ing given the term in section 101 of the Higher Edu-
12 cation Act of 1965 (20 U.S.C. 1001).

13 (6) *MANAGING CONSORTIUM.*—The term “man-
14 aging consortium” means an entity that—

15 (A) exists as of the date of enactment of this
16 section;

17 (B)(i) is an organization described in sec-
18 tion 501(c)(3) of the Internal Revenue Code of
19 1986; and

20 (ii) is exempt from taxation under section
21 501(a) of that Code;

22 (C) is experienced in planning and man-
23 aging programs in natural gas or other petro-
24 leum exploration and production research, devel-
25 opment, and demonstration; and

1 (D) has demonstrated capabilities and expe-
2 rience in representing the views and priorities of
3 industry, institutions of higher education and
4 other research institutions in formulating com-
5 prehensive research and development plans and
6 programs.

7 (7) PROGRAM.—The term “program” means the
8 program of research, development, and demonstration
9 established under subsection (b)(1)(A).

10 (8) ULTRA-DEEPWATER.—The term “ultra-deep-
11 water” means a water depth that is equal to or great-
12 er than 1,500 meters.

13 (9) ULTRA-DEEPWATER ARCHITECTURE.—The
14 term “ultra-deepwater architecture” means the inte-
15 gration of technologies to explore and produce natural
16 gas or petroleum products located at ultra-deepwater
17 depths.

18 (10) ULTRA-DEEPWATER RESOURCE.—The term
19 “ultra-deepwater resource” means natural gas or any
20 other petroleum resource (including methane hydrate)
21 located in an ultra-deepwater area.

22 (11) UNCONVENTIONAL RESOURCE.—The term
23 “unconventional resource” means natural gas or any
24 other petroleum resource located in a formation on
25 physically or economically inaccessible land currently

1 *available for lease for purposes of natural gas or other*
2 *petroleum exploration or production.*

3 **(b) ULTRA-DEEPWATER AND UNCONVENTIONAL EX-**
4 **PLORATION AND PRODUCTION PROGRAM.—**

5 **(1) ESTABLISHMENT.—**

6 **(A) IN GENERAL.—***The Secretary shall es-*
7 *tablish a program of research into, and develop-*
8 *ment and demonstration of, ultra-deepwater re-*
9 *source and unconventional resource exploration*
10 *and production technologies.*

11 **(B) LOCATION; IMPLEMENTATION.—***The*
12 *program under this subsection shall be carried*
13 *out—*

14 *(i) in areas on the outer Continental*
15 *Shelf that, as of the date of enactment of*
16 *this section, are available for leasing; and*

17 *(ii) on unconventional resources.*

18 **(2) COMPONENTS.—***The program shall include*
19 *one or more programs for long-term research into—*

20 **(A) new deepwater ultra-deepwater resource**
21 *and unconventional resource exploration and*
22 *production technologies; or*

23 **(B) environmental mitigation technologies**
24 *for production of ultra-deepwater resource and*
25 *unconventional resource.*

1 (c) *ADVISORY COMMITTEE.*—

2 (1) *ESTABLISHMENT.*—Not later than 30 days
3 after the date of enactment of this section, the Sec-
4 retary shall establish an advisory committee to be
5 known as the “Ultra-Deepwater and Unconventional
6 Resource Technology Advisory Committee”.

7 (2) *MEMBERSHIP.*—

8 (A) *COMPOSITION.*—Subject to subpara-
9 graph (B), the advisory committee shall be com-
10 posed of seven members appointed by the Sec-
11 retary that—

12 (i) have extensive operational knowl-
13 edge of and experience in the natural gas
14 and other petroleum exploration and pro-
15 duction industry; and

16 (ii) are not Federal employees or em-
17 ployees of contractors to a Federal agency.

18 (B) *EXPERTISE.*—Of the members of the ad-
19 visory committee appointed under subparagraph
20 (A)—

21 (i) at least four members shall have ex-
22 tensive knowledge of ultra-deepwater re-
23 source exploration and production tech-
24 nologies;

1 (ii) at least three members shall have
2 extensive knowledge of unconventional re-
3 source exploration and production tech-
4 nologies.

5 (3) DUTIES.—The advisory committee shall ad-
6 vise the Secretary in the implementation of this sec-
7 tion.

8 (4) COMPENSATION.—A member of the advisory
9 committee shall serve without compensation but shall
10 receive travel expenses, including per diem in lieu of
11 subsistence, in accordance with applicable provisions
12 under subchapter I of chapter 57 of title 5, United
13 States Code.

14 (d) AWARDS.—

15 (1) TYPES OF AWARDS.—

16 (A) ULTRA-DEEPWATER RESOURCES.—

17 (i) IN GENERAL.—The Secretary shall
18 make awards for research into, and develop-
19 ment and demonstration of, ultra-deepwater
20 resource exploration and production
21 technologies—

22 (I) to maximize the value of the
23 ultra-deepwater resources of the United
24 States;

1 (II) to increase the supply of
2 ultra-deepwater resources by lowering
3 the cost and improving the efficiency of
4 exploration and production of such re-
5 sources; and

6 (III) to improve safety and mini-
7 mize negative environmental impacts
8 of that exploration and production.

9 (ii) *ULTRA-DEEPWATER ARCHITEC-*
10 *TURE.—In furtherance of the purposes de-*
11 *scribed in clause (i), the Secretary shall,*
12 *where appropriate, solicit proposals from a*
13 *managing consortium to develop and dem-*
14 *onstrate next-generation architecture for*
15 *ultra-deepwater resource production.*

16 (B) *UNCONVENTIONAL RESOURCES.—The*
17 *Secretary shall make awards—*

18 (i) to carry out research into, and de-
19 velopment and demonstration of, tech-
20 nologies to maximize the value of unconven-
21 tional resources; and

22 (ii) to develop technologies to
23 simultaneously—

24 (I) increase the supply of uncon-
25 ventional resources by lowering the cost

1 *and improving the efficiency of explo-*
2 *ration and production of unconven-*
3 *tional resources; and*

4 *(II) improve safety and minimize*
5 *negative environmental impacts of that*
6 *exploration and production.*

7 *(2) CONDITIONS.—An award made under this*
8 *subsection shall be subject to the following conditions:*

9 *(A) MULTIPLE ENTITIES.—If an award re-*
10 *cipient is composed of more than one eligible or-*
11 *ganization, the recipient shall provide a signed*
12 *contract, agreed to by all eligible organizations*
13 *comprising the award recipient, that defines, in*
14 *a manner that is consistent with all applicable*
15 *law in effect as of the date of the contract, all*
16 *rights to intellectual property for—*

17 *(i) technology in existence as of that*
18 *date; and*

19 *(ii) future inventions conceived and de-*
20 *veloped using funds provided under the*
21 *award.*

22 *(B) COMPONENTS OF APPLICATION.—An*
23 *application for an award for a demonstration*
24 *project shall describe with specificity any in-*

1 *tended commercial applications of the technology*
2 *to be demonstrated.*

3 (C) *COST SHARING.—Non-Federal cost shar-*
4 *ing shall be in accordance with section 1403.*

5 (e) *PLAN AND FUNDING.—*

6 (1) *IN GENERAL.—The Secretary, and where ap-*
7 *propriate, a managing consortium under subsection*
8 *(d)(1)(A)(ii), shall formulate annual operating and*
9 *performance objectives, develop multiyear technology*
10 *roadmaps, and establish research and development*
11 *priorities for the funding of activities under this sec-*
12 *tion which will serve as guidelines for making awards*
13 *including cost-matching objectives.*

14 (2) *INDUSTRY INPUT.—In carrying out this pro-*
15 *gram, the Secretary shall promote maximum industry*
16 *input through the use of managing consortia or other*
17 *organizations in planning and executing the research*
18 *areas and conducting workshops or reviews to ensure*
19 *that this program focuses on industry problems and*
20 *needs.*

21 (f) *AUDITING.—*

22 (1) *IN GENERAL.—The Secretary shall retain an*
23 *independent, commercial auditor to determine the ex-*
24 *tent to which funds authorized by this section, pro-*
25 *vided through a managing consortium, are expended*

1 *in a manner consistent with the purposes of this sec-*
2 *tion.*

3 (2) *REPORTS.*—*The auditor retained under*
4 *paragraph (1) shall submit to the Secretary, and the*
5 *Secretary shall transmit to the appropriate congres-*
6 *sional committees, an annual report that describes—*

7 (A) *the findings of the auditor under para-*
8 *graph (1); and*

9 (B) *a plan under which the Secretary may*
10 *remedy any deficiencies identified by the audi-*
11 *tor.*

12 (g) *AUTHORIZATION OF APPROPRIATIONS.*—*There are*
13 *authorized to be appropriated to the Secretary such sums*
14 *as may be necessary to carry out this section.*

15 (h) *TERMINATION OF AUTHORITY.*—*The authority pro-*
16 *vided by this section shall terminate on September 30, 2009.*

17 (i) *SAVINGS PROVISION.*—*Nothing in this section is*
18 *intended to displace, duplicate or diminish any previously*
19 *authorized research activities of the Department of Energy.*

20 **SEC. 1235. RESEARCH AND DEVELOPMENT FOR NEW NAT-**
21 **URAL GAS TRANSPORTATION TECH-**
22 **NOLOGIES.**

23 *The Secretary of Energy shall conduct a comprehensive*
24 *5-year program for research, development and demonstra-*
25 *tion to improve the reliability, efficiency, safety and integ-*

1 rity of the natural gas transportation and distribution in-
2 frastructure and for distributed energy resources (including
3 microturbines, fuel cells, advanced engine-generators, gas
4 turbines, reciprocating engines, hybrid power generation
5 systems, and all ancillary equipment for dispatch, control
6 and maintenance).

7 **SEC. 1236. AUTHORIZATION OF APPROPRIATIONS FOR OF-**
8 **FICE OF ARCTIC ENERGY.**

9 *There are authorized to be appropriated to the Sec-*
10 *retary for the Office of Arctic Energy under section 3197*
11 *of the Floyd D. Spence National Defense Authorization Act*
12 *for Fiscal Year 2001 (Public Law 106–398) such sums as*
13 *may be necessary, but not to exceed \$25,000,000 for each*
14 *of fiscal years 2003 through 2011.*

15 **SEC. 1237. CLEAN COAL TECHNOLOGY LOAN.**

16 *There is authorized to be appropriated not to exceed*
17 *\$125,000,000 to the Secretary of Energy to provide a loan*
18 *to the owner of the experimental plant constructed under*
19 *United States Department of Energy cooperative agreement*
20 *number DE–FC22–91PC99544 on such terms and condi-*
21 *tions as the Secretary determines, including interest rates*
22 *and upfront payments.*

1 **Subtitle D—Nuclear Energy**

2 **SEC. 1241. ENHANCED NUCLEAR ENERGY RESEARCH AND**
3 **DEVELOPMENT.**

4 (a) *PROGRAM DIRECTION.*—*The Secretary shall con-*
5 *duct an energy research, development, demonstration, and*
6 *technology deployment program to enhance nuclear energy.*

7 (b) *PROGRAM GOALS.*—*The program shall—*

8 (1) *support research related to existing United*
9 *States nuclear power reactors to extend their lifetimes*
10 *and increase their reliability while optimizing their*
11 *current operations for greater efficiencies;*

12 (2) *examine—*

13 (A) *advanced proliferation-resistant and*
14 *passively safe reactor designs;*

15 (B) *new reactor designs with higher effi-*
16 *ciency, lower cost, and improved safety;*

17 (C) *in coordination with activities carried*
18 *out under the amendments made by section*
19 *1223, designs for a high temperature reactor ca-*
20 *pable of producing large-scale quantities of hy-*
21 *drogen using thermochemical processes;*

22 (D) *proliferation-resistant and high-burn-*
23 *up nuclear fuels;*

24 (E) *minimization of generation of radio-*
25 *active materials;*

1 (F) improved nuclear waste management
2 technologies; and

3 (G) improved instrumentation science;

4 (3) attract new students and faculty to the nu-
5 clear sciences and nuclear engineering and related
6 fields (including health physics and nuclear and
7 radiochemistry) through—

8 (A) university-based fundamental research
9 for existing faculty and new junior faculty;

10 (B) support for the re-licensing of existing
11 training reactors at universities in conjunction
12 with industry; and

13 (C) completing the conversion of existing
14 training reactors with proliferation-resistant
15 fuels that are low enriched and to adapt those re-
16 actors to new investigative uses;

17 (4) maintain a national capability and infra-
18 structure to produce medical isotopes and ensure a
19 well trained cadre of nuclear medicine specialists in
20 partnership with industry;

21 (5) ensure that our nation has adequate capa-
22 bility to power future satellite and space missions;
23 and

24 (6) maintain, where appropriate through a
25 prioritization process, a balanced research infrastruc-

1 *ture so that future research programs can use these*
2 *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 for*
15 *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 a*
25 *program to maintain the nation's human resource invest-*

1 *ment and infrastructure in the nuclear sciences and engi-*
2 *neering and related fields (including health physics and nu-*
3 *clear and radiochemistry), consistent with departmental*
4 *missions related to civilian nuclear research and develop-*
5 *ment.*

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 Engineering*
17 *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 related*
22 *to nuclear science and engineering.*

23 (c) *MAINTAINING UNIVERSITY RESEARCH AND TRAIN-*
24 *ING REACTORS AND ASSOCIATED INFRASTRUCTURE.—Ac-*
25 *tivities 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 United States nuclear industry, in re-*
6 *licensing and upgrading training reactors as part of*
7 *a student 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 staff*
23 *acting as a mentor.*

24 (e) *OPERATING AND MAINTENANCE COSTS.—Funding*
25 *for a research project provided under this section may be*

1 *used to offset a portion of the operating and maintenance*
2 *costs of a university research reactor used in the research*
3 *project, on a cost-shared basis with the university.*

4 (f) *AUTHORIZATION OF APPROPRIATIONS.—From*
5 *amounts authorized under section 1241(c)(1), the following*
6 *amounts are authorized for activities under this section—*

7 (1) *\$33,000,000 for fiscal year 2003;*

8 (2) *\$37,900,000 for fiscal year 2004;*

9 (3) *\$43,600,000 for fiscal year 2005; and*

10 (4) *\$50,100,000 for fiscal year 2006.*

11 **SEC. 1243. NUCLEAR ENERGY RESEARCH INITIATIVE.**

12 (a) *ESTABLISHMENT.—The Secretary shall support a*
13 *Nuclear Energy Research Initiative for grants for research*
14 *relating to nuclear energy.*

15 (b) *AUTHORIZATION OF APPROPRIATIONS.—From*
16 *amounts authorized under section 1241(c), there are author-*
17 *ized to be appropriated to the Secretary for activities under*
18 *this section such sums as are necessary for each fiscal year.*

19 **SEC. 1244. NUCLEAR ENERGY PLANT OPTIMIZATION PRO-**
20 **GRAM.**

21 (a) *ESTABLISHMENT.—The Secretary shall support a*
22 *Nuclear Energy Plant Optimization Program for grants to*
23 *improve nuclear energy plant reliability, availability, and*
24 *productivity. Notwithstanding section 1403, the program*
25 *shall require industry cost-sharing of at least 50 percent*

1 *and be subject to annual review by the Nuclear Energy Re-*
2 *search Advisory Committee of the Department.*

3 (b) *AUTHORIZATION OF APPROPRIATIONS.—From*
4 *amounts authorized under section 1241(c), there are author-*
5 *ized to be appropriated to the Secretary for activities under*
6 *this section such sums as are necessary for each fiscal year.*

7 **SEC. 1245. NUCLEAR ENERGY TECHNOLOGY DEVELOPMENT**
8 **PROGRAM.**

9 (a) *ESTABLISHMENT.—The Secretary shall support a*
10 *Nuclear Energy Technology Development Program to de-*
11 *velop a technology roadmap to design and develop new nu-*
12 *clear energy powerplants in the United States.*

13 (b) *GENERATION IV REACTOR STUDY.—The Secretary*
14 *shall, as part of the program under subsection (a), also con-*
15 *duct a study of Generation IV nuclear energy systems, in-*
16 *cluding development of a technology roadmap and perform-*
17 *ance of research and development necessary to make an in-*
18 *formed technical decision regarding the most promising*
19 *candidates for commercial deployment. The study shall ex-*
20 *amine advanced proliferation-resistant and passively safe*
21 *reactor designs, new reactor designs with higher efficiency,*
22 *lower cost and improved safety, proliferation-resistant and*
23 *high burn-up fuels, minimization of generation of radio-*
24 *active materials, improved nuclear waste management tech-*
25 *nologies, and improved instrumentation science. Not later*

1 *than December 31, 2002, the Secretary shall submit to Con-*
2 *gress a report describing the results of the study.*

3 (c) *AUTHORIZATION OF APPROPRIATIONS.—From*
4 *amounts authorized to be appropriated under section*
5 *1241(c), there are authorized to be appropriated to the Sec-*
6 *retary for activities under this section such sums as are*
7 *necessary for each fiscal year.*

8 ***Subtitle E—Fundamental Energy***
9 ***Science***

10 ***SEC. 1251. ENHANCED PROGRAMS IN FUNDAMENTAL EN-***
11 ***ERGY SCIENCE.***

12 (a) *PROGRAM DIRECTION.—The Secretary, acting*
13 *through the Office of Science, shall—*

14 (1) *conduct a comprehensive program of funda-*
15 *mental research, including research on chemical*
16 *sciences, physics, materials sciences, biological and*
17 *environmental sciences, geosciences, engineering*
18 *sciences, plasma sciences, mathematics, and advanced*
19 *scientific computing;*

20 (2) *maintain, upgrade and expand the scientific*
21 *user facilities maintained by the Office of Science and*
22 *ensure that they are an integral part of the depart-*
23 *mental mission for exploring the frontiers of funda-*
24 *mental science;*

1 (3) *maintain a leading-edge research capability*
2 *in the energy-related aspects of nanoscience and*
3 *nanotechnology, advanced scientific computing and*
4 *genome research; and*

5 (4) *ensure that its fundamental science pro-*
6 *grams, where appropriate, help inform the applied re-*
7 *search and development programs of the Department.*

8 (b) *AUTHORIZATION OF APPROPRIATIONS.—There are*
9 *authorized to be appropriated to the Secretary for carrying*
10 *out research, development, demonstration, and technology*
11 *deployment activities under this subtitle—*

12 (1) *\$3,785,000,000 for fiscal year 2003;*

13 (2) *\$4,153,000,000 for fiscal year 2004;*

14 (3) *\$4,586,000,000 for fiscal year 2005; and*

15 (4) *\$5,000,000,000 for fiscal year 2006.*

16 **SEC. 1252. NANOSCALE SCIENCE AND ENGINEERING RE-**
17 **SEARCH.**

18 (a) *ESTABLISHMENT.—The Secretary, acting through*
19 *the Office of Science, shall support a program of research*
20 *and development in nanoscience and nanoengineering con-*
21 *sistent with the Department's statutory authorities related*
22 *to research and development. The program shall include ef-*
23 *forts to further the understanding of the chemistry, physics,*
24 *materials science and engineering of phenomena on the*
25 *scale of 1 to 100 nanometers.*

1 (b) *DUTIES OF THE OFFICE OF SCIENCE.*—*In car-*
2 *rying out the program under this section, the Office of*
3 *Science shall—*

4 (1) *support both individual investigators and*
5 *multidisciplinary teams of investigators;*

6 (2) *pursuant to subsection (c), develop, plan,*
7 *construct, acquire, or operate special equipment or fa-*
8 *ilities for the use of investigators conducting research*
9 *and development in nanoscience and*
10 *nanoengineering;*

11 (3) *support technology transfer activities to ben-*
12 *efit industry and other users of nanoscience and*
13 *nanoengineering; and*

14 (4) *coordinate research and development activi-*
15 *ties with industry and other Federal agencies.*

16 (c) *NANOSCIENCE AND NANOENGINEERING RESEARCH*
17 *CENTERS AND MAJOR INSTRUMENTATION.*—

18 (1) *AUTHORIZATION.*—*From amounts authorized*
19 *to be appropriated under section 1251(b), the*
20 *amounts specified under subsection (d)(2) shall, sub-*
21 *ject to appropriations, be available for projects to de-*
22 *velop, plan, construct, acquire, or operate special*
23 *equipment, instrumentation, or facilities for inves-*
24 *tigators conducting research and development in*
25 *nanoscience and nanoengineering.*

1 (2) *PROJECTS.*—*Projects under paragraph (1)*
2 *may include the measurement of properties at the*
3 *scale of 1 to 100 nanometers, manipulation at such*
4 *scales, and the integration of technologies based on*
5 *nanoscience or nanoengineering into bulk materials*
6 *or other technologies.*

7 (3) *FACILITIES.*—*Facilities under paragraph (1)*
8 *may include electron microcharacterization facilities,*
9 *microlithography facilities, scanning probe facilities*
10 *and related instrumentation science.*

11 (4) *COLLABORATION.*—*The Secretary shall en-*
12 *courage collaborations among universities, labora-*
13 *tories and industry at facilities under this subsection.*
14 *At least one facility under this subsection shall have*
15 *a specific mission of technology transfer to other in-*
16 *stitutions and to industry.*

17 (d) *AUTHORIZATION OF APPROPRIATIONS.*—

18 (1) *TOTAL AUTHORIZATION.*—*From amounts au-*
19 *thorized to be appropriated under section 1251(b), the*
20 *following amounts are authorized for activities under*
21 *this section—*

22 (A) *\$270,000,000 for fiscal year 2003;*

23 (B) *\$290,000,000 for fiscal year 2004;*

24 (C) *\$310,000,000 for fiscal year 2005; and*

25 (D) *\$330,000,000 for fiscal year 2006.*

1 (2) *NANOSCIENCE AND NANOENGINEERING RE-*
2 *SEARCH CENTERS AND MAJOR INSTRUMENTATION.*—

3 *Of the amounts under paragraph (1), the following*
4 *amounts are authorized to carry out subsection (c)—*

5 (A) *\$135,000,000 for fiscal year 2003;*

6 (B) *\$150,000,000 for fiscal year 2004;*

7 (C) *\$120,000,000 for fiscal year 2005; and*

8 (D) *\$100,000,000 for fiscal year 2006.*

9 **SEC. 1253. ADVANCED SCIENTIFIC COMPUTING FOR EN-**
10 **ERGY MISSIONS.**

11 (a) *ESTABLISHMENT.*—*The Secretary, acting through*
12 *the Office of Science, shall support a program to advance*
13 *the Nation’s computing capability across a diverse set of*
14 *grand challenge computationally based science problems re-*
15 *lated to departmental missions.*

16 (b) *DUTIES OF THE OFFICE OF SCIENCE.*—*In car-*
17 *rying out the program under this section, the Office of*
18 *Science shall—*

19 (1) *advance basic science through computation*
20 *by developing software to solve grand challenge*
21 *science problems on new generations of computing*
22 *platforms;*

23 (2) *enhance the foundations for scientific com-*
24 *puting by developing the basic mathematical and*
25 *computing systems software needed to take full advan-*

1 *tage of the computing capabilities of computers with*
2 *peak speeds of 100 teraflops or more, some of which*
3 *may be unique to the scientific problem of interest;*

4 (3) *enhance national collaboratory and net-*
5 *working capabilities by developing software to inte-*
6 *grate geographically separated researchers into effec-*
7 *tive research teams and to facilitate access to and*
8 *movement and analysis of large (petabyte) data sets;*
9 *and*

10 (4) *maintain a robust scientific computing hard-*
11 *ware infrastructure to ensure that the computing re-*
12 *sources needed to address DOE missions are avail-*
13 *able; explore new computing approaches and tech-*
14 *nologies that promise to advance scientific computing.*

15 (c) *HIGH-PERFORMANCE COMPUTING ACT PRO-*
16 *GRAM.—Section 203(a) of the High-Performance Com-*
17 *puting Act of 1991 (15 U.S.C. 5523(a)) is amended—*

18 (1) *in paragraph (3), by striking “and”;*

19 (2) *in paragraph (4), by striking the period and*
20 *inserting “; and”;* *and*

21 (3) *by adding after paragraph (4) the following:*

22 “(5) *conduct an integrated program of research,*
23 *development, and provision of facilities to develop*
24 *and deploy to scientific and technical users the high-*
25 *performance computing and collaboration tools needed*

1 to fulfill the statutory missions of the Department of
2 Energy in conducting basic and applied energy re-
3 search.”.

4 (d) *COORDINATION WITH THE DOE NATIONAL NU-*
5 *CLEAR SECURITY AGENCY ACCELERATED STRATEGIC COM-*
6 *PUTING INITIATIVE AND OTHER NATIONAL COMPUTING*
7 *PROGRAMS.*—The Secretary shall ensure that this program,
8 to the extent feasible, is integrated and consistent with—

9 (1) *the Accelerated Strategic Computing Initia-*
10 *tive of the National Nuclear Security Agency; and*

11 (2) *other national efforts related to advanced sci-*
12 *entific computing for science and engineering.*

13 (e) *AUTHORIZATION OF APPROPRIATIONS.*—From
14 amounts authorized under section 1251(b), the following
15 amounts are authorized for activities under this section—

16 (1) *\$285,000,000 for fiscal year 2003;*

17 (2) *\$300,000,000 for fiscal year 2004;*

18 (3) *\$310,000,000 for fiscal year 2005; and*

19 (4) *\$320,000,000 for fiscal year 2006.*

20 **SEC. 1254. FUSION ENERGY SCIENCES PROGRAM AND PLAN-**
21 **NING.**

22 (a) *OVERALL PLAN FOR FUSION ENERGY SCIENCES*
23 *PROGRAM.*—

24 (1) *IN GENERAL.*—Not later than 6 months after
25 the date of enactment of this subtitle, the Secretary,

1 *after consultation with the Fusion Energy Sciences*
2 *Advisory Committee, shall develop and transmit to*
3 *the Congress a plan to ensure a strong scientific base*
4 *for the Fusion Energy Sciences Program within the*
5 *Office of Science and to enable the experiments de-*
6 *scribed in subsections (b) and (c).*

7 (2) *OBJECTIVES OF PLAN.—The plan under this*
8 *subsection shall include as its objectives—*

9 (A) *to ensure that existing fusion research*
10 *facilities and equipment are more fully utilized*
11 *with appropriate measurements and control*
12 *tools;*

13 (B) *to ensure a strengthened fusion science*
14 *theory and computational base;*

15 (C) *to encourage and ensure that the selec-*
16 *tion of and funding for new magnetic and iner-*
17 *tial fusion research facilities is based on sci-*
18 *entific innovation and cost effectiveness;*

19 (D) *to improve the communication of sci-*
20 *entific results and methods between the fusion*
21 *science community and the wider scientific com-*
22 *munity;*

23 (E) *to ensure that adequate support is pro-*
24 *vided to optimize the design of the magnetic fu-*

1 *sion burning plasma experiments referred to in*
2 *subsections (b) and (c); and*

3 *(F) to ensure that inertial confinement fu-*
4 *sion facilities are utilized to the extent prac-*
5 *ticable for the purpose of inertial fusion energy*
6 *research and development.*

7 *(b) PLAN FOR UNITED STATES FUSION EXPERI-*
8 *MENT.—*

9 *(1) IN GENERAL.—The Secretary, after consulta-*
10 *tion with the Fusion Energy Sciences Advisory Com-*
11 *mittee, shall develop a plan for construction in the*
12 *United States of a magnetic fusion burning plasma*
13 *experiment for the purpose of accelerating scientific*
14 *understanding of fusion plasmas. The Secretary shall*
15 *request a review of the plan by the National Academy*
16 *of Sciences and shall transmit the plan and the re-*
17 *view to the Congress by July 1, 2004.*

18 *(2) REQUIREMENTS OF PLAN.—The plan de-*
19 *scribed in paragraph (1) shall—*

20 *(A) address key burning plasma physics*
21 *issues; and*

22 *(B) include specific information on the sci-*
23 *entific capabilities of the proposed experiment,*
24 *the relevance of these capabilities to the goal of*
25 *practical fusion energy, and the overall design of*

1 *the experiment including its estimated cost and*
2 *potential construction sites.*

3 (c) *PLAN FOR PARTICIPATION IN AN INTERNATIONAL*
4 *EXPERIMENT.*—*In addition to the plan described in sub-*
5 *section (b), the Secretary, after consultation with the Fusion*
6 *Energy Sciences Advisory Committee, may also develop a*
7 *plan for United States participation in an international*
8 *burning plasma experiment for the same purpose, whose*
9 *construction is found by the Secretary to be highly likely*
10 *and where United States participation is cost-effective rel-*
11 *ative to the cost and scientific benefits of a domestic experi-*
12 *ment described in subsection (b). If the Secretary elects to*
13 *develop a plan under this subsection, he shall include the*
14 *information described in subsection (b)(2), and an estimate*
15 *of the cost of United States participation in such an inter-*
16 *national experiment. The Secretary shall request a review*
17 *by the National Academy of Sciences of a plan developed*
18 *under this subsection, and shall transmit the plan and the*
19 *review to the Congress no later than July 1, 2004.*

20 (d) *AUTHORIZATION FOR RESEARCH AND DEVELOP-*
21 *MENT.*—*The Secretary, through the Office of Science, may*
22 *conduct any research and development necessary to fully*
23 *develop the plans described in this section.*

24 (e) *AUTHORIZATION OF APPROPRIATIONS.*—*From*
25 *amounts authorized under section 1251, the following*

1 *amounts are authorized for activities under this section and*
2 *for activities of the Fusion Energy Science Program—*

3 *(1) for fiscal year 2003, \$335,000,000;*

4 *(2) for fiscal year 2004, \$349,000,000;*

5 *(3) for fiscal year 2005, \$362,000,000; and*

6 *(4) for fiscal year 2006, \$377,000,000.*

7 ***Subtitle F—Energy, Safety, and***
8 ***Environmental Protection***

9 ***SEC. 1261. CRITICAL ENERGY INFRASTRUCTURE PROTEC-***
10 ***TION RESEARCH AND DEVELOPMENT.***

11 *(a) IN GENERAL.—The Secretary shall carry out a re-*
12 *search, development, demonstration and technology deploy-*
13 *ment program, in partnership with industry, on critical*
14 *energy infrastructure protection, consistent with the roles*
15 *and missions outlined for the Secretary in Presidential De-*
16 *cision Directive 63, entitled “Critical Infrastructure Protec-*
17 *tion”. The program shall have the following goals:*

18 *(1) Increase the understanding of physical and*
19 *information system disruptions to the energy infra-*
20 *structure that could result in cascading or widespread*
21 *regional outages.*

22 *(2) Develop energy infrastructure assurance*
23 *“best practices” through vulnerability and risk assess-*
24 *ments.*

1 (3) *Protect against, mitigate the effect of, and*
2 *improve the ability to recover from disruptive inci-*
3 *dents within the energy infrastructure.*

4 (b) *PROGRAM SCOPE.*—*The program under subsection*
5 *(a) shall include research, development, deployment, tech-*
6 *nology demonstration for—*

7 (1) *analysis of energy infrastructure inter-*
8 *dependencies to quantify the impacts of system*
9 *vulnerabilities in relation to each other;*

10 (2) *probabilistic risk assessment of the energy in-*
11 *frastructure to account for unconventional and ter-*
12 *rorist threats;*

13 (3) *incident tracking and trend analysis tools to*
14 *assess the severity of threats and reported incidents to*
15 *the energy infrastructure; and*

16 (4) *integrated multisensor, warning and mitiga-*
17 *tion technologies to detect, integrate, and localize*
18 *events affecting the energy infrastructure including*
19 *real time control to permit the reconfiguration of en-*
20 *ergy delivery systems.*

21 (c) *REGIONAL COORDINATION.*—*The program under*
22 *this section shall cooperate with Departmental activities to*
23 *promote regional coordination under section 102 of this Act,*
24 *to ensure that the technologies and assessments developed*

1 *by the program are transferred in a timely manner to State*
2 *and local authorities, and to the energy industries.*

3 *(d) COORDINATION WITH INDUSTRY RESEARCH ORGA-*
4 *NIZATIONS.—The Secretary may enter into grants, con-*
5 *tracts, and cooperative agreements with industry research*
6 *organizations to facilitate industry participation in re-*
7 *search under this section and to fulfill applicable cost-shar-*
8 *ing requirements.*

9 *(e) AUTHORIZATION OF APPROPRIATIONS.—There is*
10 *authorized to be appropriated to the Secretary to carry out*
11 *this section—*

12 *(1) \$25,000,000 for fiscal year 2003;*

13 *(2) \$26,000,000 for fiscal year 2004;*

14 *(3) \$27,000,000 for fiscal year 2005; and*

15 *(4) \$28,000,000 for fiscal year 2006.*

16 *(f) CRITICAL ENERGY INFRASTRUCTURE FACILITY DE-*
17 *FINED.—For purposes of this section, the term “critical en-*
18 *ergy infrastructure facility” means a physical or cyber-*
19 *based system or service for the generation, transmission or*
20 *distribution of electrical energy, or the production, refining,*
21 *transportation, or storage of petroleum, natural gas, or pe-*
22 *troleum product, the incapacity or destruction of which*
23 *would have a debilitating impact on the defense or economic*
24 *security of the United States. The term shall not include*
25 *a facility that is licensed by the Nuclear Regulatory Com-*

1 mission under section 103 or 104b of the Atomic Energy
2 Act of 1954 (42 U.S.C. 2133 and 2134(b)).

3 **SEC. 1262. RESEARCH AND DEMONSTRATION FOR REMEDI-**
4 **ATION OF GROUNDWATER FROM ENERGY AC-**
5 **TIVITIES.**

6 (a) *IN GENERAL.*—The Secretary shall carry out a re-
7 search, development, demonstration, and technology deploy-
8 ment program to improve methods for environmental res-
9 toration of groundwater contaminated by energy activities,
10 including oil and gas production, surface and underground
11 mining of coal, and in-situ extraction of energy resources.

12 (b) *AUTHORIZATION OF APPROPRIATIONS.*—There are
13 authorized to be appropriated to the Secretary to carry out
14 this section \$10,000,000 for each of fiscal years 2003
15 through 2006.

16 **TITLE XIII—CLIMATE CHANGE**
17 **SCIENCE AND TECHNOLOGY**
18 **Subtitle A—Department of Energy**
19 **Programs**

20 **SEC. 1301. DEPARTMENT OF ENERGY GLOBAL CHANGE RE-**
21 **SEARCH.**

22 (a) *PROGRAM DIRECTION.*—The Secretary, acting
23 through the Office of Science, shall conduct a comprehensive
24 research program to understand and address the effects of
25 energy production and use on the global climate system.

1 **(b) PROGRAM ELEMENTS.—**

2 **(1) CLIMATE MODELING.—***The Secretary shall—*

3 **(A)** *conduct observational and analytical*
4 *research to acquire and interpret the data needed*
5 *to describe the radiation balance from the surface*
6 *of the Earth to the top of the atmosphere;*

7 **(B)** *determine the factors responsible for the*
8 *Earth’s radiation balance and incorporate im-*
9 *proved understanding of such factors in climate*
10 *models;*

11 **(C)** *improve the treatment of aerosols and*
12 *clouds in climate models;*

13 **(D)** *reduce the uncertainty in decade-to-cen-*
14 *tury model-based projections of climate change;*
15 *and*

16 **(E)** *increase the availability and utility of*
17 *climate change simulations to researchers and*
18 *policy makers interested in assessing the rela-*
19 *tionship between energy and climate change.*

20 **(2) CARBON CYCLE.—***The Secretary shall—*

21 **(A)** *carry out field research and modeling*
22 *activities—*

23 **(i)** *to understand and document the net*
24 *exchange of carbon dioxide between major*

1 *terrestrial ecosystems and the atmosphere;*

2 *or*

3 *(ii) to evaluate the potential of pro-*
4 *posed methods of carbon sequestration;*

5 *(B) develop and test carbon cycle models;*

6 *and*

7 *(C) acquire data and develop and test mod-*
8 *els to simulate and predict the transport, trans-*
9 *formation, and fate of energy-related emissions*
10 *in the atmosphere.*

11 (3) *ECOLOGICAL PROCESSES.*—*The Secretary*
12 *shall carry out long-term experiments of the response*
13 *of intact terrestrial ecosystems to—*

14 *(A) alterations in climate and atmospheric*
15 *composition; or*

16 *(B) land-use changes that affect ecosystem*
17 *extent and function.*

18 (4) *INTEGRATED ASSESSMENT.*—*The Secretary*
19 *shall develop and improve methods and tools for inte-*
20 *grated analyses of the climate change system from*
21 *emissions of aerosols and greenhouse gases to the con-*
22 *sequences of these emissions on climate and the result-*
23 *ing effects of human-induced climate change on eco-*
24 *nomie and social systems, with emphasis on critical*
25 *gaps in integrated assessment modeling, including*

1 *modeling of technology innovation and diffusion and*
2 *the development of metrics of economic costs of cli-*
3 *mate change and policies for mitigating or adapting*
4 *to climate change.*

5 *(c) AUTHORIZATION OF APPROPRIATIONS.—From*
6 *amounts authorized under section 1251(b), there are au-*
7 *thorized to be appropriated to the Secretary for carrying*
8 *out activities under this section—*

9 *(1) \$150,000,000 for fiscal year 2003;*

10 *(2) \$175,000,000 for fiscal year 2004;*

11 *(3) \$200,000,000 for fiscal year 2005; and*

12 *(4) \$230,000,000 for fiscal year 2006.*

13 *(d) LIMITATION ON FUNDS.—Funds authorized to be*
14 *appropriated under this section shall not be used for the*
15 *development, demonstration, or deployment of technology to*
16 *reduce, avoid, or sequester greenhouse gas emissions.*

17 **SEC. 1302. AMENDMENTS TO THE FEDERAL NONNUCLEAR**
18 **RESEARCH AND DEVELOPMENT ACT OF 1974.**

19 *Section 6 of the Federal Nonnuclear Energy Research*
20 *and Development Act of 1974 (42 U.S.C. 5905) is*
21 *amended—*

22 *(1) in subsection (a)—*

23 *(A) in paragraph (2), by striking “and” at*
24 *the end;*

1 (B) in paragraph (3) by striking the period
2 at the end and inserting “, and”; and

3 (C) by adding at the end the following:

4 “(4) solutions to the effective management of
5 greenhouse gas emissions in the long term by the de-
6 velopment of technologies and practices designed to—

7 “(A) reduce or avoid anthropogenic emis-
8 sions of greenhouse gases;

9 “(B) remove and sequester greenhouse gases
10 from emissions streams; and

11 “(C) remove and sequester greenhouse gases
12 from the atmosphere.”; and

13 (2) in subsection (b)—

14 (A) in paragraph (2), by striking “sub-
15 section (a)(1) through (3)” and inserting “para-
16 graphs (1) through (4) of subsection (a)”; and

17 (B) in paragraph (3)—

18 (i) in subparagraph (R), by striking
19 “and” at the end;

20 (ii) in subparagraph (S), by striking
21 the period at the end and inserting “; and”;
22 and

23 (iii) by adding at the end the fol-
24 lowing:

1 “(T) to pursue a long-term climate tech-
2 nology strategy designed to demonstrate a vari-
3 ety of technologies by which stabilization of
4 greenhouse gases might be best achieved, includ-
5 ing accelerated research, development, dem-
6 onstration and deployment of—

7 “(i) renewable energy systems;

8 “(ii) advanced fossil energy technology;

9 “(iii) advanced nuclear power plant
10 design;

11 “(iv) fuel cell technology for residen-
12 tial, industrial and transportation applica-
13 tions;

14 “(v) carbon sequestration practices and
15 technologies, including agricultural and for-
16 estry practices that store and sequester car-
17 bon;

18 “(vi) efficient electrical generation,
19 transmission and distribution technologies;
20 and

21 “(vii) efficient end use energy tech-
22 nologies.”.

1 ***Subtitle B—Department of***
2 ***Agriculture Programs***

3 ***SEC. 1311. CARBON SEQUESTRATION BASIC AND APPLIED***
4 ***RESEARCH.***

5 *(a) BASIC RESEARCH.—*

6 *(1) IN GENERAL.—The Secretary of Agriculture*
7 *shall carry out research in the areas of soil science*
8 *that promote understanding of—*

9 *(A) the net sequestration of organic carbon*
10 *in soil; and*

11 *(B) net emissions of other greenhouse gases*
12 *from agriculture.*

13 *(2) AGRICULTURAL RESEARCH SERVICE.—The*
14 *Secretary of Agriculture, acting through the Agricul-*
15 *tural Research Service, shall collaborate with other*
16 *Federal agencies in developing data and carrying out*
17 *research addressing soil carbon fluxes (losses and*
18 *gains) and net emissions of methane and nitrous*
19 *oxide from cultivation and animal management ac-*
20 *tivities.*

21 *(3) COOPERATIVE STATE RESEARCH, EXTENSION,*
22 *AND EDUCATION SERVICE.—*

23 *(A) IN GENERAL.—The Secretary of Agri-*
24 *culture, acting through the Cooperative State Re-*
25 *search, Extension, and Education Service, shall*

1 *establish a competitive grant program to carry*
2 *out research on the matters described in para-*
3 *graph (1) in land grant universities and other*
4 *research institutions.*

5 *(B) CONSULTATION ON RESEARCH TOP-*
6 *ICS.—Before issuing a request for proposals for*
7 *basic research under paragraph (1), the Coopera-*
8 *tive State Research, Extension, and Education*
9 *Service shall consult with the Agricultural Re-*
10 *search Service to ensure that proposed research*
11 *areas are complementary with and do not dupli-*
12 *cate research projects underway at the Agricul-*
13 *tural Research Service or other Federal agencies.*

14 *(b) APPLIED RESEARCH.—*

15 *(1) IN GENERAL.—The Secretary of Agriculture*
16 *shall carry out applied research in the areas of soil*
17 *science, agronomy, agricultural economics and other*
18 *agricultural sciences to—*

19 *(A) promote understanding of—*

20 *(i) how agricultural and forestry prac-*
21 *tices affect the sequestration of organic and*
22 *inorganic carbon in soil and net emissions*
23 *of other greenhouse gases;*

1 (ii) how changes in soil carbon pools
2 are cost-effectively measured, monitored,
3 and verified; and

4 (iii) how public programs and private
5 market approaches can be devised to incor-
6 porate carbon sequestration in a broader so-
7 cietal greenhouse gas emission reduction ef-
8 fort;

9 (B) develop methods for establishing base-
10 lines for measuring the quantities of carbon and
11 other greenhouse gases sequestered; and

12 (C) evaluate leakage and performance
13 issues.

14 (2) *REQUIREMENTS.*—To the maximum extent
15 practicable, applied research under paragraph (1)
16 shall—

17 (A) draw on existing technologies and meth-
18 ods; and

19 (B) strive to provide methodologies that are
20 accessible to a nontechnical audience.

21 (3) *MINIMIZATION OF ADVERSE ENVIRONMENTAL*
22 *IMPACTS.*—All applied research under paragraph (1)
23 shall be conducted with an emphasis on minimizing
24 adverse environmental impacts.

1 (4) *NATURAL RESOURCES CONSERVATION SERV-*
2 *ICE.—The Secretary of Agriculture, acting through*
3 *the Natural Resources Conservation Service, shall col-*
4 *laborate with other Federal agencies, including the*
5 *National Institute of Standards and Technology, in*
6 *developing new measuring techniques and equipment*
7 *or adapting existing techniques and equipment to en-*
8 *able cost-effective and accurate monitoring and*
9 *verification, for a wide range of agricultural and for-*
10 *estry practices, of—*

11 (A) *changes in soil carbon content in agri-*
12 *cultural soils, plants, and trees; and*

13 (B) *net emissions of other greenhouse gases.*

14 (5) *COOPERATIVE STATE RESEARCH, EXTENSION,*
15 *AND EDUCATION SERVICE.—*

16 (A) *IN GENERAL.—The Secretary of Agri-*
17 *culture, acting through the Cooperative State Re-*
18 *search, Extension, and Education Service, shall*
19 *establish a competitive grant program to encour-*
20 *age research on the matters described in para-*
21 *graph (1) by land grant universities and other*
22 *research institutions.*

23 (B) *CONSULTATION ON RESEARCH TOP-*
24 *ICS.—Before issuing a request for proposals for*
25 *applied research under paragraph (1), the Coop-*

1 *erative State Research, Extension, and Edu-*
2 *cation Service shall consult with the National*
3 *Resources Conservation Service and the Agricul-*
4 *tural Research Service to ensure that proposed*
5 *research areas are complementary with and do*
6 *not duplicate research projects underway at the*
7 *Agricultural Research Service or other Federal*
8 *agencies.*

9 *(c) RESEARCH CONSORTIA.—*

10 *(1) IN GENERAL.—The Secretary of Agriculture*
11 *may designate not more than two research consortia*
12 *to carry out research projects under this section, with*
13 *the requirement that the consortia propose to conduct*
14 *basic research under subsection (a) and applied re-*
15 *search under subsection (b).*

16 *(2) SELECTION.—The consortia shall be selected*
17 *in a competitive manner by the Cooperative State Re-*
18 *search, Extension, and Education Service.*

19 *(3) ELIGIBLE CONSORTIUM PARTICIPANTS.—En-*
20 *tities eligible to participate in a consortium*
21 *include—*

22 *(A) land grant colleges and universities;*

23 *(B) private research institutions;*

24 *(C) State geological surveys;*

1 (D) agencies of the Department of Agri-
2 culture;

3 (E) research centers of the National Aero-
4 nautics and Space Administration and the De-
5 partment of Energy;

6 (F) other Federal agencies;

7 (G) representatives of agricultural busi-
8 nesses and organizations with demonstrated ex-
9 pertise in these areas; and

10 (H) representatives of the private sector
11 with demonstrated expertise in these areas.

12 (4) *RESERVATION OF FUNDING.*—If the Secretary
13 of Agriculture designates one or two consortia, the
14 Secretary of Agriculture shall reserve for research
15 projects carried out by the consortium or consortia
16 not more than 25 percent of the amounts made avail-
17 able to carry out this section for a fiscal year.

18 (d) *STANDARDS OF PRECISION.*—

19 (1) *CONFERENCE.*—Not later than 3 years after
20 the date of enactment of this subtitle, the Secretary of
21 Agriculture, acting through the Agricultural Research
22 Service and in consultation with the Natural Re-
23 sources Conservation Service, shall convene a con-
24 ference of key scientific experts on carbon sequestra-
25 tion and measurement techniques from various sectors

1 *(including the Government, academic, and private*
2 *sectors) to—*

3 *(A) discuss benchmark standards of preci-*
4 *sion for measuring soil carbon content and net*
5 *emissions of other greenhouse gases;*

6 *(B) designate packages of measurement*
7 *techniques and modeling approaches to achieve a*
8 *level of precision agreed on by the participants*
9 *in the conference; and*

10 *(C) evaluate results of analyses on baseline,*
11 *permanence, and leakage issues.*

12 (2) *DEVELOPMENT OF BENCHMARK STAND-*
13 *ARDS.—*

14 (A) *IN GENERAL.—The Secretary shall de-*
15 *velop benchmark standards for measuring the*
16 *carbon content of soils and plants (including*
17 *trees) based on—*

18 (i) *information from the conference*
19 *under paragraph (1);*

20 (ii) *research conducted under this sec-*
21 *tion; and*

22 (iii) *other information available to the*
23 *Secretary.*

24 (B) *OPPORTUNITY FOR PUBLIC COMMENT.—*

25 *The Secretary shall provide an opportunity for*

1 *the public to comment on benchmark standards*
2 *developed under subparagraph (A).*

3 (3) *REPORT.*—*Not later than 180 days after the*
4 *conclusion of the conference under paragraph (1), the*
5 *Secretary of Agriculture shall submit to the Com-*
6 *mittee on Agriculture of the House of Representatives*
7 *and the Committee on Agriculture, Nutrition, and*
8 *Forestry of the Senate a report on the results of the*
9 *conference.*

10 (e) *AUTHORIZATION OF APPROPRIATIONS.*—

11 (1) *IN GENERAL.*—*There are authorized to be ap-*
12 *propriated to carry out this section \$25,000,000 for*
13 *each of fiscal years 2003 through 2006.*

14 (2) *ALLOCATION.*—*Of the amounts made avail-*
15 *able to carry out this section for a fiscal year, at least*
16 *50 percent shall be allocated for competitive grants by*
17 *the Cooperative State Research, Extension, and Edu-*
18 *cation Service.*

19 **SEC. 1312. CARBON SEQUESTRATION DEMONSTRATION**
20 **PROJECTS AND OUTREACH.**

21 (a) *DEMONSTRATION PROJECTS.*—

22 (1) *DEVELOPMENT OF MONITORING PRO-*
23 *GRAMS.*—

24 (A) *IN GENERAL.*—*The Secretary of Agri-*
25 *culture, acting through the Natural Resources*

1 *Conservation Service and in cooperation with*
2 *local extension agents, experts from land grant*
3 *universities, and other local agricultural or con-*
4 *servation organizations, shall develop user-*
5 *friendly programs that combine measurement*
6 *tools and modeling techniques into integrated*
7 *packages to monitor the carbon sequestering ben-*
8 *efits of conservation practices and net changes in*
9 *greenhouse gas emissions.*

10 *(B) BENCHMARK LEVELS OF PRECISION.—*

11 *The programs developed under subparagraph (A)*
12 *shall strive to achieve benchmark levels of preci-*
13 *sion in measurement in a cost-effective manner.*

14 *(2) PROJECTS.—*

15 *(A) IN GENERAL.—The Secretary of Agri-*
16 *culture, acting through the Farm Service Agency,*
17 *shall establish a program under which projects*
18 *use the monitoring programs developed under*
19 *paragraph (1) to demonstrate the feasibility of*
20 *methods of measuring, verifying, and*
21 *monitoring—*

22 *(i) changes in organic carbon content*
23 *and other carbon pools in agricultural soils,*
24 *plants, and trees; and*

1 (ii) net changes in emissions of other
2 greenhouse gases.

3 (B) *EVALUATION OF IMPLICATIONS.*—The
4 projects under subparagraph (A) shall include
5 evaluation of the implications for reassessed
6 baselines, carbon or other greenhouse gas leakage,
7 and permanence of sequestration.

8 (C) *SUBMISSION OF PROPOSALS.*—Proposals
9 for projects under subparagraph (A) shall be sub-
10 mitted by the appropriate agency of each State,
11 in cooperation with interested local jurisdictions
12 and State agricultural and conservation organi-
13 zations.

14 (D) *LIMITATION.*—Not more than 10
15 projects under subparagraph (A) may be ap-
16 proved in conjunction with applied research
17 projects under section 1311(b) until benchmark
18 measurement and assessment standards are es-
19 tablished under section 1311(d).

20 (E) *NATIONAL FOREST SYSTEM LAND.*—The
21 Secretary of Agriculture shall consider the use of
22 National Forest System land as sites to dem-
23 onstrate the feasibility of monitoring programs
24 developed under paragraph (1).

25 (b) *OUTREACH.*—

1 (1) *IN GENERAL.*—*The Cooperative State Re-*
2 *search, Extension, and Education Service shall widely*
3 *disseminate information about the economic and envi-*
4 *ronmental benefits that can be generated by adoption*
5 *of conservation practices (including benefits from in-*
6 *creased sequestration of carbon and reduced emission*
7 *of other greenhouse gases).*

8 (2) *PROJECT RESULTS.*—*The Cooperative State*
9 *Research, Extension, and Education Service shall in-*
10 *form farmers, ranchers, and State agricultural and*
11 *energy offices in each State of—*

12 (A) *the results of demonstration projects*
13 *under subsection (a)(2) in the State; and*

14 (B) *the ways in which the methods dem-*
15 *onstrated in the projects might be applicable to*
16 *the operations of those farmers and ranchers.*

17 (3) *POLICY OUTREACH.*—*On a periodic basis, the*
18 *Cooperative State Research, Extension, and Edu-*
19 *cation Service shall disseminate information on the*
20 *policy nexus between global climate change mitigation*
21 *strategies and agriculture, so that farmers and ranch-*
22 *ers may better understand the global implications of*
23 *the activities of farmers and ranchers.*

24 (c) *AUTHORIZATION OF APPROPRIATIONS.*—

1 (1) *IN GENERAL.*—*There are authorized to be ap-*
2 *propriated to carry out this section \$10,000,000 for*
3 *each of fiscal years 2003 through 2006.*

4 (2) *ALLOCATION.*—*Of the amounts made avail-*
5 *able to carry out this section for a fiscal year, at least*
6 *50 percent shall be allocated for demonstration*
7 *projects under subsection (a)(2).*

8 **SEC. 1313. CARBON STORAGE AND SEQUESTRATION AC-**
9 **COUNTING RESEARCH.**

10 (a) *IN GENERAL.*—*The Secretary of Agriculture, in*
11 *collaboration with the heads of other Federal agencies, shall*
12 *conduct research on, develop, and publish as appropriate,*
13 *carbon storage and sequestration accounting models, ref-*
14 *erence tables, or other tools that can assist landowners and*
15 *others in cost-effective and reliable quantification of the car-*
16 *bon release, sequestration, and storage expected to result*
17 *from various resource uses, land uses, practices, activities*
18 *or forest, agricultural, or cropland management practices*
19 *over various periods of time.*

20 (b) *PILOT PROGRAMS.*—*The Secretary of Agriculture*
21 *shall make competitive grants to not more than five eligible*
22 *entities to carry out pilot programs to demonstrate and as-*
23 *sess the potential for development and use of carbon inven-*
24 *tories and accounting systems that can assist in developing*
25 *and assessing carbon storage and sequestration policies and*

1 *programs. Not later than 1 year after the date of enactment*
2 *of this section, the Secretary of Agriculture, in collaboration*
3 *with the heads of other Federal agencies and with other in-*
4 *terested parties, shall develop guidelines for such pilot pro-*
5 *grams, including eligibility for awards, application con-*
6 *tents, reporting requirements, and mechanisms for peer re-*
7 *view.*

8 *(c) REPORT.—Not later than 5 years after the date of*
9 *enactment of this section, the Secretary of Agriculture, in*
10 *collaboration with the heads of other Federal agencies, shall*
11 *submit to Congress a report on the technical, institutional,*
12 *infrastructure, design and funding needs to establish and*
13 *maintain a national carbon storage and sequestration base-*
14 *line and accounting system. The report shall include docu-*
15 *mentation of the results of each of the pilot programs.*

16 *(d) AUTHORIZATION OF APPROPRIATIONS.—For the*
17 *purposes of this section, there are authorized to be appro-*
18 *priated to the Secretary of Agriculture \$20,000,000 for fis-*
19 *cal years 2003 through 2007.*

20 ***Subtitle C—International Energy***
21 ***Technology Transfer***

22 ***SEC. 1321. CLEAN ENERGY TECHNOLOGY EXPORTS PRO-***
23 ***GRAM.***

24 *(a) DEFINITIONS.—In this section:*

1 (1) *CLEAN ENERGY TECHNOLOGY.*—*The term*
2 *“clean energy technology” means an energy supply or*
3 *end-use technology that, over its lifecycle and com-*
4 *pared to a similar technology already in commercial*
5 *use in developing countries, countries in transition,*
6 *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 Exports*
14 *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 the*
19 *Administrator of the United States 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 on*
23 *opening and expanding energy markets and transfer-*
24 *ring clean energy technology to the developing coun-*
25 *tries, countries in transition, and other partner coun-*

1 *tries that are expected to experience, over the next 20*
2 *years, the most significant growth in energy produc-*
3 *tion and associated greenhouse gas emissions, includ-*
4 *ing through technology transfer programs under the*
5 *Framework Convention on Climate Change, other*
6 *international agreements, and relevant Federal ef-*
7 *forts.*

8 (2) *MEMBERSHIP.*—*The interagency working*
9 *group shall be jointly chaired by representatives ap-*
10 *pointed by the agency heads under paragraph (1) and*
11 *shall also include representatives from the Depart-*
12 *ment of State, the Department of the Treasury, the*
13 *Environmental Protection Agency, the Export-Import*
14 *Bank, the Overseas Private Investment Corporation,*
15 *the Trade and Development Agency, and other Fed-*
16 *eral agencies as deemed appropriate by all three agen-*
17 *cy 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 build-*
25 *ing capacity to deploy clean energy technology*

1 *in developing countries, countries in transition,*
2 *and other partner countries, including—*

3 *(i) energy-sector reform;*

4 *(ii) creation of open, transparent, and*
5 *competitive markets for energy technologies;*

6 *(iii) availability of trained personnel*
7 *to deploy and maintain the technology; and*

8 *(iv) demonstration and cost-buydown*
9 *mechanisms to promote first adoption of the*
10 *technology;*

11 *(C) examine relevant trade, tax, inter-*
12 *national, and other policy issues to assess what*
13 *policies would help open markets and improve*
14 *United States clean energy technology exports in*
15 *support of the following areas—*

16 *(i) enhancing energy innovation and*
17 *cooperation, including energy sector and*
18 *market reform, capacity building, and fi-*
19 *nancing measures;*

20 *(ii) improving energy end-use effi-*
21 *ciency technologies, including buildings and*
22 *facilities, vehicle, industrial, and co-genera-*
23 *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 groups
6 on the export and deployment of clean energy
7 technology;

8 (E) monitor each agency's progress towards
9 meeting goals in the 5-year strategic plan sub-
10 mitted to Congress pursuant to the Energy and
11 Water Development Appropriations Act, 2001,
12 and the Energy and Water Development Appro-
13 priations Act, 2002;

14 (F) make recommendations to heads of ap-
15 propriate Federal agencies on ways to streamline
16 Federal programs and policies to improve each
17 agency's role in the international development,
18 demonstration, and deployment of clean energy
19 technology;

20 (G) make assessments and recommendations
21 regarding the distinct technological, market, re-
22 gional, and stakeholder challenges necessary to
23 carry out the program; and

24 (H) recommend conditions and criteria that
25 will help ensure that United States funds pro-

1 *mote 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 provision*
7 *of law, each Federal agency or Government corporation car-*
8 *rying out an assistance program in support of the activities*
9 *of United States persons in the environment or energy sec-*
10 *tor of a developing country, country in transition, or other*
11 *partner country shall support, to the maximum extent prac-*
12 *ticable, the transfer of United States clean energy tech-*
13 *nology as part of that program.*

14 (d) *ANNUAL REPORT.*—*Not later than 90 days after*
15 *the date of the enactment of this Act, and on April 1st of*
16 *each year thereafter, the Interagency Working Group shall*
17 *submit a report to Congress on its activities during the pre-*
18 *ceding calendar year. The report shall include a description*
19 *of the technology, policy, and market opportunities for*
20 *international development, demonstration, and deployment*
21 *of clean energy technology investigated by the Interagency*
22 *Working Group in that year, as well as any policy rec-*
23 *ommendations to improve the expansion of clean energy*
24 *markets and United States clean energy technology exports.*

1 (e) *REPORT ON USE OF FUNDS.*—Not later than Octo-
2 ber 1, 2002, and each year thereafter, the Secretary of State,
3 in consultation with other Federal agencies, shall submit
4 a report to Congress indicating how United States funds
5 appropriated for clean energy technology exports and other
6 relevant Federal programs are being directed in a manner
7 that promotes sound energy policy commitments in devel-
8 oping countries, countries in transition, and other partner
9 countries, including efforts pursuant to multilateral envi-
10 ronmental agreements.

11 (f) *AUTHORIZATION OF APPROPRIATIONS.*—There are
12 authorized to be appropriated to the departments, agencies,
13 and entities of the United States described in subsection (b)
14 such sums as may be necessary to support the transfer of
15 clean energy technology, consistent with the subsidy codes
16 of the World Trade Organization, as part of assistance pro-
17 grams carried out by those departments, agencies, and enti-
18 ties in support of activities of United States persons in the
19 energy sector of a developing country, country in transition,
20 or other partner country.

21 **SEC. 1322. INTERNATIONAL ENERGY TECHNOLOGY DEPLOY-**
22 **MENT PROGRAM.**

23 Section 1608 of the Energy Policy Act of 1992 (42
24 U.S.C. 13387) is amended by striking subsection (l) and
25 inserting the following:

1 “(l) *INTERNATIONAL ENERGY TECHNOLOGY DEPLOY-*
2 *MENT PROGRAM.*—

3 “(1) *DEFINITIONS.*—*In this subsection:*

4 “(A) *INTERNATIONAL ENERGY DEPLOYMENT*
5 *PROJECT.*—*The term ‘international energy de-*
6 *ployment project’ means a project to construct*
7 *an energy production facility outside the United*
8 *States—*

9 “(i) *the output of which will be con-*
10 *sumed outside the United States; and*

11 “(ii) *the deployment of which will re-*
12 *sult in a greenhouse gas reduction per unit*
13 *of energy produced when compared to the*
14 *technology that would otherwise be*
15 *implemented—*

16 “(I) *10 percentage points or more,*
17 *in the case of a unit placed in service*
18 *before January 1, 2010;*

19 “(II) *20 percentage points or*
20 *more, in the case of a unit placed in*
21 *service after December 31, 2009, and*
22 *before January 1, 2020; or*

23 “(III) *30 percentage points or*
24 *more, in the case of a unit placed in*

1 *service after December 31, 2019, and*
2 *before January 1, 2030.*

3 “(B) *QUALIFYING INTERNATIONAL ENERGY*
4 *DEPLOYMENT PROJECT.—The term ‘qualifying*
5 *international energy deployment project’ means*
6 *an international energy deployment project*
7 *that—*

8 “(i) *is submitted by a United States*
9 *firm to the Secretary in accordance with*
10 *procedures established by the Secretary by*
11 *regulation;*

12 “(ii) *uses technology that has been suc-*
13 *cessfully developed or deployed in the*
14 *United States;*

15 “(iii) *meets the criteria of subsection*
16 *(k);*

17 “(iv) *is approved by the Secretary,*
18 *with notice of the approval being published*
19 *in the Federal Register; and*

20 “(v) *complies with such terms and con-*
21 *ditions as the Secretary establishes by regu-*
22 *lation.*

23 “(C) *UNITED STATES.—For purposes of this*
24 *paragraph, the term ‘United States’, when used*
25 *in a geographical sense, means the 50 States, the*

1 *District of Columbia, Puerto Rico, Guam, the*
2 *Virgin Islands, American Samoa, and the Com-*
3 *monwealth of the Northern Mariana Islands.*

4 “(2) *PILOT PROGRAM FOR FINANCIAL ASSIST-*
5 *ANCE.—*

6 “(A) *IN GENERAL.—Not later than 180*
7 *days after the date of enactment of this sub-*
8 *section, the Secretary shall, by regulation, pro-*
9 *vide for a pilot program for financial assistance*
10 *for qualifying international energy deployment*
11 *projects.*

12 “(B) *SELECTION CRITERIA.—After consulta-*
13 *tion with the Secretary of State, the Secretary of*
14 *Commerce, and the United States Trade Rep-*
15 *resentative, the Secretary shall select projects for*
16 *participation in the program based solely on the*
17 *criteria under this title and without regard to*
18 *the country in which the project 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 of*
2 *interest of any loan made under clause (i)*
3 *shall be equal to the rate for Treasury obli-*
4 *gations then issued for periods of com-*
5 *parable maturities.*

6 “(iii) *AMOUNT.*—*The amount of a loan*
7 *or loan guarantee under clause (i) shall not*
8 *exceed 50 percent of the total cost of the*
9 *qualified international energy deployment*
10 *project.*

11 “(iv) *DEVELOPED COUNTRIES.*—*Loans*
12 *or loan guarantees made for projects to be*
13 *located in a developed country, as listed in*
14 *Annex I of the United Nations Framework*
15 *Convention on Climate Change, shall re-*
16 *quire at least a 50 percent contribution to-*
17 *wards the total cost of the loan or loan*
18 *guarantee by the host country.*

19 “(v) *DEVELOPING COUNTRIES.*—*Loans*
20 *or loan guarantees made for projects to be*
21 *located in a developing country (those coun-*
22 *tries not listed in Annex I of the United*
23 *Nations Framework Convention on Climate*
24 *Change) shall require at least a 10 percent*

1 *contribution towards the total cost of the*
2 *loan or loan guarantee by the host country.*

3 “(vi) *CAPACITY BUILDING RE-*
4 *SEARCH.—Proposals made for projects to be*
5 *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 coun-*
11 *try and an industry, university or national*
12 *laboratory participant from the United*
13 *States. The host institution shall contribute*
14 *at least 50 percent of funds provided for the*
15 *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 after*
23 *the date of enactment of this subsection, the Sec-*
24 *retary shall submit to the President a report on*
25 *the results of the pilot projects.*

1 “(F) *RECOMMENDATION.*—Not later than 60
 2 days after receiving the report under subpara-
 3 graph (E), the President shall submit to Con-
 4 gress a recommendation, based on the results of
 5 the pilot projects as reported by the Secretary of
 6 Energy, concerning whether the financial assist-
 7 ance program under this section should be con-
 8 tinued, expanded, reduced, or eliminated.

9 “(3) *AUTHORIZATION OF APPROPRIATIONS.*—
 10 There are authorized to be appropriated to the Sec-
 11 retary to carry out this section \$100,000,000 for each
 12 of fiscal years 2003 through 2011, to remain available
 13 until expended.”.

14 ***Subtitle D—Climate Change***
 15 ***Science and Information***

16 ***PART I—AMENDMENTS TO THE GLOBAL***
 17 ***CHANGE RESEARCH ACT OF 1990***

18 ***SEC. 1331. AMENDMENT OF GLOBAL CHANGE RESEARCH***
 19 ***ACT OF 1990.***

20 *Except as otherwise expressly provided, whenever in*
 21 *this subtitle an amendment or repeal is expressed in terms*
 22 *of an amendment to, or repeal of, a section or other provi-*
 23 *sion, the reference shall be considered to be made to a section*
 24 *or other provision of the Global Change Research Act of*
 25 *1990 (15 U.S.C. 2921 et seq.).*

1 **SEC. 1332. CHANGES IN DEFINITIONS.**

2 *Paragraph (1) of section 2 (15 U.S.C. 2921) is amend-*
3 *ed by striking “Earth and Environmental Sciences” insert-*
4 *ing “Global Change Research”.*

5 **SEC. 1333. CHANGE IN COMMITTEE NAME AND STRUCTURE.**

6 *Section 102 (15 U.S.C. 2932) is amended—*

7 *(1) by striking “**EARTH AND ENVIRON-***
8 ***MENTAL SCIENCES**” in the section heading and in-*
9 *serting “**GLOBAL CHANGE RESEARCH**”;*

10 *(2) by striking “Earth and Environmental*
11 *Sciences” in subsection (a) and inserting “Global*
12 *Change Research”;*

13 *(3) by striking the last sentence of subsection (b)*
14 *and inserting “The representatives shall be the Dep-*
15 *uty Secretary or the Deputy Secretary’s designee (or,*
16 *in the case of an agency other than a department, the*
17 *deputy head of that agency or the deputy’s des-*
18 *ignee).”;*

19 *(4) by striking “Chairman of the Council,” in*
20 *subsection (c) and inserting “Director of the Office of*
21 *National Climate Change Policy with advice from the*
22 *Chairman of the Council, and”;*

23 *(5) by redesignating subsections (d) and (e) as*
24 *subsections (e) and (f), respectively; and*

25 *(6) by inserting after subsection (c) the fol-*
26 *lowing:*

1 “(d) *SUBCOMMITTEES AND WORKING GROUPS.*—

2 “(1) *IN GENERAL.*—*There shall be a Sub-*
3 *committee on Global Change Research, which shall*
4 *carry out such functions of the Committee as the*
5 *Committee may assign to it.*

6 “(2) *MEMBERSHIP.*—*The membership of the*
7 *Subcommittee shall consist of—*

8 “(A) *the membership of the Subcommittee*
9 *on Global Change Research of the Committee on*
10 *Environment and Natural Resources (the func-*
11 *tions of which are transferred to the Sub-*
12 *committee established by this subsection) estab-*
13 *lished by the National Science and Technology*
14 *Council; and*

15 “(B) *such additional members as the Chair*
16 *of the Committee may, from time to time, ap-*
17 *point.*

18 “(3) *CHAIR.*—*A high ranking official of one of*
19 *the departments or agencies described in subsection*
20 *(b), appointed by the Chair of the Committee with ad-*
21 *vice from the Chairman of the Council, shall chair the*
22 *subcommittee. The Chairperson shall be knowledgeable*
23 *and experienced with regard to the administration of*
24 *scientific research programs, and shall be a represent-*
25 *ative of an agency that contributes substantially, in*

1 *terms of scientific research capability and budget, to*
2 *the Program.*

3 *“(4) OTHER SUBCOMMITTEES AND WORKING*
4 *GROUPS.—The Committee may establish such addi-*
5 *tional subcommittees and working groups as it sees*
6 *fit.”.*

7 **SEC. 1334. CHANGE IN NATIONAL GLOBAL CHANGE RE-**
8 **SEARCH PLAN.**

9 *Section 104 (15 U.S.C. 2934) is amended—*

10 *(1) by inserting “short-term and long-term” be-*
11 *fore “goals” in subsection (b)(1);*

12 *(2) by striking “usable information on which to*
13 *base policy decisions related to” in subsection (b)(1)*
14 *and inserting “information relevant and readily usa-*
15 *ble by local, State, and Federal decisionmakers, as*
16 *well as other end-users, for the formulation of effective*
17 *decisions and strategies for measuring, predicting,*
18 *preventing, mitigating, and adapting to”;*

19 *(3) by adding at the end of subsection (c) the fol-*
20 *lowing:*

21 *“(6) Methods for integrating information to pro-*
22 *vide predictive and other tools for planning and deci-*
23 *sionmaking by governments, communities and the*
24 *private sector.”;*

1 (4) by striking subsection (d)(3) and inserting
2 the following:

3 “(3) combine and interpret data from various
4 sources to produce information readily usable by
5 local, State, and Federal policymakers, and other end-
6 users, attempting to formulate effective decisions and
7 strategies for preventing, mitigating, and adapting to
8 the effects of global change.”;

9 (5) by striking “and” in subsection (d)(2);

10 (6) by striking “change.” in subsection (d)(3)
11 and inserting “change; and”;

12 (7) by adding at the end of subsection (d) the fol-
13 lowing:

14 “(4) establish a common assessment and mod-
15 eling framework that may be used in both research
16 and operations to predict and assess the vulnerability
17 of natural and managed ecosystems and of human so-
18 ciety in the context of other environmental and social
19 changes.”; and

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

21 “(g) *STRATEGIC PLAN; REVISED IMPLEMENTATION*
22 *PLAN.*—The Chairman of the Council, through the Com-
23 mittee, shall develop a strategic plan for the United States
24 Global Climate Change Research Program for the 10-year
25 period beginning in 2002 and submit the plan to the Con-

1 *gress within 180 days after the date of enactment of the*
2 *Global Climate Change Act of 2002. The Chairman, through*
3 *the Committee, shall also submit revised implementation*
4 *plans as required under subsection (a).”.*

5 **SEC. 1335. INTEGRATED PROGRAM OFFICE.**

6 *Section 105 (15 U.S.C. 2935) is amended—*

7 *(1) by redesignating subsections (a), (b), and (c)*
8 *as subsections (b), (c), and (d), respectively; and*

9 *(2) by inserting before subsection (b), as redesign-*
10 *ated, the following:*

11 *“(a) INTEGRATED PROGRAM OFFICE.—*

12 *“(1) ESTABLISHMENT.—There is established in*
13 *the Office of Science and Technology Policy an inte-*
14 *grated program office for the global change research*
15 *program.*

16 *“(2) ORGANIZATION.—The integrated program*
17 *office established under paragraph (1) shall be headed*
18 *by the associate director with responsibility for cli-*
19 *mate change science and technology and shall include,*
20 *to the maximum extent feasible, a representative from*
21 *each Federal agency participating in the global*
22 *change research program.*

23 *“(3) FUNCTION.—The integrated program office*
24 *shall—*

1 “(A) manage, working in conjunction with
2 the Committee, interagency coordination and
3 program integration of global change research
4 activities and budget requests;

5 “(B) ensure that the activities and pro-
6 grams of each Federal agency or department
7 participating in the program address the goals
8 and objectives identified in the strategic research
9 plan and interagency implementation plans;

10 “(C) ensure program and budget rec-
11 ommendations of the Committee are commu-
12 nicated to the President and are integrated into
13 the climate change action strategy;

14 “(D) review, solicit, and identify, and allo-
15 cate funds for, partnership projects that address
16 critical research objectives or operational goals of
17 the program, including projects that would fill
18 research gaps identified by the program, and for
19 which project resources are shared among at
20 least two agencies participating in the program;
21 and

22 “(E) review and provide recommendations
23 on, in conjunction with the Committee, all an-
24 nual appropriations requests from Federal agen-

1 cies or departments participating in the pro-
2 gram.”;

3 (3) by striking “Committee.” in paragraph (2)
4 of subsection (c), as redesignated, and inserting
5 “Committee and the Integrated Program Office.”; and

6 (4) by inserting “and the Integrated Program
7 Office” after “Committee” in paragraph (1) of sub-
8 section (d), as redesignated.

9 **SEC. 1336. RESEARCH GRANTS.**

10 Section 105 (15 U.S.C. 2935) is amended—

11 (1) by redesignating subsection (c) as subsection
12 (d); and

13 (2) by inserting after subsection (b) the fol-
14 lowing:

15 “(c) *RESEARCH GRANTS.*—

16 “(1) *COMMITTEE TO DEVELOP LIST OF PRIORITY*
17 *RESEARCH AREAS.*—The Committee shall develop a
18 list of priority areas for research and development on
19 climate change that are not being addressed by Fed-
20 eral agencies.

21 “(2) *DIRECTOR OF OSTP TO TRANSMIT LIST TO*
22 *NSF.*—The Director of the Office of Science and Tech-
23 nology Policy shall transmit the list to the National
24 Science Foundation.

25 “(3) *FUNDING THROUGH NSF.*—

1 “(A) *BUDGET REQUEST.*—*The National*
2 *Science Foundation shall include, as part of the*
3 *annual request for appropriations for the Science*
4 *and Technology Policy Institute, a request for*
5 *appropriations to fund research in the priority*
6 *areas on the list developed under paragraph (1).*

7 “(B) *AUTHORIZATION.*—*For fiscal year*
8 *2003 and each fiscal year thereafter, there are*
9 *authorized to be appropriated to the National*
10 *Science Foundation not less than \$17,000,000, to*
11 *be made available through the Science and Tech-*
12 *nology Policy Institute, for research in those pri-*
13 *ority areas.”.*

14 **SEC. 1337. EVALUATION OF INFORMATION.**

15 *Section 106 (15 U.S.C. 2936) is amended—*

16 (1) *by striking “**Scientific**” in the section*
17 *heading;*

18 (2) *by striking “and” after the semicolon in*
19 *paragraph (2); and*

20 (3) *by striking “years.” in paragraph (3) and*
21 *inserting “years; and”;* and

22 (4) *by adding at the end the following:*

23 “(4) *evaluates the information being developed*
24 *under this title, considering in particular its useful-*
25 *ness to local, State, and national decisionmakers, as*

1 *well as to other stakeholders such as the private sector,*
2 *after providing a meaningful opportunity for the con-*
3 *sideration of the views of such stakeholders on the ef-*
4 *fectiveness of the Program and the usefulness of the*
5 *information.”.*

6 ***PART II—NATIONAL CLIMATE SERVICES***
7 ***AND MONITORING***

8 ***SEC. 1341. AMENDMENT OF NATIONAL CLIMATE PROGRAM***
9 ***ACT.***

10 *Except as otherwise expressly provided, whenever in*
11 *this subtitle an amendment or repeal is expressed in terms*
12 *of an amendment to, or repeal of, a section or other provi-*
13 *sion, the reference shall be considered to be made to a section*
14 *or other provision of the National Climate Program Act (15*
15 *U.S.C. 2901 et seq.).*

16 ***SEC. 1342. CHANGES IN FINDINGS.***

17 *Section 2 (15 U.S.C. 2901) is amended—*

18 *(1) by striking “Weather and climate change af-*
19 *fect” in paragraph (1) and inserting “Weather, cli-*
20 *mate change, and climate variability affect public*
21 *safety, environmental security, human health,”;*

22 *(2) by striking “climate” in paragraph (2) and*
23 *inserting “climate, including seasonal and decadal*
24 *fluctuations,”;*

1 (3) by striking “changes.” in paragraph (5) and
2 inserting “changes and providing free exchange of me-
3 teorological data.”; and

4 (4) by adding at the end the following:

5 “(7) The present rate of advance in research and
6 development and application of such advances is in-
7 adequate and new developments must be incorporated
8 rapidly into services for the benefit of the public.

9 “(8) The United States lacks adequate infra-
10 structure and research to meet national climate moni-
11 toring and prediction needs.”.

12 **SEC. 1343. TOOLS FOR REGIONAL PLANNING.**

13 Section 5(d) (15 U.S.C. 2904(d)) is amended—

14 (1) by redesignating paragraphs (4) through (9)
15 as paragraphs (5) through (10), respectively;

16 (2) by inserting after paragraph (3) the fol-
17 lowing:

18 “(4) methods for improving modeling and pre-
19 dictive capabilities and developing assessment meth-
20 ods to guide national, regional, and local planning
21 and decisionmaking on land use, water hazards, and
22 related issues;”;

23 (3) by inserting “sharing,” after “collection,” in
24 paragraph (5), as redesignated;

1 (4) by striking “experimental” each place it ap-
2 pears in paragraph (9), as redesignated;

3 (5) by striking “preliminary” in paragraph
4 (10), as redesignated;

5 (6) by striking “this Act,” the first place it ap-
6 pears in paragraph (10), as redesignated, and insert-
7 ing “the Global Climate Change Act of 2002,”; and

8 (7) by striking “this Act,” the second place it ap-
9 pears in paragraph (10), as redesignated, and insert-
10 ing “that Act,”.

11 **SEC. 1344. AUTHORIZATION OF APPROPRIATIONS.**

12 Section 9 (15 U.S.C. 2908) is amended—

13 (1) by striking “1979,” and inserting “2002,”;

14 (2) by striking “1980,” and inserting “2003,”;

15 (3) by striking “1981,” and inserting “2004,”;

16 and

17 (4) by striking “\$25,500,000” and inserting
18 “\$75,500,000”.

19 **SEC. 1345. NATIONAL CLIMATE SERVICE PLAN.**

20 The Act (15 U.S.C. 2901 et seq.) is amended by insert-
21 ing after section 5 the following:

22 **“SEC. 6. NATIONAL CLIMATE SERVICE PLAN.**

23 “Within 1 year after the date of enactment of the Glob-
24 al Climate Change Act of 2002, the Secretary of Commerce
25 shall submit to the Senate Committee on Commerce,

1 *Science, and Transportation and the House Science Com-*
2 *mittee a plan of action for a National Climate Service*
3 *under the National Climate Program. The plan shall set*
4 *forth recommendations and funding estimates for—*

5 “(1) *a national center for operational climate*
6 *monitoring and predicting with the functional capac-*
7 *ity to monitor and adjust observing systems as nec-*
8 *essary to reduce bias;*

9 “(2) *the design, deployment, and operation of an*
10 *adequate national climate observing system that*
11 *builds upon existing environmental monitoring sys-*
12 *tems and closes gaps in coverage by existing systems;*

13 “(3) *the establishment of a national coordinated*
14 *modeling strategy, including a national climate mod-*
15 *eling center to provide a dedicated capability for cli-*
16 *mate modeling and a regular schedule of projections*
17 *on a long- and short-term time schedule and at a*
18 *range of spatial scales;*

19 “(4) *improvements in modeling and assessment*
20 *capabilities needed to integrate information to predict*
21 *regional and local climate changes and impacts;*

22 “(5) *in coordination with the private sector, im-*
23 *proving the capacity to assess the impacts of pre-*
24 *dicted and projected climate changes and variations;*

1 “(6) a program for long-term stewardship, qual-
2 ity control, development of relevant climate products,
3 and efficient access to all relevant climate data, prod-
4 ucts, and critical model simulations; and

5 “(7) mechanisms to coordinate among Federal
6 agencies, State, and local government entities and the
7 academic community to ensure timely and full shar-
8 ing and dissemination of climate information and
9 services, both domestically and internationally.”.

10 **SEC. 1346. INTERNATIONAL PACIFIC RESEARCH AND CO-**
11 **OPERATION.**

12 *The Secretary of Commerce, in cooperation with the*
13 *Administrator of the National Aeronautics and Space Ad-*
14 *ministration, shall conduct international research in the*
15 *Pacific region that will increase understanding of the na-*
16 *ture and predictability of climate variability in the Asia-*
17 *Pacific sector, including regional aspects of global environ-*
18 *mental change. Such research activities shall be conducted*
19 *in cooperation with other nations of the region. There are*
20 *authorized to be appropriated for purposes of this section*
21 *\$1,500,000 to the National Oceanic and Atmospheric Ad-*
22 *ministration, \$1,500,000 to the National Aeronautics and*
23 *Space Administration, and \$500,000 for the Pacific ENSO*
24 *Applications Center.*

1 **SEC. 1347. REPORTING ON TRENDS.**

2 (a) *ATMOSPHERIC MONITORING AND VERIFICATION*
3 *PROGRAM.*—*The Secretary of Commerce, in coordination*
4 *with relevant Federal agencies, shall, as part of the Na-*
5 *tional Climate Service, establish an atmospheric moni-*
6 *toring and verification program utilizing aircraft, satellite,*
7 *ground sensors, and modeling capabilities to monitor, meas-*
8 *ure, and verify atmospheric greenhouse gas levels, dates,*
9 *and emissions. Where feasible, the program shall measure*
10 *emissions from identified sources participating in the re-*
11 *porting system for verification purposes. The program shall*
12 *use measurements and standards that are consistent with*
13 *those utilized in the greenhouse gas measurement and re-*
14 *porting system established under subsection (a) and the reg-*
15 *istry established under section 1102.*

16 (b) *ANNUAL REPORTING.*—*The Secretary of Commerce*
17 *shall issue an annual report that identifies greenhouse emis-*
18 *sions and trends on a local, regional, and national level.*
19 *The report shall also identify emissions or reductions attrib-*
20 *utable to individual or multiple sources covered by the*
21 *greenhouse gas measurement and reporting system estab-*
22 *lished under section 1102.*

23 **SEC. 1348. ARCTIC RESEARCH AND POLICY.**

24 (a) *ARCTIC RESEARCH COMMISSION.*—*Section 103(d)*
25 *of the Arctic Research and Policy Act of 1984 (15 U.S.C.*
26 *4102(d)) is amended—*

1 (1) *by striking “exceed 90 days” in the second*
2 *sentence of paragraph (1) and inserting “exceed, in*
3 *the case of the chairperson of the Commission, 120*
4 *days, and, in the case of any other member of the*
5 *Commission, 90 days,”;*

6 (2) *by striking “Chairman” in paragraph (2)*
7 *and inserting “chairperson”.*

8 (b) *GRANTS.—Section 104 of the Arctic Research and*
9 *Policy Act of 1984 (15 U.S.C. 4103) is amended by adding*
10 *at the end the following:*

11 “(c) *FUNDING FOR ARCTIC RESEARCH.—*

12 “(1) *IN GENERAL.—With the prior approval of*
13 *the commission, or under authority delegated by the*
14 *Commission, and subject to such conditions as the*
15 *Commission may specify, the Executive Director ap-*
16 *pointed under section 106(a) may—*

17 “(A) *make grants to persons to conduct re-*
18 *search concerning the Arctic; and*

19 “(B) *make funds available to the National*
20 *Science Foundation or to Federal agencies for*
21 *the conduct of research concerning the Arctic.*

22 “(2) *EFFECT OF ACTION BY EXECUTIVE DIREC-*
23 *TOR.—An action taken by the executive director*
24 *under paragraph (1) shall be final and binding on*
25 *the Commission.*

1 “(3) *AUTHORIZATION OF APPROPRIATIONS.*—
2 *There are authorized to be appropriated to the Com-*
3 *mission such sums as are necessary to carry out this*
4 *section.*”.

5 **SEC. 1349. ABRUPT CLIMATE CHANGE RESEARCH.**

6 (a) *IN GENERAL.*—*The Secretary of Commerce,*
7 *through the National Oceanic and Atmospheric Adminis-*
8 *tration, shall carry out a program of scientific research on*
9 *potential abrupt climate change designed—*

10 (1) *to develop a global array of terrestrial and*
11 *oceanographic indicators of paleoclimate in order suf-*
12 *ficiently to identify and describe past instances of ab-*
13 *rupt climate change;*

14 (2) *to improve understanding of thresholds and*
15 *nonlinearities in geophysical systems related to the*
16 *mechanisms of abrupt climate change;*

17 (3) *to incorporate these mechanisms into ad-*
18 *vanced geophysical models of climate change; and*

19 (4) *to test the output of these models against an*
20 *improved global array of records of past abrupt cli-*
21 *mate changes.*

22 (b) *ABRUPT CLIMATE CHANGE DEFINED.*—*In this sec-*
23 *tion, the term “abrupt climate change” means a change in*
24 *climate that occurs so rapidly or unexpectedly that human*
25 *or natural systems may have difficulty adapting to it.*

1 (c) *AUTHORIZATION OF APPROPRIATIONS.*—*There are*
2 *authorized to be appropriated to the Secretary of Commerce*
3 *\$10,000,000 for each of the fiscal years 2003 through 2008,*
4 *and such sums as may be necessary for fiscal years after*
5 *fiscal year 2008, to carry out subsection (a).*

6 **PART III—OCEAN AND COASTAL**
7 **OBSERVING SYSTEM**

8 **SEC. 1351. OCEAN AND COASTAL OBSERVING SYSTEM.**

9 (a) *ESTABLISHMENT.*—*The President, through the Na-*
10 *tional Ocean Research Leadership Council, established by*
11 *section 7902(a) of title 10, United States Code, shall estab-*
12 *lish and maintain an integrated ocean and coastal observ-*
13 *ing system that provides for long-term, continuous, and*
14 *real-time observations of the oceans and coasts for the pur-*
15 *poses of—*

16 (1) *understanding, assessing and responding to*
17 *human-induced and natural processes of global*
18 *change;*

19 (2) *improving weather forecasts and public*
20 *warnings;*

21 (3) *strengthening national security and military*
22 *preparedness;*

23 (4) *enhancing the safety and efficiency of marine*
24 *operations;*

1 (5) *supporting efforts to restore the health of and*
2 *manage coastal and marine ecosystems and living re-*
3 *sources;*

4 (6) *monitoring and evaluating the effectiveness of*
5 *ocean and coastal environmental policies;*

6 (7) *reducing and mitigating ocean and coastal*
7 *pollution; and*

8 (8) *providing information that contributes to*
9 *public awareness of the state and importance of the*
10 *oceans.*

11 (b) *COUNCIL FUNCTIONS.*—*In addition to its respon-*
12 *sibilities under section 7902(a) of such title, the Council*
13 *shall be responsible for planning and coordinating the ob-*
14 *serving system and in carrying out this responsibility*
15 *shall—*

16 (1) *develop and submit to the Congress, within*
17 *6 months after the date of enactment of this Act, a*
18 *plan for implementing a national ocean and coastal*
19 *observing system that—*

20 (A) *uses an end-to-end engineering and de-*
21 *velopment approach to develop a system design*
22 *and schedule for operational implementation;*

23 (B) *determines how current and planned*
24 *observing activities can be integrated in a cost-*
25 *effective manner;*

1 (C) provides for regional and concept dem-
2 onstration projects;

3 (D) describes the role and estimated budget
4 of each Federal agency in implementing the
5 plan;

6 (E) contributes, to the extent practicable, to
7 the National Global Change Research Plan under
8 section 104 of the Global Change Research Act of
9 1990 (15 U.S.C. 2934); and

10 (F) makes recommendations for coordina-
11 tion of ocean observing activities of the United
12 States with those of other nations and inter-
13 national organizations;

14 (2) serve as the mechanism for coordinating Fed-
15 eral ocean observing requirements and activities;

16 (3) work with academic, State, industry and
17 other actual and potential users of the observing sys-
18 tem to make effective use of existing capabilities and
19 incorporate new technologies;

20 (4) approve standards and protocols for the ad-
21 ministration of the system, including—

22 (A) a common set of measurements to be
23 collected and distributed routinely and by uni-
24 form methods;

1 (B) standards for quality control and as-
2 sessment of data;

3 (C) design, testing and employment of fore-
4 cast models for ocean conditions;

5 (D) data management, including data
6 transfer protocols and archiving; and

7 (E) designation of coastal ocean observing
8 regions; and

9 (5) in consultation with the Secretary of State,
10 provide representation at international meetings on
11 ocean observing programs and coordinate relevant
12 Federal activities with those of other nations.

13 (c) *SYSTEM ELEMENTS.*—The integrated ocean and
14 coastal observing system shall include the following ele-
15 ments:

16 (1) A nationally coordinated network of regional
17 coastal ocean observing systems that measure and dis-
18 seminate a common set of ocean observations and re-
19 lated products in a uniform manner and according to
20 sound scientific practice, but that are adapted to local
21 and regional needs.

22 (2) Ocean sensors for climate observations, in-
23 cluding the Arctic Ocean and sub-polar seas.

24 (3) Coastal, relocatable, and cabled sea floor ob-
25 servatories.

1 (4) *Broad bandwidth communications that are*
2 *capable of transmitting high volumes of data from*
3 *open ocean locations at low cost and in real time.*

4 (5) *Ocean data management and assimilation*
5 *systems that ensure full use of new sources of data*
6 *from space-borne and in situ sensors.*

7 (6) *Focused research programs.*

8 (7) *Technology development program to develop*
9 *new observing technologies and techniques, including*
10 *data management and dissemination.*

11 (8) *Public outreach and education.*

12 **SEC. 1352. AUTHORIZATION OF APPROPRIATIONS.**

13 *For development and implementation of an integrated*
14 *ocean and coastal observation system under this title, in-*
15 *cluding financial assistance to regional coastal ocean ob-*
16 *servicing systems, there are authorized to be appropriated*
17 *\$235,000,000 in fiscal year 2003, \$315,000,000 in fiscal*
18 *year 2004, \$390,000,000 in fiscal year 2005, and*
19 *\$445,000,000 in fiscal year 2006.*

20 ***Subtitle E—Climate Change***
21 ***Technology***

22 **SEC. 1361. NIST GREENHOUSE GAS FUNCTIONS.**

23 *Section 2(c) of the National Institute of Standards and*
24 *Technology Act (15 U.S.C. 272(c)) is amended—*

1 (1) by striking “and” after the semicolon in
2 paragraph (21);

3 (2) by redesignating paragraph (22) as para-
4 graph (23); and

5 (3) by inserting after paragraph (21) the fol-
6 lowing:

7 “(22) perform research to develop enhanced
8 measurements, calibrations, standards, and tech-
9 nologies which will enable the reduced production in
10 the United States of greenhouse gases associated with
11 global warming, including carbon dioxide, methane,
12 nitrous oxide, ozone, perfluorocarbons, hydro-
13 fluorocarbons, and sulfur hexafluoride; and”.

14 **SEC. 1362. DEVELOPMENT OF NEW MEASUREMENT TECH-**
15 **NOLOGIES.**

16 *The Secretary of Commerce shall initiate a program*
17 *to develop, with technical assistance from appropriate Fed-*
18 *eral agencies, innovative standards and measurement tech-*
19 *nologies (including technologies to measure carbon changes*
20 *due to changes in land use cover) to calculate—*

21 (1) greenhouse gas emissions and reductions
22 from agriculture, forestry, and other land use prac-
23 tices;

24 (2) noncarbon dioxide greenhouse gas emissions
25 from transportation;

1 (3) *greenhouse gas emissions from facilities or*
2 *sources using remote sensing technology; and*

3 (4) *any other greenhouse gas emission or reduc-*
4 *tions for which no accurate or reliable measurement*
5 *technology exists.*

6 **SEC. 1363. ENHANCED ENVIRONMENTAL MEASUREMENTS**
7 **AND STANDARDS.**

8 *The National Institute of Standards and Technology*
9 *Act (15 U.S.C. 271 et seq.) is amended—*

10 (1) *by redesignating sections 17 through 32 as*
11 *sections 18 through 33, respectively; and*

12 (2) *by inserting after section 16 the following:*

13 **“SEC. 17. CLIMATE CHANGE STANDARDS AND PROCESSES.**

14 **“(a) IN GENERAL.—***The Director shall establish with-*
15 *in the Institute a program to perform and support research*
16 *on global climate change standards and processes, with the*
17 *goal of providing scientific and technical knowledge appli-*
18 *cable to the reduction of greenhouse gases (as defined in sec-*
19 *tion 4 of the Global Climate Change Act of 2002).*

20 **“(b) RESEARCH PROGRAM.—**

21 **“(1) IN GENERAL.—***The Director is authorized to*
22 *conduct, directly or through contracts or grants, a*
23 *global climate change standards and processes re-*
24 *search program.*

1 “(2) *RESEARCH PROJECTS.*—*The specific con-*
2 *tents and priorities of the research program shall be*
3 *determined in consultation with appropriate Federal*
4 *agencies, including the Environmental Protection*
5 *Agency, the National Oceanic and Atmospheric Ad-*
6 *ministration, and the National Aeronautics and*
7 *Space Administration. The program generally shall*
8 *include basic and applied research—*

9 “(A) *to develop and provide the enhanced*
10 *measurements, calibrations, data, models, and*
11 *reference material standards which will enable*
12 *the monitoring of greenhouse gases;*

13 “(B) *to assist in establishing a baseline ref-*
14 *erence point for future trading in greenhouse*
15 *gases and the measurement of progress in emis-*
16 *sions reduction;*

17 “(C) *that will be exchanged internationally*
18 *as scientific or technical information which has*
19 *the stated purpose of developing mutually recog-*
20 *nized measurements, standards, and procedures*
21 *for reducing greenhouse gases; and*

22 “(D) *to assist in developing improved in-*
23 *dustrial processes designed to reduce or eliminate*
24 *greenhouse gases.*

25 “(c) *NATIONAL MEASUREMENT LABORATORIES.*—

1 “(1) *IN GENERAL.*—*In carrying out this section,*
2 *the Director shall utilize the collective skills of the Na-*
3 *tional Measurement Laboratories of the National In-*
4 *stitute of Standards and Technology to improve the*
5 *accuracy of measurements that will permit better un-*
6 *derstanding and control of these industrial chemical*
7 *processes and result in the reduction or elimination*
8 *of greenhouse gases.*

9 “(2) *MATERIAL, PROCESS, AND BUILDING RE-*
10 *SEARCH.*—*The National Measurement Laboratories*
11 *shall conduct research under this subsection that*
12 *includes—*

13 “(A) *developing material and manufac-*
14 *turing processes which are designed for energy ef-*
15 *iciency and reduced greenhouse gas emissions*
16 *into the environment;*

17 “(B) *developing environmentally-friendly,*
18 *‘green’ chemical processes to be used by industry;*
19 *and*

20 “(C) *enhancing building performance with*
21 *a focus in developing standards or tools which*
22 *will help incorporate low- or no-emission tech-*
23 *nologies into building designs.*

24 “(3) *STANDARDS AND TOOLS.*—*The National*
25 *Measurement Laboratories shall develop standards*

1 *and tools under this subsection that include software*
2 *to assist designers in selecting alternate building ma-*
3 *terials, performance data on materials, artificial in-*
4 *telligence-aided design procedures for building sub-*
5 *systems and ‘smart buildings’, and improved test*
6 *methods and rating procedures for evaluating the en-*
7 *ergy performance of residential and commercial ap-*
8 *pliances and products.*

9 *“(d) NATIONAL VOLUNTARY LABORATORY ACCREDITA-*
10 *TION PROGRAM.—The Director shall utilize the National*
11 *Voluntary Laboratory Accreditation Program under this*
12 *section to establish a program to include specific calibration*
13 *or test standards and related methods and protocols assem-*
14 *bled to satisfy the unique needs for accreditation in meas-*
15 *uring the production of greenhouse gases. In carrying out*
16 *this subsection the Director may cooperate with other de-*
17 *partments and agencies of the Federal Government, State*
18 *and local governments, and private organizations.”.*

19 **SEC. 1364. TECHNOLOGY DEVELOPMENT AND DIFFUSION.**

20 *The Director of the National Institute of Standards and*
21 *Technology, through the Manufacturing Extension Partner-*
22 *ship Program, may develop a program to support the im-*
23 *plementation of new “green” manufacturing technologies*
24 *and techniques by the more than 380,000 small manufac-*
25 *turers.*

1 **SEC. 1365. AUTHORIZATION OF APPROPRIATIONS.**

2 *There are authorized to be appropriated to the Director*
3 *to carry out functions pursuant to sections 1345, 1351, and*
4 *1361 through 1363, \$10,000,000 for fiscal years 2002*
5 *through 2006.*

6 ***Subtitle F—Climate Adaptation***
7 ***and Hazards Prevention***

8 **PART I—ASSESSMENT AND ADAPTATION**

9 **SEC. 1371. REGIONAL CLIMATE ASSESSMENT AND ADAPTA-**
10 **TION PROGRAM.**

11 *(a) IN GENERAL.—The President shall establish with-*
12 *in the Department of Commerce a National Climate Change*
13 *Vulnerability and Adaptation Program for regional im-*
14 *pacts related to increasing concentrations of greenhouse*
15 *gases in the atmosphere and climate variability.*

16 *(b) COORDINATION.—In designing such program the*
17 *Secretary shall consult with the Federal Emergency Man-*
18 *agement Agency, the Environmental Protection Agency, the*
19 *Army Corps of Engineers, the Department of Transpor-*
20 *tation, and other appropriate Federal, State, and local gov-*
21 *ernment entities.*

22 *(c) VULNERABILITY ASSESSMENTS.—The program*
23 *shall—*

24 *(1) evaluate, based on predictions and other in-*
25 *formation developed under this Act and the National*
26 *Climate Program Act (15 U.S.C. 2901 et seq.), re-*

1 *gional vulnerability to phenomena associated with*
2 *climate change and climate variability, including—*

3 *(A) increases in severe weather events;*

4 *(B) sea level rise and shifts in the*
5 *hydrological cycle;*

6 *(C) natural hazards, including tsunami,*
7 *drought, flood and fire; and*

8 *(D) alteration of ecological communities, in-*
9 *cluding at the ecosystem or watershed levels; and*

10 *(2) build upon predictions and other information*
11 *developed in the National Assessments prepared under*
12 *the Global Change Research Act of 1990 (15 U.S.C.*
13 *2921 et seq.).*

14 *(d) PREPAREDNESS RECOMMENDATIONS.—The pro-*
15 *gram shall submit a report to Congress within 2 years after*
16 *the date of enactment of this Act that identifies and rec-*
17 *ommends implementation and funding strategies for short-*
18 *and long-term actions that may be taken at the national,*
19 *regional, State, and local level—*

20 *(1) to reduce vulnerability of human life and*
21 *property;*

22 *(2) to improve resilience to hazards;*

23 *(3) to minimize economic impacts; and*

24 *(4) to reduce threats to critical biological and ec-*
25 *ological processes.*

1 (e) *INFORMATION AND TECHNOLOGY.*—*The Secretary*
2 *shall make available appropriate information and other*
3 *technologies and products that will assist national, re-*
4 *gional, State, and local efforts, as well as efforts by other*
5 *end-users, to reduce loss of life and property, and coordinate*
6 *dissemination of such technologies and products.*

7 (f) *AUTHORIZATION OF APPROPRIATIONS.*—*There are*
8 *authorized to be appropriated to the Secretary of Commerce*
9 *\$4,500,000 to implement the requirements of this section.*

10 **SEC. 1372. COASTAL VULNERABILITY AND ADAPTATION.**

11 (a) *COASTAL VULNERABILITY.*—*Within 2 years after*
12 *the date of enactment of this Act, the Secretary shall, in*
13 *consultation with the appropriate Federal, State, and local*
14 *governmental entities, conduct regional assessments of the*
15 *vulnerability of coastal areas to hazards associated with cli-*
16 *mate change, climate variability, sea level rise, and fluctua-*
17 *tion of Great Lakes water levels. The Secretary may also*
18 *establish, as warranted, longer term regional assessment*
19 *programs. The Secretary may also consult with the govern-*
20 *ments of Canada and Mexico as appropriate in developing*
21 *such regional assessments. In preparing the regional assess-*
22 *ments, the Secretary shall collect and compile current infor-*
23 *mation on climate change, sea level rise, natural hazards,*
24 *and coastal erosion and mapping, and specifically address*
25 *impacts on Arctic regions and the Central, Western, and*

1 *South Pacific regions. The regional assessments shall in-*
2 *clude an evaluation of—*

3 (1) *social impacts associated with threats to and*
4 *potential losses of housing, communities, and infra-*
5 *structure;*

6 (2) *physical impacts such as coastal erosion,*
7 *flooding and loss of estuarine habitat, saltwater in-*
8 *trusion of aquifers and saltwater encroachment, and*
9 *species migration; and*

10 (3) *economic impact on local, State, and re-*
11 *gional economies, including the impact on abundance*
12 *or distribution of economically important living ma-*
13 *rine resources.*

14 (b) *COASTAL ADAPTATION PLAN.—The Secretary shall,*
15 *within 3 years after the date of enactment of this Act, sub-*
16 *mit to the Congress a national coastal adaptation plan,*
17 *composed of individual regional adaptation plans that rec-*
18 *ommend targets and strategies to address coastal impacts*
19 *associated with climate change, sea level rise, or climate*
20 *variability. The plan shall be developed with the participa-*
21 *tion of other Federal, State, and local government agencies*
22 *that will be critical in the implementation of the plan at*
23 *the State and local levels. The regional plans that will make*
24 *up the national coastal adaptation plan shall be based on*
25 *the information contained in the regional assessments and*

1 *shall identify special needs associated with Arctic areas and*
2 *the Central, Western, and South Pacific regions. The Plan*
3 *shall recommend both short- and long-term adaptation*
4 *strategies and shall include recommendations regarding—*

5 (1) *Federal flood insurance program modifica-*
6 *tions;*

7 (2) *areas that have been identified as high risk*
8 *through mapping and assessment;*

9 (3) *mitigation incentives such as rolling ease-*
10 *ments, strategic retreat, State or Federal acquisition*
11 *in fee simple or other interest in land, construction*
12 *standards, and zoning;*

13 (4) *land and property owner education;*

14 (5) *economic planning for small communities de-*
15 *pendent upon affected coastal resources, including*
16 *fisheries; and*

17 (6) *funding requirements and mechanisms.*

18 (c) *TECHNICAL PLANNING ASSISTANCE.—The Sec-*
19 *retary, through the National Ocean Service, shall establish*
20 *a coordinated program to provide technical planning assist-*
21 *ance and products to coastal States and local governments*
22 *as they develop and implement adaptation or mitigation*
23 *strategies and plans. Products, information, tools and tech-*
24 *nical expertise generated from the development of the re-*
25 *gional assessments and the regional adaptation plans will*

1 *be made available to coastal States for the purposes of devel-*
2 *oping their own State and local plans.*

3 (d) *COASTAL ADAPTATION GRANTS.—The Secretary*
4 *shall provide grants of financial assistance to coastal States*
5 *with federally approved coastal zone management programs*
6 *to develop and begin implementing coastal adaptation pro-*
7 *grams if the State provides a Federal-to-State match of 4*
8 *to 1 in the first fiscal year, 2.3 to 1 in the second fiscal*
9 *year, 2 to 1 in the third fiscal year, and 1 to 1 thereafter.*
10 *Distribution of these funds to coastal States shall be based*
11 *upon the formula established under section 306(c) of the*
12 *Coastal Zone Management Act of 1972 (16 U.S.C. 1455(c)),*
13 *adjusted in consultation with the States as necessary to pro-*
14 *vide assistance to particularly vulnerable coastlines.*

15 (e) *COASTAL RESPONSE PILOT PROGRAM.—*

16 (1) *IN GENERAL.—The Secretary shall establish*
17 *a 4-year pilot program to provide financial assistance*
18 *to coastal communities most adversely affected by the*
19 *impact of climate change or climate variability that*
20 *are located in States with federally approved coastal*
21 *zone management programs.*

22 (2) *ELIGIBLE PROJECTS.—A project is eligible*
23 *for financial assistance under the pilot program if*
24 *it—*

1 (A) will restore or strengthen coastal re-
2 sources, facilities, or infrastructure that have
3 been damaged by such an impact, as determined
4 by the Secretary;

5 (B) meets the requirements of the Coastal
6 Zone Management Act (16 U.S.C. 1451 et seq.)
7 and is consistent with the coastal zone manage-
8 ment plan of the State in which it is located;
9 and

10 (C) will not cost more than \$100,000.

11 (3) *FUNDING SHARE.*—The Federal funding
12 share of any project under this subsection may not ex-
13 ceed 75 percent of the total cost of the project. In the
14 administration of this paragraph—

15 (A) the Secretary may take into account in-
16 kind contributions and other noncash support of
17 any project to determine the Federal funding
18 share for that project; and

19 (B) the Secretary may waive the require-
20 ments of this paragraph for a project in a com-
21 munity if—

22 (i) the Secretary determines that the
23 project is important; and

24 (ii) the economy and available re-
25 sources of the community in which the

1 *project is to be conducted are insufficient to*
2 *meet the non-Federal share of the project's*
3 *costs.*

4 *(f) DEFINITIONS.—Any term used in this section that*
5 *is defined in section 304 of the Coastal Zone Management*
6 *Act of 1972 (16 U.S.C. 1453) has the meaning given it by*
7 *that section.*

8 *(g) AUTHORIZATION OF APPROPRIATIONS.—There are*
9 *authorized to be appropriated \$3,000,000 annually for re-*
10 *gional assessments under subsection (a), and \$3,000,000 an-*
11 *nually for coastal adaptation grants under subsection (d).*

12 **SEC. 1373. ARCTIC RESEARCH CENTER.**

13 *(a) ESTABLISHMENT.—The Secretary of Commerce, in*
14 *consultation with the Secretaries of Energy and the Inte-*
15 *rior, the Director of the National Science Foundation, and*
16 *the Administrator of the Environmental Protection Agency,*
17 *shall establish a joint research facility, to be known as the*
18 *Barrow Arctic Research Center, to support climate change*
19 *and other scientific research activities in the Arctic.*

20 *(b) AUTHORIZATION OF APPROPRIATIONS.—There are*
21 *authorized to be appropriated to the Secretaries of Com-*
22 *merce, Energy, and the Interior, the Director of the Na-*
23 *tional Science Foundation, and the Administrator of the*
24 *Environmental Protection Agency, \$35,000,000 for the*

1 *planning, design, construction, and support of the Barrow*
2 *Arctic Research Center.*

3 ***PART II—FORECASTING AND PLANNING***

4 ***PILOT PROGRAMS***

5 ***SEC. 1381. REMOTE SENSING PILOT PROJECTS.***

6 *(a) IN GENERAL.—The Administrator of the National*
7 *Aeronautics and Space Administration may establish,*
8 *through the National Oceanic and Atmospheric Adminis-*
9 *tration’s Coastal Services Center, a program of grants for*
10 *competitively awarded pilot projects to explore the inte-*
11 *grated use of sources of remote sensing and other geospatial*
12 *information to address State, local, regional, and tribal*
13 *agency needs to forecast a plan for adaptation to coastal*
14 *zone and land use changes that may result as a consequence*
15 *of global climate change or climate variability.*

16 *(b) PREFERRED PROJECTS.—In awarding grants*
17 *under this section, the Center shall give preference to*
18 *projects that—*

19 *(1) focus on areas that are most sensitive to the*
20 *consequences of global climate change or climate vari-*
21 *ability;*

22 *(2) make use of existing public or commercial*
23 *data sets;*

24 *(3) integrate multiple sources of geospatial infor-*
25 *mation, such as geographic information system data,*

1 *satellite-provided positioning data, and remotely*
2 *sensed data, in innovative ways;*

3 *(4) offer diverse, innovative approaches that may*
4 *serve as models for establishing a future coordinated*
5 *framework for planning strategies for adaptation to*
6 *coastal zone and land use changes related to global*
7 *climate change or climate variability;*

8 *(5) include funds or in-kind contributions from*
9 *non-Federal sources;*

10 *(6) involve the participation of commercial enti-*
11 *ties that process raw or lightly processed data, often*
12 *merging that data with other geospatial information,*
13 *to create data products that have significant value*
14 *added to the original data; and*

15 *(7) taken together demonstrate as diverse a set of*
16 *public sector applications as possible.*

17 *(c) OPPORTUNITIES.—In carrying out this section, the*
18 *Center shall seek opportunities to assist—*

19 *(1) in the development of commercial applica-*
20 *tions potentially available from the remote sensing in-*
21 *dustry; and*

22 *(2) State, local, regional, and tribal agencies in*
23 *applying remote sensing and other geospatial infor-*
24 *mation technologies for management and adaptation*

1 *to coastal and land use consequences of global climate*
2 *change or climate variability.*

3 (d) *DURATION.*—*Assistance for a pilot project under*
4 *subsection (a) shall be provided for a period of not more*
5 *than 3 years.*

6 (e) *RESPONSIBILITIES OF GRANTEES.*—*Within 180*
7 *days after completion of a grant project, each recipient of*
8 *a grant under subsection (a) shall transmit a report to the*
9 *Center on the results of the pilot project and conduct at*
10 *least one workshop for potential users to disseminate the*
11 *lessons learned from the pilot project as widely as feasible.*

12 (f) *REGULATIONS.*—*The Center shall issue regulations*
13 *establishing application, selection, and implementation*
14 *procedures for pilot projects, and guidelines for reports and*
15 *workshops required by this section.*

16 **SEC. 1382. DATABASE ESTABLISHMENT.**

17 *The Center shall establish and maintain an electronic,*
18 *Internet-accessible database of the results of each pilot*
19 *project completed under section 1381.*

20 **SEC. 1383. AIR QUALITY RESEARCH, FORECASTS AND WARN-**
21 **INGS.**

22 (a) *REGIONAL STUDIES.*—*The Secretary of Commerce,*
23 *through the Administrator of the National Oceanographic*
24 *and Atmospheric Administration, shall, in order of priority*
25 *as listed in section (c), conduct regional studies of the air*

1 *quality within specific regions of the United States. Such*
2 *studies should assess the effects of in situ emissions of air*
3 *pollutants and their precursors, transport of such emissions*
4 *and precursors from outside the region, and production of*
5 *air pollutants within the region via chemical reactions.*

6 (b) *FORECASTS AND WARNINGS.—The Secretary of*
7 *Commerce, through the Administrator of the National*
8 *Oceanographic and Atmospheric Administration, shall, in*
9 *order of priority as listed in section (c), establish a program*
10 *to provide operational air quality forecasts and warnings*
11 *for specific regions of the United States.*

12 (c) *DEFINITION.—For the purposes of this section, the*
13 *term “specific regions of the United States” means the fol-*
14 *lowing geographical areas:*

15 (1) *the Northeast, composed of Main, New*
16 *Hampshire, Vermont, Massachusetts, Rhode Island,*
17 *Connecticut, New York, New Jersey, Pennsylvania,*
18 *Maryland, Delaware, the District of Columbia, and*
19 *West Virginia;*

20 (2) *the Southeast, composed of Virginia, North*
21 *Carolina, South Carolina, Georgia, Alabama, and*
22 *Florida;*

23 (3) *the Midwest, composed of Minnesota, Wis-*
24 *consin, Iowa, Missouri, Illinois, Kentucky, Indiana,*
25 *Ohio, and Michigan;*

1 (4) *the South, composed of Tennessee, Mis-*
2 *issippi, Louisiana, Arkansas, Oklahoma, and Texas;*

3 (5) *the High Plains, composed of North Dakota,*
4 *South Dakota, Nebraska, and Kansas;*

5 (6) *the Northwest, composed of Washington, Or-*
6 *egon, Idaho, Montana, and Wyoming;*

7 (7) *the Southwest, composed of California, Ne-*
8 *vada, Utah, Colorado, Arizona, and New Mexico;*

9 (8) *Alaska; and*

10 (9) *Hawaii.*

11 (d) *AUTHORIZATION OF APPROPRIATIONS.—There are*
12 *authorized to be appropriated to the Secretary of Commerce*
13 *\$3,000,000 for each of fiscal years 2003 through 2006 for*
14 *studies pursuant to subsection (b) of this section, and*
15 *\$5,000,000 for fiscal year 2003 and such sums as may be*
16 *necessary for subsequent fiscal years for the forecast and*
17 *warning program pursuant to subsection (c) of this section.*

18 **SEC. 1384. DEFINITIONS.**

19 *In this subtitle:*

20 (1) *CENTER.—The term “Center” means the*
21 *Coastal Services Center of the National Oceanic and*
22 *Atmospheric Administration.*

23 (2) *GEOSPATIAL INFORMATION.—The term*
24 *“geospatial information” means knowledge of the na-*
25 *ture and distribution of physical and cultural fea-*

1 *tures on the landscape based on analysis of data from*
 2 *airborne or spaceborne platforms or other types and*
 3 *sources of data.*

4 (3) *INSTITUTION OF HIGHER EDUCATION.—The*
 5 *term “institution of higher education” has the mean-*
 6 *ing given that term in section 101(a) of the Higher*
 7 *Education Act of 1965 (20 U.S.C. 1001(a)).*

8 **SEC. 1385. AUTHORIZATION OF APPROPRIATIONS.**

9 *There are authorized to be appropriated to the Admin-*
 10 *istrator to carry out the provisions of this subtitle—*

11 (1) *\$17,500,000 for fiscal year 2003;*

12 (2) *\$20,000,000 for fiscal year 2004;*

13 (3) *\$22,500,000 for fiscal year 2005; and*

14 (4) *\$25,000,000 for fiscal year 2006.*

15 **TITLE XIV—MANAGEMENT OF**
 16 **DOE SCIENCE AND TECH-**
 17 **NOLOGY PROGRAMS**

18 **SEC. 1401. DEFINITIONS.**

19 *In this title:*

20 (1) *APPLICABILITY OF DEFINITIONS.—The defi-*
 21 *nitions in section 1203 shall apply.*

22 (2) *SINGLE-PURPOSE RESEARCH FACILITY.—The*
 23 *term “single-purpose research facility” means any of*
 24 *the following primarily single purpose entities owned*
 25 *by the Department of Energy—*

- 1 (A) *Ames Laboratory;*
- 2 (B) *East Tennessee Technology Park;*
- 3 (C) *Environmental Measurement Labora-*
- 4 *tory;*
- 5 (D) *Fernald Environmental Management*
- 6 *Project;*
- 7 (E) *Fermi National Accelerator Laboratory;*
- 8 (F) *Kansas City Plant;*
- 9 (G) *Nevada Test Site;*
- 10 (H) *New Brunswick Laboratory;*
- 11 (I) *Pantex Weapons Facility;*
- 12 (J) *Princeton Plasma Physics Laboratory;*
- 13 (K) *Savannah River Technology Center;*
- 14 (L) *Stanford Linear Accelerator Center;*
- 15 (M) *Thomas Jefferson National Accelerator*
- 16 *Facility;*
- 17 (N) *Y-12 facility at Oak Ridge National*
- 18 *Laboratory;*
- 19 (O) *Waste Isolation Pilot Plant; or*
- 20 (P) *other similar organization of the De-*
- 21 *partment designated by the Secretary that en-*
- 22 *gages in technology transfer, partnering, or li-*
- 23 *censing activities.*

1 **SEC. 1402. AVAILABILITY OF FUNDS.**

2 *Funds authorized to be appropriated to the Depart-*
3 *ment of Energy under title XII, title XIII, and title XV*
4 *shall remain available until expended.*

5 **SEC. 1403. COST SHARING.**

6 (a) *RESEARCH AND DEVELOPMENT.*—*For research*
7 *and development projects funded from appropriations au-*
8 *thorized under subtitles A through D of title XII, the Sec-*
9 *retary shall require a commitment from non-Federal*
10 *sources of at least 20 percent of the cost of the project. The*
11 *Secretary may reduce or eliminate the non-Federal require-*
12 *ment under this subsection if the Secretary determines that*
13 *the research and development is of a basic or fundamental*
14 *nature.*

15 (b) *DEMONSTRATION AND DEPLOYMENT.*—*For dem-*
16 *onstration and technology deployment activities funded*
17 *from appropriations authorized under subtitles A through*
18 *D of title XII, the Secretary shall require a commitment*
19 *from non-Federal sources of at least 50 percent of the costs*
20 *of the project directly and specifically related to any dem-*
21 *onstration or technology deployment activity. The Secretary*
22 *may reduce or eliminate the non-Federal requirement under*
23 *this subsection if the Secretary determines that the reduc-*
24 *tion is necessary and appropriate considering the techno-*
25 *logical risks involved in the project and is necessary to meet*
26 *one or more goals of this title.*

1 (c) *CALCULATION OF AMOUNT.*—*In calculating the*
2 *amount of the non-Federal commitment under subsection*
3 *(a) or (b), the Secretary shall include cash, personnel, serv-*
4 *ices, equipment, and other resources.*

5 **SEC. 1404. MERIT REVIEW OF PROPOSALS.**

6 *Awards of funds authorized under title XII, subtitle*
7 *A of title XIII, and title XV shall be made only after an*
8 *independent review of the scientific and technical merit of*
9 *the proposals for such awards has been made by the Depart-*
10 *ment of Energy.*

11 **SEC. 1405. EXTERNAL TECHNICAL REVIEW OF DEPART-**
12 **MENTAL PROGRAMS.**

13 (a) *NATIONAL ENERGY RESEARCH AND DEVELOPMENT*
14 *ADVISORY BOARDS.*—(1) *The Secretary shall establish an*
15 *advisory board to oversee Department research and develop-*
16 *ment programs in each of the following areas—*

17 (A) *energy efficiency;*

18 (B) *renewable energy;*

19 (C) *fossil energy;*

20 (D) *nuclear energy; and*

21 (E) *climate change technology, with emphasis on*
22 *integration, collaboration, and other special features*
23 *of the cross-cutting technologies supported by the Of-*
24 *fice of Climate Change Technology.*

1 (2) *The Secretary may designate an existing advisory*
2 *board within the Department to fulfill the responsibilities*
3 *of an advisory board under this subsection, or may enter*
4 *into appropriate arrangements with the National Academy*
5 *of Sciences to establish such an advisory board.*

6 (b) *UTILIZATION OF EXISTING COMMITTEES.—The*
7 *Secretary of Energy shall continue to use the scientific pro-*
8 *gram advisory committees chartered under the Federal Ad-*
9 *visory Committee Act by the Office of Science to oversee re-*
10 *search and development programs under that Office.*

11 (c) *MEMBERSHIP.—Each advisory board under this*
12 *section shall consist of experts drawn from industry, aca-*
13 *demia, Federal laboratories, research institutions, or State,*
14 *local, or tribal governments, as appropriate.*

15 (d) *MEETINGS AND PURPOSES.—Each advisory board*
16 *under this section shall meet at least semi-annually to re-*
17 *view and advise on the progress made by the respective re-*
18 *search, development, demonstration, and technology deploy-*
19 *ment program. The advisory board shall also review the*
20 *adequacy and relevance of the goals established for each pro-*
21 *gram by Congress and the President, and may otherwise*
22 *advise on promising future directions in research and devel-*
23 *opment that should be considered by each program.*

1 **SEC. 1406. IMPROVED COORDINATION AND MANAGEMENT**
2 **OF CIVILIAN SCIENCE AND TECHNOLOGY**
3 **PROGRAMS.**

4 (a) *EFFECTIVE TOP-LEVEL COORDINATION OF RE-*
5 *SEARCH AND DEVELOPMENT PROGRAMS.*—Section 202(b)
6 *of the Department of Energy Organization Act (42 U.S.C.*
7 *7132(b)) is amended to read as follows:*

8 “(b)(1) *There shall be in the Department an Under*
9 *Secretary for Energy and Science, who shall be appointed*
10 *by the President, by and with the advice and consent of*
11 *the Senate. The Under Secretary shall be compensated at*
12 *the rate provided for at level III of the Executive Schedule*
13 *under section 5314 of title 5, United States Code.*

14 “(2) *The Under Secretary for Energy and Science*
15 *shall be appointed from among persons who—*

16 “(A) *have extensive background in scientific or*
17 *engineering fields; and*

18 “(B) *are well qualified to manage the civilian*
19 *research and development programs of the Depart-*
20 *ment of Energy.*

21 “(3) *The Under Secretary for Energy and Science*
22 *shall—*

23 “(A) *serve as the Science and Technology Advi-*
24 *sor to the Secretary;*

25 “(B) *monitor the Department’s research and de-*
26 *velopment programs in order to advise the Secretary*

1 *with respect to any undesirable duplication or gaps*
2 *in such programs;*

3 “(C) *advise the Secretary with respect to the*
4 *well-being and management of the multipurpose lab-*
5 *oratories under the jurisdiction of the Department;*

6 “(D) *advise the Secretary with respect to edu-*
7 *cation and training activities required for effective*
8 *short- and long-term basic and applied research ac-*
9 *tivities of the Department;*

10 “(E) *advise the Secretary with respect to grants*
11 *and other forms of financial assistance required for*
12 *effective short- and long-term basic and applied re-*
13 *search activities of the Department; and*

14 “(F) *exercise authority and responsibility over*
15 *Assistant Secretaries carrying out energy research*
16 *and development and energy technology functions*
17 *under sections 203 and 209, as well as other elements*
18 *of the Department assigned by the Secretary.”.*

19 **(b) RECONFIGURATION OF POSITION OF DIRECTOR OF**
20 **THE OFFICE OF SCIENCE.**—*Section 209 of the Department*
21 *of Energy Organization Act (41 U.S.C. 7139) is amended*
22 *to read as follows:*

23 “(a) *There shall be within the Department an Office*
24 *of Science, to be headed by an Assistant Secretary of*
25 *Science, who shall be appointed by the President, by and*

1 *with the advice and consent of the Senate, and who shall*
2 *be compensated at the rate provided for level IV of the Exec-*
3 *utive Schedule under section 5315 of title 5, United States*
4 *Code.*

5 “(b) *The Assistant Secretary of Science shall be in ad-*
6 *dition to the Assistant Secretaries provided for under sec-*
7 *tion 203 of this Act.*

8 “(c) *It shall be the duty and responsibility of the As-*
9 *stant Secretary of Science to carry out the fundamental*
10 *science and engineering research functions of the Depart-*
11 *ment, including the responsibility for policy and manage-*
12 *ment of such research, as well as other functions vested in*
13 *the Secretary which he may assign to the Assistant Sec-*
14 *retary.”.*

15 (c) *ADDITIONAL ASSISTANT SECRETARY POSITION TO*
16 *ENABLE IMPROVED MANAGEMENT OF NUCLEAR ENERGY*
17 *ISSUES.—*

18 (1) *Section 203(a) of the Department of Energy*
19 *Organization Act (42 U.S.C. 7133(a)) is amended by*
20 *striking “There shall be in the Department six Assist-*
21 *ant Secretaries” and inserting “Except as provided*
22 *in section 209, there shall be in the Department seven*
23 *Assistant Secretaries”.*

1 (2) *It is the sense of the Senate that the leader-*
2 *ship for departmental missions in nuclear energy*
3 *should be at the Assistant Secretary level.*

4 (d) *TECHNICAL AND CONFORMING AMENDMENTS.—*

5 (1) *Section 202 of the Department of Energy Or-*
6 *ganization Act (42 U.S.C. 7132) is further amended*
7 *by adding the following at the end:*

8 “(d) *There shall be in the Department an Under Sec-*
9 *retary, who shall be appointed by the President, by and*
10 *with the advice and consent of the Senate, and who shall*
11 *perform such functions and duties as the Secretary shall*
12 *prescribe, consistent with this section. The Under Secretary*
13 *shall be compensated at the rate provided for level III of*
14 *the Executive Schedule under section 5314 of title 5, United*
15 *States Code.*

16 “(e) *There shall be in the Department a General Coun-*
17 *sel, who shall be appointed by the President, by and with*
18 *the advice and consent of the Senate. The General Counsel*
19 *shall be compensated at the rate provided for level IV of*
20 *the Executive Schedule under section 5315 of title 5, United*
21 *States Code.”.*

22 (2) *Section 5314 of title 5, United States Code,*
23 *is amended by striking “Under Secretaries of Energy*
24 *(2)” and inserting “Under Secretaries of Energy (3)”.*

1 (3) *Section 5315 of title 5, United States Code,*
2 *is amended by—*

3 (A) *striking “Director, Office of Science,*
4 *Department of Energy.”; and*

5 (B) *striking “Assistant Secretaries of En-*
6 *ergy (6)” and inserting “Assistant Secretaries of*
7 *Energy (8)”.*

8 (4) *The table of contents for the Department of*
9 *Energy Organization Act (42 U.S.C. 7101 note) is*
10 *amended—*

11 (A) *by striking “Section 209” and inserting*
12 *“Sec. 209”;*

13 (B) *by striking “213.” and inserting “Sec.*
14 *213.”;*

15 (C) *by striking “214.” and inserting “Sec.*
16 *214.”;*

17 (D) *by striking “215.” and inserting “Sec.*
18 *215.”; and*

19 (E) *by striking “216.” and inserting “Sec.*
20 *216.”.*

21 **SEC. 1407. IMPROVED COORDINATION OF TECHNOLOGY**

22 **TRANSFER ACTIVITIES.**

23 (a) *TECHNOLOGY TRANSFER COORDINATOR.—The*
24 *Secretary shall appoint a Technology Transfer Coordinator*
25 *to perform oversight of and policy development for tech-*

1 *nology transfer activities at the Department. The Tech-*
2 *nology Transfer Coordinator shall coordinate the activities*
3 *of the Technology Partnerships Working Group, and shall*
4 *oversee the expenditure of funds allocated to the Technology*
5 *Partnership Working Group.*

6 (b) *TECHNOLOGY PARTNERSHIP WORKING GROUP.—*
7 *The Secretary shall establish a Technology Partnership*
8 *Working Group, which shall consist of representatives of the*
9 *National Laboratories and single-purpose research facili-*
10 *ties, to—*

11 (1) *coordinate technology transfer activities oc-*
12 *curring at National Laboratories and single-purpose*
13 *research facilities;*

14 (2) *exchange information about technology trans-*
15 *fer practices; and*

16 (3) *develop and disseminate to the public and*
17 *prospective technology partners information about op-*
18 *portunities and procedures for technology transfer*
19 *with the Department.*

20 **SEC. 1408. TECHNOLOGY INFRASTRUCTURE PROGRAM.**

21 (a) *ESTABLISHMENT.—The Secretary shall establish a*
22 *Technology Infrastructure Program in accordance with this*
23 *section.*

24 (b) *PURPOSE.—The purpose of the Technology Infra-*
25 *structure Program shall be to improve the ability of Na-*

1 *tional Laboratories or single-purpose research facilities to*
2 *support departmental missions by—*

3 *(1) stimulating the development of technology*
4 *clusters that can support departmental missions at*
5 *the National Laboratories or single-purpose research*
6 *facilities;*

7 *(2) improving the ability of National Labora-*
8 *tories or single-purpose research facilities to leverage*
9 *and benefit from commercial research, technology,*
10 *products, processes, and services; and*

11 *(3) encouraging the exchange of scientific and*
12 *technological expertise between National Laboratories*
13 *or single-purpose research facilities and—*

14 *(A) institutions of higher education,*

15 *(B) technology-related business concerns,*

16 *(C) nonprofit institutions, and*

17 *(D) agencies of State, tribal, or local gov-*
18 *ernments,*

19 *that can support departmental missions at the Na-*
20 *tional Laboratories and single-purpose research facili-*
21 *ties.*

22 *(c) PROJECTS.—The Secretary shall authorize the Di-*
23 *rector of each National Laboratory or facility to implement*
24 *the Technology Infrastructure Program at such National*
25 *Laboratory or single-purpose research facility through*

1 *projects that meet the requirements of subsections (d) and*
2 *(e).*

3 *(d) PROGRAM REQUIREMENTS.—Each project funded*
4 *under this section shall meet the following requirements:*

5 *(1) MINIMUM PARTICIPANTS.—Each project shall*
6 *at a minimum include—*

7 *(A) a National Laboratory or single-pur-*
8 *pose research facility; and*

9 *(B) one of the following entities—*

10 *(i) a business,*

11 *(ii) an institution of higher education,*

12 *(iii) a nonprofit institution, or*

13 *(iv) an agency of a State, local, or*
14 *tribal government.*

15 *(2) COST SHARING.—*

16 *(A) MINIMUM AMOUNT.—Not less than 50*
17 *percent of the costs of each project funded under*
18 *this section shall be provided from non-Federal*
19 *sources.*

20 *(B) QUALIFIED FUNDING AND RE-*
21 *SOURCES.—(i) The calculation of costs paid by*
22 *the non-Federal sources to a project shall include*
23 *cash, personnel, services, equipment, and other*
24 *resources expended on the project.*

1 (ii) *Independent research and development*
2 *expenses of Government contractors that qualify*
3 *for reimbursement under section 31–205–18(e) of*
4 *the Federal Acquisition Regulations issued pur-*
5 *suant to section 25(c)(1) of the Office of Federal*
6 *Procurement Policy Act (41 U.S.C. 421(c)(1))*
7 *may be credited towards costs paid by non-Fed-*
8 *eral sources to a project, if the expenses meet the*
9 *other requirements of this section.*

10 (iii) *No funds or other resources expended*
11 *either before the start of a project under this sec-*
12 *tion or outside the project’s scope of work shall*
13 *be credited toward the costs paid by the non-Fed-*
14 *eral sources to the project.*

15 (3) *COMPETITIVE SELECTION.*—*All projects in*
16 *which a party other than the Department, a National*
17 *Laboratory, or a single-purpose research facility re-*
18 *ceives funding under this section shall, to the extent*
19 *practicable, be competitively selected by the National*
20 *Laboratory or facility using procedures determined to*
21 *be appropriate by the Secretary.*

22 (4) *ACCOUNTING STANDARDS.*—*Any participant*
23 *that receives funds under this section, other than a*
24 *National Laboratory or single-purpose research facil-*
25 *ity, may use generally accepted accounting principles*

1 *for maintaining accounts, books, and records relating*
2 *to the project.*

3 (5) *LIMITATIONS.—No Federal funds shall be*
4 *made available under this section for—*

5 (A) *construction; or*

6 (B) *any project for more than 5 years.*

7 (e) *SELECTION CRITERIA.—*

8 (1) *THRESHOLD FUNDING CRITERIA.—The Sec-*
9 *retary shall allocate funds under this section only if*
10 *the Director of the National Laboratory or single-pur-*
11 *pose research facility managing the project determines*
12 *that the project is likely to improve the ability of the*
13 *National Laboratory or single-purpose research facil-*
14 *ity to achieve technical success in meeting depart-*
15 *mental missions.*

16 (2) *ADDITIONAL CRITERIA.—The Secretary shall*
17 *require the Director of the National Laboratory or*
18 *single-purpose research facility managing a project*
19 *under this section to consider the following criteria in*
20 *selecting a project to receive Federal funds—*

21 (A) *the potential of the project to succeed,*
22 *based on its technical merit, team members,*
23 *management approach, resources, and project*
24 *plan;*

1 (B) the potential of the project to promote
2 the development of a commercially sustainable
3 technology cluster, which will derive most of the
4 demand for its products or services from the pri-
5 vate sector, and which will support departmental
6 missions at the participating National Labora-
7 tory or single-purpose research facility;

8 (C) the potential of the project to promote
9 the use of commercial research, technology, prod-
10 ucts, processes, and services by the participating
11 National Laboratory or single-purpose research
12 facility to achieve its departmental mission or
13 the commercial development of technological in-
14 novations made at the participating National
15 Laboratory or single-purpose research facility;

16 (D) the commitment shown by non-Federal
17 organizations to the project, based primarily on
18 the nature and amount of the financial and
19 other resources they will risk on the project;

20 (E) the extent to which the project involves
21 a wide variety and number of institutions of
22 higher education, nonprofit institutions, and
23 technology-related business concerns that can
24 support the missions of the participating Na-
25 tional Laboratory or single-purpose research fa-

1 *cility and that will make substantive contribu-*
2 *tions to achieving the goals of the project;*

3 *(F) the extent of participation in the project*
4 *by agencies of State, tribal, or local governments*
5 *that will make substantive contributions to*
6 *achieving the goals of the project;*

7 *(G) the extent to which the project focuses*
8 *on promoting the development of technology-re-*
9 *lated business concerns that are small business*
10 *concerns or involves such small business concerns*
11 *substantively in the project; and*

12 *(H) such other criteria as the Secretary de-*
13 *termines to be appropriate.*

14 *(f) REPORT TO CONGRESS.—Not later than January*
15 *1, 2004, the Secretary shall report to Congress on whether*
16 *the Technology Infrastructure Program should be continued*
17 *and, if so, how the program should be managed.*

18 *(g) DEFINITIONS.—In this section:*

19 *(1) TECHNOLOGY CLUSTER.—The term “tech-*
20 *nology cluster” means a concentration of—*

21 *(A) technology-related business concerns;*

22 *(B) institutions of higher education; or*

23 *(C) other nonprofit institutions;*

1 *that reinforce each other's performance in the areas of*
2 *technology development through formal or informal*
3 *relationships.*

4 (2) *TECHNOLOGY-RELATED BUSINESS CON-*
5 *CERN.—The term “technology-related business con-*
6 *cern” means a for-profit corporation, company, asso-*
7 *ciation, firm, partnership, or small business concern*
8 *that—*

9 (A) *conducts scientific or engineering re-*
10 *search,*

11 (B) *develops new technologies,*

12 (C) *manufactures products based on new*
13 *technologies, or*

14 (D) *performs technological services.*

15 (h) *AUTHORIZATION OF APPROPRIATIONS.—There are*
16 *authorized to be appropriated to the Secretary for activities*
17 *under this section \$10,000,000 for each of fiscal years 2003*
18 *and 2004.*

19 **SEC. 1409. SMALL BUSINESS ADVOCACY AND ASSISTANCE.**

20 (a) *SMALL BUSINESS ADVOCATE.—The Secretary*
21 *shall require the Director of each National Laboratory, and*
22 *may require the Director of a single-purpose research facil-*
23 *ity, to appoint a small business advocate to—*

24 (1) *increase the participation of small business*
25 *concerns, including socially and economically dis-*

1 *advantaged small business concerns, in procurement,*
2 *collaborative research, technology licensing, and tech-*
3 *nology transfer activities conducted by the National*
4 *Laboratory or single-purpose research facility;*

5 *(2) report to the Director of the National Lab-*
6 *oratory or single-purpose research facility on the ac-*
7 *tual participation of small business concerns in pro-*
8 *curement and collaborative research along with rec-*
9 *ommendations, if appropriate, on how to improve*
10 *participation;*

11 *(3) make available to small business concerns*
12 *training, mentoring, and clear, up-to-date informa-*
13 *tion on how to participate in the procurement and*
14 *collaborative research, including how to submit effec-*
15 *tive proposals;*

16 *(4) increase the awareness inside the National*
17 *Laboratory or single-purpose research facility of the*
18 *capabilities and opportunities presented by small*
19 *business concerns; and*

20 *(5) establish guidelines for the program under*
21 *subsection (b) and report on the effectiveness of such*
22 *program to the Director of the National Laboratory*
23 *or single-purpose research facility.*

24 **(b) ESTABLISHMENT OF SMALL BUSINESS ASSIST-**
25 **ANCE PROGRAM.**—*The Secretary shall require the Director*

1 of each National Laboratory, and may require the director
2 of a single-purpose research facility, to establish a program
3 to provide small business concerns—

4 (1) assistance directed at making them more ef-
5 fective and efficient subcontractors or suppliers to the
6 National Laboratory or single-purpose research facil-
7 ity; or

8 (2) general technical assistance, the cost of which
9 shall not exceed \$10,000 per instance of assistance, to
10 improve the small business concern's products or serv-
11 ices.

12 (c) *USE OF FUNDS.*—None of the funds expended
13 under subsection (b) may be used for direct grants to the
14 small business concerns.

15 (d) *DEFINITIONS.*—In this section:

16 (1) *SMALL BUSINESS CONCERN.*—The term
17 “small business concern” has the meaning given such
18 term in section 3 of the Small Business Act (15
19 U.S.C. 632).

20 (2) *SOCIALLY AND ECONOMICALLY DISADVAN-*
21 *TAGED SMALL BUSINESS CONCERNS.*—The term “so-
22 cially and economically disadvantaged small business
23 concerns” has the meaning given such term in section
24 8(a)(4) of the Small Business Act (15 U.S.C.
25 637(a)(4)).

1 **SEC. 1410. OTHER TRANSACTIONS.**

2 (a) *IN GENERAL.*—Section 646 of the Department of
3 *Energy Organization Act (42 U.S.C. 7256) is amended by*
4 *adding at the end the following:*

5 “(g) *OTHER TRANSACTIONS AUTHORITY.*—(1) *In ad-*
6 *dition to other authorities granted to the Secretary to enter*
7 *into procurement contracts, leases, cooperative agreements,*
8 *grants, and other similar arrangements, the Secretary may*
9 *enter into other transactions with public agencies, private*
10 *organizations, or persons on such terms as the Secretary*
11 *may deem appropriate in furtherance of basic, applied, and*
12 *advanced research functions now or hereafter vested in the*
13 *Secretary. Such other transactions shall not be subject to*
14 *the provisions of section 9 of the Federal Nonnuclear En-*
15 *ergy Research and Development Act of 1974 (42 U.S.C.*
16 *5908).*

17 “(2)(A) *The Secretary of Energy shall ensure that—*

18 “(i) *to the maximum extent practicable, no*
19 *transaction entered into under paragraph (1) pro-*
20 *vides for research that duplicates research being con-*
21 *ducted under existing programs carried out by the*
22 *Department of Energy; and*

23 “(ii) *to the extent that the Secretary determines*
24 *practicable, the funds provided by the Government*
25 *under a transaction authorized by paragraph (1) do*

1 *not exceed the total amount provided by other parties*
2 *to the transaction.*

3 “(B) *A transaction authorized by paragraph (1) may*
4 *be used for a research project when the use of a standard*
5 *contract, grant, or cooperative agreement for such project*
6 *is not feasible or appropriate.*

7 “(3)(A) *The Secretary shall not disclose any trade se-*
8 *cret or commercial or financial information submitted by*
9 *a non-Federal entity under paragraph (1) that is privileged*
10 *and confidential.*

11 “(B) *The Secretary shall not disclose, for 5 years after*
12 *the date the information is received, any other information*
13 *submitted by a non-Federal entity under paragraph (1), in-*
14 *cluding any proposal, proposal abstract, document sup-*
15 *porting a proposal, business plan, or technical information*
16 *that is privileged and confidential.*

17 “(C) *The Secretary may protect from disclosure, for*
18 *up to 5 years, any information developed pursuant to a*
19 *transaction under paragraph (1) that would be protected*
20 *from disclosure under section 552(b)(4) of title 5, United*
21 *States Code, if obtained from a person other than a Federal*
22 *agency.”.*

23 (b) *IMPLEMENTATION.*—*Not later than 6 months after*
24 *the date of enactment of this section, the Department shall*
25 *establish guidelines for the use of other transactions.*

1 **SEC. 1411. MOBILITY OF SCIENTIFIC AND TECHNICAL PER-**
2 **SONNEL.**

3 *Not later than 2 years after the enactment of this sec-*
4 *tion, the Secretary, acting through the Technology Transfer*
5 *Coordinator under section 1407, shall determine whether*
6 *each contractor operating a National Laboratory or single-*
7 *purpose research facility has policies and procedures that*
8 *do not create disincentives to the transfer of scientific and*
9 *technical personnel among the contractor-operated National*
10 *Laboratories or contractor-operated single-purpose research*
11 *facilities.*

12 **SEC. 1412. NATIONAL ACADEMY OF SCIENCES REPORT.**

13 *Within 90 days after the date of enactment of this Act,*
14 *the Secretary shall contract with the National Academy of*
15 *Sciences to—*

16 *(1) conduct a study on the obstacles to accel-*
17 *erating the innovation cycle for energy technology,*
18 *and*

19 *(2) report to the Congress recommendations for*
20 *shortening the cycle of research, development, and de-*
21 *ployment.*

22 **SEC. 1413. REPORT ON TECHNOLOGY READINESS AND BAR-**
23 **RIERS TO TECHNOLOGY TRANSFER.**

24 *(a) IN GENERAL.—The Secretary, acting through the*
25 *Technology Partnership Working Group and in consulta-*

1 *tion with representatives of affected industries, universities,*
2 *and small business concerns, shall—*

3 *(1) assess the readiness for technology transfer of*
4 *energy technologies developed through projects funded*
5 *from appropriations authorized under subtitles A*
6 *through D of title XIV, and*

7 *(2) identify barriers to technology transfer and*
8 *cooperative research and development agreements be-*
9 *tween the Department or a National Laboratory and*
10 *a non-Federal person; and*

11 *(3) make recommendations for administrative or*
12 *legislative actions needed to reduce or eliminate such*
13 *barriers.*

14 *(b) REPORT.—The Secretary shall provide a report to*
15 *Congress and the President on activities carried out under*
16 *this section not later than 1 year after the date of enactment*
17 *of this section, and shall update such report on a biennial*
18 *basis, taking into account progress toward eliminating bar-*
19 *riers to technology transfer identified in previous reports*
20 *under this section.*

21 **SEC. 1414. UNITED STATES-MEXICO ENERGY TECHNOLOGY**
22 **COOPERATION.**

23 *(a) FINDING.—Congress finds that the economic and*
24 *energy security of the United States and Mexico is furthered*

1 *through collaboration between the United States and Mexico*
2 *on research related to energy technologies.*

3 *(b) PROGRAM.—*

4 *(1) IN GENERAL.—The Secretary, acting through*
5 *the Assistant Secretary for Environmental Manage-*
6 *ment, shall establish a collaborative research, develop-*
7 *ment, and deployment program to promote energy ef-*
8 *fective, environmentally sound economic development*
9 *along the United States-Mexico border to—*

10 *(A) mitigate hazardous waste;*

11 *(B) promote energy efficient materials proc-*
12 *essing technologies that minimize environmental*
13 *damage; and*

14 *(C) protect the public health.*

15 *(2) CONSULTATION.—The Secretary, acting*
16 *through the Assistant Secretary for Environmental*
17 *Management, shall consult with the Office of Energy*
18 *Efficiency and Renewable Energy in carrying out*
19 *paragraph (1)(B).*

20 *(c) PROGRAM MANAGEMENT.—The program under*
21 *subsection (b) shall be managed by the Department of En-*
22 *ergy Carlsbad Environmental Management Field Office.*

23 *(d) COST SHARING.—The cost of any project or activ-*
24 *ity carried out using funds provided under this section shall*
25 *be shared as provided in section 1403.*

1 (e) *TECHNOLOGY TRANSFER.*—*In carrying out*
2 *projects and activities under this section to mitigate haz-*
3 *ardous waste, the Secretary shall emphasize the transfer of*
4 *technology developed under the Environmental Management*
5 *Science Program of the Department of Energy.*

6 (f) *INTELLECTUAL PROPERTY.*—*In carrying out this*
7 *section, the Secretary shall comply with the requirements*
8 *of any agreement entered between the United States and*
9 *Mexico regarding intellectual property protection.*

10 (g) *AUTHORIZATION OF APPROPRIATIONS.*—*There are*
11 *authorized to be appropriated to carry out this section*
12 *\$5,000,000 for fiscal year 2003 and \$6,000,000 for each of*
13 *fiscal years 2004 through 2006, to remain available until*
14 *expended.*

15 **TITLE XV—PERSONNEL AND**
16 **TRAINING**

17 **SEC. 1501. WORKFORCE TRENDS AND TRAINEESHIP**
18 **GRANTS.**

19 (a) *WORKFORCE TRENDS.*—

20 (1) *MONITORING.*—*The Secretary of Energy (in*
21 *this title referred to as the “Secretary”), acting*
22 *through the Administrator of the Energy Information*
23 *Administration, in consultation with the Secretary of*
24 *Labor, shall monitor trends in the workforce of skilled*
25 *technical personnel supporting energy technology in-*

1 *dustries, including renewable energy industries, com-*
2 *panies developing and commercializing devices to in-*
3 *crease energy-efficiency, the oil and gas industry, the*
4 *electric power generation industry (including the nu-*
5 *clear power industry), the coal industry, and other*
6 *industrial sectors as the Secretary may deem appro-*
7 *priate.*

8 (2) *ANNUAL REPORTS.*—*The Administrator of*
9 *the Energy Information Administration shall include*
10 *statistics on energy industry workforce trends in the*
11 *annual reports of the Energy Information Adminis-*
12 *tration.*

13 (3) *SPECIAL REPORTS.*—*The Secretary shall re-*
14 *port to the appropriate committees of Congress when-*
15 *ever the Secretary determines that significant short-*
16 *falls of technical personnel in one or more energy in-*
17 *dustry segments are forecast or have occurred.*

18 (b) *TRAINEESHIP GRANTS FOR TECHNICALLY SKILLED*
19 *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 by
2 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 section*
9 *3 of the Carl D. Perkins Vocational and Tech-*
10 *nical Education Act of 1998 (20 U.S.C. 2302));*

11 (C) *appropriate agencies of State, local, or*
12 *tribal governments; or*

13 (D) *joint labor and management training*
14 *organizations with State or federally recognized*
15 *apprenticeship programs and other employee-*
16 *based training organizations as the Secretary*
17 *considers appropriate.*

18 (c) *DEFINITION.*—For purposes of this section, the
19 term “skilled technical personnel” means journey and ap-
20 prentice level workers who are enrolled in or have completed
21 a State or federally recognized apprenticeship program and
22 other skilled workers in energy technology industries.

23 (d) *AUTHORIZATION OF APPROPRIATIONS.*—From
24 amounts authorized under section 1241(c), there are author-
25 ized to be appropriated to the Secretary for activities under

1 *this section such sums as may be necessary for each fiscal*
2 *year.*

3 **SEC. 1502. POSTDOCTORAL AND SENIOR RESEARCH FEL-**
4 **LOWSHIPS IN ENERGY RESEARCH.**

5 (a) *POSTDOCTORAL FELLOWSHIPS.—The Secretary*
6 *shall establish a program of fellowships to encourage out-*
7 *standing young scientists and engineers to pursue*
8 *postdoctoral research appointments in energy research and*
9 *development at institutions of higher education of their*
10 *choice. In establishing a program under this subsection, the*
11 *Secretary may enter into appropriate arrangements with*
12 *the National Academy of Sciences to help administer the*
13 *program.*

14 (b) *DISTINGUISHED SENIOR RESEARCH FELLOW-*
15 *SHIPS.—The Secretary shall establish a program of fellow-*
16 *ships to allow outstanding senior researchers in energy re-*
17 *search and development and their research groups to explore*
18 *research and development topics of their choosing for a fixed*
19 *period of time. Awards under this program shall be made*
20 *on the basis of past scientific or technical accomplishment*
21 *and promise for continued accomplishment during the pe-*
22 *riod of support, which shall not be less than 3 years.*

23 (c) *AUTHORIZATION OF APPROPRIATIONS.—From*
24 *amounts authorized under section 1241(c), there are author-*
25 *ized to be appropriated to the Secretary for activities under*

1 *this section such sums as may be necessary for each fiscal*
2 *year.*

3 **SEC. 1503. TRAINING GUIDELINES FOR ELECTRIC ENERGY**
4 **INDUSTRY PERSONNEL.**

5 (a) *MODEL GUIDELINES.*—*The Secretary shall, in co-*
6 *operation with electric generation, transmission, and dis-*
7 *tribution companies and recognized representatives of em-*
8 *ployees of those entities, develop model employee training*
9 *guidelines to support electric supply system reliability and*
10 *safety.*

11 (b) *CONTENT OF GUIDELINES.*—*The guidelines under*
12 *this section shall include—*

13 (1) *requirements for worker training, com-*
14 *petency, and certification, developed using criteria set*
15 *forth by the Utility Industry Group recognized by the*
16 *National Skill Standards Board; and*

17 (2) *consolidation of existing guidelines on the*
18 *construction, operation, maintenance, and inspection*
19 *of electric supply generation, transmission and dis-*
20 *tribution facilities such as those established by the*
21 *National Electric Safety Code and other industry*
22 *consensus standards.*

1 **SEC. 1504. NATIONAL CENTER ON ENERGY MANAGEMENT**
2 **AND BUILDING TECHNOLOGIES.**

3 *The Secretary shall establish a National Center on En-*
4 *ergy Management and Building Technologies, to carry out*
5 *research, education, and training activities to facilitate the*
6 *improvement of energy efficiency and indoor air quality in*
7 *industrial, commercial and residential buildings. The Na-*
8 *tional Center shall be established in cooperation with—*

9 (1) *recognized representatives of employees in the*
10 *heating, ventilation, and air-conditioning industry;*

11 (2) *contractors that install and maintain heat-*
12 *ing, ventilation and air-conditioning systems and*
13 *equipment;*

14 (3) *manufacturers of heating, ventilation and*
15 *air-conditioning systems and equipment;*

16 (4) *representatives of the advanced building en-*
17 *velope industry, including design, windows, lighting,*
18 *and insulation industries; and*

19 (5) *other entities as appropriate.*

20 **SEC. 1505. IMPROVED ACCESS TO ENERGY-RELATED SCI-**
21 **ENTIFIC AND TECHNICAL CAREERS.**

22 (a) *DEPARTMENT OF ENERGY SCIENCE EDUCATION*
23 *PROGRAMS.—Section 3164 of the Department of Energy*
24 *Science Education Enhancement Act (42 U.S.C. 7381a) is*
25 *amended by adding at the end the following:*

1 “(c) *PROGRAMS FOR WOMEN AND MINORITY STU-*
 2 *DENTS.*—*In carrying out a program under subsection (a),*
 3 *the Secretary shall give priority to activities that are de-*
 4 *signed to encourage women and minority students to pursue*
 5 *scientific and technical careers.”.*

6 (b) *PARTNERSHIPS WITH HISTORICALLY BLACK COL-*
 7 *LEGES AND UNIVERSITIES, HISPANIC-SERVICING INSTITU-*
 8 *TIONS, AND TRIBAL COLLEGES.*—*The Department of En-*
 9 *ergy Science Education Enhancement Act (42 U.S.C. 7381*
 10 *et seq.) is amended—*

11 (1) *by redesignating sections 3167 and 3168 as*
 12 *sections 3168 and 3169, respectively; and*

13 (2) *by inserting after section 3166 the following:*

14 **“SEC. 3167. PARTNERSHIPS WITH HISTORICALLY BLACK**
 15 **COLLEGES AND UNIVERSITIES, HISPANIC-**
 16 **SERVING INSTITUTIONS, AND TRIBAL COL-**
 17 **LEGES.**

18 “(a) *DEFINITIONS.*—*In this section:*

19 “(1) *HISPANIC-SERVING INSTITUTION.*—*The term*
 20 *‘Hispanic-serving institution’ has the meaning given*
 21 *the term in section 502(a) of the Higher Education*
 22 *Act of 1965 (20 U.S.C. 1101a(a)).*

23 “(2) *HISTORICALLY BLACK COLLEGE OR UNIVER-*
 24 *SITY.*—*The term ‘historically Black college or univer-*
 25 *sity’ has the meaning given the term ‘part B institu-*

1 *tion’ in section 322 of the Higher Education Act of*
2 *1965 (20 U.S.C. 1061).*

3 “(3) *NATIONAL LABORATORY.*—*The term ‘Na-*
4 *tional Laboratory’ has the meaning given the term in*
5 *section 1203 of the Energy Science and Technology*
6 *Enhancement Act of 2002.*

7 “(4) *SCIENCE FACILITY.*—*The term ‘science facil-*
8 *ity’ has the meaning given the term ‘single-purpose*
9 *research facility’ in section 1401 of the Energy*
10 *Science and Technology Enhancement Act of 2002.*

11 “(5) *TRIBAL COLLEGE.*—*The term ‘tribal college’*
12 *has the meaning given the term ‘tribally controlled*
13 *college or university’ in section 2(a) of the Tribally*
14 *Controlled College or University Assistance Act of*
15 *1978 (25 U.S.C. 1801(a)).*

16 “(b) *EDUCATION PARTNERSHIP.*—

17 “(1) *IN GENERAL.*—*The Secretary shall direct*
18 *the Director of each National Laboratory, and may*
19 *direct the head of any science facility, to increase the*
20 *participation of historically Black colleges or univer-*
21 *sities, Hispanic-serving institutions, or tribal colleges*
22 *in activities that increase the capacity of the histori-*
23 *cally Black colleges or universities, Hispanic-serving*
24 *institutions, or tribal colleges to train personnel in*
25 *science or engineering.*

1 “(2) *ACTIVITIES.*—*An activity under paragraph*
2 *(1) may include—*

3 “(A) *collaborative research;*

4 “(B) *a transfer of equipment;*

5 “(C) *training of personnel at a National*
6 *Laboratory or science facility; and*

7 “(D) *a mentoring activity by personnel at*
8 *a National Laboratory or science facility.*

9 “(c) *REPORT.*—*Not later than 2 years after the date*
10 *of enactment of this section, the Secretary shall submit to*
11 *the Committee on Science of the House of Representatives*
12 *and the Committee on Energy and Natural Resources of*
13 *the Senate a report on the activities carried out under this*
14 *section.”.*

15 **SEC. 1506. NATIONAL POWER PLANT OPERATIONS TECH-**
16 **NOLOGY AND EDUCATION CENTER.**

17 “(a) *ESTABLISHMENT.*—*The Secretary shall establish a*
18 *National Power Plant Operations Technology and Edu-*
19 *cation Center (the “Center”), to address the need for train-*
20 *ing and educating certified operators for electric power gen-*
21 *eration plants.*

22 “(b) *ROLE.*—*The Center shall provide both training*
23 *and continuing education relating to electric power genera-*
24 *tion plant technologies and operations. The Center shall*
25 *conduct training and education activities on site and*

1 *through Internet-based information technologies that allow*
2 *for learning at remote sites.*

3 (c) *CRITERIA FOR COMPETITIVE SELECTION.—The*
4 *Secretary shall establish the Center at an institution of*
5 *higher education with expertise in plant technology and op-*
6 *eration and that can provide on-site as well as Internet-*
7 *based training.*

8 **SEC. 1507. FEDERAL MINE INSPECTORS.**

9 *In light of projected retirements of Federal mine in-*
10 *spectors and the need for additional personnel, the Sec-*
11 *retary of Labor shall hire, train, and deploy such addi-*
12 *tional skilled mine inspectors (particularly inspectors with*
13 *practical experience as a practical mining engineer) as nec-*
14 *essary to ensure the availability of skilled and experienced*
15 *individuals and to maintain the number of Federal mine*
16 *inspectors at or above the levels authorized by law or estab-*
17 *lished by regulation.*

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 As-*
15 *essment Service (hereinafter referred to as the ‘Service’),*
16 *which shall be within and responsible to the legislative*
17 *branch of the Government.*

18 ***“SEC. 702. COMPOSITION.***

19 *“The Service shall consist of a Science and Technology*
20 *Board (hereinafter referred to as the ‘Board’) which shall*
21 *formulate and promulgate the policies of the Service, and*
22 *a Director who shall carry out such policies and administer*
23 *the operations of the Service.*

1 **“SEC. 703. FUNCTIONS AND DUTIES.**

2 *“The Service shall coordinate and develop information*
3 *for Congress relating to the uses and application of tech-*
4 *nology to address current national science and technology*
5 *policy issues. In developing such technical assessments for*
6 *Congress, the Service shall utilize, to the extent practicable,*
7 *experts selected in coordination with the National Research*
8 *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 of—*

12 *“(1) the Chairman of any standing, special, or*
13 *select committee of either House of the Congress, or of*
14 *any joint committee of the Congress, acting for him-*
15 *self or at the request of the ranking minority member*
16 *or a majority of the committee members;*

17 *“(2) the Board; or*

18 *“(3) the Director.*

19 **“SEC. 705. ADMINISTRATION AND SUPPORT.**

20 *“The Director of the Science and Technology Assess-*
21 *ment Service shall be appointed by the Board and shall*
22 *serve for a term of 6 years unless sooner removed by the*
23 *Board. The Director shall receive basic pay at the rate pro-*
24 *vided for level III of the Executive Schedule under section*
25 *5314 of title 5, United States Code. The Director shall con-*

1 *tract for administrative support from the Library of Con-*
2 *gress.*

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 ar-*
11 *rangements when appropriate;*

12 *“(2) enter into contracts or other arrangements*
13 *as may be necessary for the conduct of the work of the*
14 *Office with any agency or instrumentality of the*
15 *United States, with any State, territory, or possession*
16 *or any political subdivision thereof, or with any per-*
17 *son, firm, association, corporation, or educational in-*
18 *stitution, 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 transpor-*
24 *tation and subsistence as authorized by section 5703*

1 *of title 5, United States Code, for persons serving*
2 *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) *six Members of the Senate, appointed by the*
9 *President pro tempore of the Senate, three from the*
10 *majority party and three from the minority party;*

11 “(2) *six Members of the House of Representatives*
12 *appointed by the Speaker of the House of Representa-*
13 *tives, three from the majority party and three 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 evalua-*
20 *tion of technology assessment techniques and identification,*
21 *insofar as may be feasible, of technological areas and pro-*
22 *grams requiring future analysis. The annual report shall*
23 *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 Service*
3 *such sums as are necessary to fulfill the requirements of*
4 *this title.”.*

5 **TITLE XVII—STUDIES**

6 **SEC. 1701. REGULATORY REVIEWS.**

7 *(a) REGULATORY REVIEWS.—Not later than 1 year*
8 *after the date of enactment of this section and every 5 years*
9 *thereafter, each Federal agency shall review relevant regula-*
10 *tions and standards to identify—*

11 *(1) existing regulations and standards that act*
12 *as barriers to—*

13 *(A) market entry for emerging energy tech-*
14 *nologies (including fuel cells, combined heat and*
15 *power, distributed power generation, and small-*
16 *scale renewable energy), and*

17 *(B) market development and expansion for*
18 *existing energy technologies (including combined*
19 *heat and power, small-scale renewable energy,*
20 *geothermal heat pump technology, and energy re-*
21 *covery in industrial processes), 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 conserva-
2 tion, 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 months
7 after the date of enactment of this section, and every 5 years
8 thereafter, the Director of the Office of Science and Tech-
9 nology Policy shall report to the Congress on the results of
10 the agency reviews conducted under subsection (a).

11 (c) *CONTENTS OF THE REPORT.*—The report shall—

12 (1) identify all regulatory barriers to—

13 (A) the development and commercialization
14 of emerging energy technologies and processes,
15 and

16 (B) the further development and expansion
17 of existing energy conservation technologies and
18 processes,

19 (2) actions taken, or proposed to be taken, to re-
20 move such barriers, and

21 (3) recommendations for changes in laws or reg-
22 ulations that may be needed to—

23 (A) expedite the siting and development of
24 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 en-
6 ergy facilities and processes through transparent
7 and flexible compliance methods.

8 **SEC. 1702. ASSESSMENT OF DEPENDENCE OF STATE OF HA-**
9 **WAII ON OIL.**

10 (a) *ASSESSMENT.*—*The Secretary of Energy shall as-*
11 *sess the economic implications of the dependence of the State*
12 *of Hawaii on oil as the principal source of energy for the*
13 *State, including—*

14 (1) *the short- and long-term prospects for crude*
15 *oil supply disruption and price volatility and poten-*
16 *tial impacts on the economy of Hawaii;*

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

21 (3) *the technical and economic feasibility of in-*
22 *creasing the contribution of renewable energy re-*
23 *sources for generation of electricity, on an island-by-*
24 *island basis, including—*

25 (A) *siting and facility configuration;*

1 (B) environmental, operational, and safety
2 considerations;

3 (C) the availability of technology;

4 (D) effects on the utility system, including
5 reliability;

6 (E) infrastructure and transport require-
7 ments;

8 (F) community support; and

9 (G) other factors affecting the economic im-
10 pact of such an increase and any effect on the
11 economic relationship described in paragraph
12 (2);

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

19 (A) the availability of supply;

20 (B) siting and facility configuration for on-
21 shore and offshore liquefied natural gas receiving
22 terminals;

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

25 (D) other economic factors;

1 (5) *the technical and economic feasibility of*
2 *using renewable energy sources (including hydrogen)*
3 *for ground, marine, and air transportation energy*
4 *applications to displace the use of refined petroleum*
5 *products, on an island-by-island basis, and the eco-*
6 *nomical impact of such displacement on the relation-*
7 *ship described in paragraph (2); and*

8 (6) *an island-by-island approach to—*

9 (A) *the development of hydrogen from re-*
10 *newable resources; and*

11 (B) *the application of hydrogen to the en-*
12 *ergy needs of Hawaii.*

13 (b) *CONTRACTING AUTHORITY.—The Secretary may*
14 *carry out the assessment under subsection (a) directly or,*
15 *in whole or in part, through one or more contracts with*
16 *qualified public or private entities.*

17 (c) *REPORT.—Not later than 300 days after the date*
18 *of enactment of this Act, the Secretary shall prepare, in*
19 *consultation with agencies of the State of Hawaii and other*
20 *stakeholders, as appropriate, and submit to Congress, a re-*
21 *port detailing the findings, conclusions, and recommenda-*
22 *tions resulting from the assessment.*

23 (d) *AUTHORIZATION OF APPROPRIATIONS.—There are*
24 *authorized to be appropriated such sums as are necessary*
25 *to carry out this section.*

1 **SEC. 1703. STUDY OF SITING AN ELECTRIC TRANSMISSION**
2 **SYSTEM ON AMTRAK RIGHT-OF-WAY.**

3 (a) *STUDY.*—*The Secretary of Energy shall contract*
4 *with Amtrak to conduct a study of the feasibility of building*
5 *and operating a new electric transmission system on the*
6 *Amtrak right-of-way in the Northeast Corridor.*

7 (b) *SCOPE OF THE STUDY.*—*The study shall focus on*
8 *siting the new system on the Amtrak right-of-way within*
9 *the Northeast Corridor between Washington, D.C., and New*
10 *Rochelle, New York, including the Amtrak right-of-way be-*
11 *tween Philadelphia, Pennsylvania and Harrisburg, Penn-*
12 *sylvania.*

13 (c) *CONTENTS OF THE STUDY.*—*The study shall*
14 *consider—*

15 (1) *alternative geographic configuration of a new*
16 *electric transmission system on the Amtrak right-*
17 *of-way;*

18 (2) *alternative technologies for the system;*

19 (3) *the estimated costs of building and operating*
20 *each alternative;*

21 (4) *alternative means of financing the system;*

22 (5) *the environmental risks and benefits of build-*
23 *ing and operating each alternative as well as environ-*
24 *mental risks and benefits of building and operating*
25 *the system on the Northeast Corridor rather than at*
26 *other locations;*

1 (6) *engineering and technological obstacles to*
2 *building and operating each alternative; and*

3 (7) *the extent to which each alternative would*
4 *enhance the reliability of the electric transmission*
5 *grid and enhance competition in the sale of electric*
6 *energy at wholesale within the Northeast Corridor.*

7 (d) *RECOMMENDATIONS.—The study shall recommend*
8 *the optimal geographic configuration, the optimal tech-*
9 *nology, the optimal engineering design, and the optimal*
10 *means of financing for the new system from among the al-*
11 *ternatives considered.*

12 (e) *REPORT.—The Secretary of Energy shall submit*
13 *the completed study to the Committee on Energy and Nat-*
14 *ural Resources of the United States Senate and the Com-*
15 *mittee on Energy and Commerce of the House of Represent-*
16 *atives not later than 270 days after the date of enactment*
17 *of this section.*

18 (f) *DEFINITIONS.—For purposes of this section—*

19 (1) *the term “Amtrak” means the National Rail-*
20 *road Passenger Corporation established under chapter*
21 *243 of title 49, United States Code; and*

22 (2) *the term “Northeast Corridor” shall have the*
23 *meaning given such term under section 24102(7) of*
24 *title 49, United States Code.*

1 **SEC. 1704. UPDATING OF INSULAR AREA RENEWABLE EN-**
2 **ERGY AND ENERGY EFFICIENCY PLANS.**

3 *Section 604 of Public Law 96–597 (48 U.S.C. 1492)*
4 *is amended—*

5 *(1) in subsection (a) at the end of paragraph (4)*
6 *by striking “resources.” and inserting “resources; and*

7 *“(5) the development of renewable energy and en-*
8 *ergy efficiency technologies since publication of the*
9 *1982 Territorial Energy Assessment prepared under*
10 *subsection (c) reveals the need to reassess the state of*
11 *energy production, consumption, efficiency, infra-*
12 *structure, reliance on imported energy, and potential*
13 *of the indigenous renewable energy resources and en-*
14 *ergy efficiency in regard to the insular areas.”; and*

15 *(2) by adding at the end of subsection (e) “The*
16 *Secretary of Energy, in consultation with the Sec-*
17 *retary of the Interior and the chief executive officer of*
18 *each insular area, shall update the plans required*
19 *under subsection (c) and draft long-term energy plans*
20 *for each insular area that will reduce, to the extent*
21 *feasible, the reliance of the insular area on energy im-*
22 *ports by the year 2010, and maximize, to the extent*
23 *feasible, use of renewable energy resources and energy*
24 *efficiency opportunities. Not later than December 31,*
25 *2002, the Secretary of Energy shall submit the up-*
26 *dated plans to Congress.”.*

1 **SEC. 1705. CONSUMER ENERGY COMMISSION.**

2 (a) *ESTABLISHMENT OF COMMISSION.*—*There is estab-*
3 *lished a commission to be known as the “Consumer Energy*
4 *Commission”.*

5 (b) *MEMBERSHIP.*—

6 (1) *IN GENERAL.*—*The Commission shall be com-*
7 *prised of 11 members who shall be appointed within*
8 *30 days from the date of enactment of this section and*
9 *who shall serve for the life of the Commission.*

10 (2) *APPOINTMENTS IN THE SENATE AND THE*
11 *HOUSE.*—*The Majority Leader and the Minority*
12 *Leader of the Senate and the Speaker and Minority*
13 *Leader of the House of Representatives shall each ap-*
14 *point 2 members—*

15 (A) *one of whom shall represent consumer*
16 *groups focusing on energy issues; and*

17 (B) *one of whom shall represent the energy*
18 *industry.*

19 (3) *APPOINTMENTS BY THE PRESIDENT.*—*The*
20 *President shall appoint three members—*

21 (A) *one of whom shall represent consumer*
22 *groups focusing on energy issues;*

23 (B) *one of whom shall represent the energy*
24 *industry; and*

25 (C) *one of whom shall represent the Depart-*
26 *ment of Energy.*

1 (c) *INITIAL MEETING.*—Not later than 60 days after
2 the date of enactment of this Act, the Commission shall hold
3 the first meeting of the Commission regardless of the num-
4 ber of members that have been appointed and shall select
5 a Chairperson and Vice Chairperson from among the mem-
6 bers of the Commission.

7 (d) *ADMINISTRATIVE EXPENSES.*—Members of the
8 Commission shall serve without compensation, except for
9 per diem and travel expenses which shall be reimbursed,
10 and the Department of Energy shall pay expenses as nec-
11 essary to carry out this section, with the expenses not to
12 exceed \$400,000.

13 (e) *STUDIES.*—The Commission shall conduct a na-
14 tionwide study of significant price spikes since 1990 in
15 major United States consumer energy products, including
16 electricity, gasoline, home heating oil, natural gas and pro-
17 pane with a focus on their causes including insufficient in-
18 ventories, supply disruptions, refinery capacity limits, in-
19 sufficient infrastructure, regulatory failures, demand
20 growth, reliance on imported supplies, insufficient avail-
21 ability of alternative energy sources, abuse of market power,
22 market concentration and any other relevant factors.

23 (f) *REPORT.*—Not later than 180 days after the date
24 of the first meeting of the Commission, the Commission
25 shall submit to Congress a report that contains the findings

1 *and conclusions of the Commission and any recommenda-*
2 *tions for legislation, administrative actions, and voluntary*
3 *actions by industry and consumers to protect consumers*
4 *and small businesses from future price spikes in consumer*
5 *energy products.*

6 (g) *CONSULTATION.*—*The Commission shall consult*
7 *with the Federal Trade Commission, the Federal Energy*
8 *Regulatory Commission, the Department of Energy and*
9 *other Federal and State agencies as appropriate.*

10 (h) *SUNSET.*—*The Commission shall terminate within*
11 *30 days after the submission of the report to Congress.*

12 **SEC. 1706. STUDY OF NATURAL GAS AND OTHER ENERGY**
13 **TRANSMISSION INFRASTRUCTURE ACROSS**
14 **THE GREAT LAKES.**

15 (a) *DEFINITIONS.*—*In this section:*

16 (1) *GREAT LAKE.*—*The term “Great Lake”*
17 *means Lake Erie, Lake Huron (including Lake Saint*
18 *Clair), Lake Michigan, Lake Ontario (including the*
19 *Saint Lawrence River from Lake Ontario to the 45th*
20 *parallel of latitude), and Lake Superior.*

21 (2) *SECRETARY.*—*The term “Secretary” means*
22 *the Secretary of Energy.*

23 (b) *STUDY.*—

1 (1) *IN GENERAL.*—*The Secretary, in consultation*
2 *with representatives of appropriate Federal and State*
3 *agencies, shall—*

4 (A) *conduct a study of—*

5 (i) *the location and extent of antici-*
6 *ipated growth of natural gas and other en-*
7 *ergy transmission infrastructure proposed*
8 *to be constructed across the Great Lakes;*
9 *and*

10 (ii) *the environmental impacts of any*
11 *natural gas or other energy transmission*
12 *infrastructure proposed to be constructed*
13 *across the Great Lakes; and*

14 (B) *make recommendations for minimizing*
15 *the environmental impact of pipelines and other*
16 *energy transmission infrastructure on the Great*
17 *Lakes ecosystem.*

18 (2) *ADVISORY COMMITTEE.*—*Not later than 30*
19 *days after the date of enactment of this Act, the Sec-*
20 *retary shall enter into an agreement with the Na-*
21 *tional Academy of Sciences to establish an advisory*
22 *committee to ensure that the study is complete, objec-*
23 *tive, and of good quality.*

24 (c) *REPORT.*—*Not later than 1 year after the date of*
25 *enactment of this Act, the Secretary shall submit to Con-*

1 *gress a report that describes the findings and recommenda-*
2 *tions resulting from the study under subsection (b).*

3 **SEC. 1707. NATIONAL ACADEMY OF SCIENCES STUDY OF**
4 **PROCEDURES FOR SELECTION AND ASSESS-**
5 **MENT OF CERTAIN ROUTES FOR SHIPMENT**
6 **OF SPENT NUCLEAR FUEL FROM RESEARCH**
7 **NUCLEAR REACTORS.**

8 *(a) IN GENERAL.—The Secretary of Transportation*
9 *shall enter into an agreement with the National Academy*
10 *of Sciences under which agreement the National Academy*
11 *of Sciences shall conduct a study of the procedures by which*
12 *the Department of Energy, together with the Department*
13 *of Transportation and the Nuclear Regulatory Commission,*
14 *selects routes for the shipment of spent nuclear fuel from*
15 *research nuclear reactors between or among existing De-*
16 *partment of Energy facilities currently licensed to accept*
17 *such spent nuclear fuel.*

18 *(b) ELEMENTS OF STUDY.—In conducting the study*
19 *under subsection (a), the National Academy of Sciences*
20 *shall analyze the manner in which the Department of*
21 *Energy—*

22 *(1) selects potential routes for the shipment of*
23 *spent nuclear fuel from research nuclear reactors be-*
24 *tween or among existing Department facilities cur-*
25 *rently licensed to accept such spent nuclear fuel;*

1 (2) *selects such a route for a specific shipment of*
2 *such spent nuclear fuel; and*

3 (3) *conducts assessments of the risks associated*
4 *with shipments of such spent nuclear fuel along such*
5 *a route.*

6 (c) *CONSIDERATIONS REGARDING ROUTE SELEC-*
7 *TION.—The analysis under subsection (b) shall include a*
8 *consideration whether, and to what extent, the procedures*
9 *analyzed for purposes of that subsection take into account*
10 *the following:*

11 (1) *The proximity of the routes under consider-*
12 *ation to major population centers and the risks asso-*
13 *ciated with shipments of spent nuclear fuel from re-*
14 *search nuclear reactors through densely populated*
15 *areas.*

16 (2) *Current traffic and accident data with re-*
17 *spect to the routes under consideration.*

18 (3) *The quality of the roads comprising the*
19 *routes under consideration.*

20 (4) *Emergency response capabilities along the*
21 *routes under consideration.*

22 (5) *The proximity of the routes under consider-*
23 *ation to places or venues (including sports stadiums,*
24 *convention centers, concert halls and theaters, and*
25 *other venues) where large numbers of people gather.*

1 (d) *RECOMMENDATIONS.*—*In conducting the study*
2 *under subsection (a), the National Academy of Sciences*
3 *shall also make such recommendations regarding the mat-*
4 *ters studied as the National Academy of Sciences considers*
5 *appropriate.*

6 (e) *DEADLINE FOR DISPERSAL OF FUNDS FOR*
7 *STUDY.*—*The Secretary shall disperse to the National Acad-*
8 *emy of Sciences the funds for the cost of the study required*
9 *by subsection (a) not later than 30 days after the date of*
10 *the enactment of this Act.*

11 (f) *REPORT ON RESULTS OF STUDY.*—*Not later than*
12 *6 months after the date of the dispersal of funds under sub-*
13 *section (e), the National Academy of Sciences shall submit*
14 *to the appropriate committees of Congress a report on the*
15 *study conducted under subsection (a), including the rec-*
16 *ommendations required by subsection (d).*

17 (g) *APPROPRIATE COMMITTEES OF CONGRESS DE-*
18 *FINED.*—*In this section, the term “appropriate committees*
19 *of Congress” means—*

20 (1) *the Committees on Commerce, Science, and*
21 *Transportation, Energy and Natural Resources, and*
22 *Environment and Public Works of the Senate; and*

23 (2) *the Committee on Energy and Commerce of*
24 *the House of Representatives.*

1 **SEC. 1708. REPORT ON ENERGY SAVINGS AND WATER USE.**

2 (a) *REPORT.*—*The Secretary of Energy shall conduct*
3 *a study of opportunities to reduce energy use by cost-effec-*
4 *tive improvements in the efficiency of municipal water and*
5 *wastewater treatment and use, including water pumps, mo-*
6 *tors, and delivery systems; purification, conveyance and*
7 *distribution; upgrading of aging water infrastructure, and*
8 *improved methods for leakage monitoring, measuring, and*
9 *reporting; and public education.*

10 (b) *SUBMISSION OF REPORT.*—*The Secretary of En-*
11 *ergy shall submit a report on the results of the study, in-*
12 *cluding any recommendations for implementation of meas-*
13 *ures and estimates of costs and resource savings, no later*
14 *than 2 years from the date of enactment of this section.*

15 (c) *AUTHORIZATION.*—*There is hereby authorized to be*
16 *appropriated such sums as may be necessary to carry out*
17 *the purposes of this section.*

18 **SEC. 1709. REPORT ON RESEARCH ON HYDROGEN PRODUC-**
19 **TION AND USE.**

20 *Not later than 120 days after the date of enactment*
21 *of this Act, the Secretary of Energy shall submit to Congress*
22 *a report that identifies current or potential research*
23 *projects at Department of Energy nuclear facilities relating*
24 *to the production or use of hydrogen in fuel cell development*
25 *or any other method or process enhancing alternative en-*
26 *ergy production technologies.*

1 ***DIVISION G—ENERGY***
2 ***INFRASTRUCTURE SECURITY***
3 ***TITLE XVIII—CRITICAL ENERGY***
4 ***INFRASTRUCTURE***
5 ***Subtitle A—Department of Energy***
6 ***Programs***

7 ***SEC. 1801. DEFINITIONS.***

8 *In this title:*

9 (1) *CRITICAL ENERGY INFRASTRUCTURE.—*

10 (A) *IN GENERAL.—The term “critical en-*
11 *ergy infrastructure” means a physical or cyber-*
12 *based system or service for—*

13 (i) *the generation, transmission or dis-*
14 *tribution of electric energy; or*

15 (ii) *the production, refining, or storage*
16 *of petroleum, natural gas, or petroleum*
17 *product—*

18 *the incapacity or destruction of which would*
19 *have a debilitating impact on the defense or eco-*
20 *nomics security of the United States.*

21 (B) *EXCLUSION.—The term shall not in-*
22 *clude a facility that is licensed by the Nuclear*
23 *Regulatory Commission under section 103 or*
24 *104b. of the Atomic Energy Act of 1954 (42*
25 *U.S.C. 2133 and 2134(b)).*

1 (2) *DEPARTMENT; NATIONAL LABORATORY; SEC-*
2 *RETARY.—The terms “Department”, “National Lab-*
3 *oratory”, and “Secretary” have the meaning given*
4 *such terms in section 1203.*

5 **SEC. 1802. ROLE OF THE DEPARTMENT OF ENERGY.**

6 *Section 102 of the Department of Energy Organization*
7 *Act (42 U.S.C. 7112) is amended by adding at the end the*
8 *following:*

9 “(20) *To ensure the safety, reliability, and secu-*
10 *urity of the Nation’s energy infrastructure, and to re-*
11 *spond to any threat to or disruption of such infra-*
12 *structure, through activities including—*

13 “(A) *research and development;*

14 “(B) *financial assistance, technical assist-*
15 *ance, and cooperative activities with States, in-*
16 *dustry, and other interested parties; and*

17 “(C) *education and public outreach activi-*
18 *ties.”.*

19 **SEC. 1803. CRITICAL ENERGY INFRASTRUCTURE PRO-**
20 **GRAMS.**

21 (a) *PROGRAMS.—In addition to the authorities other-*
22 *wise provided by law (including section 1261), the Sec-*
23 *retary is authorized to establish programs of financial, tech-*
24 *nical, or administrative assistance to—*

1 (1) *enhance the security of critical energy infra-*
2 *structure in the United States;*

3 (2) *develop and disseminate, in cooperation with*
4 *industry, best practices for critical energy infrastruc-*
5 *ture assurance; and*

6 (3) *protect against, mitigate the effect of, and*
7 *improve the ability to recover from disruptive inci-*
8 *dents affecting critical energy infrastructure.*

9 (b) **REQUIREMENTS.**—*A program established under*
10 *this section shall—*

11 (1) *be undertaken in consultation with the advi-*
12 *sory committee established under section 1804;*

13 (2) *have available to it the scientific and tech-*
14 *anical resources of the Department, including resources*
15 *at a National Laboratory; and*

16 (3) *be consistent with any overall Federal plan*
17 *for national infrastructure security developed by the*
18 *President or his designee.*

19 **SEC. 1804. ADVISORY COMMITTEE ON ENERGY INFRA-**
20 **STRUCTURE SECURITY.**

21 (a) **ESTABLISHMENT.**—*The Secretary shall establish*
22 *an advisory committee, or utilize an existing advisory com-*
23 *mittee within the Department, to advise the Secretary on*
24 *policies and programs related to the security of United*
25 *States energy infrastructure.*

1 (b) *BALANCED MEMBERSHIP.*—*The Secretary shall en-*
2 *sure that the advisory committee established or utilized*
3 *under subsection (a) has a membership with an appropriate*
4 *balance among the various interests related to energy infra-*
5 *structure security, including—*

6 (1) *scientific and technical experts;*

7 (2) *industrial managers;*

8 (3) *worker representatives;*

9 (4) *insurance companies or organizations;*

10 (5) *environmental organizations;*

11 (6) *representatives of State, local, and tribal gov-*
12 *ernments; and*

13 (7) *such other interests as the Secretary may*
14 *deem appropriate.*

15 (c) *EXPENSES.*—*Members of the advisory committee*
16 *established or utilized under subsection (a) shall serve with-*
17 *out compensation, and shall be allowed travel expenses, in-*
18 *cluding per diem in lieu of subsistence, at rates authorized*
19 *for an employee of an agency under subchapter I of chapter*
20 *57 of title 5, United States Code, while away from the home*
21 *or regular place of business of the member in the perform-*
22 *ance of the duties of the committee.*

1 **SEC. 1805. BEST PRACTICES AND STANDARDS FOR ENERGY**
2 **INFRASTRUCTURE SECURITY.**

3 *The Secretary, in consultation with the advisory com-*
4 *mittee under section 1804, shall enter into appropriate ar-*
5 *rangements with one or more standard-setting organiza-*
6 *tions, or similar organizations, to assist the development*
7 *of industry best practices and standards for security related*
8 *to protecting critical energy infrastructure.*

9 **Subtitle B—Department of the**
10 **Interior Programs**

11 **SEC. 1811. OUTER CONTINENTAL SHELF ENERGY INFRA-**
12 **STRUCTURE SECURITY.**

13 *(a) DEFINITIONS.—In this section:*

14 *(1) APPROVED STATE PLAN.—The term “ap-*
15 *proved State plan” means a State plan approved by*
16 *the Secretary under subsection (c)(3).*

17 *(2) COASTLINE.—The term “coastline” has the*
18 *same meaning as the term “coast line” as defined in*
19 *subsection 2(c) of the Submerged Lands Act (43*
20 *U.S.C. 1301(c)).*

21 *(3) CRITICAL OCS ENERGY INFRASTRUCTURE FA-*
22 *CILITY.—The term “OCS critical energy infrastruc-*
23 *ture facility” means—*

24 *(A) a facility located in an OCS Production*
25 *State or in the waters of such State related to the*

1 *production of oil or gas on the Outer Continental*
2 *Shelf; or*

3 *(B) a related facility located in an OCS*
4 *Production State or in the waters of such State*
5 *that carries out a public service, transportation,*
6 *or infrastructure activity critical to the oper-*
7 *ation of an Outer Continental Shelf energy in-*
8 *frastructure facility, as determined by the Sec-*
9 *retary.*

10 *(4) DISTANCE.—The term “distance” means the*
11 *minimum great circle distance, measured in statute*
12 *miles.*

13 *(5) LEASED TRACT.—*

14 *(A) IN GENERAL.—The term “leased tract”*
15 *means a tract that—*

16 *(i) is subject to a lease under section 6*
17 *or 8 of the Outer Continental Shelf Lands*
18 *Act (43 U.S.C. 1335, 1337) for the purpose*
19 *of drilling for, developing, and producing*
20 *oil or natural gas resources; and*

21 *(ii) consists of a block, a portion of a*
22 *block, a combination of blocks or portions of*
23 *blocks, or a combination of portions of*
24 *blocks, as—*

25 *(I) specified in the lease; and*

1 (ii) depicted on an outer Conti-
2 nental Shelf official protraction dia-
3 gram.

4 (B) *EXCLUSION.*—The term “leased tract”
5 does not include a tract described in subpara-
6 graph (A) that is located in a geographic area
7 subject to a leasing moratorium on January 1,
8 2001, unless the lease was in production on that
9 date.

10 (6) *OCS POLITICAL SUBDIVISION.*—The term
11 “OCS political subdivision” means a county, parish,
12 borough or any equivalent subdivision of an OCS
13 Production State all or part of which subdivision lies
14 within the coastal zone (as defined in section 304(1)
15 of the Coastal Zone Management Act of 1972 (16
16 U.S.C. 1453(1)).

17 (7) *OCS PRODUCTION STATE.*—The term “OCS
18 Production State” means the State of—

- 19 (A) Alaska;
- 20 (B) Alabama;
- 21 (C) California;
- 22 (D) Florida;
- 23 (E) Louisiana;
- 24 (F) Mississippi; or
- 25 (G) Texas.

1 (8) *PRODUCTION.*—*The term “production” has*
2 *the meaning given the term in section 2 of the Outer*
3 *Continental Shelf Lands Act (43 U.S.C. 1331).*

4 (9) *PROGRAM.*—*The term “program” means the*
5 *Outer Continental Shelf Energy Infrastructure Secu-*
6 *rity Program established under subsection (b).*

7 (10) *QUALIFIED OUTER CONTINENTAL SHELF*
8 *REVENUES.*—*The term “qualified Outer Continental*
9 *Shelf revenues” means all amounts received by the*
10 *United States from each leased tract or portion of a*
11 *leased tract lying seaward of the zone defined and*
12 *governed by section 8(g) of the Outer Continental*
13 *Shelf Lands Act (43 U.S.C. 1331 et seq.), or lying*
14 *within such zone but to which section 8(g) does not*
15 *apply, the geographic center of which lies within a*
16 *distance of 200 miles from any part of the coastline*
17 *of any State, including bonus bids, rents, royalties*
18 *(including payments for royalties taken in kind and*
19 *sold), net profit share payments, and related late pay-*
20 *ment interest. Such term does not include any reve-*
21 *nués from a leased tract or portion of a leased tract*
22 *that is included within any area of the Outer Conti-*
23 *ental Shelf where a moratorium on new leasing was*
24 *in effect as of January 1, 2001, unless the lease was*

1 *issued prior to the establishment of the moratorium*
2 *and was in production on January 1, 2001.*

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

5 (12) *STATE PLAN.*—*The term “State plan”*
6 *means a State plan described in subsection (b).*

7 (b) *ESTABLISHMENT.*—*The Secretary shall establish a*
8 *program, to be known as the “Outer Continental Shelf En-*
9 *ergy Infrastructure Security Program”, under which the*
10 *Secretary shall provide funds to OCS Production States to*
11 *implement approved State plans to provide security against*
12 *hostile and natural threats to critical OCS energy infra-*
13 *structure facilities and support of any necessary public*
14 *service or transportation activities that are needed to main-*
15 *tain the safety and operation of critical energy infrastruc-*
16 *ture activities. For purposes of this program, restoration*
17 *of any coastal wetland shall be considered to be an activity*
18 *that secures critical OCS energy infrastructure facilities*
19 *from a natural threat.*

20 (c) *STATE PLANS.*—

21 (1) *INITIAL PLAN.*—*Not later than 180 days*
22 *after the date of enactment of this Act, to be eligible*
23 *to receive funds under the program, the Governor of*
24 *an OCS Production State shall submit to the Sec-*
25 *retary a plan to provide security against hostile and*

1 *natural threats to critical energy infrastructure facili-*
2 *ties in the OCS Production State and to support any*
3 *of the necessary public service or transportation ac-*
4 *tivities that are needed to maintain the safety and*
5 *operation of critical energy infrastructure facilities.*
6 *Such plan shall include—*

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

11 *(B) a program for the implementation of*
12 *the plan which describes how the amounts pro-*
13 *vided under this section will be used;*

14 *(C) a contact for each OCS political sub-*
15 *division and description of how such political*
16 *subdivisions will use amounts provided under*
17 *this section, including a certification by the Gov-*
18 *ernor that such uses are consistent with the re-*
19 *quirements of this section; and*

20 *(D) measures for taking into account other*
21 *relevant Federal resources and programs.*

22 *(2) ANNUAL REVIEWS.—Not later than 1 year*
23 *after the date of submission of the plan and annually*
24 *thereafter, the Governor of an OCS Production State*
25 *shall—*

1 (A) review the approved State plan; and

2 (B) submit to the Secretary any revised
3 State plan resulting from the review.

4 (3) APPROVAL OF PLANS.—

5 (A) IN GENERAL.—In consultation with ap-
6 propriate Federal security officials and the Sec-
7 retaries of Commerce and Energy, the Secretary
8 shall—

9 (i) approve each State plan; or

10 (ii) recommend changes to the State
11 plan.

12 (B) RESUBMISSION OF STATE PLANS.—If
13 the Secretary recommends changes to a State
14 plan under subparagraph (A)(ii), the Governor
15 of the OCS Production State may resubmit a re-
16 vised State plan to the Secretary for approval.

17 (4) AVAILABILITY OF PLANS.—The Secretary
18 shall provide to Congress a copy of each approved
19 State plan.

20 (5) CONSULTATION AND PUBLIC COMMENT.—

21 (A) CONSULTATION.—The Governor of an
22 OCS Production State shall develop the State
23 plan in consultation with Federal, State, and
24 local law enforcement and public safety officials,

1 *industry, Indian tribes, the scientific commu-*
2 *nity, and other persons as appropriate.*

3 *(B) PUBLIC COMMENT.—The Governor of*
4 *an OCS Production State may solicit public*
5 *comments on the State plan to the extent that the*
6 *Governor determines to be appropriate.*

7 *(d) ALLOCATION OF AMOUNTS BY THE SECRETARY.—*
8 *The Secretary shall allocate the amounts made available for*
9 *the purposes of carrying out the program provided for by*
10 *this section among OCS Production States as follows:*

11 *(1) twenty-five percent of the amounts shall be*
12 *divided equally among OCS Production States.*

13 *(2) seventy-five percent of the amounts shall be*
14 *divided among OCS Production States on the basis of*
15 *the proximity of each OCS Production State to off-*
16 *shore locations at which oil and gas are being pro-*
17 *duced.*

18 *(e) CALCULATION.—The amount for each OCS Produc-*
19 *tion State under paragraph (d)(2) shall be calculated based*
20 *on the ratio of qualified OCS revenues generated off the*
21 *coastline of the OCS Production State to the qualified OCS*
22 *revenues generated off the coastlines of all OCS Production*
23 *States for the prior 5-year period. Where there is more than*
24 *one OCS Production State within 200 miles of a leased*
25 *tract, the amount of each OCS Production State's payment*

1 *under paragraph (d)(2) for such leased tract shall be in-*
2 *versely proportional to the distance between the nearest*
3 *point on the coastline of such State and the geographic cen-*
4 *ter of each leased tract or portion of the leased tract (to*
5 *the nearest whole mile) that is within 200 miles of that*
6 *coastline, as determined by the Secretary. A leased tract or*
7 *portion of a leased tract shall be excluded if the tract or*
8 *portion is located in a geographic area where a moratorium*
9 *on new leasing was in effect on January 1, 2001, unless*
10 *the lease was issued prior to the establishment of the mora-*
11 *torium and was in production on January 1, 2001.*

12 *(f) PAYMENTS TO OCS POLITICAL SUBDIVISIONS.—*
13 *Thirty-five percent of each OCS Production State's allo-*
14 *cable share as determined under subsection (e) shall be paid*
15 *directly to the OCS political subdivisions by the Secretary*
16 *based on the following formula:*

17 *(1) twenty-five percent shall be allocated based*
18 *on the ratio of such OCS political subdivision's popu-*
19 *lation to the population of all OCS political subdivi-*
20 *sions in the OCS Production State.*

21 *(2) twenty-five percent shall be allocated based*
22 *on the ratio of such OCS political subdivision's coast-*
23 *line miles to the coastline miles of all OCS political*
24 *subdivisions in the OCS Production State. For pur-*
25 *poses of this subsection, those OCS political subdivi-*

1 *sions without coastlines shall be considered to have a*
2 *coastline that is the average length of the coastlines of*
3 *all political subdivisions in the State.*

4 *(3) fifty percent shall be allocated based on the*
5 *relative distance of such OCS political subdivision*
6 *from any leased tract used to calculate that OCS Pro-*
7 *duction State's allocation using ratios that are in-*
8 *versely proportional to the distance between the point*
9 *in the coastal political subdivision closest to the geo-*
10 *graphic center of each leased tract or portion, as de-*
11 *termined by the Secretary. For purposes of the cal-*
12 *culations under this subparagraph, a leased tract or*
13 *portion of a leased tract shall be excluded if the leased*
14 *tract or portion is located in a geographic area where*
15 *a moratorium on new leasing was in effect on Janu-*
16 *ary 1, 2001, unless the lease was issued prior to the*
17 *establishment of the moratorium and was in produc-*
18 *tion on January 1, 2001.*

19 *(g) FAILURE TO HAVE PLAN APPROVED.—Any*
20 *amount allocated to an OCS Production State or OCS po-*
21 *litical subdivision but not disbursed because of a failure to*
22 *have an approved Plan under this section shall be allocated*
23 *equally by the Secretary among all other OCS Production*
24 *States in a manner consistent with this subsection except*
25 *that the Secretary shall hold in escrow such amount until*

1 *the final resolution of any appeal regarding the disapproval*
2 *of a plan submitted under this section. The Secretary may*
3 *waive the provisions of this paragraph and hold an OCS*
4 *Production State's allocable share in escrow if the Secretary*
5 *determines that such State is making a good faith effort*
6 *to develop and submit, or update, a Plan.*

7 *(h) USE OF AMOUNTS ALLOCATED BY THE SEC-*
8 *RETARY.—*

9 *(1) IN GENERAL.—Amounts allocated by the Sec-*
10 *retary under subsection (d) may be used only in ac-*
11 *cordance with a plan approved pursuant to sub-*
12 *section (c) for—*

13 *(A) activities to secure critical OCS energy*
14 *infrastructure facilities from human or natural*
15 *threats; and*

16 *(B) support of any necessary public service*
17 *or transportation activities that are needed to*
18 *maintain the safety and operation of critical*
19 *OCS energy infrastructure facilities.*

20 *(2) RESTORATION OF COASTAL WETLAND.—For*
21 *the purpose of subparagraph (1)(A), restoration of*
22 *any coastal wetland shall be considered to be an ac-*
23 *tivity that secures critical OCS energy infrastructure*
24 *facilities from a natural threat.*

1 (i) *FAILURE TO HAVE USE.*—Any amount allocated
2 to an OCS political subdivision but not disbursed because
3 of a failure to have a qualifying use as described in sub-
4 section (h) shall be allocated by the Secretary to the OCS
5 Production State in which the OCS political subdivision
6 is located except that the Secretary shall hold in escrow such
7 amount until the final resolution of any appeal regarding
8 the use of the funds.

9 (j) *COMPLIANCE WITH AUTHORIZED USES.*—If the
10 Secretary determines that any expenditure made by an
11 OCS Production State or an OCS political subdivision is
12 not consistent with the uses authorized in subsection (h),
13 the Secretary shall not disburse any further amounts under
14 this section to that OCS Production State or OCS political
15 subdivision until the amounts used for the inconsistent ex-
16 penditure have been repaid or obligated for authorized uses.

17 (k) *RULEMAKING.*—The Secretary may promulgate
18 such rules and regulations as may be necessary to carry
19 out the purposes of this section, including rules and regula-
20 tions setting forth an appropriate process for appeals.

21 (l) *AUTHORIZATION OF APPROPRIATIONS.*—There are
22 hereby authorized to be appropriated \$450,000,000 for each
23 of the fiscal years 2003 through 2008 to carry out the pur-
24 poses of this section.

1 ***DIVISION H—ENERGY TAX***
 2 ***INCENTIVES***

3 ***SEC. 1900. SHORT TITLE; ETC.***

4 (a) *SHORT TITLE.*—*This division may be cited as the*
 5 *“Energy Tax Incentives Act of 2002”.*

6 (b) *AMENDMENT OF 1986 CODE.*—*Except as otherwise*
 7 *expressly provided, whenever in this division an amend-*
 8 *ment or repeal is expressed in terms of an amendment to,*
 9 *or repeal of, a section or other provision, the reference shall*
 10 *be considered to be made to a section or other provision*
 11 *of the Internal Revenue Code of 1986.*

12 ***TITLE XIX—EXTENSION AND***
 13 ***MODIFICATION OF RENEW-***
 14 ***ABLE ELECTRICITY PRODUC-***
 15 ***TION TAX CREDIT***

16 ***SEC. 1901. THREE-YEAR EXTENSION OF CREDIT FOR PRO-***
 17 ***DUCING ELECTRICITY FROM WIND AND POUL-***
 18 ***TRY WASTE.***

19 (a) *IN GENERAL.*—*Subparagraphs (A) and (C) of sec-*
 20 *tion 45(c)(3) (relating to qualified facility), as amended by*
 21 *section 603(a) of the Job Creation and Worker Assistance*
 22 *Act of 2002, are each amended by striking “January 1,*
 23 *2004” and inserting “January 1, 2007”.*

24 (b) *EFFECTIVE DATE.*—*The amendments made by this*
 25 *section shall apply to electricity sold after the date of the*

1 *enactment of this Act, in taxable years ending after such*
2 *date.*

3 **SEC. 1902. CREDIT FOR ELECTRICITY PRODUCED FROM BIO-**
4 **MASS.**

5 *(a) EXTENSION AND MODIFICATION OF PLACED-IN-*
6 *SERVICE RULES.—Paragraph (3) of section 45(c) is*
7 *amended—*

8 *(1) by striking subparagraph (B) and inserting*
9 *the following new subparagraph:*

10 *“(B) CLOSED-LOOP BIOMASS FACILITY.—*

11 *“(i) IN GENERAL.—In the case of a fa-*
12 *cility using closed-loop biomass to produce*
13 *electricity, the term ‘qualified facility’*
14 *means any facility—*

15 *“(I) owned by the taxpayer which*
16 *is originally placed in service after De-*
17 *cember 31, 1992, and before January*
18 *1, 2007, or*

19 *“(II) owned by the taxpayer*
20 *which is originally placed in service*
21 *before January 1, 1993, and modified*
22 *to use closed-loop biomass to co-fire*
23 *with coal before January 1, 2007, as*
24 *approved under the Biomass Power for*
25 *Rural Development Programs or under*

1 a pilot project of the Commodity Cred-
2 it Corporation as described in 65 Fed.
3 Reg. 63052.

4 “(i) *SPECIAL RULES.*—In the case of a
5 qualified facility described in clause
6 (i)(II)—

7 “(I) the 10-year period referred to
8 in subsection (a) shall be treated as be-
9 ginning no earlier than the date of the
10 enactment of this subclause, and

11 “(II) if the owner of such facility
12 is not the producer of the electricity,
13 the person eligible for the credit allow-
14 able under subsection (a) is the lessee
15 or the operator of such facility.”, and

16 (2) by adding at the end the following new sub-
17 paragraph:

18 “(D) *BIOMASS FACILITY.*—

19 “(i) *IN GENERAL.*—In the case of a fa-
20 cility using biomass (other than closed-loop
21 biomass) to produce electricity, the term
22 ‘qualified facility’ means any facility owned
23 by the taxpayer which is originally placed
24 in service before January 1, 2005.

1 “(ii) *SPECIAL RULE FOR*
2 *POSTEFFECTIVE DATE FACILITIES.—In the*
3 *case of any facility described in clause (i)*
4 *which is placed in service after the date of*
5 *the enactment of this clause, the 3-year pe-*
6 *riod beginning on the date the facility is*
7 *originally placed in service shall be sub-*
8 *stituted for the 10-year period in subsection*
9 *(a)(2)(A)(ii).*

10 “(iii) *SPECIAL RULES FOR*
11 *PREEFFECTIVE DATE FACILITIES.—In the*
12 *case of any facility described in clause (i)*
13 *which is placed in service before the date of*
14 *the enactment of this clause—*

15 “(I) *subsection (a)(1) shall be ap-*
16 *plied by substituting ‘1.0 cents’ for ‘1.5*
17 *cents’, and*

18 “(II) *the 3-year period beginning*
19 *after December 31, 2002, shall be sub-*
20 *stituted for the 10-year period in sub-*
21 *section (a)(2)(A)(ii).*

22 “(iv) *CREDIT ELIGIBILITY.—In the*
23 *case of any facility described in clause (i),*
24 *if the owner of such facility is not the pro-*
25 *ducer of the electricity, the person eligible*

1 for the credit allowable under subsection (a)
2 is the lessee or the operator of such facil-
3 ity.”.

4 (b) *DEFINITION OF BIOMASS.*—

5 (1) *IN GENERAL.*—Section 45(c)(1) (defining
6 qualified energy resources) is amended—

7 (A) by striking “and” at the end of sub-
8 paragraph (B),

9 (B) by striking the period at the end of sub-
10 paragraph (C) and inserting “, and”, and

11 (C) by adding at the end the following new
12 subparagraph:

13 “(D) biomass (other than closed-loop bio-
14 mass).”.

15 (2) *BIOMASS DEFINED.*—Section 45(c) (relating
16 to definitions) is amended by adding at the end the
17 following new paragraph:

18 “(5) *BIOMASS.*—The term ‘biomass’ means any
19 solid, nonhazardous, cellulosic waste material which
20 is segregated from other waste materials and which is
21 derived from—

22 “(A) any of the following forest-related re-
23 sources: mill residues, precommercial thinnings,
24 slash, and brush, but not including old-growth
25 timber (other than old-growth timber which has

1 *been permitted or contracted for removal by any*
2 *appropriate Federal authority through the Na-*
3 *tional Environmental Policy Act or by any ap-*
4 *propriate State authority),*

5 *“(B) solid wood waste materials, including*
6 *waste pallets, crates, dunnage, manufacturing*
7 *and construction wood wastes (other than pres-*
8 *sure-treated, chemically-treated, or painted wood*
9 *wastes), and landscape or right-of-way tree trim-*
10 *mings, but not including municipal solid waste*
11 *(garbage), gas derived from the biodegradation of*
12 *solid waste, or paper that is commonly recycled,*
13 *or*

14 *“(C) agriculture sources, including orchard*
15 *tree crops, vineyard, grain, legumes, sugar, and*
16 *other crop by-products or residues.”.*

17 *(c) COORDINATION WITH SECTION 29.—Section 45(c)*
18 *(relating to definitions) is amended by adding at the end*
19 *the following new paragraph:*

20 *“(6) COORDINATION WITH SECTION 29.—The*
21 *term ‘qualified facility’ shall not include any facility*
22 *the production from which is taken into account in*
23 *determining any credit under section 29 for the tax-*
24 *able year or any prior taxable year.”.*

25 *(d) CLERICAL AMENDMENTS.—*

1 (1) *The heading for subsection (c) of section 45*
 2 *is amended by inserting “AND SPECIAL RULES” after*
 3 *“DEFINITIONS”.*

4 (2) *The heading for subsection (d) of section 45*
 5 *is amended by inserting “ADDITIONAL” before “DEFI-*
 6 *NITIONS”.*

7 (e) *EFFECTIVE DATES.—*

8 (1) *IN GENERAL.—Except as provided in para-*
 9 *graph (2), the amendments made by this section shall*
 10 *apply to electricity sold after the date of the enact-*
 11 *ment of this Act.*

12 (2) *CERTAIN BIOMASS FACILITIES.—With respect*
 13 *to any facility described in section 45(c)(3)(D)(i) of*
 14 *the Internal Revenue Code of 1986, as added by this*
 15 *section, which is placed in service before the date of*
 16 *the enactment of this Act, the amendments made by*
 17 *this section shall apply to electricity sold after Decem-*
 18 *ber 31, 2002.*

19 **SEC. 1903. CREDIT FOR ELECTRICITY PRODUCED FROM**
 20 **SWINE AND BOVINE WASTE NUTRIENTS, GEO-**
 21 **THERMAL ENERGY, AND SOLAR ENERGY.**

22 (a) *EXPANSION OF QUALIFIED ENERGY RE-*
 23 *SOURCES.—*

24 (1) *IN GENERAL.—Section 45(c)(1) (defining*
 25 *qualified energy resources), as amended by this Act,*

1 *is amended by striking “and” at the end of subpara-*
2 *graph (C), by striking the period at the end of sub-*
3 *paragraph (D) and inserting a comma, and by add-*
4 *ing at the end the following new subparagraphs:*

5 *“(E) swine and bovine waste nutrients,*

6 *“(F) geothermal energy, and*

7 *“(G) solar energy.”.*

8 *(2) DEFINITIONS.—Section 45(c) (relating to*
9 *definitions and special rules), as amended by this*
10 *Act, is amended by redesignating paragraph (6) as*
11 *paragraph (8) and by inserting after paragraph (5)*
12 *the following new paragraphs:*

13 *“(6) SWINE AND BOVINE WASTE NUTRIENTS.—*

14 *The term ‘swine and bovine waste nutrients’ means*
15 *swine and bovine manure and litter, including bed-*
16 *ding material for the disposition of manure.*

17 *“(7) GEOTHERMAL ENERGY.—The term ‘geo-*
18 *thermal energy’ means energy derived from a geo-*
19 *thermal deposit (within the meaning of section*
20 *613(e)(2)).”.*

21 *(b) EXTENSION AND MODIFICATION OF PLACED-*
22 *IN-SERVICE RULES.—Section 45(c)(3) (relating to*
23 *qualified facility), as amended by this Act, is amend-*
24 *ed by adding at the end the following new subpara-*
25 *graphs:*

1 “(E) *SWINE AND BOVINE WASTE NUTRIENTS*
2 *FACILITY.*—*In the case of a facility using swine*
3 *and bovine waste nutrients to produce electricity,*
4 *the term ‘qualified facility’ means any facility*
5 *owned by the taxpayer which is originally placed*
6 *in service after the date of the enactment of this*
7 *subparagraph and before January 1, 2007.*

8 “(F) *GEOHERMAL OR SOLAR ENERGY FA-*
9 *CILITY.*—

10 “(i) *IN GENERAL.*—*In the case of a fa-*
11 *cility using geothermal or solar energy to*
12 *produce electricity, the term ‘qualified facil-*
13 *ity’ means any facility owned by the tax-*
14 *payer which is originally placed in service*
15 *after the date of the enactment of this clause*
16 *and before January 1, 2007.*

17 “(ii) *SPECIAL RULE.*—*In the case of*
18 *any facility described in clause (i), the 5-*
19 *year period beginning on the date the facil-*
20 *ity was originally placed in service shall be*
21 *substituted for the 10-year period in sub-*
22 *section (a)(2)(A)(ii).”.*

23 “(d) *EFFECTIVE DATE.*—*The amendments made by this*
24 *section shall apply to electricity sold after the date of the*

1 *enactment of this Act, in taxable years ending after such*
2 *date.*

3 **SEC. 1904. TREATMENT OF PERSONS NOT ABLE TO USE EN-**
4 **TIRE CREDIT.**

5 *(a) IN GENERAL.—Section 45(d) (relating to addi-*
6 *tional definitions and special rules), as amended by this*
7 *Act, is amended by adding at the end the following new*
8 *paragraph:*

9 *“(8) TREATMENT OF PERSONS NOT ABLE TO USE*
10 *ENTIRE CREDIT.—*

11 *“(A) ALLOWANCE OF CREDIT.—*

12 *“(i) IN GENERAL.—Except as otherwise*
13 *provided in this subsection—*

14 *“(I) any credit allowable under*
15 *subsection (a) with respect to a quali-*
16 *fied facility owned by a person de-*
17 *scribed in clause (ii) may be trans-*
18 *ferred or used as provided in this*
19 *paragraph, and*

20 *“(II) the determination as to*
21 *whether the credit is allowable shall be*
22 *made without regard to the tax-exempt*
23 *status of the person.*

24 *“(ii) PERSONS DESCRIBED.—A person*
25 *is described in this clause if the person is—*

1 “(I) an organization described in
2 section 501(c)(12)(C) and exempt from
3 tax under section 501(a),

4 “(II) an organization described in
5 section 1381(a)(2)(C),

6 “(III) a public utility (as defined
7 in section 136(c)(2)(B)), which is ex-
8 empt from income tax under this sub-
9 title,

10 “(IV) any State or political sub-
11 division thereof, the District of Colum-
12 bia, any possession of the United
13 States, or any agency or instrumen-
14 tality of any of the foregoing, or

15 “(V) any Indian tribal govern-
16 ment (within the meaning of section
17 7871) or any agency or instrumen-
18 tality thereof.

19 “(B) TRANSFER OF CREDIT.—

20 “(i) IN GENERAL.—A person described
21 in subparagraph (A)(i) may transfer any
22 credit to which subparagraph (A)(i) applies
23 through an assignment to any other person
24 not described in subparagraph (A)(i). Such

1 *transfer may be revoked only with the con-*
2 *sent of the Secretary.*

3 “(ii) *REGULATIONS.—The Secretary*
4 *shall prescribe such regulations as necessary*
5 *to ensure that any credit described in clause*
6 *(i) is claimed once and not reassigned by*
7 *such other person.*

8 “(iii) *TRANSFER PROCEEDS TREATED*
9 *AS ARISING FROM ESSENTIAL GOVERNMENT*
10 *FUNCTION.—Any proceeds derived by a per-*
11 *son described in subclause (III), (IV), or (V)*
12 *of subparagraph (A)(ii) from the transfer of*
13 *any credit under clause (i) shall be treated*
14 *as arising from the exercise of an essential*
15 *government function.*

16 “(C) *USE OF CREDIT AS AN OFFSET.—Not-*
17 *withstanding any other provision of law, in the*
18 *case of a person described in subclause (I), (II),*
19 *or (V) of subparagraph (A)(ii), any credit to*
20 *which subparagraph (A)(i) applies may be ap-*
21 *plied by such person, to the extent provided by*
22 *the Secretary of Agriculture, as a prepayment of*
23 *any loan, debt, or other obligation the entity has*
24 *incurred under subchapter I of chapter 31 of title*
25 *7 of the Rural Electrification Act of 1936 (7*

1 *U.S.C. 901 et seq.*), as in effect on the date of the
2 enactment of the *Energy Tax Incentives Act of*
3 2002.

4 “(D) *CREDIT NOT INCOME.*—Any transfer
5 under subparagraph (B) or use under subpara-
6 graph (C) of any credit to which subparagraph
7 (A)(i) applies shall not be treated as income for
8 purposes of section 501(c)(12).

9 “(E) *TREATMENT OF UNRELATED PER-*
10 *SONS.*—For purposes of subsection (a)(2)(B),
11 sales among and between persons described in
12 subparagraph (A)(i) shall be treated as sales be-
13 tween unrelated parties.”.

14 (b) *CREDITS NOT REDUCED BY TAX-EXEMPT BONDS*
15 *OR CERTAIN OTHER SUBSIDIES.*—Section 45(b)(3) (relat-
16 ing to credit reduced for grants, tax-exempt bonds, sub-
17 sidized energy financing, and other credits) is amended—

18 (1) by striking clause (ii),

19 (2) by redesignating clauses (iii) and (iv) as
20 clauses (ii) and (iii),

21 (3) by inserting “(other than any loan, debt, or
22 other obligation incurred under subchapter I of chap-
23 ter 31 of title 7 of the *Rural Electrification Act of*
24 1936 (7 U.S.C. 901 et seq.), as in effect on the date
25 of the enactment of the *Energy Tax Incentives Act of*

1 2002)” after “project” in clause (ii) (as so redesign-
2 nated),

3 (4) by adding at the end the following new sen-
4 tence: “This paragraph shall not apply with respect
5 to any facility described in subsection
6 (c)(3)(B)(i)(II).”, and

7 (5) by striking “TAX-EXEMPT BONDS,” in the
8 heading and inserting “CERTAIN”.

9 (c) *EFFECTIVE DATE.*—The amendments made by this
10 section shall apply to electricity sold after the date of the
11 enactment of this Act, in taxable years ending after such
12 date.

13 **SEC. 1905. CREDIT FOR ELECTRICITY PRODUCED FROM**
14 **SMALL IRRIGATION POWER.**

15 (a) *IN GENERAL.*—Section 45(c)(1) (defining qualified
16 energy resources), as amended by this Act, is amended by
17 striking “and” at the end of subparagraph (F), by striking
18 the period at the end of subparagraph (G) and inserting
19 “, and”, and by adding at the end the following new sub-
20 paragraph:

21 “(H) small irrigation power.”.

22 (b) *QUALIFIED FACILITY.*—Section 45(c)(3) (relating
23 to qualified facility), as amended by this Act, is amended
24 by adding at the end the following new subparagraph:

1 “(G) *SMALL IRRIGATION POWER FACIL-*
2 *ITY.—In the case of a facility using small irriga-*
3 *tion power to produce electricity, the term ‘quali-*
4 *fied facility’ means any facility owned by the*
5 *taxpayer which is originally placed in service*
6 *after date of the enactment of this subparagraph*
7 *and before January 1, 2007.”.*

8 (c) *DEFINITION.—Section 45(c), as amended by this*
9 *Act, is amended by redesignating paragraph (8) as para-*
10 *graph (9) and by inserting after paragraph (7) the fol-*
11 *lowing new paragraph:*

12 “(8) *SMALL IRRIGATION POWER.—The term*
13 *‘small irrigation power’ means power—*

14 “(A) *generated without any dam or im-*
15 *poundment of water through an irrigation sys-*
16 *tem canal or ditch, and*

17 “(B) *the installed capacity of which is less*
18 *than 5 megawatts.”.*

19 (d) *EFFECTIVE DATE.—The amendments made by this*
20 *section shall apply to electricity sold after the date of the*
21 *enactment of this Act, in taxable years ending after such*
22 *date.*

1 **SEC. 1906. CREDIT FOR ELECTRICITY PRODUCED FROM MU-**
2 **NICIPAL BIOSOLIDS AND RECYCLED SLUDGE.**

3 (a) *IN GENERAL.*—Section 45(c)(1) (defining qualified
4 energy resources), as amended by this Act, is amended by
5 striking “and” at the end of subparagraph (F), by striking
6 the period at the end of subparagraph (G), and by adding
7 at the end the following new subparagraphs:

8 “(H) municipal biosolids, and

9 “(I) recycled sludge.”.

10 (b) *QUALIFIED FACILITIES.*—Section 45(c)(3) (relat-
11 ing to qualified facility), as amended by this Act, is amend-
12 ed by adding at the end the following new subparagraphs:

13 “(G) *MUNICIPAL BIOSOLIDS FACILITY.*—In
14 the case of a facility using municipal biosolids
15 to produce electricity, the term ‘qualified facility’
16 means any facility owned by the taxpayer which
17 is originally placed in service after December 31,
18 2001, and before January 1, 2007.

19 “(H) *RECYCLED SLUDGE FACILITY.*—

20 “(i) *IN GENERAL.*—In the case of a fa-
21 cility using recycled sludge to produce elec-
22 tricity, the term ‘qualified facility’ means
23 any facility owned by the taxpayer which is
24 originally placed in service before January
25 1, 2007.

1 “(ii) *SPECIAL RULE.*—*In the case of a*
2 *qualified facility described in clause (i), the*
3 *10-year period referred to in subsection (a)*
4 *shall be treated as beginning no earlier than*
5 *the date of the enactment of this subpara-*
6 *graph.”.*

7 (c) *DEFINITIONS.*—*Section 45(c), as amended by this*
8 *Act, is amended by redesignating paragraph (8) as para-*
9 *graph (10) and by inserting after paragraph (7) the fol-*
10 *lowing new paragraphs:*

11 “(8) *MUNICIPAL BIOSOLIDS.*—*The term ‘munic-*
12 *ipal biosolids’ means the residue or solids removed by*
13 *a municipal wastewater treatment facility.*

14 “(9) *RECYCLED SLUDGE.*—

15 “(A) *IN GENERAL.*—*The term ‘recycled*
16 *sludge’ means the recycled residue byproduct cre-*
17 *ated in the treatment of commercial, industrial,*
18 *municipal, or navigational wastewater.*

19 “(B) *RECYCLED.*—*The term ‘recycled’*
20 *means the processing of residue into a market-*
21 *able product, but does not include incineration*
22 *for the purpose of volume reduction.”.*

23 (d) *EFFECTIVE DATE.*—*The amendments made by this*
24 *section shall apply to electricity sold after the date of the*

1 *enactment of this Act, in taxable years ending after such*
 2 *date.*

3 **TITLE XX—ALTERNATIVE MOTOR**
 4 **VEHICLES AND FUELS INCEN-**
 5 **TIVES**

6 **SEC. 2001. ALTERNATIVE MOTOR VEHICLE CREDIT.**

7 *(a) IN GENERAL.—Subpart B of part IV of subchapter*
 8 *A of chapter 1 (relating to foreign tax credit, etc.) is amend-*
 9 *ed by adding at the end the following new section:*

10 **“SEC. 30B. ALTERNATIVE MOTOR VEHICLE CREDIT.**

11 *“(a) ALLOWANCE OF CREDIT.—There shall be allowed*
 12 *as a credit against the tax imposed by this chapter for the*
 13 *taxable year an amount equal to the sum of—*

14 *“(1) the new qualified fuel cell motor vehicle*
 15 *credit determined under subsection (b),*

16 *“(2) the new qualified hybrid motor vehicle cred-*
 17 *it determined under subsection (c), and*

18 *“(3) the new qualified alternative fuel motor ve-*
 19 *hicle credit determined under subsection (d).*

20 *“(b) NEW QUALIFIED FUEL CELL MOTOR VEHICLE*
 21 *CREDIT.—*

22 *“(1) IN GENERAL.—For purposes of subsection*
 23 *(a), the new qualified fuel cell motor vehicle credit de-*
 24 *termined under this subsection with respect to a new*

1 *qualified fuel cell motor vehicle placed in service by*
2 *the taxpayer during the taxable year is—*

3 *“(A) \$4,000, if such vehicle has a gross ve-*
4 *hicle weight rating of not more than 8,500*
5 *pounds,*

6 *“(B) \$10,000, if such vehicle has a gross ve-*
7 *hicle weight rating of more than 8,500 pounds*
8 *but not more than 14,000 pounds,*

9 *“(C) \$20,000, if such vehicle has a gross ve-*
10 *hicle weight rating of more than 14,000 pounds*
11 *but not more than 26,000 pounds, and*

12 *“(D) \$40,000, if such vehicle has a gross ve-*
13 *hicle weight rating of more than 26,000 pounds.*

14 *“(2) INCREASE FOR FUEL EFFICIENCY.—*

15 *“(A) IN GENERAL.—The amount determined*
16 *under paragraph (1)(A) with respect to a new*
17 *qualified fuel cell motor vehicle which is a pas-*
18 *senger automobile or light truck shall be in-*
19 *creased by—*

20 *“(i) \$1,000, if such vehicle achieves at*
21 *least 150 percent but less than 175 percent*
22 *of the 2000 model year city fuel economy,*

23 *“(ii) \$1,500, if such vehicle achieves at*
24 *least 175 percent but less than 200 percent*
25 *of the 2000 model year city fuel economy,*

1 “(iii) \$2,000, if such vehicle achieves
 2 at least 200 percent but less than 225 per-
 3 cent of the 2000 model year city fuel econ-
 4 omy,

5 “(iv) \$2,500, if such vehicle achieves at
 6 least 225 percent but less than 250 percent
 7 of the 2000 model year city fuel economy,

8 “(v) \$3,000, if such vehicle achieves at
 9 least 250 percent but less than 275 percent
 10 of the 2000 model year city fuel economy,

11 “(vi) \$3,500, if such vehicle achieves at
 12 least 275 percent but less than 300 percent
 13 of the 2000 model year city fuel economy,
 14 and

15 “(vii) \$4,000, if such vehicle achieves
 16 at least 300 percent of the 2000 model year
 17 city fuel economy.

18 “(B) 2000 MODEL YEAR CITY FUEL ECON-
 19 OMY.—For purposes of subparagraph (A), the
 20 2000 model year city fuel economy with respect
 21 to a vehicle shall be determined in accordance
 22 with the following tables:

23 “(i) In the case of a passenger auto-
 24 mobile:

| “If vehicle inertia weight class is: | The 2000 model year city fuel economy is: |
|---|--|
| 1,500 or 1,750 lbs | 43.7 mpg |
| 2,000 lbs | 38.3 mpg |

1 *qualified fuel cell motor vehicle*’ means a motor
2 *vehicle—*

3 “(A) *which is propelled by power derived*
4 *from one or more cells which convert chemical*
5 *energy directly into electricity by combining ox-*
6 *xygen with hydrogen fuel which is stored on board*
7 *the vehicle in any form and may or may not re-*
8 *quire reformation prior to use,*

9 “(B) *which, in the case of a passenger auto-*
10 *mobile or light truck—*

11 “(i) *for 2002 and later model vehicles,*
12 *has received a certificate of conformity*
13 *under the Clean Air Act and meets or ex-*
14 *ceeds the equivalent qualifying California*
15 *low emission vehicle standard under section*
16 *243(e)(2) of the Clean Air Act for that make*
17 *and model year, and*

18 “(ii) *for 2004 and later model vehicles,*
19 *has received a certificate that such vehicle*
20 *meets or exceeds the Bin 5 Tier II emission*
21 *level established in regulations prescribed by*
22 *the Administrator of the Environmental*
23 *Protection Agency under section 202(i) of*
24 *the Clean Air Act for that make and model*
25 *year vehicle,*

1 “(C) the original use of which commences
2 with the taxpayer,

3 “(D) which is acquired for use or lease by
4 the taxpayer and not for resale, and

5 “(E) which is made by a manufacturer.

6 “(c) *NEW QUALIFIED HYBRID MOTOR VEHICLE CRED-*
7 *IT.*—

8 “(1) *IN GENERAL.*—For purposes of subsection
9 (a), the new qualified hybrid motor vehicle credit de-
10 termined under this subsection with respect to a new
11 qualified hybrid motor vehicle placed in service by the
12 taxpayer during the taxable year is the credit amount
13 determined under paragraph (2).

14 “(2) *CREDIT AMOUNT.*—

15 “(A) *IN GENERAL.*—The credit amount de-
16 termined under this paragraph shall be deter-
17 mined in accordance with the following tables:

18 “(i) In the case of a new qualified hy-
19 brid motor vehicle which is a passenger
20 automobile or light truck and which pro-
21 vides the following percentage of the max-
22 imum available power:

| “If percentage of the maximum available power is: | The credit amount is: |
|--|------------------------------|
| At least 5 percent but less than 10 percent | \$250 |
| At least 10 percent but less than 20 percent | \$500 |
| At least 20 percent but less than 30 percent | \$750 |
| At least 30 percent | \$1,000. |

1 “(ii) In the case of a new qualified hy-
 2 brid motor vehicle which is a heavy duty
 3 hybrid motor vehicle and which provides the
 4 following percentage of the maximum avail-
 5 able power:

6 “(I) If such vehicle has a gross ve-
 7 hicle weight rating of not more than
 8 14,000 pounds:

| “If percentage of the maximum available power is: | The credit amount is: |
|--|------------------------------|
| At least 20 percent but less than 30 percent | \$1,000 |
| At least 30 percent but less than 40 percent | \$1,750 |
| At least 40 percent but less than 50 percent | \$2,000 |
| At least 50 percent but less than 60 percent | \$2,250 |
| At least 60 percent | \$2,500. |

9 “(II) If such vehicle has a gross
 10 vehicle weight rating of more than
 11 14,000 but not more than 26,000
 12 pounds:

| “If percentage of the maximum available power is: | The credit amount is: |
|--|------------------------------|
| At least 20 percent but less than 30 percent | \$4,000 |
| At least 30 percent but less than 40 percent | \$4,500 |
| At least 40 percent but less than 50 percent | \$5,000 |
| At least 50 percent but less than 60 percent | \$5,500 |
| At least 60 percent | \$6,000. |

13 “(III) If such vehicle has a gross
 14 vehicle weight rating of more than
 15 26,000 pounds:

| “If percentage of the maximum available power is: | The credit amount is: |
|--|------------------------------|
| At least 20 percent but less than 30 percent | \$6,000 |
| At least 30 percent but less than 40 percent | \$7,000 |
| At least 40 percent but less than 50 percent | \$8,000 |
| At least 50 percent but less than 60 percent | \$9,000 |
| At least 60 percent | \$10,000. |

1 “(B) *INCREASE FOR FUEL EFFICIENCY.*—

2 “(i) *AMOUNT.*—*The amount deter-*
3 *mined under subparagraph (A)(i) with re-*
4 *spect to a new qualified hybrid motor vehi-*
5 *cle which is a passenger automobile or light*
6 *truck shall be increased by—*

7 “(I) *\$500, if such vehicle achieves*
8 *at least 125 percent but less than 150*
9 *percent of the 2000 model year city*
10 *fuel economy,*

11 “(II) *\$1,000, if such vehicle*
12 *achieves at least 150 percent but less*
13 *than 175 percent of the 2000 model*
14 *year city fuel economy,*

15 “(III) *\$1,500, if such vehicle*
16 *achieves at least 175 percent but less*
17 *than 200 percent of the 2000 model*
18 *year city fuel economy,*

19 “(IV) *\$2,000, if such vehicle*
20 *achieves at least 200 percent but less*
21 *than 225 percent of the 2000 model*
22 *year city fuel economy,*

23 “(V) *\$2,500, if such vehicle*
24 *achieves at least 225 percent but less*

1 *than 250 percent of the 2000 model*
 2 *year city fuel economy, and*

3 *“(VI) \$3,000, if such vehicle*
 4 *achieves at least 250 percent of the*
 5 *2000 model year city fuel economy.*

6 *“(ii) 2000 MODEL YEAR CITY FUEL*
 7 *ECONOMY.—For purposes of clause (i), the*
 8 *2000 model year city fuel economy with re-*
 9 *spect to a vehicle shall be determined using*
 10 *the tables provided in subsection (b)(2)(B)*
 11 *with respect to such vehicle.*

12 *“(C) INCREASE FOR ACCELERATED EMIS-*
 13 *SIONS PERFORMANCE.—The amount determined*
 14 *under subparagraph (A)(ii) with respect to an*
 15 *applicable heavy duty hybrid motor vehicle shall*
 16 *be increased by the increased credit amount de-*
 17 *termined in accordance with the following tables:*

18 *“(i) In the case of a vehicle which has*
 19 *a gross vehicle weight rating of not more*
 20 *than 14,000 pounds:*

| <i>“If the model year is:</i> | <i>The increased credit amount is:</i> |
|-------------------------------|--|
| <i>2002</i> | <i>\$3,500</i> |
| <i>2003</i> | <i>\$3,000</i> |
| <i>2004</i> | <i>\$2,500</i> |
| <i>2005</i> | <i>\$2,000</i> |
| <i>2006</i> | <i>\$1,500.</i> |

21 *“(ii) In the case of a vehicle which has*
 22 *a gross vehicle weight rating of more than*

1 14,000 pounds but not more than 26,000
2 pounds:

| <i>“If the model year is:</i> | <i>The increased credit amount is:</i> |
|--------------------------------------|---|
| 2002 | \$9,000 |
| 2003 | \$7,750 |
| 2004 | \$6,500 |
| 2005 | \$5,250 |
| 2006 | \$4,000. |

3 “(iii) In the case of a vehicle which has
4 a gross vehicle weight rating of more than
5 26,000 pounds:

| <i>“If the model year is:</i> | <i>The increased credit amount is:</i> |
|--------------------------------------|---|
| 2002 | \$14,000 |
| 2003 | \$12,000 |
| 2004 | \$10,000 |
| 2005 | \$8,000 |
| 2006 | \$6,000. |

6 “(D) DEFINITIONS.—

7 “(i) APPLICABLE HEAVY DUTY HYBRID
8 MOTOR VEHICLE.—For purposes of subpara-
9 graph (C), the term ‘applicable heavy duty
10 hybrid motor vehicle’ means a heavy duty
11 hybrid motor vehicle which is powered by
12 an internal combustion or heat engine
13 which is certified as meeting the emission
14 standards set in the regulations prescribed
15 by the Administrator of the Environmental
16 Protection Agency for 2007 and later model
17 year diesel heavy duty engines, or for 2008
18 and later model year ottocycle heavy duty
19 engines, as applicable.

1 “(ii) *HEAVY DUTY HYBRID MOTOR VE-*
2 *HICLE.—For purposes of this paragraph,*
3 *the term ‘heavy duty hybrid motor vehicle’*
4 *means a new qualified hybrid motor vehicle*
5 *which has a gross vehicle weight rating of*
6 *more than 10,000 pounds and draws pro-*
7 *pulsion energy from both of the following*
8 *onboard sources of stored energy:*

9 “(I) *An internal combustion or*
10 *heat engine using consumable fuel*
11 *which, for 2002 and later model vehi-*
12 *cles, has received a certificate of con-*
13 *formity under the Clean Air Act and*
14 *meets or exceeds a level of not greater*
15 *than 3.0 grams per brake horsepower–*
16 *hour of oxides of nitrogen and 0.01 per*
17 *brake horsepower–hour of particulate*
18 *matter.*

19 “(II) *A rechargeable energy stor-*
20 *age system.*

21 “(iii) *MAXIMUM AVAILABLE POWER.—*

22 “(I) *PASSENGER AUTOMOBILE OR*
23 *LIGHT TRUCK.—For purposes of sub-*
24 *paragraph (A)(i), the term ‘maximum*
25 *available power’ means the maximum*

1 *power available from the rechargeable*
2 *energy storage system, during a stand-*
3 *ard 10 second pulse power or equiva-*
4 *lent test, divided by such maximum*
5 *power and the SAE net power of the*
6 *heat engine.*

7 “(II) *HEAVY DUTY HYBRID MOTOR*
8 *VEHICLE.—For purposes of subpara-*
9 *graph (A)(ii), the term ‘maximum*
10 *available power’ means the maximum*
11 *power available from the rechargeable*
12 *energy storage system, during a stand-*
13 *ard 10 second pulse power or equiva-*
14 *lent test, divided by the vehicle’s total*
15 *traction power. The term ‘total trac-*
16 *tion power’ means the sum of the peak*
17 *power from the rechargeable energy*
18 *storage system and the heat engine*
19 *peak power of the vehicle, except that if*
20 *such storage system is the sole means*
21 *by which the vehicle can be driven, the*
22 *total traction power is the peak power*
23 *of such storage system.*

24 “(3) *NEW QUALIFIED HYBRID MOTOR VEHI-*
25 *CLE.—For purposes of this subsection, the term ‘new*

1 *qualified hybrid motor vehicle’ means a motor*
2 *vehicle—*

3 *“(A) which draws propulsion energy from*
4 *onboard sources of stored energy which are*
5 *both—*

6 *“(i) an internal combustion or heat en-*
7 *gine using combustible fuel, and*

8 *“(ii) a rechargeable energy storage sys-*
9 *tem,*

10 *“(B) which, in the case of a passenger auto-*
11 *mobile or light truck—*

12 *“(i) for 2002 and later model vehicles,*
13 *has received a certificate of conformity*
14 *under the Clean Air Act and meets or ex-*
15 *ceeds the equivalent qualifying California*
16 *low emission vehicle standard under section*
17 *243(e)(2) of the Clean Air Act for that make*
18 *and model year, and*

19 *“(ii) for 2004 and later model vehicles,*
20 *has received a certificate that such vehicle*
21 *meets or exceeds the Bin 5 Tier II emission*
22 *level established in regulations prescribed by*
23 *the Administrator of the Environmental*
24 *Protection Agency under section 202(i) of*

1 *the Clean Air Act for that make and model*
2 *year vehicle,*

3 “(C) *the original use of which commences*
4 *with the taxpayer,*

5 “(D) *which is acquired for use or lease by*
6 *the taxpayer and not for resale, and*

7 “(E) *which is made by a manufacturer.*

8 “(d) *NEW QUALIFIED ALTERNATIVE FUEL MOTOR VE-*
9 *HICLE CREDIT.—*

10 “(1) *ALLOWANCE OF CREDIT.—Except as pro-*
11 *vided in paragraph (5), the credit determined under*
12 *this subsection is an amount equal to the applicable*
13 *percentage of the incremental cost of any new quali-*
14 *fied alternative fuel motor vehicle placed in service by*
15 *the taxpayer during the taxable year.*

16 “(2) *APPLICABLE PERCENTAGE.—For purposes*
17 *of paragraph (1), the applicable percentage with re-*
18 *spect to any new qualified alternative fuel motor vehi-*
19 *cle is—*

20 “(A) *40 percent, plus*

21 “(B) *30 percent, if such vehicle—*

22 “(i) *has received a certificate of con-*
23 *formity under the Clean Air Act and meets*
24 *or exceeds the most stringent standard*
25 *available for certification under the Clean*

1 *Air Act for that make and model year vehi-*
2 *cle (other than a zero emission standard), or*
3 *“(ii) has received an order certifying*
4 *the vehicle as meeting the same require-*
5 *ments as vehicles which may be sold or*
6 *leased in California and meets or exceeds*
7 *the most stringent standard available for*
8 *certification under the State laws of Cali-*
9 *fornia (enacted in accordance with a waiver*
10 *granted under section 209(b) of the Clean*
11 *Air Act) for that make and model year vehi-*
12 *cle (other than a zero emission standard).*

13 *“(3) INCREMENTAL COST.—For purposes of this*
14 *subsection, the incremental cost of any new qualified*
15 *alternative fuel motor vehicle is equal to the amount*
16 *of the excess of the manufacturer’s suggested retail*
17 *price for such vehicle over such price for a gasoline*
18 *or diesel fuel motor vehicle of the same model, to the*
19 *extent such amount does not exceed—*

20 *“(A) \$5,000, if such vehicle has a gross ve-*
21 *hicle weight rating of not more than 8,500*
22 *pounds,*

23 *“(B) \$10,000, if such vehicle has a gross ve-*
24 *hicle weight rating of more than 8,500 pounds*
25 *but not more than 14,000 pounds,*

1 “(C) \$25,000, if such vehicle has a gross ve-
2 hicle weight rating of more than 14,000 pounds
3 but not more than 26,000 pounds, and

4 “(D) \$40,000, if such vehicle has a gross ve-
5 hicle weight rating of more than 26,000 pounds.

6 “(4) *QUALIFIED ALTERNATIVE FUEL MOTOR VE-*
7 *HICLE DEFINED.—For purposes of this subsection—*

8 “(A) *IN GENERAL.—The term ‘qualified al-*
9 *ternative fuel motor vehicle’ means any motor*
10 *vehicle—*

11 “(i) *which is only capable of operating*
12 *on an alternative fuel,*

13 “(ii) *the original use of which com-*
14 *mences with the taxpayer,*

15 “(iii) *which is acquired by the tax-*
16 *payer for use or lease, but not for resale,*
17 *and*

18 “(iv) *which is made by a manufac-*
19 *turer.*

20 “(B) *ALTERNATIVE FUEL.—The term ‘alter-*
21 *native fuel’ means compressed natural gas, lique-*
22 *fied natural gas, liquefied petroleum gas, hydro-*
23 *gen, and any liquid at least 85 percent of the*
24 *volume of which consists of methanol.*

25 “(5) *CREDIT FOR MIXED-FUEL VEHICLES.—*

1 “(A) *IN GENERAL.*—*In the case of a mixed-*
2 *fuel vehicle placed in service by the taxpayer*
3 *during the taxable year, the credit determined*
4 *under this subsection is an amount equal to—*

5 “(i) *in the case of a 75/25 mixed-fuel*
6 *vehicle, 70 percent of the credit which would*
7 *have been allowed under this subsection if*
8 *such vehicle was a qualified alternative fuel*
9 *motor vehicle, and*

10 “(ii) *in the case of a 90/10 mixed-fuel*
11 *vehicle, 90 percent of the credit which would*
12 *have been allowed under this subsection if*
13 *such vehicle was a qualified alternative fuel*
14 *motor vehicle.*

15 “(B) *MIXED-FUEL VEHICLE.*—*For purposes*
16 *of this subsection, the term ‘mixed-fuel vehicle’*
17 *means any motor vehicle described in subpara-*
18 *graph (C) or (D) of paragraph (3), which—*

19 “(i) *is certified by the manufacturer as*
20 *being able to perform efficiently in normal*
21 *operation on a combination of an alter-*
22 *native fuel and a petroleum-based fuel,*

23 “(ii) *either—*

24 “(I) *has received a certificate of*
25 *conformity under the Clean Air Act, or*

1 “(II) has received an order certi-
2 fying the vehicle as meeting the same
3 requirements as vehicles which may be
4 sold or leased in California and meets
5 or exceeds the low emission vehicle
6 standard under section 88.105-94 of
7 title 40, Code of Federal Regulations,
8 for that make and model year vehicle,
9 “(iii) the original use of which com-
10 mences with the taxpayer,
11 “(iv) which is acquired by the tax-
12 payer for use or lease, but not for resale,
13 and
14 “(v) which is made by a manufacturer.
15 “(C) 75/25 MIXED-FUEL VEHICLE.—For
16 purposes of this subsection, the term ‘75/25
17 mixed-fuel vehicle’ means a mixed-fuel vehicle
18 which operates using at least 75 percent alter-
19 native fuel and not more than 25 percent petro-
20 leum-based fuel.
21 “(D) 90/10 MIXED-FUEL VEHICLE.—For
22 purposes of this subsection, the term ‘90/10
23 mixed-fuel vehicle’ means a mixed-fuel vehicle
24 which operates using at least 90 percent alter-

1 *native fuel and not more than 10 percent petro-*
2 *leum-based fuel.*

3 “(e) *APPLICATION WITH OTHER CREDITS.*—*The credit*
4 *allowed under subsection (a) for any taxable year shall not*
5 *exceed the excess (if any) of—*

6 “(1) *the regular tax for the taxable year reduced*
7 *by the sum of the credits allowable under subpart A*
8 *and sections 27, 29, and 30, over*

9 “(2) *the tentative minimum tax for the taxable*
10 *year.*

11 “(f) *OTHER DEFINITIONS AND SPECIAL RULES.*—*For*
12 *purposes of this section—*

13 “(1) *CONSUMABLE FUEL.*—*The term ‘consumable*
14 *fuel’ means any solid, liquid, or gaseous matter which*
15 *releases energy when consumed by an auxiliary power*
16 *unit.*

17 “(2) *MOTOR VEHICLE.*—*The term ‘motor vehicle’*
18 *has the meaning given such term by section 30(c)(2).*

19 “(3) *CITY FUEL ECONOMY.*—*The city fuel econ-*
20 *omy with respect to any vehicle shall be measured in*
21 *a manner which is substantially similar to the man-*
22 *ner city fuel economy is measured in accordance with*
23 *procedures under part 600 of subchapter Q of chapter*
24 *I of title 40, Code of Federal Regulations, as in effect*
25 *on the date of the enactment of this section.*

1 “(4) *OTHER TERMS.*—*The terms ‘automobile’,*
2 *‘passenger automobile’, ‘light truck’, and ‘manufac-*
3 *turer’ have the meanings given such terms in regula-*
4 *tions prescribed by the Administrator of the Environ-*
5 *mental Protection Agency for purposes of the admin-*
6 *istration of title II of the Clean Air Act (42 U.S.C.*
7 *7521 et seq.).*

8 “(5) *REDUCTION IN BASIS.*—*For purposes of this*
9 *subtitle, the basis of any property for which a credit*
10 *is allowable under subsection (a) shall be reduced by*
11 *the amount of such credit so allowed (determined*
12 *without regard to subsection (e)).*

13 “(6) *NO DOUBLE BENEFIT.*—*The amount of any*
14 *deduction or other credit allowable under this*
15 *chapter—*

16 “(A) *for any incremental cost taken into ac-*
17 *count in computing the amount of the credit de-*
18 *termined under subsection (d) shall be reduced*
19 *by the amount of such credit attributable to such*
20 *cost, and*

21 “(B) *with respect to a vehicle described*
22 *under subsection (b) or (c), shall be reduced by*
23 *the amount of credit allowed under subsection*
24 *(a) for such vehicle for the taxable year.*

1 “(7) *PROPERTY USED BY TAX-EXEMPT ENTI-*
2 *TIES.—In the case of a credit amount which is allow-*
3 *able with respect to a motor vehicle which is acquired*
4 *by an entity exempt from tax under this chapter, the*
5 *person which sells or leases such vehicle to the entity*
6 *shall be treated as the taxpayer with respect to the ve-*
7 *hicle for purposes of this section and the credit shall*
8 *be allowed to such person, but only if the person*
9 *clearly discloses to the entity at the time of any sale*
10 *or lease the specific amount of any credit otherwise*
11 *allowable to the entity under this section.*

12 “(8) *RECAPTURE.—The Secretary shall, by regu-*
13 *lations, provide for recapturing the benefit of any*
14 *credit allowable under subsection (a) with respect to*
15 *any property which ceases to be property eligible for*
16 *such credit (including recapture in the case of a lease*
17 *period of less than the economic life of a vehicle).*

18 “(9) *PROPERTY USED OUTSIDE UNITED STATES,*
19 *ETC., NOT QUALIFIED.—No credit shall be allowed*
20 *under subsection (a) with respect to any property re-*
21 *ferred to in section 50(b) or with respect to the por-*
22 *tion of the cost of any property taken into account*
23 *under section 179.*

24 “(10) *ELECTION TO NOT TAKE CREDIT.—No*
25 *credit shall be allowed under subsection (a) for any*

1 *vehicle if the taxpayer elects to not have this section*
2 *apply to such vehicle.*

3 *“(11) CARRYBACK AND CARRYFORWARD AL-*
4 *LOWED.—*

5 *“(A) IN GENERAL.—If the credit amount al-*
6 *lowable under subsection (a) for a taxable year*
7 *exceeds the amount of the limitation under sub-*
8 *section (e) for such taxable year (in this para-*
9 *graph referred to as the ‘unused credit year’),*
10 *such excess shall be allowed as a credit carryback*
11 *for each of the 3 taxable years beginning after*
12 *September 30, 2002, which precede the unused*
13 *credit year and a credit carryforward for each of*
14 *the 20 taxable years which succeed the unused*
15 *credit year.*

16 *“(B) RULES.—Rules similar to the rules of*
17 *section 39 shall apply with respect to the credit*
18 *carryback and credit carryforward under sub-*
19 *paragraph (A).*

20 *“(12) INTERACTION WITH AIR QUALITY AND*
21 *MOTOR VEHICLE SAFETY STANDARDS.—Unless other-*
22 *wise provided in this section, a motor vehicle shall*
23 *not be considered eligible for a credit under this sec-*
24 *tion unless such vehicle is in compliance with—*

1 “(A) *the applicable provisions of the Clean*
2 *Air Act for the applicable make and model year*
3 *of the vehicle (or applicable air quality provi-*
4 *sions of State law in the case of a State which*
5 *has adopted such provision under a waiver*
6 *under section 209(b) of the Clean Air Act), and*

7 “(B) *the motor vehicle safety provisions of*
8 *sections 30101 through 30169 of title 49, United*
9 *States Code.*

10 “(g) *REGULATIONS.—*

11 “(1) *IN GENERAL.—Except as provided in para-*
12 *graph (2), the Secretary shall promulgate such regula-*
13 *tions as necessary to carry out the provisions of this*
14 *section.*

15 “(2) *COORDINATION IN PRESCRIPTION OF CER-*
16 *TAIN REGULATIONS.—The Secretary of the Treasury,*
17 *in coordination with the Secretary of Transportation*
18 *and the Administrator of the Environmental Protec-*
19 *tion Agency, shall prescribe such regulations as nec-*
20 *essary to determine whether a motor vehicle meets the*
21 *requirements to be eligible for a credit under this sec-*
22 *tion.*

23 “(h) *TERMINATION.—This section shall not apply to*
24 *any property purchased after—*

1 “(1) in the case of a new qualified fuel cell motor
2 vehicle (as described in subsection (b)), December 31,
3 2011, and

4 “(2) in the case of any other property, December
5 31, 2006.”.

6 **(b) CONFORMING AMENDMENTS.**—

7 (1) Section 1016(a) is amended by striking
8 “and” at the end of paragraph (27), by striking the
9 period at the end of paragraph (28) and inserting “,
10 and”, and by adding at the end the following new
11 paragraph:

12 “(29) to the extent provided in section
13 30B(f)(5).”.

14 (2) Section 55(c)(2) is amended by inserting
15 “30B(e),” after “30(b)(3)”.

16 (3) Section 6501(m) is amended by inserting
17 “30B(f)(10),” after “30(d)(4),”.

18 (4) The table of sections for subpart B of part IV
19 of subchapter A of chapter 1 is amended by inserting
20 after the item relating to section 30A the following
21 new item:

 “Sec. 30B. Alternative motor vehicle credit.”.

22 **(e) EFFECTIVE DATE.**—The amendments made by this
23 section shall apply to property placed in service after Sep-
24 tember 30, 2002, in taxable years ending after such date.

1 **SEC. 2002. MODIFICATION OF CREDIT FOR QUALIFIED**
2 **ELECTRIC VEHICLES.**

3 (a) *AMOUNT OF CREDIT.*—

4 (1) *IN GENERAL.*—Section 30(a) (relating to al-
5 lowance of credit) is amended by striking “10 percent
6 of”.

7 (2) *LIMITATION OF CREDIT ACCORDING TO TYPE*
8 *OF VEHICLE.*—Section 30(b) (relating to limitations)
9 is amended—

10 (A) by striking paragraphs (1) and (2) and
11 inserting the following new paragraph:

12 “(1) *LIMITATION ACCORDING TO TYPE OF VEHI-*
13 *CLE.*—The amount of the credit allowed under sub-
14 section (a) for any vehicle shall not exceed the greatest
15 of the following amounts applicable to such vehicle:

16 “(A) In the case of a vehicle which conforms
17 to the Motor Vehicle Safety Standard 500 pre-
18 scribed by the Secretary of Transportation, as in
19 effect on the date of the enactment of the Energy
20 Tax Incentives Act of 2002, the lesser of—

21 “(i) 10 percent of the manufacturer’s
22 suggested retail price of the vehicle, or

23 “(ii) \$1,500.

24 “(B) In the case of a vehicle not described
25 in subparagraph (A) with a gross vehicle weight
26 rating not exceeding 8,500 pounds—

1 “(i) \$3,500, or

2 “(ii) \$6,000, if such vehicle is—

3 “(I) capable of a driving range of
4 at least 100 miles on a single charge of
5 the vehicle’s rechargeable batteries as
6 measured pursuant to the urban dyna-
7 mometer schedules under appendix I to
8 part 86 of title 40, Code of Federal
9 Regulations, or

10 “(II) capable of a payload capaci-
11 ty of at least 1,000 pounds.

12 “(C) In the case of a vehicle with a gross
13 vehicle weight rating exceeding 8,500 but not ex-
14 ceeding 14,000 pounds, \$10,000.

15 “(D) In the case of a vehicle with a gross
16 vehicle weight rating exceeding 14,000 but not
17 exceeding 26,000 pounds, \$20,000.

18 “(E) In the case of a vehicle with a gross
19 vehicle weight rating exceeding 26,000 pounds,
20 \$40,000.”, and

21 (B) by redesignating paragraph (3) as
22 paragraph (2).

23 (3) CONFORMING AMENDMENTS.—

1 (A) Section 53(d)(1)(B)(iii) is amended by
2 striking “section 30(b)(3)(B)” and inserting
3 “section 30(b)(2)(B)”.

4 (3) Section 55(c)(2), as amended by this Act, is
5 amended by striking “30(b)(3)” and inserting
6 “30(b)(2)”.

7 (b) QUALIFIED BATTERY ELECTRIC VEHICLE.—

8 (1) IN GENERAL.—Section 30(c)(1)(A) (defining
9 qualified electric vehicle) is amended to read as fol-
10 lows:

11 “(A) which is—

12 “(i) operated solely by use of a battery
13 or battery pack, or

14 “(ii) powered primarily through the
15 use of an electric battery or battery pack
16 using a flywheel or capacitor which stores
17 energy produced by an electric motor
18 through regenerative braking to assist in ve-
19 hicle operation,”.

20 (2) LEASED VEHICLES.—Section 30(c)(1)(C) is
21 amended by inserting “or lease” after “use”.

22 (3) CONFORMING AMENDMENTS.—

23 (A) Subsections (a), (b)(2), and (c) of sec-
24 tion 30 are each amended by inserting “battery”
25 after “qualified” each place it appears.

1 (B) *The heading of subsection (c) of section*
2 *30 is amended by inserting “BATTERY” after*
3 *“QUALIFIED”.*

4 (C) *The heading of section 30 is amended*
5 *by inserting “BATTERY” after “QUALIFIED”.*

6 (D) *The item relating to section 30 in the*
7 *table of sections for subpart B of part IV of sub-*
8 *chapter A of chapter 1 is amended by inserting*
9 *“battery” after “qualified”.*

10 (E) *Section 179A(c)(3) is amended by in-*
11 *serting “battery” before “electric”.*

12 (F) *The heading of paragraph (3) of section*
13 *179A(c) is amended by inserting “BATTERY” be-*
14 *fore “ELECTRIC”.*

15 (c) *ADDITIONAL SPECIAL RULES.—Section 30(d) (re-*
16 *lating to special rules) is amended by adding at the end*
17 *the following new paragraphs:*

18 “(5) *NO DOUBLE BENEFIT.—The amount of any*
19 *deduction or other credit allowable under this chapter*
20 *for any cost taken into account in computing the*
21 *amount of the credit determined under subsection (a)*
22 *shall be reduced by the amount of such credit attrib-*
23 *utable to such cost.*

24 “(6) *PROPERTY USED BY TAX-EXEMPT ENTI-*
25 *TIES.—In the case of a credit amount which is allow-*

1 *able with respect to a vehicle which is acquired by an*
2 *entity exempt from tax under this chapter, the person*
3 *which sells or leases such vehicle to the entity shall be*
4 *treated as the taxpayer with respect to the vehicle for*
5 *purposes of this section and the credit shall be allowed*
6 *to such person, but only if the person clearly discloses*
7 *to the entity at the time of any sale or lease the spe-*
8 *cific amount of any credit otherwise allowable to the*
9 *entity under this section.*

10 *“(7) CARRYBACK AND CARRYFORWARD AL-*
11 *LOWED.—*

12 *“(A) IN GENERAL.—If the credit amount al-*
13 *lowable under subsection (a) for a taxable year*
14 *exceeds the amount of the limitation under sub-*
15 *section (b)(2) for such taxable year (in this para-*
16 *graph referred to as the ‘unused credit year’),*
17 *such excess shall be allowed as a credit carryback*
18 *for each of the 3 taxable years beginning after*
19 *September 30, 2002, which precede the unused*
20 *credit year and a credit carryforward for each of*
21 *the 20 taxable years which succeed the unused*
22 *credit year.*

23 *“(B) RULES.—Rules similar to the rules of*
24 *section 39 shall apply with respect to the credit*

1 *carryback and credit carryforward under sub-*
2 *paragraph (A).”.*

3 (d) *EFFECTIVE DATE.*—*The amendments made by this*
4 *section shall apply to property placed in service after Sep-*
5 *tember 30, 2002, in taxable years ending after such date.*

6 **SEC. 2003. CREDIT FOR INSTALLATION OF ALTERNATIVE**
7 **FUELING STATIONS.**

8 (a) *IN GENERAL.*—*Subpart B of part IV of subchapter*
9 *A of chapter 1 (relating to foreign tax credit, etc.), as*
10 *amended by this Act, is amended by adding at the end the*
11 *following new section:*

12 **“SEC. 30C. CLEAN-FUEL VEHICLE REFUELING PROPERTY**
13 **CREDIT.**

14 “(a) *CREDIT ALLOWED.*—*There shall be allowed as a*
15 *credit against the tax imposed by this chapter for the tax-*
16 *able year an amount equal to 50 percent of the amount*
17 *paid or incurred by the taxpayer during the taxable year*
18 *for the installation of qualified clean-fuel vehicle refueling*
19 *property.*

20 “(b) *LIMITATION.*—*The credit allowed under sub-*
21 *section (a)—*

22 “(1) *with respect to any retail clean-fuel vehicle*
23 *refueling property, shall not exceed \$30,000, and*

24 “(2) *with respect to any residential clean-fuel ve-*
25 *hicle refueling property, shall not exceed \$1,000.*

1 “(c) *YEAR CREDIT ALLOWED.*—*The credit allowed*
2 *under subsection (a) shall be allowed in the taxable year*
3 *in which the qualified clean-fuel vehicle refueling property*
4 *is placed in service by the taxpayer.*

5 “(d) *DEFINITIONS.*—*For purposes of this section—*

6 “(1) *QUALIFIED CLEAN-FUEL VEHICLE REFUEL-*
7 *ING PROPERTY.*—*The term ‘qualified clean-fuel vehicle*
8 *refueling property’ has the same meaning given such*
9 *term by section 179A(d).*

10 “(2) *RESIDENTIAL CLEAN-FUEL VEHICLE RE-*
11 *FUELING PROPERTY.*—*The term ‘residential clean-fuel*
12 *vehicle refueling property’ means qualified clean-fuel*
13 *vehicle refueling property which is installed on prop-*
14 *erty which is used as the principal residence (within*
15 *the meaning of section 121) of the taxpayer.*

16 “(3) *RETAIL CLEAN-FUEL VEHICLE REFUELING*
17 *PROPERTY.*—*The term ‘retail clean-fuel vehicle refuel-*
18 *ing property’ means qualified clean-fuel vehicle refuel-*
19 *ing property which is installed on property (other*
20 *than property described in paragraph (2)) used in a*
21 *trade or business of the taxpayer.*

22 “(e) *APPLICATION WITH OTHER CREDITS.*—*The credit*
23 *allowed under subsection (a) for any taxable year shall not*
24 *exceed the excess (if any) of—*

1 “(1) the regular tax for the taxable year reduced
2 by the sum of the credits allowable under subpart A
3 and sections 27, 29, 30, and 30B, over

4 “(2) the tentative minimum tax for the taxable
5 year.

6 “(f) *BASIS REDUCTION*.—For purposes of this title, the
7 basis of any property shall be reduced by the portion of
8 the cost of such property taken into account under sub-
9 section (a).

10 “(g) *NO DOUBLE BENEFIT*.—No deduction shall be al-
11 lowed under section 179A with respect to any property with
12 respect to which a credit is allowed under subsection (a).

13 “(h) *REFUELING PROPERTY INSTALLED FOR TAX-EX-*
14 *EMPT ENTITIES*.—In the case of qualified clean-fuel vehicle
15 refueling property installed on property owned or used by
16 an entity exempt from tax under this chapter, the person
17 which installs such refueling property for the entity shall
18 be treated as the taxpayer with respect to the refueling prop-
19 erty for purposes of this section (and such refueling prop-
20 erty shall be treated as retail clean-fuel vehicle refueling
21 property) and the credit shall be allowed to such person,
22 but only if the person clearly discloses to the entity in any
23 installation contract the specific amount of the credit allow-
24 able under this section.

25 “(i) *CARRYFORWARD ALLOWED*.—

1 “(1) *IN GENERAL.*—If the credit amount allow-
2 able under subsection (a) for a taxable year exceeds
3 the amount of the limitation under subsection (e) for
4 such taxable year (referred to as the ‘unused credit
5 year’ in this subsection), such excess shall be allowed
6 as a credit carryforward for each of the 20 taxable
7 years following the unused credit year.

8 “(2) *RULES.*—Rules similar to the rules of sec-
9 tion 39 shall apply with respect to the credit
10 carryforward under paragraph (1).

11 “(j) *SPECIAL RULES.*—Rules similar to the rules of
12 paragraphs (4) and (5) of section 179A(e) shall apply.

13 “(k) *REGULATIONS.*—The Secretary shall prescribe
14 such regulations as necessary to carry out the provisions
15 of this section.

16 “(l) *TERMINATION.*—This section shall not apply to
17 any property placed in service—

18 “(1) in the case of property relating to hydrogen,
19 after December 31, 2011, and

20 “(2) in the case of any other property, after De-
21 cember 31, 2006.”.

22 (b) *INCENTIVE FOR PRODUCTION OF HYDROGEN AT*
23 *QUALIFIED CLEAN-FUEL VEHICLE REFUELING PROP-*
24 *ERTY.*—Section 179A(d) (defining qualified clean-fuel vehi-

1 *cle refueling property) is amended by adding at the end*
 2 *the following new flush sentence:*

3 *“In the case of clean-burning fuel which is hydrogen pro-*
 4 *duced from another clean-burning fuel, paragraph (3)(A)*
 5 *shall be applied by substituting ‘production, storage, or dis-*
 6 *persing’ for ‘storage or dispensing’ both places it appears.”.*

7 *(c) CONFORMING AMENDMENTS.—(1) Section 1016(a),*
 8 *as amended by this Act, is amended by striking “and” at*
 9 *the end of paragraph (28), by striking the period at the*
 10 *end of paragraph (29) and inserting “, and”, and by add-*
 11 *ing at the end the following new paragraph:*

12 *“(30) to the extent provided in section 30C(f).”.*

13 *(2) Section 55(c)(2), as amended by this Act, is*
 14 *amended by inserting “30C(e),” after “30B(e).”.*

15 *(3) The table of sections for subpart B of part IV of*
 16 *subchapter A of chapter 1, as amended by this Act, is*
 17 *amended by inserting after the item relating to section 30B*
 18 *the following new item:*

“Sec. 30C. Clean-fuel vehicle refueling property credit.”.

19 *(c) EFFECTIVE DATE.—The amendments made by this*
 20 *section shall apply to property placed in service after Sep-*
 21 *tember 30, 2002, in taxable years ending after such date.*

22 **SEC. 2004. CREDIT FOR RETAIL SALE OF ALTERNATIVE**
 23 **FUELS AS MOTOR VEHICLE FUEL.**

24 *(a) IN GENERAL.—Subpart D of part IV of subchapter*
 25 *A of chapter 1 (relating to business related credits) is*

1 *amended by inserting after section 40 the following new sec-*
 2 *tion:*

3 **“SEC. 40A. CREDIT FOR RETAIL SALE OF ALTERNATIVE**
 4 **FUELS AS MOTOR VEHICLE FUEL.**

5 *“(a) GENERAL RULE.—For purposes of section 38, the*
 6 *alternative fuel retail sales credit for any taxable year is*
 7 *the applicable amount for each gasoline gallon equivalent*
 8 *of alternative fuel sold at retail by the taxpayer during such*
 9 *year as a fuel to propel any qualified motor vehicle.*

10 *“(b) DEFINITIONS.—For purposes of this section—*

11 *“(1) APPLICABLE AMOUNT.—The term ‘applica-*
 12 *ble amount’ means the amount determined in accord-*
 13 *ance with the following table:*

| <i>“In the case of any taxable year ending in—</i> | <i>The applicable amount is—</i> |
|---|---|
| <i>2002 and 2003</i> | <i>30 cents</i> |
| <i>2004</i> | <i>40 cents</i> |
| <i>2005 and 2006</i> | <i>50 cents.</i> |

14 *“(2) ALTERNATIVE FUEL.—The term ‘alternative*
 15 *fuel’ means compressed natural gas, liquefied natural*
 16 *gas, liquefied petroleum gas, hydrogen, and any liq-*
 17 *uid at least 85 percent of the volume of which consists*
 18 *of methanol or ethanol.*

19 *“(3) GASOLINE GALLON EQUIVALENT.—The term*
 20 *‘gasoline gallon equivalent’ means, with respect to*
 21 *any alternative fuel, the amount (determined by the*
 22 *Secretary) of such fuel having a Btu content of*
 23 *114,000.*

1 “(4) *QUALIFIED MOTOR VEHICLE.*—*The term*
2 *‘qualified motor vehicle’ means any motor vehicle (as*
3 *defined in section 30(c)(2)) which meets any applica-*
4 *ble Federal or State emissions standards with respect*
5 *to each fuel by which such vehicle is designed to be*
6 *propelled.*

7 “(5) *SOLD AT RETAIL.*—

8 “(A) *IN GENERAL.*—*The term ‘sold at retail’*
9 *means the sale, for a purpose other than resale,*
10 *after manufacture, production, or importation.*

11 “(B) *USE TREATED AS SALE.*—*If any per-*
12 *son uses alternative fuel (including any use after*
13 *importation) as a fuel to propel any qualified*
14 *alternative fuel motor vehicle (as defined in sec-*
15 *tion 30B(d)(4)) before such fuel is sold at retail,*
16 *then such use shall be treated in the same man-*
17 *ner as if such fuel were sold at retail as a fuel*
18 *to propel such a vehicle by such person.*

19 “(c) *NO DOUBLE BENEFIT.*—*The amount of any de-*
20 *duction or other credit allowable under this chapter for any*
21 *fuel taken into account in computing the amount of the*
22 *credit determined under subsection (a) shall be reduced by*
23 *the amount of such credit attributable to such fuel.*

24 “(d) *PASS-THRU IN THE CASE OF ESTATES AND*
25 *TRUSTS.*—*Under regulations prescribed by the Secretary,*

1 *rules similar to the rules of subsection (d) of section 52 shall*
2 *apply.*

3 “(e) *TERMINATION.*—*This section shall not apply to*
4 *any fuel sold at retail after December 31, 2006.*”.

5 “(b) *CREDIT TREATED AS BUSINESS CREDIT.*—*Section*
6 *38(b) (relating to current year business credit) is amended*
7 *by striking “plus” at the end of paragraph (14), by striking*
8 *the period at the end of paragraph (15) and inserting “,*
9 *plus”, and by adding at the end the following new para-*
10 *graph:*

11 “(16) *the alternative fuel retail sales credit deter-*
12 *mined under section 40A(a).*”.

13 “(c) *TRANSITIONAL RULE.*—*Section 39(d) (relating to*
14 *transitional rules) is amended by adding at the end the fol-*
15 *lowing new paragraph:*

16 “(11) *NO CARRYBACK OF SECTION 40A CREDIT*
17 *BEFORE EFFECTIVE DATE.*—*No portion of the unused*
18 *business credit for any taxable year which is attrib-*
19 *utable to the alternative fuel retail sales credit deter-*
20 *mined under section 40A(a) may be carried back to*
21 *a taxable year ending before January 1, 2002.*”.

22 “(d) *CLERICAL AMENDMENT.*—*The table of sections for*
23 *subpart D of part IV of subchapter A of chapter 1 is amend-*
24 *ed by inserting after the item relating to section 40 the fol-*
25 *lowing new item:*

 “*Sec. 40A. Credit for retail sale of alternative fuels as motor vehicle fuel.*”.

1 (e) *EFFECTIVE DATE.*—*The amendments made by this*
2 *section shall apply to fuel sold at retail after September*
3 *30, 2002, in taxable years ending after such date.*

4 **SEC. 2005. SMALL ETHANOL PRODUCER CREDIT.**

5 (a) *ALLOCATION OF ALCOHOL FUELS CREDIT TO PA-*
6 *TRONS OF A COOPERATIVE.*—*Section 40(g) (relating to al-*
7 *cohol used as fuel) is amended by adding at the end the*
8 *following new paragraph:*

9 “(6) *ALLOCATION OF SMALL ETHANOL PRO-*
10 *DUCER CREDIT TO PATRONS OF COOPERATIVE.*—

11 “(A) *ELECTION TO ALLOCATE.*—

12 “(i) *IN GENERAL.*—*In the case of a co-*
13 *operative organization described in section*
14 *1381(a), any portion of the credit deter-*
15 *mined under subsection (a)(3) for the tax-*
16 *able year may, at the election of the organi-*
17 *zation, be apportioned pro rata among pa-*
18 *trons of the organization on the basis of the*
19 *quantity or value of business done with or*
20 *for such patrons for the taxable year.*

21 “(ii) *FORM AND EFFECT OF ELEC-*
22 *TION.*—*An election under clause (i) for any*
23 *taxable year shall be made on a timely filed*
24 *return for such year. Such election, once*

1 *made, shall be irrevocable for such taxable*
2 *year.*

3 “(B) *TREATMENT OF ORGANIZATIONS AND*
4 *PATRONS.—The amount of the credit apportioned*
5 *to patrons under subparagraph (A)—*

6 “(i) *shall not be included in the*
7 *amount determined under subsection (a)*
8 *with respect to the organization for the tax-*
9 *able year,*

10 “(ii) *shall be included in the amount*
11 *determined under subsection (a) for the tax-*
12 *able year of each patron for which the pa-*
13 *tronage dividends for the taxable year de-*
14 *scribed in subparagraph (A) are included in*
15 *gross income, and*

16 “(iii) *shall be included in gross income*
17 *of such patrons for the taxable year in the*
18 *manner and to the extent provided in sec-*
19 *tion 87.*

20 “(C) *SPECIAL RULES FOR DECREASE IN*
21 *CREDITS FOR TAXABLE YEAR.—If the amount of*
22 *the credit of a cooperative organization deter-*
23 *mined under subsection (a)(3) for a taxable year*
24 *is less than the amount of such credit shown on*

1 *the return of the cooperative organization for*
 2 *such year, an amount equal to the excess of—*
 3 *“(i) such reduction, over*
 4 *“(ii) the amount not apportioned to*
 5 *such patrons under subparagraph (A) for*
 6 *the taxable year,*
 7 *shall be treated as an increase in tax imposed by*
 8 *this chapter on the organization. Such increase*
 9 *shall not be treated as tax imposed by this chap-*
 10 *ter for purposes of determining the amount of*
 11 *any credit under this chapter or for purposes of*
 12 *section 55.”.*

13 ***(b) IMPROVEMENTS TO SMALL ETHANOL PRODUCER***
 14 ***CREDIT.—***

15 ***(1) DEFINITION OF SMALL ETHANOL PRO-***
 16 ***DUCCER.—Section 40(g) (relating to definitions and***
 17 ***special rules for eligible small ethanol producer cred-***
 18 ***it) is amended by striking “30,000,000” each place it***
 19 ***appears and inserting “60,000,000”.***

20 ***(2) SMALL ETHANOL PRODUCER CREDIT NOT A***
 21 ***PASSIVE ACTIVITY CREDIT.—Clause (i) of section***
 22 ***469(d)(2)(A) is amended by striking “subpart D” and***
 23 ***inserting “subpart D, other than section 40(a)(3).”.***

24 ***(3) ALLOWING CREDIT AGAINST ENTIRE REG-***
 25 ***ULAR TAX AND MINIMUM TAX.—***

1 (A) *IN GENERAL.*—*Subsection (c) of section*
2 38 *(relating to limitation based on amount of*
3 *tax), as amended by section 301(b) of the Job*
4 *Creation and Worker Assistance Act of 2002, is*
5 *amended by redesignating paragraph (4) as*
6 *paragraph (5) and by inserting after paragraph*
7 *(3) the following new paragraph:*

8 “(4) *SPECIAL RULES FOR SMALL ETHANOL PRO-*
9 *DUCER CREDIT.*—

10 “(A) *IN GENERAL.*—*In the case of the small*
11 *ethanol producer credit—*

12 “(i) *this section and section 39 shall be*
13 *applied separately with respect to the cred-*
14 *it, and*

15 “(ii) *in applying paragraph (1) to the*
16 *credit—*

17 “(I) *the amounts in subpara-*
18 *graphs (A) and (B) thereof shall be*
19 *treated as being zero, and*

20 “(II) *the limitation under para-*
21 *graph (1) (as modified by subclause*
22 *(I)) shall be reduced by the credit al-*
23 *lowed under subsection (a) for the tax-*
24 *able year (other than the small ethanol*
25 *producer credit).*

1 “(B) *SMALL ETHANOL PRODUCER CRED-*
2 *IT.*—For purposes of this subsection, the term
3 ‘small ethanol producer credit’ means the credit
4 allowable under subsection (a) by reason of sec-
5 tion 40(a)(3).”.

6 (B) *CONFORMING AMENDMENTS.*—Subclause
7 (II) of section 38(c)(2)(A)(ii), as amended by
8 section 301(b)(2) of the Job Creation and Worker
9 Assistance Act of 2002, and subclause (II) of sec-
10 tion 38(c)(3)(A)(ii), as added by section
11 301(b)(1) of such Act, are each amended by in-
12 serting “or the small ethanol producer credit”
13 after “employee credit”.

14 (4) *SMALL ETHANOL PRODUCER CREDIT NOT*
15 *ADDED BACK TO INCOME UNDER SECTION 87.*—Sec-
16 tion 87 (relating to income inclusion of alcohol fuel
17 credit) is amended to read as follows:

18 **“SEC. 87. ALCOHOL FUEL CREDIT.**

19 “Gross income includes an amount equal to the sum
20 of—

21 “(1) the amount of the alcohol mixture credit de-
22 termined with respect to the taxpayer for the taxable
23 year under section 40(a)(1), and

1 (b) *EFFECTIVE DATE.*—*The amendments made by this*
2 *section shall apply to taxes imposed after September 30,*
3 *2003.*

4 **SEC. 2007. INCREASED FLEXIBILITY IN ALCOHOL FUELS**
5 **TAX CREDIT.**

6 (a) *ALCOHOL FUELS CREDIT MAY BE TRANS-*
7 *FERRED.*—*Section 40 (relating to alcohol used as fuel) is*
8 *amended by adding at the end the following new subsection:*

9 “(i) *CREDIT MAY BE TRANSFERRED.*—

10 “(1) *IN GENERAL.*—*A taxpayer may transfer*
11 *any credit allowable under paragraph (1) or (2) of*
12 *subsection (a) with respect to alcohol used in the pro-*
13 *duction of ethyl tertiary butyl ether through an as-*
14 *signment to a qualified assignee. Such transfer may*
15 *be revoked only with the consent of the Secretary.*

16 “(2) *QUALIFIED ASSIGNEE.*—*For purposes of*
17 *this subsection, the term ‘qualified assignee’ means*
18 *any person who—*

19 “(A) *is liable for taxes imposed under sec-*
20 *tion 4081,*

21 “(B) *is required to register under section*
22 *4101, and*

23 “(C) *obtains a certificate from the taxpayer*
24 *described in paragraph (1) which identifies the*
25 *amount of alcohol used in such production.*

1 “(3) *REGULATIONS.*—*The Secretary shall pre-*
2 *scribe such regulations as necessary to insure that*
3 *any credit described in paragraph (1) is claimed once*
4 *and not reassigned by a qualified assignee.”.*

5 ***(b) ALCOHOL FUELS CREDIT MAY BE TAKEN AGAINST***
6 ***MOTOR FUELS TAX LIABILITY.***—

7 ***(1) IN GENERAL.***—*Subpart C of part III of sub-*
8 *chapter A of chapter 32 (relating to special provisions*
9 *applicable to petroleum products) is amended by add-*
10 *ing at the end the following new section:*

11 **“SEC. 4104. CREDIT AGAINST MOTOR FUELS TAXES.**

12 ***(a) ELECTION TO USE CREDIT AGAINST MOTOR***
13 ***FUELS TAXES.***—*There is hereby allowed as a credit against*
14 *the taxes imposed by section 4081, any credit allowed under*
15 *paragraph (1) or (2) of section 40(a) with respect to alcohol*
16 *used in the production of ethyl tertiary butyl ether to the*
17 *extent—*

18 ***(1) such credit is not claimed by the taxpayer***
19 ***or the qualified assignee under section 40(i) as a***
20 ***credit under section 40, and***

21 ***(2) the taxpayer or qualified assignee elects to***
22 ***claim such credit under this section.***

23 ***(b) ELECTION IRREVOCABLE.***—*Any election under*
24 *subsection (a) shall be irrevocable.*

1 “(c) *REQUIRED STATEMENT.*—Any return claiming a
2 credit pursuant to an election under this section shall be
3 accompanied by a statement that the credit was not, and
4 will not, be claimed on an income tax return.

5 “(d) *REGULATIONS.*—The Secretary shall prescribe
6 such regulations as necessary to avoid the claiming of dou-
7 ble benefits and to prescribe the taxable periods with respect
8 to which the credit may be claimed.”.

9 (2) *CONFORMING AMENDMENT.*—Section 40(c) is
10 amended by striking “or section 4091(c)” and insert-
11 ing “section 4091(c), or section 4104”.

12 (3) *CLERICAL AMENDMENT.*—The table of sec-
13 tions for subpart C of part III of subchapter A of
14 chapter 32 is amended by adding at the end the fol-
15 lowing new item:

 “Sec. 4104. Credit against motor fuels taxes.”.

16 (c) *EFFECTIVE DATE.*—The amendments made by this
17 section shall take effect on and after the date of the enact-
18 ment of this Act.

19 **SEC. 2008. INCENTIVES FOR BIODIESEL.**

20 (a) *CREDIT FOR BIODIESEL USED AS A FUEL.*—

21 (1) *IN GENERAL.*—Subpart D of part IV of sub-
22 chapter A of chapter 1 (relating to business related
23 credits), as amended by this Act, is amended by in-
24 serting after section 40A the following new section:

1 **“SEC. 40B. BIODIESEL USED AS FUEL.**

2 “(a) *GENERAL RULE.*—For purposes of section 38, the
3 *biodiesel fuels credit determined under this section for the*
4 *taxable year is an amount equal to the biodiesel mixture*
5 *credit.*

6 “(b) *DEFINITION OF BIODIESEL MIXTURE CREDIT.*—
7 *For purposes of this section—*

8 “(1) *BIODIESEL MIXTURE CREDIT.*—

9 “(A) *IN GENERAL.*—The *biodiesel mixture*
10 *credit of any taxpayer for any taxable year is*
11 *the sum of the products of the biodiesel mixture*
12 *rate for each qualified biodiesel mixture and the*
13 *number of gallons of such mixture of the tax-*
14 *payer for the taxable year.*

15 “(B) *BIODIESEL MIXTURE RATE.*—For pur-
16 *poses of subparagraph (A), the biodiesel mixture*
17 *rate for each qualified biodiesel mixture shall*
18 *be—*

19 “(i) *in the case of a mixture with only*
20 *biodiesel V, 1 cent for each whole percentage*
21 *point (not exceeding 20 percentage points)*
22 *of biodiesel V in such mixture, and*

23 “(ii) *in the case of a mixture with bio-*
24 *diesel NV, or a combination of biodiesel V*
25 *and biodiesel NV, 0.5 cent for each whole*
26 *percentage point (not exceeding 20 percent-*

1 age points) of such biodiesel in such mix-
2 ture.

3 “(2) *QUALIFIED BIODIESEL MIXTURE.*—

4 “(A) *IN GENERAL.*—The term ‘qualified bio-
5 diesel mixture’ means a mixture of diesel and
6 biodiesel V or biodiesel NV which—

7 “(i) is sold by the taxpayer producing
8 such mixture to any person for use as a
9 fuel, or

10 “(ii) is used as a fuel by the taxpayer
11 producing such mixture.

12 “(B) *SALE OR USE MUST BE IN TRADE OR*
13 *BUSINESS, ETC.*—

14 “(i) *IN GENERAL.*—Biodiesel V or bio-
15 diesel NV used in the production of a quali-
16 fied biodiesel mixture shall be taken into
17 account—

18 “(I) only if the sale or use de-
19 scribed in subparagraph (A) is in a
20 trade or business of the taxpayer, and

21 “(II) for the taxable year in which
22 such sale or use occurs.

23 “(ii) *CERTIFICATION FOR BIODIESEL*
24 *V.*—Biodiesel V used in the production of a
25 qualified biodiesel mixture shall be taken

1 *into account only if the taxpayer described*
2 *in subparagraph (A) obtains a certification*
3 *from the producer of the biodiesel V which*
4 *identifies the product produced.*

5 “(C) *CASUAL OFF-FARM PRODUCTION NOT*
6 *ELIGIBLE.*—*No credit shall be allowed under this*
7 *section with respect to any casual off-farm pro-*
8 *duction of a qualified biodiesel mixture.*

9 “(c) *COORDINATION WITH EXEMPTION FROM EXCISE*
10 *TAX.*—*The amount of the credit determined under this sec-*
11 *tion with respect to any biodiesel V shall, under regulations*
12 *prescribed by the Secretary, be properly reduced to take into*
13 *account any benefit provided with respect to such biodiesel*
14 *V solely by reason of the application of section 4041(n) or*
15 *section 4081(f).*

16 “(d) *DEFINITIONS AND SPECIAL RULES.*—*For pur-*
17 *poses of this section—*

18 “(1) *BIODIESEL V DEFINED.*—*The term ‘biodiesel*
19 *V’ means the monoalkyl esters of long chain fatty*
20 *acids derived solely from virgin vegetable oils for use*
21 *in compressional-ignition (diesel) engines. Such term*
22 *shall include esters derived from vegetable oils from*
23 *corn, soybeans, sunflower seeds, cottonseeds, canola,*
24 *crambe, rapeseeds, safflowers, flaxseeds, rice bran, and*
25 *mustard seeds.*

1 “(2) *BIODIESEL NV DEFINED.*—*The term ‘bio-*
2 *diesel nv’ means the monoalkyl esters of long chain*
3 *fatty acids derived from nonvirgin vegetable oils or*
4 *animal fats for use in compressional-ignition (diesel)*
5 *engines.*

6 “(3) *REGISTRATION REQUIREMENTS.*—*The terms*
7 *‘biodiesel V’ and ‘biodiesel NV’ shall only include a*
8 *biodiesel which meets—*

9 “(i) *the registration requirements for*
10 *fuels and fuel additives established by the*
11 *Environmental Protection Agency under*
12 *section 211 of the Clean Air Act (42 U.S.C.*
13 *7545), and*

14 “(ii) *the requirements of the American*
15 *Society of Testing and Materials D6751.*

16 “(2) *BIODIESEL MIXTURE NOT USED AS A FUEL,*
17 *ETC.—*

18 “(A) *IMPOSITION OF TAX.—If—*

19 “(i) *any credit was determined under*
20 *this section with respect to biodiesel V or*
21 *biodiesel NV used in the production of any*
22 *qualified biodiesel mixture, and*

23 “(ii) *any person—*

24 “(I) *separates such biodiesel from*
25 *the mixture, or*

1 “(II) *without separation, uses the*
2 *mixture other than as a fuel,*
3 *then there is hereby imposed on such person*
4 *a tax equal to the product of the biodiesel*
5 *mixture rate applicable under subsection*
6 *(b)(1)(B) and the number of gallons of the*
7 *mixture.*

8 “(B) *APPLICABLE LAWS.—All provisions of*
9 *law, including penalties, shall, insofar as appli-*
10 *cable and not inconsistent with this section,*
11 *apply in respect of any tax imposed under sub-*
12 *paragraph (A) as if such tax were imposed by*
13 *section 4081 and not by this chapter.*

14 “(3) *PASS-THRU IN THE CASE OF ESTATES AND*
15 *TRUSTS.—Under regulations prescribed by the Sec-*
16 *retary, rules similar to the rules of subsection (d) of*
17 *section 52 shall apply.*

18 “(e) *ELECTION TO HAVE BIODIESEL FUELS CREDIT*
19 *NOT APPLY.—*

20 “(1) *IN GENERAL.—A taxpayer may elect to*
21 *have this section not apply for any taxable year.*

22 “(2) *TIME FOR MAKING ELECTION.—An election*
23 *under paragraph (1) for any taxable year may be*
24 *made (or revoked) at any time before the expiration*
25 *of the 3-year period beginning on the last date pre-*

1 scribed by law for filing the return for such taxable
2 year (determined without regard to extensions).

3 “(3) *MANNER OF MAKING ELECTION.*—An elec-
4 tion under paragraph (1) (or revocation thereof) shall
5 be made in such manner as the Secretary may by reg-
6 ulations prescribe.”.

7 “(f) *TERMINATION.*—This section shall not apply to
8 any fuel sold after December 31, 2005.”.

9 (2) *CREDIT TREATED AS PART OF GENERAL*
10 *BUSINESS CREDIT.*—Section 38(b), as amended by
11 this Act, is amended by striking “plus” at the end of
12 paragraph (15), by striking the period at the end of
13 paragraph (16) and inserting “, plus”, and by add-
14 ing at the end the following new paragraph:

15 “(17) the biodiesel fuels credit determined under
16 section 40B(a).”.

17 (3) *CONFORMING AMENDMENTS.*—

18 (A) Section 39(d), as amended by this Act,
19 is amended by adding at the end the following
20 new paragraph:

21 “(12) *NO CARRYBACK OF BIODIESEL FUELS*
22 *CREDIT BEFORE JANUARY 1, 2003.*—No portion of the
23 unused business credit for any taxable year which is
24 attributable to the biodiesel fuels credit determined

1 *under section 40B may be carried back to a taxable*
2 *year beginning before January 1, 2003.”.*

3 *(B) Section 196(c) is amended by striking*
4 *“and” at the end of paragraph (9), by striking*
5 *the period at the end of paragraph (10), and by*
6 *adding at the end the following new paragraph:*
7 *“(11) the biodiesel fuels credit determined under*
8 *section 40B(a).”.*

9 *(C) Section 6501(m), as amended by this*
10 *Act, is amended by inserting “40B(e),” after*
11 *“40(f),”.*

12 *(D) The table of sections for subpart D of*
13 *part IV of subchapter A of chapter 1, as amend-*
14 *ed by this Act, is amended by adding after the*
15 *item relating to section 40A the following new*
16 *item:*

“Sec. 40B. Biodiesel used as fuel.”.

17 *(4) EFFECTIVE DATE.—The amendments made*
18 *by this subsection shall apply to taxable years begin-*
19 *ning after December 31, 2002.*

20 *(b) REDUCTION OF MOTOR FUEL EXCISE TAXES ON*
21 *BIODIESEL V MIXTURES.—*

22 *(1) IN GENERAL.—Section 4081 (relating to*
23 *manufacturers tax on petroleum products) is amended*
24 *by adding at the end the following new subsection:*

1 “(f) *BIODIESEL V MIXTURES.*—Under regulations pre-
2 scribed by the Secretary—

3 “(1) *IN GENERAL.*—In the case of the removal or
4 entry of a qualified biodiesel mixture with biodiesel V,
5 the rate of tax under subsection (a) shall be the other-
6 wise applicable rate reduced by the biodiesel mixture
7 rate (if any) applicable to the mixture.

8 “(2) *TAX PRIOR TO MIXING.*—

9 “(A) *IN GENERAL.*—In the case of the re-
10 moval or entry of diesel fuel for use in producing
11 at the time of such removal or entry a qualified
12 biodiesel mixture with biodiesel V, the rate of tax
13 under subsection (a) shall be the rate determined
14 under subparagraph (B).

15 “(B) *DETERMINATION OF RATE.*—For pur-
16 poses of subparagraph (A), the rate determined
17 under this subparagraph is the rate determined
18 under paragraph (1), divided by a percentage
19 equal to 100 percent minus the percentage of bio-
20 diesel V which will be in the mixture.

21 “(3) *DEFINITIONS.*—For purposes of this sub-
22 section, any term used in this subsection which is also
23 used in section 40B shall have the meaning given
24 such term by section 40B.

1 “(4) *CERTAIN RULES TO APPLY.*—*Rules similar*
2 *to the rules of paragraphs (6) and (7) of subsection*
3 *(c) shall apply for purposes of this subsection.*”.

4 (2) *CONFORMING AMENDMENTS.*—

5 (A) *Section 4041 is amended by adding at*
6 *the end the following new subsection:*

7 “(n) *BIODIESEL V MIXTURES.*—*Under regulations*
8 *prescribed by the Secretary, in the case of the sale or use*
9 *of a qualified biodiesel mixture (as defined in section*
10 *40B(b)(2)) with biodiesel V, the rates under paragraphs (1)*
11 *and (2) of subsection (a) shall be the otherwise applicable*
12 *rates, reduced by any applicable biodiesel mixture rate (as*
13 *defined in section 40B(b)(1)(B)).*”.

14 (B) *Section 6427 is amended by redesign-*
15 *ating subsection (p) as subsection (q) and by*
16 *inserting after subsection (o) the following new*
17 *subsection:*

18 “(p) *BIODIESEL V MIXTURES.*—*Except as provided in*
19 *subsection (k), if any diesel fuel on which tax was imposed*
20 *by section 4081 at a rate not determined under section*
21 *4081(f) is used by any person in producing a qualified bio-*
22 *diesel mixture (as defined in section 40B(b)(2)) with bio-*
23 *diesel V which is sold or used in such person’s trade or busi-*
24 *ness, the Secretary shall pay (without interest) to such per-*
25 *son an amount equal to the per gallon applicable biodiesel*

1 mixture rate (as defined in section 40B(b)(1)(B)) with re-
2 spect to such fuel.”.

3 (3) *EFFECTIVE DATE.*—The amendments made
4 by this subsection shall apply to any fuel sold after
5 December 31, 2002, and before January 1, 2006.

6 (c) *HIGHWAY TRUST FUND HELD HARMLESS.*—There
7 are hereby transferred (from time to time) from the funds
8 of the Commodity Credit Corporation amounts determined
9 by the Secretary of the Treasury to be equivalent to the re-
10 ductions that would occur (but for this subsection) in the
11 receipts of the Highway Trust Fund by reason of the
12 amendments made by this section.

13 **SEC. 2009. CREDIT FOR TAXPAYERS OWNING COMMERCIAL**
14 **POWER TAKEOFF VEHICLES.**

15 (a) *IN GENERAL.*—Subpart D of part IV of subchapter
16 A of chapter 1 (relating to business-related credits), as
17 amended by this Act, is amended by adding at the end the
18 following new section:

19 **“SEC. 45N. COMMERCIAL POWER TAKEOFF VEHICLES CRED-**
20 **IT.**

21 “(a) *GENERAL RULE.*—For purposes of section 38, the
22 amount of the commercial power takeoff vehicles credit de-
23 termined under this section for the taxable year is \$250 for
24 each qualified commercial power takeoff vehicle owned by

1 *the taxpayer as of the close of the calendar year in which*
2 *or with which the taxable year of the taxpayer ends.*

3 “(b) *DEFINITIONS.—For purposes of this section—*

4 “(1) *QUALIFIED COMMERCIAL POWER TAKEOFF*
5 *VEHICLE.—The term ‘qualified commercial power*
6 *takeoff vehicle’ means any highway vehicle described*
7 *in paragraph (2) which is propelled by any fuel sub-*
8 *ject to tax under section 4041 or 4081 if such vehicle*
9 *is used in a trade or business or for the production*
10 *of income (and is licensed and insured for such use).*

11 “(2) *HIGHWAY VEHICLE DESCRIBED.—A high-*
12 *way vehicle is described in this paragraph if such ve-*
13 *hicle is—*

14 “(A) *designed to engage in the daily collec-*
15 *tion of refuse or recyclables from homes or busi-*
16 *nesses and is equipped with a mechanism under*
17 *which the vehicle’s propulsion engine provides*
18 *the power to operate a load compactor, or*

19 “(B) *designed to deliver ready mixed con-*
20 *crete on a daily basis and is equipped with a*
21 *mechanism under which the vehicle’s propulsion*
22 *engine provides the power to operate a mixer*
23 *drum to agitate and mix the product en route to*
24 *the delivery site.*

1 “(c) *EXCEPTION FOR VEHICLES USED BY GOVERN-*
2 *MENTS, ETC.*—No credit shall be allowed under this section
3 *for any vehicle owned by any person at the close of a cal-*
4 *endar year if such vehicle is used at any time during such*
5 *year by—*

6 “(1) *the United States or an agency or instru-*
7 *mentality thereof, a State, a political subdivision of*
8 *a State, or an agency or instrumentality of one or*
9 *more States or political subdivisions, or*

10 “(2) *an organization exempt from tax under sec-*
11 *tion 501(a).*

12 “(d) *DENIAL OF DOUBLE BENEFIT.*—*The amount of*
13 *any deduction under this subtitle for any tax imposed by*
14 *subchapter B of chapter 31 or part III of subchapter A of*
15 *chapter 32 for any taxable year shall be reduced (but not*
16 *below zero) by the amount of the credit determined under*
17 *this subsection for such taxable year.*

18 “(e) *TERMINATION.*—*This section shall not apply with*
19 *respect to any calendar year after 2004.”.*

20 (b) *CREDIT MADE PART OF GENERAL BUSINESS*
21 *CREDIT.*—*Subsection (b) of section 38 (relating to general*
22 *business credit), as amended by this Act, is amended by*
23 *striking “plus” at the end of paragraph (22), by striking*
24 *the period at the end of paragraph (23) and inserting “,*

1 *plus*”, and by adding at the end the following new para-
2 *graph*:

3 “(24) the commercial power takeoff vehicles cred-
4 it under section 45N(a).”.

5 (c) *CLERICAL AMENDMENT*.—The table of sections for
6 subpart D of part IV of subchapter A of chapter 1, as
7 amended by this Act, is amended by adding at the end the
8 following new item:

 “Sec. 45N. Commercial power takeoff vehicles credit.”.

9 (d) *REGULATIONS*.—Not later than January 1, 2005,
10 the Secretary of the Treasury, in consultation with the Sec-
11 retary of Energy, shall by regulation provide for the method
12 of determining the exemption from any excise tax imposed
13 under section 4041 or 4081 of the Internal Revenue Code
14 of 1986 on fuel used through a mechanism to power equip-
15 ment attached to a highway vehicle as described in section
16 45N(b)(2) of such Code, as added by subsection (a).

17 (e) *EFFECTIVE DATE*.—The amendments made by this
18 section shall apply to taxable years beginning after the date
19 of the enactment of this Act.

20 **SEC. 2010. MODIFICATIONS TO THE INCENTIVES FOR AL-**
21 **TERNATIVE VEHICLES AND FUELS.**

22 (a) *MODIFICATION TO NEW QUALIFIED HYBRID*
23 *MOTOR VEHICLE CREDIT*.—The table in section
24 30B(c)(2)(A) of the Internal Revenue Code of 1986, as

1 *added by this Act, is amended by striking “5 percent” and*
2 *inserting “4 percent”.*

3 *(b) MODIFICATIONS TO EXTENSION OF DEDUCTION*
4 *FOR CERTAIN REFUELING PROPERTY.—*

5 *(1) IN GENERAL.—Subsection (f) of section 179A*
6 *of the Internal Revenue Code of 1986 is amended to*
7 *read as follows:*

8 *“(f) TERMINATION.—This section shall not apply to*
9 *any property placed in service—*

10 *“(1) in the case of property relating to hydrogen,*
11 *after December 31, 2011, and*

12 *“(2) in the case of any other property, after De-*
13 *cember 31, 2007.”.*

14 *(2) EXTENSION OF PHASEOUT.—Section*
15 *179A(b)(1)(B) of such Code, as amended by section*
16 *606(a) of the Job Creation and Worker Assistance Act*
17 *of 2002, is amended—*

18 *(A) by striking “calendar year 2004” in*
19 *clause (i) and inserting “calendar years 2004*
20 *and 2005 (calendar years 2004 through 2009 in*
21 *the case of property relating to hydrogen) ”,*

22 *(B) by striking “2005” in clause (ii) and*
23 *inserting “2006 (calendar year 2010 in the case*
24 *of property relating to hydrogen)”, and*

1 (C) by striking “2006” in clause (iii) and
2 inserting “2007 (calendar year 2011 in the case
3 of property relating to hydrogen)”.

4 (3) *EFFECTIVE DATE.*—*The amendments made*
5 *by this subsection shall apply to property placed in*
6 *service after December 31, 2003, in taxable years end-*
7 *ing after such date.*

8 (c) *MODIFICATION TO CREDIT FOR INSTALLATION OF*
9 *ALTERNATIVE FUELING STATIONS.*—*Subsection (l) of sec-*
10 *tion 30C of the Internal Revenue Code of 1986, as added*
11 *by this Act, is amended to read as follows:*

12 “(l) *TERMINATION.*—*This section shall not apply to*
13 *any property placed in service—*

14 “(1) *in the case of property relating to hydrogen,*
15 *after December 31, 2011, and*

16 “(2) *in the case of any other property, after De-*
17 *cember 31, 2007.”.*

18 (d) *EFFECTIVE DATE.*—*Except as provided in sub-*
19 *section (b)(3), the amendments made by this section shall*
20 *apply to property placed in service after September 30,*
21 *2002, in taxable years ending after such date.*

1 **TITLE XXI—CONSERVATION AND**
2 **ENERGY EFFICIENCY PROVI-**
3 **SIONS**

4 **SEC. 2101. CREDIT FOR CONSTRUCTION OF NEW ENERGY**
5 **EFFICIENT HOME.**

6 (a) *IN GENERAL.*—Subpart D of part IV of subchapter
7 A of chapter 1 (relating to business related credits), as
8 amended by this Act, is amended by adding at the end the
9 following new section:

10 **“SEC. 45G. NEW ENERGY EFFICIENT HOME CREDIT.**

11 “(a) *IN GENERAL.*—For purposes of section 38, in the
12 case of an eligible contractor, the credit determined under
13 this section for the taxable year is an amount equal to the
14 aggregate adjusted bases of all energy efficient property in-
15 stalled in a qualifying new home during construction of
16 such home.

17 “(b) *LIMITATIONS.*—

18 “(1) *MAXIMUM CREDIT.*—

19 “(A) *IN GENERAL.*—The credit allowed by
20 this section with respect to a qualifying new
21 home shall not exceed—

22 “(i) in the case of a 30-percent home,
23 \$1,250, and

24 “(ii) in the case of a 50-percent home,
25 \$2,000.

1 “(B) 30- OR 50-PERCENT HOME.—For pur-
2 poses of subparagraph (A)—

3 “(i) 30-PERCENT HOME.—The term
4 ‘30-percent home’ means a qualifying new
5 home which is certified to have a projected
6 level of annual heating and cooling energy
7 consumption, measured in terms of average
8 annual energy cost to the homeowner, which
9 is at least 30 percent less than the annual
10 level of heating and cooling energy con-
11 sumption of a reference qualifying new
12 home constructed in accordance with the
13 standards of chapter 4 of the 2000 Inter-
14 national Energy Conservation Code, or a
15 qualifying new home which is a manufac-
16 tured home which meets the applicable
17 standards of the Energy Star program
18 managed jointly by the Environmental Pro-
19 tection Agency and the Department of En-
20 ergy.

21 “(ii) 50-PERCENT HOME.—The term
22 ‘50-percent home’ means a qualifying new
23 home which is certified to have a projected
24 level of annual heating and cooling energy
25 consumption, measured in terms of average

1 *annual energy cost to the homeowner, which*
2 *is at least 50 percent less than such annual*
3 *level of heating and cooling energy con-*
4 *sumption.*

5 “(C) *PRIOR CREDIT AMOUNTS ON SAME*
6 *HOME TAKEN INTO ACCOUNT.—If a credit was*
7 *allowed under subsection (a) with respect to a*
8 *qualifying new home in 1 or more prior taxable*
9 *years, the amount of the credit otherwise allow-*
10 *able for the taxable year with respect to that*
11 *home shall not exceed the amount under clause*
12 *(i) or (ii) of subparagraph (A) (as the case may*
13 *be), reduced by the sum of the credits allowed*
14 *under subsection (a) with respect to the home for*
15 *all prior taxable years.*

16 “(2) *COORDINATION WITH REHABILITATION AND*
17 *ENERGY CREDITS.—For purposes of this section—*

18 “(A) *the basis of any property referred to in*
19 *subsection (a) shall be reduced by that portion of*
20 *the basis of any property which is attributable to*
21 *the rehabilitation credit (as determined under*
22 *section 47(a)) or to the energy percentage of en-*
23 *ergy property (as determined under section*
24 *48(a)), and*

1 “(B) expenditures taken into account under
2 either section 47 or 48(a) shall not be taken into
3 account under this section.

4 “(c) DEFINITIONS.—For purposes of this section—

5 “(1) ELIGIBLE CONTRACTOR.—The term ‘eligible
6 contractor’ means the person who constructed the
7 qualifying new home, or in the case of a manufac-
8 tured home which conforms to Federal Manufactured
9 Home Construction and Safety Standards (24 C.F.R.
10 3280), the manufactured home producer of such home.

11 “(2) ENERGY EFFICIENT PROPERTY.—The term
12 ‘energy efficient property’ means any energy efficient
13 building envelope component, and any energy effi-
14 cient heating or cooling equipment which can, indi-
15 vidually or in combination with other components,
16 meet the requirements of this section.

17 “(3) QUALIFYING NEW HOME.—The term ‘quali-
18 fying new home’ means a dwelling—

19 “(A) located in the United States,

20 “(B) the construction of which is substan-
21 tially completed after the date of the enactment
22 of this section, and

23 “(C) the first use of which after construction
24 is as a principal residence (within the meaning
25 of section 121).

1 “(4) *CONSTRUCTION.*—*The term ‘construction’*
2 *includes reconstruction and rehabilitation.*

3 “(5) *BUILDING ENVELOPE COMPONENT.*—*The*
4 *term ‘building envelope component’ means—*

5 “(A) *any insulation material or system*
6 *which is specifically and primarily designed to*
7 *reduce the heat loss or gain of a qualifying new*
8 *home when installed in or on such home, and*

9 “(B) *exterior windows (including skylights)*
10 *and doors.*

11 “(6) *MANUFACTURED HOME INCLUDED.*—*The*
12 *term ‘qualifying new home’ includes a manufactured*
13 *home conforming to Federal Manufactured Home*
14 *Construction and Safety Standards (24 C.F.R. 3280).*

15 “(d) *CERTIFICATION.*—

16 “(1) *METHOD OF CERTIFICATION.*—

17 “(A) *IN GENERAL.*—*A certification de-*
18 *scribed in subsection (b)(1)(B) shall be deter-*
19 *mined either by a component-based method or a*
20 *performance-based method.*

21 “(B) *COMPONENT-BASED METHOD.*—*A com-*
22 *ponent-based method is a method which uses the*
23 *applicable technical energy efficiency specifica-*
24 *tions or ratings (including product labeling re-*
25 *quirements) for the energy efficient building en-*

1 *velope component or energy efficient heating or*
2 *cooling equipment. The Secretary shall, in con-*
3 *sultation with the Administrator of the Environ-*
4 *mental Protection Agency, develop prescriptive*
5 *component-based packages that are equivalent in*
6 *energy performance to properties that qualify*
7 *under subparagraph (C).*

8 “(C) *PERFORMANCE-BASED METHOD.*—

9 “(i) *IN GENERAL.*—A performance-
10 *based method is a method which calculates*
11 *projected energy usage and cost reductions*
12 *in the qualifying new home in relation to a*
13 *reference qualifying new home—*

14 “(I) *heated by the same energy*
15 *source and heating system type, and*

16 “(II) *constructed in accordance*
17 *with the standards of chapter 4 of the*
18 *2000 International Energy Conserva-*
19 *tion Code.*

20 “(ii) *COMPUTER SOFTWARE.*—Com-
21 *puter software shall be used in support of a*
22 *performance-based method certification*
23 *under clause (i). Such software shall meet*
24 *procedures and methods for calculating en-*
25 *ergy and cost savings in regulations pro-*

1 *mulgated by the Secretary of Energy. Such*
2 *regulations on the specifications for software*
3 *and verification protocols shall be based on*
4 *the 2001 California Residential Alternative*
5 *Calculation Method Approval Manual.*

6 “(2) *PROVIDER.*—*A certification described in*
7 *subsection (b)(1)(B) shall be provided by—*

8 “(A) *in the case of a component-based meth-*
9 *od, a local building regulatory authority, a util-*
10 *ity, a manufactured home production inspection*
11 *primary inspection agency (IPIA), or a home*
12 *energy rating organization, or*

13 “(B) *in the case of a performance-based*
14 *method, an individual recognized by an organi-*
15 *zation designated by the Secretary for such pur-*
16 *poses.*

17 “(3) *FORM.*—

18 “(A) *IN GENERAL.*—*A certification de-*
19 *scribed in subsection (b)(1)(B) shall be made in*
20 *writing in a manner that specifies in readily*
21 *verifiable fashion the energy efficient building*
22 *envelope components and energy efficient heating*
23 *or cooling equipment installed and their respec-*
24 *tive rated energy efficiency performance, and in*
25 *the case of a performance-based method, accom-*

1 *panied by a written analysis documenting the*
2 *proper application of a permissible energy per-*
3 *formance calculation method to the specific cir-*
4 *cumstances of such qualifying new home.*

5 *“(B) FORM PROVIDED TO BUYER.—A form*
6 *documenting the energy efficient building enve-*
7 *lope components and energy efficient heating or*
8 *cooling equipment installed and their rated en-*
9 *ergy efficiency performance shall be provided to*
10 *the buyer of the qualifying new home. The form*
11 *shall include labeled R-value for insulation prod-*
12 *ucts, NFRC-labeled U-factor and Solar Heat*
13 *Gain Coefficient for windows, skylights, and*
14 *doors, labeled AFUE ratings for furnaces and*
15 *boilers, labeled HSPF ratings for electric heat*
16 *pumps, and labeled SEER ratings for air condi-*
17 *tioners.*

18 *“(C) RATINGS LABEL AFFIXED IN DWELL-*
19 *ING.—A permanent label documenting the rat-*
20 *ings in subparagraph (B) shall be affixed to the*
21 *front of the electrical distribution panel of the*
22 *qualifying new home, or shall be otherwise per-*
23 *manently displayed in a readily inspectable lo-*
24 *cation in such home.*

25 *“(4) REGULATIONS.—*

1 “(A) *IN GENERAL.*—*In prescribing regula-*
2 *tions under this subsection for performance-based*
3 *certification methods, the Secretary, after exam-*
4 *ining the requirements for energy consultants*
5 *and home energy ratings providers specified by*
6 *the Mortgage Industry National Accreditation*
7 *Procedures for Home Energy Rating Systems,*
8 *shall prescribe procedures for calculating annual*
9 *energy usage and cost reductions for heating and*
10 *cooling and for the reporting of the results. Such*
11 *regulations shall—*

12 “(i) *provide that any calculation pro-*
13 *cedures be fuel neutral such that the same*
14 *energy efficiency measures allow a quali-*
15 *fying new home to be eligible for the credit*
16 *under this section regardless of whether such*
17 *home uses a gas or oil furnace or boiler or*
18 *an electric heat pump, and*

19 “(ii) *require that any computer soft-*
20 *ware allow for the printing of the Federal*
21 *tax forms necessary for the credit under this*
22 *section and for the printing of forms for*
23 *disclosure to the homebuyer.*

24 “(B) *PROVIDERS.*—*For purposes of para-*
25 *graph (2)(B), the Secretary shall establish re-*

1 *quirements for the designation of individuals*
2 *based on the requirements for energy consultants*
3 *and home energy raters specified by the Mort-*
4 *gage Industry National Accreditation Procedures*
5 *for Home Energy Rating Systems.*

6 “(e) *TERMINATION.*—Subsection (a) shall apply to
7 *qualifying new homes purchased during the period begin-*
8 *ning on the date of the enactment of this section and ending*
9 *on December 31, 2007.”.*

10 *(b) CREDIT MADE PART OF GENERAL BUSINESS*
11 *CREDIT.*—Subsection (b) of section 38 (relating to current
12 *year business credit), as amended by this Act, is amended*
13 *by striking “plus” at the end of paragraph (16), by striking*
14 *the period at the end of paragraph (17) and inserting “,*
15 *plus”, and by adding at the end the following new para-*
16 *graph:*

17 “(18) *the new energy efficient home credit deter-*
18 *mined under section 45G(a).”.*

19 *(c) DENIAL OF DOUBLE BENEFIT.*—Section 280C (re-
20 *lating to certain expenses for which credits are allowable)*
21 *is amended by adding at the end the following new sub-*
22 *section:*

23 “(d) *NEW ENERGY EFFICIENT HOME EXPENSES.*—No
24 *deduction shall be allowed for that portion of expenses for*
25 *a qualifying new home otherwise allowable as a deduction*

1 *for the taxable year which is equal to the amount of the*
2 *credit determined for such taxable year under section*
3 *45G(a).”.*

4 *(d) LIMITATION ON CARRYBACK.—Subsection (d) of*
5 *section 39, as amended by this Act, is amended by adding*
6 *at the end the following new paragraph:*

7 *“(13) NO CARRYBACK OF NEW ENERGY EFFI-*
8 *CIENT HOME CREDIT BEFORE EFFECTIVE DATE.—No*
9 *portion of the unused business credit for any taxable*
10 *year which is attributable to the credit determined*
11 *under section 45G may be carried back to any taxable*
12 *year ending on or before the date of the enactment of*
13 *section 45G.”.*

14 *(e) DEDUCTION FOR CERTAIN UNUSED BUSINESS*
15 *CREDITS.—Subsection (c) of section 196, as amended by*
16 *this Act, is amended by striking “and” at the end of para-*
17 *graph (10), by striking the period at the end of paragraph*
18 *(11) and inserting “, and”, and by adding after paragraph*
19 *(11) the following new paragraph:*

20 *“(12) the new energy efficient home credit deter-*
21 *mined under section 45G(a).”.*

22 *(f) CLERICAL AMENDMENT.—The table of sections for*
23 *subpart D of part IV of subchapter A of chapter 1, as*
24 *amended by this Act, is amended by adding at the end the*
25 *following new item:*

“Sec. 45G. New energy efficient home credit.”.

1 (g) *EFFECTIVE DATE.*—*The amendments made by this*
2 *section shall apply to taxable years ending after the date*
3 *of the enactment of this Act.*

4 **SEC. 2102. CREDIT FOR ENERGY EFFICIENT APPLIANCES.**

5 (a) *IN GENERAL.*—*Subpart D of part IV of subchapter*
6 *A of chapter 1 (relating to business-related credits), as*
7 *amended by this Act, is amended by adding at the end the*
8 *following new section:*

9 **“SEC. 45H. ENERGY EFFICIENT APPLIANCE CREDIT.**

10 “(a) *GENERAL RULE.*—*For purposes of section 38, the*
11 *energy efficient appliance credit determined under this sec-*
12 *tion for the taxable year is an amount equal to the applica-*
13 *ble amount determined under subsection (b) with respect*
14 *to the eligible production of qualified energy efficient appli-*
15 *ances produced by the taxpayer during the calendar year*
16 *ending with or within the taxable year.*

17 “(b) *APPLICABLE AMOUNT; ELIGIBLE PRODUCTION.*—
18 *For purposes of subsection (a)—*

19 “(1) *APPLICABLE AMOUNT.*—*The applicable*
20 *amount is—*

21 “(A) *\$50, in the case of—*

22 “(i) *a clothes washer which is manu-*
23 *factured with at least a 1.26 MEF, or*

24 “(ii) *a refrigerator which consumes at*
25 *least 10 percent less kWh per year than the*

1 *energy conservation standards for refrigerators promulgated by the Department of Energy effective July 1, 2001, and*

2 *“(B) \$100, in the case of—*

3 *“(i) a clothes washer which is manufactured with at least a 1.42 MEF (at least 1.5 MEF for washers produced after 2004),*
4 *or*

5 *“(ii) a refrigerator which consumes at least 15 percent less kWh per year than such energy conservation standards.*

6 *“(2) ELIGIBLE PRODUCTION.—*

7 *“(A) IN GENERAL.—The eligible production of each category of qualified energy efficient appliances is the excess of—*

8 *“(i) the number of appliances in such category which are produced by the taxpayer during such calendar year, over*

9 *“(ii) the average number of appliances in such category which were produced by the taxpayer during calendar years 1999, 2000, and 2001.*

10 *“(B) CATEGORIES.—For purposes of subparagraph (A), the categories are—*

1 “(i) clothes washers described in para-
2 graph (1)(A)(i),

3 “(ii) clothes washers described in para-
4 graph (1)(B)(i),

5 “(iii) refrigerators described in para-
6 graph (1)(A)(ii), and

7 “(iv) refrigerators described in para-
8 graph (1)(B)(ii).

9 “(c) *LIMITATION ON MAXIMUM CREDIT.*—

10 “(1) *IN GENERAL.*—The maximum amount of
11 credit allowed under subsection (a) with respect to a
12 taxpayer for all taxable years shall be—

13 “(A) \$30,000,000 with respect to the credit
14 determined under subsection (b)(1)(A), and

15 “(B) \$30,000,000 with respect to the credit
16 determined under subsection (b)(1)(B).

17 “(2) *LIMITATION BASED ON GROSS RECEIPTS.*—
18 The credit allowed under subsection (a) with respect
19 to a taxpayer for the taxable year shall not exceed an
20 amount equal to 2 percent of the average annual gross
21 receipts of the taxpayer for the 3 taxable years pre-
22 ceding the taxable year in which the credit is deter-
23 mined.

1 “(3) *GROSS RECEIPTS.*—For purposes of this
2 subsection, the rules of paragraphs (2) and (3) of sec-
3 tion 448(c) shall apply.

4 “(d) *DEFINITIONS.*—For purposes of this section—

5 “(1) *QUALIFIED ENERGY EFFICIENT APPLI-*
6 *ANCE.*—The term ‘qualified energy efficient appliance’
7 means—

8 “(A) a clothes washer described in subpara-
9 graph (A)(i) or (B)(i) of subsection (b)(1), or

10 “(B) a refrigerator described in subpara-
11 graph (A)(ii) or (B)(ii) of subsection (b)(1).

12 “(2) *CLOTHES WASHER.*—The term ‘clothes
13 washer’ means a residential clothes washer, including
14 a residential style coin operated washer.

15 “(3) *REFRIGERATOR.*—The term ‘refrigerator’
16 means an automatic defrost refrigerator-freezer which
17 has an internal volume of at least 16.5 cubic feet.

18 “(4) *MEF.*—The term ‘MEF’ means Modified
19 Energy Factor (as determined by the Secretary of En-
20 ergy).

21 “(e) *SPECIAL RULES.*—

22 “(1) *IN GENERAL.*—Rules similar to the rules of
23 subsections (c), (d), and (e) of section 52 shall apply
24 for purposes of this section.

1 “(2) *AGGREGATION RULES.*—All persons treated
2 as a single employer under subsection (a) or (b) of
3 section 52 or subsection (m) or (o) of section 414 shall
4 be treated as 1 person for purposes of subsection (a).

5 “(f) *VERIFICATION.*—The taxpayer shall submit such
6 information or certification as the Secretary, in consulta-
7 tion with the Secretary of Energy, determines necessary to
8 claim the credit amount under subsection (a).

9 “(g) *TERMINATION.*—This section shall not apply—

10 “(1) with respect to refrigerators described in
11 subsection (b)(1)(A)(ii) produced after December 31,
12 2004, and

13 “(2) with respect to all other qualified energy ef-
14 ficient appliances produced after December 31,
15 2006.”.

16 “(b) *LIMITATION ON CARRYBACK.*—Section 39(d) (relat-
17 ing to transition rules), as amended by this Act, is amended
18 by adding at the end the following new paragraph:

19 “(14) *NO CARRYBACK OF ENERGY EFFICIENT AP-*
20 *PLIANCE CREDIT BEFORE EFFECTIVE DATE.*—No por-
21 tion of the unused business credit for any taxable year
22 which is attributable to the energy efficient appliance
23 credit determined under section 45H may be carried
24 to a taxable year ending before January 1, 2003.”.

1 (c) *CONFORMING AMENDMENT.*—Section 38(b) (relat-
 2 ing to general business credit), as amended by this Act, is
 3 amended by striking “plus” at the end of paragraph (17),
 4 by striking the period at the end of paragraph (18) and
 5 inserting “, plus”, and by adding at the end the following
 6 new paragraph:

7 “(19) the energy efficient appliance credit deter-
 8 mined under section 45H(a).”.

9 (d) *CLERICAL AMENDMENT.*—The table of sections for
 10 subpart D of part IV of subchapter A of chapter 1, as
 11 amended by this Act, is amended by adding at the end the
 12 following new item:

 “Sec. 45H. Energy efficient appliance credit.”.

13 (e) *EFFECTIVE DATE.*—The amendments made by this
 14 section shall apply to appliances produced after December
 15 31, 2002, in taxable years ending after such date.

16 **SEC. 2103. CREDIT FOR RESIDENTIAL ENERGY EFFICIENT**
 17 **PROPERTY.**

18 (a) *IN GENERAL.*—Subpart A of part IV of subchapter
 19 A of chapter 1 (relating to nonrefundable personal credits)
 20 is amended by inserting after section 25B the following new
 21 section:

22 **“SEC. 25C. RESIDENTIAL ENERGY EFFICIENT PROPERTY.**

23 “(a) *ALLOWANCE OF CREDIT.*—In the case of an indi-
 24 vidual, there shall be allowed as a credit against the tax

1 *imposed by this chapter for the taxable year an amount*
2 *equal to the sum of—*

3 “(1) 15 percent of the qualified photovoltaic
4 *property expenditures made by the taxpayer during*
5 *such year,*

6 “(2) 15 percent of the qualified solar water heat-
7 *ing property expenditures made by the taxpayer dur-*
8 *ing such year,*

9 “(3) 30 percent of the qualified fuel cell property
10 *expenditures made by the taxpayer during such year,*

11 “(4) 30 percent of the qualified wind energy
12 *property expenditures made by the taxpayer during*
13 *such year, and*

14 “(5) the sum of the qualified Tier 2 energy effi-
15 *cient building property expenditures made by the tax-*
16 *payer during such year.*

17 “(b) *LIMITATIONS.—*

18 “(1) *MAXIMUM CREDIT.—The credit allowed*
19 *under subsection (a) shall not exceed—*

20 “(A) \$2,000 for property described in sub-
21 *section (d)(1),*

22 “(B) \$2,000 for property described in sub-
23 *section (d)(2),*

24 “(C) \$1,000 for each kilowatt of capacity of
25 *property described in subsection (d)(4),*

1 “(D) \$2,000 for property described in sub-
2 section (d)(5), and

3 “(E) for property described in subsection
4 (d)(6)—

5 “(i) \$75 for each electric heat pump
6 water heater,

7 “(ii) \$250 for each electric heat pump,

8 “(iii) \$250 for each advanced natural
9 gas furnace,

10 “(iv) \$250 for each central air condi-
11 tioner,

12 “(v) \$75 for each natural gas water
13 heater, and

14 “(vi) \$250 for each geothermal heat
15 pump.

16 “(2) SAFETY CERTIFICATIONS.—No credit shall
17 be allowed under this section for an item of property
18 unless—

19 “(A) in the case of solar water heating
20 property, such property is certified for perform-
21 ance and safety by the non-profit Solar Rating
22 Certification Corporation or a comparable entity
23 endorsed by the government of the State in which
24 such property is installed,

1 “(B) in the case of a photovoltaic property,
2 a fuel cell property, or a wind energy property,
3 such property meets appropriate fire and electric
4 code requirements, and

5 “(C) in the case of property described in
6 subsection (d)(6), such property meets the per-
7 formance and quality standards, and the certifi-
8 cation requirements (if any), which—

9 “(i) have been prescribed by the Sec-
10 retary by regulations (after consultation
11 with the Secretary of Energy or the Admin-
12 istrator of the Environmental Protection
13 Agency, as appropriate),

14 “(ii) in the case of the energy efficiency
15 ratio (EER)—

16 “(I) require measurements to be
17 based on published data which is tested
18 by manufacturers at 95 degrees Fahr-
19 enheit, and

20 “(II) do not require ratings to be
21 based on certified data of the Air Con-
22 ditioning and Refrigeration Institute,
23 and

24 “(iii) are in effect at the time of the
25 acquisition of the property.

1 “(c) *CARRYFORWARD OF UNUSED CREDIT.*—If the
2 *credit allowable under subsection (a) exceeds the limitation*
3 *imposed by section 26(a) for such taxable year reduced by*
4 *the sum of the credits allowable under this subpart (other*
5 *than this section and section 25D), such excess shall be car-*
6 *ried to the succeeding taxable year and added to the credit*
7 *allowable under subsection (a) for such succeeding taxable*
8 *year.*

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

10 “(1) *QUALIFIED SOLAR WATER HEATING PROP-*
11 *ERTY EXPENDITURE.*—The term ‘qualified solar water
12 *heating property expenditure’ means an expenditure*
13 *for property to heat water for use in a dwelling unit*
14 *located in the United States and used as a residence*
15 *by the taxpayer if at least half of the energy used by*
16 *such property for such purpose is derived from the*
17 *sun.*

18 “(2) *QUALIFIED PHOTOVOLTAIC PROPERTY EX-*
19 *PENDITURE.*—The term ‘qualified photovoltaic prop-
20 *erty expenditure’ means an expenditure for property*
21 *that uses solar energy to generate electricity for use*
22 *in such a dwelling unit.*

23 “(3) *SOLAR PANELS.*—No expenditure relating to
24 *a solar panel or other property installed as a roof (or*
25 *portion thereof) shall fail to be treated as property de-*

1 *scribed in paragraph (1) or (2) solely because it con-*
2 *stitutes a structural component of the structure on*
3 *which it is installed.*

4 “(4) *QUALIFIED FUEL CELL PROPERTY EXPENDI-*
5 *TURE.—The term ‘qualified fuel cell property expend-*
6 *iture’ means an expenditure for qualified fuel cell*
7 *property (as defined in section 48(a)(4)) installed on*
8 *or in connection with such a dwelling unit.*

9 “(5) *QUALIFIED WIND ENERGY PROPERTY EX-*
10 *PENDITURE.—The term ‘qualified wind energy prop-*
11 *erty expenditure’ means an expenditure for property*
12 *which uses wind energy to generate electricity for use*
13 *in such a dwelling unit.*

14 “(6) *QUALIFIED TIER 2 ENERGY EFFICIENT*
15 *BUILDING PROPERTY EXPENDITURE.—*

16 “(A) *IN GENERAL.—The term ‘qualified*
17 *Tier 2 energy efficient building property expend-*
18 *iture’ means an expenditure for any Tier 2 en-*
19 *ergy efficient building property.*

20 “(B) *TIER 2 ENERGY EFFICIENT BUILDING*
21 *PROPERTY.—The term ‘Tier 2 energy efficient*
22 *building property’ means—*

23 “(i) *an electric heat pump water heater*
24 *which yields an energy factor of at least 1.7*

1 *in the standard Department of Energy test*
2 *procedure,*

3 “(ii) *an electric heat pump which has*
4 *a heating seasonal performance factor*
5 *(HSPF) of at least 9, a seasonal energy effi-*
6 *ciency ratio (SEER) of at least 15, and an*
7 *energy efficiency ratio (EER) of at least*
8 *12.5,*

9 “(iii) *an advanced natural gas furnace*
10 *which achieves at least 95 percent annual*
11 *fuel utilization efficiency (AFUE),*

12 “(iv) *a central air conditioner which*
13 *has a seasonal energy efficiency ratio*
14 *(SEER) of at least 15 and an energy effi-*
15 *ciency ratio (EER) of at least 12.5,*

16 “(v) *a natural gas water heater which*
17 *has an energy factor of at least 0.80 in the*
18 *standard Department of Energy test proce-*
19 *dure, and*

20 “(vi) *a geothermal heat pump which*
21 *has an energy efficiency ratio (EER) of at*
22 *least 21.*

23 “(7) *LABOR COSTS.—Expenditures for labor*
24 *costs properly allocable to the onsite preparation, as-*
25 *sembly, or original installation of the property de-*

1 scribed in paragraph (1), (2), (4), (5), or (6) and for
2 piping or wiring to interconnect such property to the
3 dwelling unit shall be taken into account for purposes
4 of this section.

5 “(8) SWIMMING POOLS, ETC., USED AS STORAGE
6 MEDIUM.—Expenditures which are properly allocable
7 to a swimming pool, hot tub, or any other energy
8 storage medium which has a function other than the
9 function of such storage shall not be taken into ac-
10 count for purposes of this section.

11 “(e) SPECIAL RULES.—For purposes of this section—

12 “(1) DOLLAR AMOUNTS IN CASE OF JOINT OCCU-
13 PANCY.—In the case of any dwelling unit which is
14 jointly occupied and used during any calendar year
15 as a residence by 2 or more individuals the following
16 shall apply:

17 “(A) The amount of the credit allowable,
18 under subsection (a) by reason of expenditures
19 (as the case may be) made during such calendar
20 year by any of such individuals with respect to
21 such dwelling unit shall be determined by treat-
22 ing all of such individuals as 1 taxpayer whose
23 taxable year is such calendar year.

24 “(B) There shall be allowable, with respect
25 to such expenditures to each of such individuals,

1 *a credit under subsection (a) for the taxable year*
2 *in which such calendar year ends in an amount*
3 *which bears the same ratio to the amount deter-*
4 *mined under subparagraph (A) as the amount of*
5 *such expenditures made by such individual dur-*
6 *ing such calendar year bears to the aggregate of*
7 *such expenditures made by all of such individ-*
8 *uals during such calendar year.*

9 “(2) *TENANT-STOCKHOLDER IN COOPERATIVE*
10 *HOUSING CORPORATION.—In the case of an indi-*
11 *vidual who is a tenant-stockholder (as defined in sec-*
12 *tion 216) in a cooperative housing corporation (as de-*
13 *finied in such section), such individual shall be treated*
14 *as having made his tenant-stockholder’s proportionate*
15 *share (as defined in section 216(b)(3)) of any expend-*
16 *itures of such corporation.*

17 “(3) *CONDOMINIUMS.—*

18 “(A) *IN GENERAL.—In the case of an indi-*
19 *vidual who is a member of a condominium man-*
20 *agement association with respect to a condo-*
21 *minium which the individual owns, such indi-*
22 *vidual shall be treated as having made the indi-*
23 *vidual’s proportionate share of any expenditures*
24 *of such association.*

1 “(B) *CONDOMINIUM MANAGEMENT ASSOCIA-*
2 *TION.—For purposes of this paragraph, the term*
3 *‘condominium management association’ means*
4 *an organization which meets the requirements of*
5 *paragraph (1) of section 528(c) (other than sub-*
6 *paragraph (E) thereof) with respect to a condo-*
7 *minium project substantially all of the units of*
8 *which are used as residences.*

9 “(4) *ALLOCATION IN CERTAIN CASES.—Except in*
10 *the case of qualified wind energy property expendi-*
11 *tures, if less than 80 percent of the use of an item is*
12 *for nonbusiness purposes, only that portion of the ex-*
13 *penditures for such item which is properly allocable*
14 *to use for nonbusiness purposes shall be taken into ac-*
15 *count.*

16 “(5) *WHEN EXPENDITURE MADE; AMOUNT OF*
17 *EXPENDITURE.—*

18 “(A) *IN GENERAL.—Except as provided in*
19 *subparagraph (B), an expenditure with respect*
20 *to an item shall be treated as made when the*
21 *original installation of the item is completed.*

22 “(B) *EXPENDITURES PART OF BUILDING*
23 *CONSTRUCTION.—In the case of an expenditure*
24 *in connection with the construction or recon-*
25 *struction of a structure, such expenditure shall be*

1 *treated as made when the original use of the con-*
2 *structed or reconstructed structure by the tax-*
3 *payer begins.*

4 “(C) *AMOUNT.*—*The amount of any expend-*
5 *iture shall be the cost thereof.*

6 “(6) *PROPERTY FINANCED BY SUBSIDIZED EN-*
7 *ERGY FINANCING.*—*For purposes of determining the*
8 *amount of expenditures made by any individual with*
9 *respect to any dwelling unit, there shall not be taken*
10 *in to account expenditures which are made from sub-*
11 *sidized energy financing (as defined in section*
12 *48(a)(5)(C)).*

13 “(f) *BASIS ADJUSTMENTS.*—*For purposes of this sub-*
14 *title, if a credit is allowed under this section for any ex-*
15 *penditure with respect to any property, the increase in the*
16 *basis of such property which would (but for this subsection)*
17 *result from such expenditure shall be reduced by the amount*
18 *of the credit so allowed.*

19 “(g) *TERMINATION.*—*The credit allowed under this*
20 *section shall not apply to expenditures after December 31,*
21 *2007.”.*

22 “(b) *CREDIT ALLOWED AGAINST REGULAR TAX AND*
23 *ALTERNATIVE MINIMUM TAX.*—

1 (1) *IN GENERAL.*—Section 25C(b), as added by
2 subsection (a), is amended by adding at the end the
3 following new paragraph:

4 “(3) *LIMITATION BASED ON AMOUNT OF TAX.*—
5 The credit allowed under subsection (a) for the tax-
6 able year shall not exceed the excess of—

7 “(A) the sum of the regular tax liability (as
8 defined in section 26(b)) plus the tax imposed by
9 section 55, over

10 “(B) the sum of the credits allowable under
11 this subpart (other than this section and section
12 25D) and section 27 for the taxable year.”.

13 (2) *CONFORMING AMENDMENTS.*—

14 (A) Section 25C(c), as added by subsection
15 (a), is amended by striking “section 26(a) for
16 such taxable year reduced by the sum of the cred-
17 its allowable under this subpart (other than this
18 section and section 25D)” and inserting “sub-
19 section (b)(3)”.

20 (B) Section 23(b)(4)(B) is amended by in-
21 serting “and section 25C” after “this section”.

22 (C) Section 24(b)(3)(B) is amended by
23 striking “23 and 25B” and inserting “23, 25B,
24 and 25C”.

1 (D) Section 25(e)(1)(C) is amended by in-
2 serting “25C,” after “25B,”.

3 (E) Section 25B(g)(2) is amended by strik-
4 ing “section 23” and inserting “sections 23 and
5 25C”.

6 (F) Section 26(a)(1) is amended by striking
7 “and 25B” and inserting “25B, and 25C”.

8 (G) Section 904(h) is amended by striking
9 “and 25B” and inserting “25B, and 25C”.

10 (H) Section 1400C(d) is amended by strik-
11 ing “and 25B” and inserting “25B, and 25C”.

12 (c) *ADDITIONAL CONFORMING AMENDMENTS.*—

13 (1) Section 23(c), as in effect for taxable years
14 beginning before January 1, 2004, is amended by
15 striking “section 1400C” and inserting “sections 25C
16 and 1400C”.

17 (2) Section 25(e)(1)(C), as in effect for taxable
18 years beginning before January 1, 2004, is amended
19 by inserting “, 25Cs,” after “sections 23”.

20 (3) Subsection (a) of section 1016, as amended
21 by this Act, is amended by striking “and” at the end
22 of paragraph (29), by striking the period at the end
23 of paragraph (30) and inserting “, and”, and by add-
24 ing at the end the following new paragraph:

1 “(31) to the extent provided in section 25C(f), in
2 the case of amounts with respect to which a credit has
3 been allowed under section 25C.”.

4 (4) Section 1400C(d), as in effect for taxable
5 years beginning before January 1, 2004, is amended
6 by inserting “and section 25C” after “this section”.

7 (5) The table of sections for subpart A of part IV
8 of subchapter A of chapter 1 is amended by inserting
9 after the item relating to section 25B the following
10 new item:

 “Sec. 25C. Residential energy efficient property.”.

11 (d) **EFFECTIVE DATES.**—

12 (1) **IN GENERAL.**—Except as provided by para-
13 graph (2), the amendments made by this section shall
14 apply to expenditures after December 31, 2002, in
15 taxable years ending after such date.

16 (2) **SUBSECTION (b).**—The amendments made by
17 subsection (b) shall apply to taxable years beginning
18 after December 31, 2003.

19 **SEC. 2104. CREDIT FOR BUSINESS INSTALLATION OF QUALI-**
20 **FIED FUEL CELLS AND STATIONARY MICRO-**
21 **TURBINE POWER PLANTS.**

22 (a) **IN GENERAL.**—Subparagraph (A) of section
23 48(a)(3) (defining energy property) is amended by striking
24 “or” at the end of clause (i), by adding “or” at the end

1 of clause (ii), and by inserting after clause (ii) the following
 2 new clause:

3 “(iii) *qualified fuel cell property or*
 4 *qualified microturbine property,*”.

5 (b) *QUALIFIED FUEL CELL PROPERTY; QUALIFIED*
 6 *MICROTURBINE PROPERTY.*—Subsection (a) of section 48
 7 is amended by redesignating paragraphs (4) and (5) as
 8 paragraphs (5) and (6), respectively, and by inserting after
 9 paragraph (3) the following new paragraph:

10 “(4) *QUALIFIED FUEL CELL PROPERTY; QUALI-*
 11 *FIED MICROTURBINE PROPERTY.*—For purposes of
 12 *this subsection—*

13 “(A) *QUALIFIED FUEL CELL PROPERTY.*—

14 “(i) *IN GENERAL.*—The term ‘qualified
 15 *fuel cell property*’ means a fuel cell power
 16 *plant that—*

17 “(I) *generates at least 0.5 kilowatt*
 18 *of electricity using an electrochemical*
 19 *process, and*

20 “(II) *has an electricity-only gen-*
 21 *eration efficiency greater than 30 per-*
 22 *cent.*

23 “(ii) *LIMITATION.*—In the case of
 24 *qualified fuel cell property placed in service*
 25 *during the taxable year, the credit deter-*

1 mined under paragraph (1) for such year
2 with respect to such property shall not ex-
3 ceed an amount equal to the lesser of—

4 “(I) 30 percent of the basis of such
5 property, or

6 “(II) \$500 for each 0.5 kilowatt of
7 capacity of such property.

8 “(iii) *FUEL CELL POWER PLANT.*—The
9 term ‘fuel cell power plant’ means an inte-
10 grated system comprised of a fuel cell stack
11 assembly and associated balance of plant
12 components that converts a fuel into elec-
13 tricity using electrochemical means.

14 “(iv) *TERMINATION.*—Such term shall
15 not include any property placed in service
16 after December 31, 2007.

17 “(B) *QUALIFIED MICROTURBINE PROP-*
18 *ERTY.*—

19 “(i) *IN GENERAL.*—The term “quali-
20 fied microturbine property’ means a sta-
21 tionary microturbine power plant which
22 has an electricity-only generation efficiency
23 not less than 26 percent at International
24 Standard Organization conditions.

1 “(ii) *LIMITATION.*—*In the case of*
2 *qualified microturbine property placed in*
3 *service during the taxable year, the credit*
4 *determined under paragraph (1) for such*
5 *year with respect to such property shall not*
6 *exceed an amount equal to the lesser of—*

7 “(I) *10 percent of the basis of such*
8 *property, or*

9 “(II) *\$200 for each kilowatt of ca-*
10 *capacity of such property.*

11 “(iii) *STATIONARY MICROTURBINE*
12 *POWER PLANT.*—*The term ‘stationary*
13 *microturbine power plant means a system*
14 *comprising of a rotary engine which is ac-*
15 *tuated by the aerodynamic reaction or im-*
16 *pulse or both on radial or axial curved full-*
17 *circumferential-admission airfoils on a cen-*
18 *tral axial rotating spindle. Such system—*

19 “(I) *commonly includes an air*
20 *compressor, combustor, gas pathways*
21 *which lead compressed air to the com-*
22 *bustor and which lead hot combusted*
23 *gases from the combustor to 1 or more*
24 *rotating turbine spools, which in turn*

1 drive the compressor and power output
2 shaft,

3 “(II) includes a fuel compressor,
4 recuperator/regenerator, generator or
5 alternator, integrated combined cycle
6 equipment, cooling-heating-and-power
7 equipment, sound attenuation appa-
8 ratus, and power conditioning equip-
9 ment, and

10 “(III) includes all secondary com-
11 ponents located between the existing in-
12 frastructure for fuel delivery and the
13 existing infrastructure for power dis-
14 tribution, including equipment and
15 controls for meeting relevant power
16 standards, such as voltage, frequency,
17 and power factors.

18 “(iv) *TERMINATION*.—Such term shall
19 not include any property placed in service
20 after December 31, 2006.”.

21 (c) *LIMITATION*.—Section 48(a)(2)(A) (relating to en-
22 ergy percentage) is amended to read as follows:

23 “(A) *IN GENERAL*.—The energy percentage
24 is—

1 “(i) in the case of qualified fuel cell
2 property, 30 percent, and

3 “(ii) in the case of any other energy
4 property, 10 percent.”.

5 (d) *CONFORMING AMENDMENTS.*—

6 (A) Section 29(b)(3)(A)(i)(III) is amended
7 by striking “section 48(a)(4)(C)” and inserting
8 “section 48(a)(5)(C)”.

9 (B) Section 48(a)(1) is amended by insert-
10 ing “except as provided in subparagraph (A)(ii)
11 or (B)(ii) of paragraph (4),” before “the energy”.

12 (e) *EFFECTIVE DATE.*—The amendments made by this
13 subsection shall apply to property placed in service after
14 December 31, 2002, under rules similar to the rules of sec-
15 tion 48(m) of the Internal Revenue Code of 1986 (as in
16 effect on the day before the date of the enactment of the Rev-
17 enue Reconciliation Act of 1990).

18 **SEC. 2105. ENERGY EFFICIENT COMMERCIAL BUILDINGS**

19 **DEDUCTION.**

20 (a) *IN GENERAL.*—Part VI of subchapter B of chapter
21 1 is amended by inserting after section 179A the following
22 new section:

1 **“SEC. 179B. ENERGY EFFICIENT COMMERCIAL BUILDINGS**
2 **DEDUCTION.**

3 “(a) *IN GENERAL.*—*There shall be allowed as a deduc-*
4 *tion for the taxable year an amount equal to the energy*
5 *efficient commercial building property expenditures made*
6 *by a taxpayer for the taxable year.*

7 “(b) *MAXIMUM AMOUNT OF DEDUCTION.*—*The amount*
8 *of energy efficient commercial building property expendi-*
9 *tures taken into account under subsection (a) shall not ex-*
10 *ceed an amount equal to the product of—*

11 “(1) \$2.25, and

12 “(2) the square footage of the building with re-
13 spect to which the expenditures are made.

14 “(c) *YEAR DEDUCTION ALLOWED.*—*The deduction*
15 *under subsection (a) shall be allowed in the taxable year*
16 *in which the construction of the building is completed.*

17 “(d) *ENERGY EFFICIENT COMMERCIAL BUILDING*
18 *PROPERTY EXPENDITURES.*—*For purposes of this section—*

19 “(1) *IN GENERAL.*—*The term ‘energy efficient*
20 *commercial building property expenditures’ means an*
21 *amount paid or incurred for energy efficient commer-*
22 *cial building property installed on or in connection*
23 *with new construction or reconstruction of property—*

24 “(A) *for which depreciation is allowable*
25 *under section 167,*

1 “(B) which is located in the United States,
2 and

3 “(C) the construction or erection of which is
4 completed by the taxpayer.

5 *Such property includes all residential rental prop-*
6 *erty, including low-rise multifamily structures and*
7 *single family housing property which is not within*
8 *the scope of Standard 90.1–1999 (described in para-*
9 *graph (2)). Such term includes expenditures for labor*
10 *costs properly allocable to the onsite preparation, as-*
11 *sembly, or original installation of the property.*

12 “(2) *ENERGY EFFICIENT COMMERCIAL BUILDING*
13 *PROPERTY.—For purposes of paragraph (1)—*

14 “(A) *IN GENERAL.—The term ‘energy effi-*
15 *cient commercial building property’ means any*
16 *property which reduces total annual energy and*
17 *power costs with respect to the lighting, heating,*
18 *cooling, ventilation, and hot water supply sys-*
19 *tems of the building by 50 percent or more in*
20 *comparison to a reference building which meets*
21 *the requirements of Standard 90.1–1999 of the*
22 *American Society of Heating, Refrigerating, and*
23 *Air Conditioning Engineers and the Illu-*
24 *minating Engineering Society of North America*
25 *using methods of calculation under subpara-*

1 *graph (B) and certified by qualified profes-*
2 *ionals as provided under paragraph (5).*

3 “(B) *METHODS OF CALCULATION.—The*
4 *Secretary, in consultation with the Secretary of*
5 *Energy, shall promulgate regulations which de-*
6 *scribe in detail methods for calculating and*
7 *verifying energy and power consumption and*
8 *cost, taking into consideration the provisions of*
9 *the 2001 California Nonresidential Alternative*
10 *Calculation Method Approval Manual. These reg-*
11 *ulations shall meet the following requirements:*

12 “(i) *In calculating tradeoffs and en-*
13 *ergy performance, the regulations shall pre-*
14 *scribe the costs per unit of energy and*
15 *power, such as kilowatt hour, kilowatt, gal-*
16 *lon of fuel oil, and cubic foot or Btu of nat-*
17 *ural gas, which may be dependent on time*
18 *of usage.*

19 “(ii) *The calculational methodology*
20 *shall require that compliance be dem-*
21 *onstrated for a whole building. If some sys-*
22 *tems of the building, such as lighting, are*
23 *designed later than other systems of the*
24 *building, the method shall provide that*
25 *either—*

1 “(I) the expenses taken into ac-
2 count under paragraph (1) shall not
3 occur until the date designs for all en-
4 ergy-using systems of the building are
5 completed,

6 “(II) the energy performance of
7 all systems and components not yet de-
8 signed shall be assumed to comply
9 minimally with the requirements of
10 such Standard 90.1–1999, or

11 “(III) the expenses taken into ac-
12 count under paragraph (1) shall be a
13 fraction of such expenses based on the
14 performance of less than all energy-
15 using systems in accordance with
16 clause (iii).

17 “(iii) The expenditures in connection
18 with the design of subsystems in the build-
19 ing, such as the envelope, the heating, ven-
20 tilation, air conditioning and water heating
21 system, and the lighting system shall be al-
22 located to the appropriate building sub-
23 system based on system-specific energy cost
24 savings targets in regulations promulgated
25 by the Secretary of Energy which are equiv-

1 *alent, using the calculation methodology, to*
2 *the whole building requirement of 50 per-*
3 *cent savings.*

4 *“(iv) The calculational methods under*
5 *this subparagraph need not comply fully*
6 *with section 11 of such Standard 90.1–*
7 *1999.*

8 *“(v) The calculational methods shall be*
9 *fuel neutral, such that the same energy effi-*
10 *ciency features shall qualify a building for*
11 *the deduction under this subsection regard-*
12 *less of whether the heating source is a gas*
13 *or oil furnace or an electric heat pump.*

14 *“(vi) The calculational methods shall*
15 *provide appropriate calculated energy sav-*
16 *ings for design methods and technologies not*
17 *otherwise credited in either such Standard*
18 *90.1–1999 or in the 2001 California Non-*
19 *residential Alternative Calculation Method*
20 *Approval Manual, including the following:*

21 *“(I) Natural ventilation.*

22 *“(II) Evaporative cooling.*

23 *“(III) Automatic lighting controls*
24 *such as occupancy sensors, photocells,*
25 *and timeclocks.*

1 “(IV) *Daylighting.*

2 “(V) *Designs utilizing semi-condi-*
3 *tioned spaces that maintain adequate*
4 *comfort conditions without air condi-*
5 *tioning or without heating.*

6 “(VI) *Improved fan system effi-*
7 *ciency, including reductions in static*
8 *pressure.*

9 “(VII) *Advanced unloading mech-*
10 *anisms for mechanical cooling, such as*
11 *multiple or variable speed compressors.*

12 “(VIII) *The calculational methods*
13 *may take into account the extent of*
14 *commissioning in the building, and*
15 *allow the taxpayer to take into account*
16 *measured performance that exceeds*
17 *typical performance.*

18 “(C) *COMPUTER SOFTWARE.—*

19 “(i) *IN GENERAL.—Any calculation*
20 *under this paragraph shall be prepared by*
21 *qualified computer software.*

22 “(ii) *QUALIFIED COMPUTER SOFT-*
23 *WARE.—For purposes of this subparagraph,*
24 *the term ‘qualified computer software’*
25 *means software—*

1 “(I) for which the software de-
2 signer has certified that the software
3 meets all procedures and detailed meth-
4 ods for calculating energy and power
5 consumption and costs as required by
6 the Secretary,

7 “(II) which provides such forms
8 as required to be filed by the Secretary
9 in connection with energy efficiency of
10 property and the deduction allowed
11 under this subsection, and

12 “(III) which provides a notice
13 form which summarizes the energy effi-
14 ciency features of the building and its
15 projected annual energy costs.

16 “(3) ALLOCATION OF DEDUCTION FOR PUBLIC
17 PROPERTY.—In the case of energy efficient commer-
18 cial building property installed on or in public prop-
19 erty, the Secretary shall promulgate a regulation to
20 allow the allocation of the deduction to the person
21 primarily responsible for designing the property in
22 lieu of the public entity which is the owner of such
23 property. Such person shall be treated as the taxpayer
24 for purposes of this subsection.

1 “(4) *NOTICE TO OWNER.*—*The qualified indi-*
2 *vidual shall provide an explanation to the owner of*
3 *the building regarding the energy efficiency features*
4 *of the building and its projected annual energy costs*
5 *as provided in the notice under paragraph*
6 *(2)(C)(i)(III).*

7 “(5) *CERTIFICATION.*—

8 “(A) *IN GENERAL.*—*Except as provided in*
9 *this paragraph, the Secretary shall prescribe pro-*
10 *cedures for the inspection and testing for compli-*
11 *ance of buildings that are comparable, given the*
12 *difference between commercial and residential*
13 *buildings, to the requirements in the Mortgage*
14 *Industry National Accreditation Procedures for*
15 *Home Energy Rating Systems.*

16 “(B) *QUALIFIED INDIVIDUALS.*—*Individ-*
17 *uals qualified to determine compliance shall be*
18 *only those individuals who are recognized by an*
19 *organization certified by the Secretary for such*
20 *purposes. The Secretary may qualify a Home*
21 *Ratings Systems Organization, a local building*
22 *code agency, a State or local energy office, a util-*
23 *ity, or any other organization which meets the*
24 *requirements prescribed under this section.*

1 “(C) *PROFICIENCY OF QUALIFIED INDIVID-*
2 *UALS.—The Secretary shall consult with non-*
3 *profit organizations and State agencies with ex-*
4 *pertise in energy efficiency calculations and in-*
5 *spections to develop proficiency tests and train-*
6 *ing programs to qualify individuals to determine*
7 *compliance.*

8 “(e) *BASIS REDUCTION.—For purposes of this subtitle,*
9 *if a deduction is allowed under this section with respect*
10 *to any energy efficient commercial building property, the*
11 *basis of such property shall be reduced by the amount of*
12 *the deduction so allowed.*

13 “(f) *REGULATIONS.—The Secretary shall promulgate*
14 *such regulations as necessary to take into account new tech-*
15 *nologies regarding energy efficiency and renewable energy*
16 *for purposes of determining energy efficiency and savings*
17 *under this section.*

18 “(g) *TERMINATION.—This section shall not apply with*
19 *respect to any energy efficient commercial building prop-*
20 *erty expenditures in connection with property—*

21 “(1) *the plans for which are not certified under*
22 *subsection (d)(5) on or before December 31, 2007, and*

23 “(2) *the construction of which is not completed*
24 *on or before December 31, 2009.”.*

25 “(b) *CONFORMING AMENDMENTS.—*

1 (1) *Section 1016(a), as amended by this Act, is*
2 *amended by striking “and” at the end of paragraph*
3 *(30), by striking the period at the end of paragraph*
4 *(31) and inserting “, and”, and by adding at the end*
5 *the following new paragraph:*

6 “(32) *to the extent provided in section 179B(e).*”.

7 (2) *Section 1245(a) is amended by inserting*
8 *“179B,” after “179A,” both places it appears in*
9 *paragraphs (2)(C) and (3)(C).*

10 (3) *Section 1250(b)(3) is amended by inserting*
11 *before the period at the end of the first sentence “or*
12 *by section 179B”.*

13 (4) *Section 263(a)(1) is amended by striking*
14 *“or” at the end of subparagraph (G), by striking the*
15 *period at the end of subparagraph (H) and inserting*
16 *“, or”, and by inserting after subparagraph (H) the*
17 *following new subparagraph:*

18 “(I) *expenditures for which a deduction is*
19 *allowed under section 179B.*”.

20 (5) *Section 312(k)(3)(B) is amended by striking*
21 *“or 179A” each place it appears in the heading and*
22 *text and inserting “, 179A, or 179B”.*

23 (c) *CLERICAL AMENDMENT.—The table of sections for*
24 *part VI of subchapter B of chapter 1 is amended by insert-*
25 *ing after section 179A the following new item:*

 “*Sec. 179B. Energy efficient commercial buildings deduction.*”.

1 (d) *EFFECTIVE DATE.*—The amendments made by this
2 section shall apply to taxable years beginning after Sep-
3 tember 30, 2002.

4 **SEC. 2106. ALLOWANCE OF DEDUCTION FOR QUALIFIED**
5 **NEW OR RETROFITTED ENERGY MANAGE-**
6 **MENT DEVICES.**

7 (a) *IN GENERAL.*—Part VI of subchapter B of chapter
8 1 (relating to itemized deductions for individuals and cor-
9 porations), as amended by this Act, is amended by inserting
10 after section 179B the following new section:

11 **“SEC. 179C. DEDUCTION FOR QUALIFIED NEW OR RETRO-**
12 **FITTED ENERGY MANAGEMENT DEVICES.**

13 “(a) *ALLOWANCE OF DEDUCTION.*—In the case of a
14 taxpayer who is a supplier of electric energy or natural
15 gas or a provider of electric energy or natural gas services,
16 there shall be allowed as a deduction an amount equal to
17 the cost of each qualified energy management device placed
18 in service during the taxable year.

19 “(b) *MAXIMUM DEDUCTION.*—The deduction allowed
20 by this section with respect to each qualified energy man-
21 agement device shall not exceed \$30.

22 “(c) *QUALIFIED ENERGY MANAGEMENT DEVICE.*—The
23 term ‘qualified energy management device’ means any tan-
24 gible property to which section 168 applies if such property
25 is a meter or metering device—

1 “(1) which is acquired and used by the taxpayer
2 to enable consumers to manage their purchase or use
3 of electricity or natural gas in response to energy
4 price and usage signals, and

5 “(2) which permits reading of energy price and
6 usage signals on at least a daily basis.

7 “(d) *PROPERTY USED OUTSIDE THE UNITED STATES*
8 *NOT QUALIFIED.*—No deduction shall be allowed under sub-
9 section (a) with respect to property which is used predomi-
10 nantly outside the United States or with respect to the por-
11 tion of the cost of any property taken into account under
12 section 179.

13 “(e) *BASIS REDUCTION.*—

14 “(1) *IN GENERAL.*—For purposes of this title, the
15 basis of any property shall be reduced by the amount
16 of the deduction with respect to such property which
17 is allowed by subsection (a).

18 “(2) *ORDINARY INCOME RECAPTURE.*—For pur-
19 poses of section 1245, the amount of the deduction al-
20 lowable under subsection (a) with respect to any
21 property that is of a character subject to the allow-
22 ance for depreciation shall be treated as a deduction
23 allowed for depreciation under section 167.”.

24 “(b) *CONFORMING AMENDMENTS.*—

1 (1) *Section 263(a)(1), as amended by this Act, is*
2 *amended by striking “or” at the end of subparagraph*
3 *(H), by striking the period at the end of subpara-*
4 *graph (I) and inserting “, or”, and by inserting after*
5 *subparagraph (I) the following new subparagraph:*

6 *“(J) expenditures for which a deduction is*
7 *allowed under section 179C.”.*

8 (2) *Section 312(k)(3)(B), as amended by this*
9 *Act, is amended by striking “or 179B” each place it*
10 *appears in the heading and text and inserting “,*
11 *179B, or 179C”.*

12 (3) *Section 1016(a), as amended by this Act, is*
13 *amended by striking “and” at the end of paragraph*
14 *(31), by striking the period at the end of paragraph*
15 *(32) and inserting “, and”, and by adding at the end*
16 *the following new paragraph:*

17 *“(33) to the extent provided in section*
18 *179C(e)(1).”.*

19 (4) *Section 1245(a), as amended by this Act, is*
20 *amended by inserting “179C,” after “179B,” both*
21 *places it appears in paragraphs (2)(C) and (3)(C).*

22 (5) *The table of contents for subpart B of part*
23 *IV of subchapter A of chapter 1, as amended by this*
24 *Act, is amended by inserting after the item relating*
25 *to section 179B the following new item:*

“Sec. 179C. Deduction for qualified new or retrofitted energy management devices.”.

1 (c) *EFFECTIVE DATE.*—The amendments made by this
2 section shall apply to qualified energy management devices
3 placed in service after the date of the enactment of this Act,
4 in taxable years ending after such date.

5 **SEC. 2107. THREE-YEAR APPLICABLE RECOVERY PERIOD**
6 **FOR DEPRECIATION OF QUALIFIED ENERGY**
7 **MANAGEMENT DEVICES.**

8 (a) *IN GENERAL.*—Subparagraph (A) of section
9 168(e)(3) (relating to classification of property) is amended
10 by striking “and” at the end of clause (ii), by striking the
11 period at the end of clause (iii) and inserting “, and”, and
12 by adding at the end the following new clause:

13 “(iv) any qualified energy manage-
14 ment device.”.

15 (b) *DEFINITION OF QUALIFIED ENERGY MANAGEMENT*
16 *DEVICE.*—Section 168(i) (relating to definitions and spe-
17 cial rules) is amended by inserting at the end the following
18 new paragraph:

19 “(15) *QUALIFIED ENERGY MANAGEMENT DE-*
20 *VICE.*—The term ‘qualified energy management de-
21 *vice*’ means any qualified energy management device
22 as defined in section 179C(c) which is placed in serv-
23 ice by a taxpayer who is a supplier of electric energy

1 or natural gas or a provider of electric energy or nat-
2 ural gas services.”.

3 (c) *EFFECTIVE DATE.*—The amendments made by this
4 section shall apply to property placed in service after the
5 date of the enactment of this Act, in taxable years ending
6 after such date.

7 **SEC. 2108. ENERGY CREDIT FOR COMBINED HEAT AND**
8 **POWER SYSTEM PROPERTY.**

9 (a) *IN GENERAL.*—Subparagraph (A) of section
10 48(a)(3) (defining energy property), as amended by this
11 Act, is amended by striking “or” at the end of clause (ii),
12 by adding “or” at the end of clause (iii), and by inserting
13 after clause (iii) the following new clause:

14 “(iv) combined heat and power system
15 property,”.

16 (b) *COMBINED HEAT AND POWER SYSTEM PROP-*
17 *ERTY.*—Subsection (a) of section 48, as amended by this
18 Act, is amended by redesignating paragraphs (5) and (6)
19 as paragraphs (6) and (7), respectively, and by inserting
20 after paragraph (4) the following new paragraph:

21 “(5) *COMBINED HEAT AND POWER SYSTEM PROP-*
22 *ERTY.*—For purposes of this subsection—

23 “(A) *COMBINED HEAT AND POWER SYSTEM*
24 *PROPERTY.*—The term ‘combined heat and power

1 *system property’ means property comprising a*
2 *system—*

3 “(i) *which uses the same energy source*
4 *for the simultaneous or sequential genera-*
5 *tion of electrical power, mechanical shaft*
6 *power, or both, in combination with the*
7 *generation of steam or other forms of useful*
8 *thermal energy (including heating and cool-*
9 *ing applications),*

10 “(ii) *which has an electrical capacity*
11 *of more than 50 kilowatts or a mechanical*
12 *energy capacity of more than 67 horsepower*
13 *or an equivalent combination of electrical*
14 *and mechanical energy capacities,*

15 “(iii) *which produces—*

16 “(I) *at least 20 percent of its total*
17 *useful energy in the form of thermal*
18 *energy, and*

19 “(II) *at least 20 percent of its*
20 *total useful energy in the form of elec-*
21 *trical or mechanical power (or com-*
22 *bination thereof),*

23 “(iv) *the energy efficiency percentage*
24 *of which exceeds 60 percent (70 percent in*
25 *the case of a system with an electrical ca-*

1 *capacity in excess of 50 megawatts or a me-*
2 *chanical energy capacity in excess of 67,000*
3 *horsepower, or an equivalent combination of*
4 *electrical and mechanical energy capaci-*
5 *ties), and*

6 *“(v) which is placed in service after*
7 *December 31, 2002, and before January 1,*
8 *2007.*

9 *“(B) SPECIAL RULES.—*

10 *“(i) ENERGY EFFICIENCY PERCENT-*
11 *AGE.—For purposes of subparagraph*
12 *(A)(iv), the energy efficiency percentage of a*
13 *system is the fraction—*

14 *“(I) the numerator of which is the*
15 *total useful electrical, thermal, and me-*
16 *chanical power produced by the system*
17 *at normal operating rates, and ex-*
18 *pected to be consumed in its normal*
19 *application, and*

20 *“(II) the denominator of which is*
21 *the lower heating value of the primary*
22 *fuel source for the system.*

23 *“(ii) DETERMINATIONS MADE ON BTU*
24 *BASIS.—The energy efficiency percentage*

1 and the percentages under subparagraph
2 (A)(iii) shall be determined on a Btu basis.

3 “(iii) *INPUT AND OUTPUT PROPERTY*
4 *NOT INCLUDED.*—The term ‘combined heat
5 and power system property’ does not in-
6 clude property used to transport the energy
7 source to the facility or to distribute energy
8 produced by the facility.

9 “(iv) *PUBLIC UTILITY PROPERTY.*—

10 “(I) *ACCOUNTING RULE FOR PUB-*
11 *LIC UTILITY PROPERTY.*—If the com-
12 bined heat and power system property
13 is public utility property (as defined
14 in section 168(i)(10)), the taxpayer
15 may only claim the credit under the
16 subsection if, with respect to such prop-
17 erty, the taxpayer uses a normalization
18 method of accounting.

19 “(II) *CERTAIN EXCEPTION NOT TO*
20 *APPLY.*—The matter following para-
21 graph (3)(D) shall not apply to com-
22 bined heat and power system property.

23 “(v) *NONAPPLICATION OF CERTAIN*
24 *RULES.*—For purposes of determining if the
25 term ‘combined heat and power system

1 *property’ includes technologies which gen-*
2 *erate electricity or mechanical power using*
3 *back-pressure steam turbines in place of ex-*
4 *isting pressure-reducing valves or which*
5 *make use of waste heat from industrial*
6 *processes such as by using organic rankin,*
7 *stirling, or kalina heat engine systems, sub-*
8 *paragraph (A) shall be applied without re-*
9 *gard to clauses (iii) and (iv) thereof.*

10 *“(C) EXTENSION OF DEPRECIATION RECOV-*
11 *ERY PERIOD.—If a taxpayer is allowed credit*
12 *under this section for combined heat and power*
13 *system property and such property would (but*
14 *for this subparagraph) have a class life of 15*
15 *years or less under section 168, such property*
16 *shall be treated as having a 22-year class life for*
17 *purposes of section 168.”.*

18 *(c) NO CARRYBACK OF ENERGY CREDIT BEFORE EF-*
19 *FECTIVE DATE.—Subsection (d) of section 39, as amended*
20 *by this Act, is amended by adding at the end the following*
21 *new paragraph:*

22 *“(15) NO CARRYBACK OF ENERGY CREDIT BE-*
23 *FORE EFFECTIVE DATE.—No portion of the unused*
24 *business credit for any taxable year which is attrib-*
25 *utable to the energy credit with respect to property*

1 described in section 48(a)(5) may be carried back to
2 a taxable year ending before January 1, 2003.”.

3 (d) *CONFORMING AMENDMENTS.*—

4 (A) Section 25C(e)(6), as added by this Act,
5 is amended by striking “section 48(a)(5)(C)”
6 and inserting “section 48(a)(6)(C)”.

7 (B) Section 29(b)(3)(A)(i)(III), as amended
8 by this Act, is amended by striking “section
9 48(a)(5)(C)” and inserting “section
10 48(a)(6)(C)”.

11 (e) *EFFECTIVE DATE.*—The amendments made by this
12 section shall apply to property placed in service after De-
13 cember 31, 2002, in taxable years ending after such date.

14 **SEC. 2109. CREDIT FOR ENERGY EFFICIENCY IMPROVE-**
15 **MENTS TO EXISTING HOMES.**

16 (a) *IN GENERAL.*—Subpart A of part IV of subchapter
17 A of chapter 1 (relating to nonrefundable personal credits),
18 as amended by this Act, is amended by inserting after sec-
19 tion 25C the following new section:

20 **“SEC. 25D. ENERGY EFFICIENCY IMPROVEMENTS TO EXIST-**
21 **ING HOMES.**

22 “(a) *ALLOWANCE OF CREDIT.*—In the case of an indi-
23 vidual, there shall be allowed as a credit against the tax
24 imposed by this chapter for the taxable year an amount
25 equal to 10 percent of the amount paid or incurred by the

1 *taxpayer for qualified energy efficiency improvements in-*
2 *stalled during such taxable year.*

3 “(b) *LIMITATIONS.—*

4 “(1) *MAXIMUM CREDIT.—The credit allowed by*
5 *this section with respect to a dwelling shall not exceed*
6 *\$300.*

7 “(2) *PRIOR CREDIT AMOUNTS FOR TAXPAYER ON*
8 *SAME DWELLING TAKEN INTO ACCOUNT.—If a credit*
9 *was allowed to the taxpayer under subsection (a) with*
10 *respect to a dwelling in 1 or more prior taxable years,*
11 *the amount of the credit otherwise allowable for the*
12 *taxable year with respect to that dwelling shall not*
13 *exceed the amount of \$300 reduced by the sum of the*
14 *credits allowed under subsection (a) to the taxpayer*
15 *with respect to the dwelling for all prior taxable*
16 *years.*

17 “(c) *CARRYFORWARD OF UNUSED CREDIT.—If the*
18 *credit allowable under subsection (a) exceeds the limitation*
19 *imposed by section 26(a) for such taxable year reduced by*
20 *the sum of the credits allowable under this subpart (other*
21 *than this section) for any taxable year, such excess shall*
22 *be carried to the succeeding taxable year and added to the*
23 *credit allowable under subsection (a) for such succeeding*
24 *taxable year.*

1 “(d) *QUALIFIED ENERGY EFFICIENCY IMPROVE-*
2 *MENTS.*—*For purposes of this section, the term ‘qualified*
3 *energy efficiency improvements’ means any energy efficient*
4 *building envelope component which is certified to meet or*
5 *exceed the prescriptive criteria for such component in the*
6 *2000 International Energy Conservation Code, any energy*
7 *efficient building envelope component which is described in*
8 *subsection (f)(4)(B) and is certified by the Energy Star pro-*
9 *gram managed jointly by the Environmental Protection*
10 *Agency and the Department of Energy, or any combination*
11 *of energy efficiency measures which are certified as achiev-*
12 *ing at least a 30 percent reduction in heating and cooling*
13 *energy usage for the dwelling (as measured in terms of en-*
14 *ergy cost to the taxpayer), if—*

15 “(1) *such component or combination of measures*
16 *is installed in or on a dwelling—*

17 “(A) *located in the United States, and*

18 “(B) *owned and used by the taxpayer as the*
19 *taxpayer’s principal residence (within the mean-*
20 *ing of section 121),*

21 “(2) *the original use of such component or com-*
22 *bination of measures commences with the taxpayer,*
23 *and*

1 “(3) *such component or combination of measures*
2 *reasonably can be expected to remain in use for at*
3 *least 5 years.*

4 “(e) *CERTIFICATION.—*

5 “(1) *METHODS OF CERTIFICATION.—*

6 “(A) *COMPONENT-BASED METHOD.—The*
7 *certification described in subsection (d) for any*
8 *component described in such subsection shall be*
9 *determined on the basis of applicable energy effi-*
10 *ciency ratings (including product labeling re-*
11 *quirements) for affected building envelope compo-*
12 *nents.*

13 “(B) *PERFORMANCE-BASED METHOD.—*

14 “(i) *IN GENERAL.—The certification*
15 *described in subsection (d) for any combina-*
16 *tion of measures described in such sub-*
17 *section shall be—*

18 “(I) *determined by comparing the*
19 *projected heating and cooling energy*
20 *usage for the dwelling to such usage for*
21 *such dwelling in its original condition,*
22 *and*

23 “(II) *accompanied by a written*
24 *analysis documenting the proper ap-*
25 *plication of a permissible energy per-*

1 *formance calculation method to the*
2 *specific circumstances of such dwelling.*

3 “(ii) *COMPUTER SOFTWARE.—Com-*
4 *puter software shall be used in support of a*
5 *performance-based method certification*
6 *under clause (i). Such software shall meet*
7 *procedures and methods for calculating en-*
8 *ergy and cost savings in regulations pro-*
9 *mulgated by the Secretary of Energy. Such*
10 *regulations on the specifications for software*
11 *and verification protocols shall be based on*
12 *the 2001 California Residential Alternative*
13 *Calculation Method Approval Manual.*

14 “(2) *PROVIDER.—A certification described in*
15 *subsection (d) shall be provided by—*

16 “(A) *in the case of the method described in*
17 *paragraph (1)(A), by a third party, such as a*
18 *local building regulatory authority, a utility, a*
19 *manufactured home production inspection pri-*
20 *mary inspection agency (IPIA), or a home en-*
21 *ergy rating organization, or*

22 “(B) *in the case of the method described in*
23 *paragraph (1)(B), an individual recognized by*
24 *an organization designated by the Secretary for*
25 *such purposes.*

1 “(3) *FORM.*—A certification described in sub-
2 section (d) shall be made in writing on forms which
3 specify in readily inspectable fashion the energy effi-
4 cient components and other measures and their re-
5 spective efficiency ratings, and which include a per-
6 manent label affixed to the electrical distribution
7 panel of the dwelling.

8 “(4) *REGULATIONS.*—

9 “(A) *IN GENERAL.*—In prescribing regula-
10 tions under this subsection for certification meth-
11 ods described in paragraph (1)(B), the Secretary,
12 after examining the requirements for energy con-
13 sultants and home energy ratings providers spec-
14 ified by the Mortgage Industry National Accredi-
15 tation Procedures for Home Energy Rating Sys-
16 tems, shall prescribe procedures for calculating
17 annual energy usage and cost reductions for
18 heating and cooling and for the reporting of the
19 results. Such regulations shall—

20 “(i) provide that any calculation pro-
21 cedures be fuel neutral such that the same
22 energy efficiency measures allow a dwelling
23 to be eligible for the credit under this sec-
24 tion regardless of whether such dwelling uses

1 *a gas or oil furnace or boiler or an electric*
2 *heat pump, and*

3 “(ii) *require that any computer soft-*
4 *ware allow for the printing of the Federal*
5 *tax forms necessary for the credit under this*
6 *section and for the printing of forms for*
7 *disclosure to the owner of the dwelling.*

8 “(B) *PROVIDERS.—For purposes of para-*
9 *graph (2)(B), the Secretary shall establish re-*
10 *quirements for the designation of individuals*
11 *based on the requirements for energy consultants*
12 *and home energy raters specified by the Mort-*
13 *gage Industry National Accreditation Procedures*
14 *for Home Energy Rating Systems.*

15 “(f) *DEFINITIONS AND SPECIAL RULES.—For pur-*
16 *poses of this section—*

17 “(1) *DOLLAR AMOUNTS IN CASE OF JOINT OCCU-*
18 *PANCY.—In the case of any dwelling unit which is*
19 *jointly occupied and used during any calendar year*
20 *as a residence by 2 or more individuals the following*
21 *shall apply:*

22 “(A) *The amount of the credit allowable*
23 *under subsection (a) by reason of expenditures*
24 *for the qualified energy efficiency improvements*
25 *made during such calendar year by any of such*

1 *individuals with respect to such dwelling unit*
2 *shall be determined by treating all of such indi-*
3 *viduals as 1 taxpayer whose taxable year is such*
4 *calendar year.*

5 “(B) *There shall be allowable, with respect*
6 *to such expenditures to each of such individuals,*
7 *a credit under subsection (a) for the taxable year*
8 *in which such calendar year ends in an amount*
9 *which bears the same ratio to the amount deter-*
10 *mined under subparagraph (A) as the amount of*
11 *such expenditures made by such individual dur-*
12 *ing such calendar year bears to the aggregate of*
13 *such expenditures made by all of such individ-*
14 *uals during such calendar year.*

15 “(2) *TENANT-STOCKHOLDER IN COOPERATIVE*
16 *HOUSING CORPORATION.—In the case of an indi-*
17 *vidual who is a tenant-stockholder (as defined in sec-*
18 *tion 216) in a cooperative housing corporation (as de-*
19 *fined in such section), such individual shall be treated*
20 *as having paid his tenant-stockholder’s proportionate*
21 *share (as defined in section 216(b)(3)) of the cost of*
22 *qualified energy efficiency improvements made by*
23 *such corporation.*

24 “(3) *CONDOMINIUMS.—*

1 “(A) *IN GENERAL.*—*In the case of an indi-*
2 *vidual who is a member of a condominium man-*
3 *agement association with respect to a condo-*
4 *minium which the individual owns, such indi-*
5 *vidual shall be treated as having paid the indi-*
6 *vidual’s proportionate share of the cost of quali-*
7 *fied energy efficiency improvements made by*
8 *such association.*

9 “(B) *CONDOMINIUM MANAGEMENT ASSOCIA-*
10 *TION.*—*For purposes of this paragraph, the term*
11 *‘condominium management association’ means*
12 *an organization which meets the requirements of*
13 *paragraph (1) of section 528(c) (other than sub-*
14 *paragraph (E) thereof) with respect to a condo-*
15 *minium project substantially all of the units of*
16 *which are used as residences.*

17 “(4) *BUILDING ENVELOPE COMPONENT.*—*The*
18 *term ‘building envelope component’ means—*

19 “(A) *insulation material or system which is*
20 *specifically and primarily designed to reduce the*
21 *heat loss or gain of a dwelling when installed in*
22 *or on such dwelling,*

23 “(B) *exterior windows (including skylights),*
24 *and*

25 “(C) *exterior doors.*

1 “(5) *MANUFACTURED HOMES INCLUDED.*—For
2 purposes of this section, the term ‘dwelling’ includes
3 a manufactured home which conforms to Federal
4 *Manufactured Home Construction and Safety Stand-*
5 *ards (24 C.F.R. 3280).*

6 “(g) *BASIS ADJUSTMENT.*—For purposes of this sub-
7 title, if a credit is allowed under this section for any ex-
8 penditure with respect to any property, the increase in the
9 basis of such property which would (but for this subsection)
10 result from such expenditure shall be reduced by the amount
11 of the credit so allowed.

12 “(h) *APPLICATION OF SECTION.*—Subsection (a) shall
13 apply to qualified energy efficiency improvements installed
14 during the period beginning on the date of the enactment
15 of this section and ending on December 31, 2006.”.

16 (b) *CREDIT ALLOWED AGAINST REGULAR TAX AND*
17 *ALTERNATIVE MINIMUM TAX.*—

18 (1) *IN GENERAL.*—Section 25D(b), as added by
19 subsection (a), is amended by adding at the end the
20 following new paragraph:

21 “(3) *LIMITATION BASED ON AMOUNT OF TAX.*—
22 The credit allowed under subsection (a) for the tax-
23 able year shall not exceed the excess of—

1 “(A) the sum of the regular tax liability (as
2 defined in section 26(b)) plus the tax imposed by
3 section 55, over

4 “(B) the sum of the credits allowable under
5 this subpart (other than this section) and section
6 27 for the taxable year.”.

7 (2) CONFORMING AMENDMENTS.—

8 (A) Section 25D(c), as added by subsection
9 (a), is amended by striking “section 26(a) for
10 such taxable year reduced by the sum of the cred-
11 its allowable under this subpart (other than this
12 section)” and inserting “subsection (b)(3)”.

13 (B) Section 23(b)(4)(B), as amended by this
14 Act, is amended by striking “section 25C” and
15 inserting “sections 25C and 25D”.

16 (C) Section 24(b)(3)(B), as amended by this
17 Act, is amended by striking “and 25C” and in-
18 serting “25C, and 25D”.

19 (D) Section 25(e)(1)(C), as amended by this
20 Act, is amended by inserting “25D,” after
21 “25C,”.

22 (E) Section 25B(g)(2), as amended by this
23 Act, is amended by striking “23 and 25C” and
24 inserting “23, 25C, and 25D”.

1 (F) Section 26(a)(1), as amended by this
2 Act, is amended by striking “and 25C” and in-
3 serting “25C, and 25D”.

4 (G) Section 904(h), as amended by this Act,
5 is amended by striking “and 25C” and inserting
6 “25C, and 25D”.

7 (H) Section 1400C(d), as amended by this
8 Act, is amended by striking “and 25C” and in-
9 serting “25C, and 25D”.

10 (c) *ADDITIONAL CONFORMING AMENDMENTS.*—

11 (1) Section 23(c), as in effect for taxable years
12 beginning before January 1, 2004, and as amended
13 by this Act, is amended by inserting “, 25D,” after
14 “sections 25C”.

15 (2) Section 25(e)(1)(C), as in effect for taxable
16 years beginning before January 1, 2004, and as
17 amended by this Act, is amended by inserting “25D,”
18 after “25C,”.

19 (3) Subsection (a) of section 1016, as amended
20 by this Act, is amended by striking “and” at the end
21 of paragraph (32), by striking the period at the end
22 of paragraph (33) and inserting “; and”, and by add-
23 ing at the end the following new paragraph:

1 “(34) to the extent provided in section 25D(f), in
2 the case of amounts with respect to which a credit has
3 been allowed under section 25D.”.

4 (4) Section 1400C(d), as in effect for taxable
5 years beginning before January 1, 2004, and as
6 amended by this Act, is amended by striking “section
7 25C” and inserting “sections 25C and 25D”.

8 (5) The table of sections for subpart A of part IV
9 of subchapter A of chapter 1, as amended by this Act,
10 is amended by inserting after the item relating to sec-
11 tion 25C the following new item:

 “Sec. 25D. Energy efficiency improvements to existing homes.”.

12 (d) **EFFECTIVE DATES.**—

13 (1) **IN GENERAL.**—Except as provided by para-
14 graph (2), the amendments made by this section shall
15 apply to expenditures after December 31, 2002, in
16 taxable years ending after such date.

17 (2) **SUBSECTION (b).**—The amendments made by
18 subsection (b) shall apply to taxable years beginning
19 after December 31, 2003.

20 **SEC. 2110. ALLOWANCE OF DEDUCTION FOR QUALIFIED**
21 **NEW OR RETROFITTED WATER SUBMETERING**
22 **DEVICES.**

23 (a) **IN GENERAL.**—Part VI of subchapter B of chapter
24 1 (relating to itemized deductions for individuals and cor-

1 porations), as amended by this Act, is amended by inserting
2 after section 179D the following new section:

3 **“SEC. 179E. DEDUCTION FOR QUALIFIED NEW OR RETRO-**
4 **FITTED WATER SUBMETERING DEVICES.**

5 “(a) ALLOWANCE OF DEDUCTION.—In the case of a
6 taxpayer who is an eligible resupplier, there shall be allowed
7 as a deduction an amount equal to the cost of each qualified
8 water submetering device placed in service during the tax-
9 able year.

10 “(b) MAXIMUM DEDUCTION.—The deduction allowed
11 by this section with respect to each qualified water sub-
12 metering device shall not exceed \$30.

13 “(c) ELIGIBLE RESUPPLIER.—For purposes of this
14 section, the term ‘eligible resupplier’ means any taxpayer
15 who purchases and installs qualified water submetering de-
16 vices in every unit in any multi-unit property.

17 “(d) QUALIFIED WATER SUBMETERING DEVICE.—The
18 term ‘qualified water submetering device’ means any tan-
19 gible property to which section 168 applies if such property
20 is a submetering device (including ancillary equipment)—

21 “(1) which is purchased and installed by the tax-
22 payer to enable consumers to manage their purchase
23 or use of water in response to water price and usage
24 signals, and

1 “(2) which permits reading of water price and
2 usage signals on at least a daily basis.

3 “(e) *PROPERTY USED OUTSIDE THE UNITED STATES*
4 *NOT QUALIFIED.*—No deduction shall be allowed under sub-
5 section (a) with respect to property which is used predomi-
6 nantly outside the United States or with respect to the por-
7 tion of the cost of any property taken into account under
8 section 179.

9 “(f) *BASIS REDUCTION.*—

10 “(1) *IN GENERAL.*—For purposes of this title, the
11 basis of any property shall be reduced by the amount
12 of the deduction with respect to such property which
13 is allowed by subsection (a).

14 “(2) *ORDINARY INCOME RECAPTURE.*—For pur-
15 poses of section 1245, the amount of the deduction al-
16 lowable under subsection (a) with respect to any
17 property that is of a character subject to the allow-
18 ance for depreciation shall be treated as a deduction
19 allowed for depreciation under section 167.

20 “(g) *TERMINATION.*—This section shall not apply to
21 any property placed in service after December 31, 2007.”.

22 “(b) *CONFORMING AMENDMENTS.*—

23 “(1) Section 263(a)(1), as amended by this Act, is
24 amended by striking “or” at the end of subparagraph
25 (J), by striking the period at the end of subparagraph

1 *(K) and inserting “, or”, and by inserting after sub-*
2 *paragraph (K) the following new subparagraph:*

3 *“(L) expenditures for which a deduction is*
4 *allowed under section 179E.”.*

5 (2) *Section 312(k)(3)(B), as amended by this*
6 *Act, is amended by striking “or 179D” each place it*
7 *appears in the heading and text and inserting “,*
8 *179D, or 179E”.*

9 (3) *Section 1016(a), as amended by this Act, is*
10 *amended by striking “and” at the end of paragraph*
11 *(34), by striking the period at the end of paragraph*
12 *(35) and inserting “, and”, and by adding at the end*
13 *the following new paragraph:*

14 *“(36) to the extent provided in section*
15 *179E(f)(1).”.*

16 (4) *Section 1245(a), as amended by this Act, is*
17 *amended by inserting “179E,” after “179D,” both*
18 *places it appears in paragraphs (2)(C) and (3)(C).*

19 (5) *The table of contents for subpart B of part*
20 *IV of subchapter A of chapter 1, as amended by this*
21 *Act, is amended by inserting after the item relating*
22 *to section 179D the following new item:*

“Sec. 179E. Deduction for qualified new or retrofitted water sub-
metering devices.”.

23 (c) *EFFECTIVE DATE.—The amendments made by this*
24 *section shall apply to qualified water submetering devices*

1 *placed in service after the date of the enactment of this Act,*
 2 *in taxable years ending after such date.*

3 **SEC. 2111. THREE-YEAR APPLICABLE RECOVERY PERIOD**
 4 **FOR DEPRECIATION OF QUALIFIED WATER**
 5 **SUBMETERING DEVICES.**

6 (a) *IN GENERAL.*—Subparagraph (A) of section
 7 168(e)(3) (relating to classification of property) is amended
 8 by striking “and” at the end of clause (iii), by striking the
 9 period at the end of clause (iv) and inserting “, and”, and
 10 by adding at the end the following new clause:

11 “(v) any qualified water submetering
 12 device.”.

13 (b) *DEFINITION OF QUALIFIED WATER SUBMETERING*
 14 *DEVICE.*—Section 168(i) (relating to definitions and spe-
 15 cial rules), as amended by this Act, is amended by inserting
 16 at the end the following new paragraph:

17 “(16) *QUALIFIED WATER SUBMETERING DE-*
 18 *VICE.*—The term ‘qualified water submetering device’
 19 means any qualified water submetering device (as de-
 20 fined in section 179E(d)) which is placed in service
 21 before January 1, 2008, by a taxpayer who is an eli-
 22 gible resupplier (as defined in section 179E(c)).”.

23 (c) *EFFECTIVE DATE.*—The amendments made by this
 24 section shall apply to property placed in service after the

1 *date of the enactment of this Act, in taxable years ending*
 2 *after such date.*

3 **TITLE XXII—CLEAN COAL**
 4 **INCENTIVES**

5 ***Subtitle A—Credit for Emission Re-***
 6 ***ductions and Efficiency Improve-***
 7 ***ments in Existing Coal-Based***
 8 ***Electricity Generation Facilities***

9 **SEC. 2201. CREDIT FOR PRODUCTION FROM A QUALIFYING**
 10 **CLEAN COAL TECHNOLOGY UNIT.**

11 (a) *CREDIT FOR PRODUCTION FROM A QUALIFYING*
 12 *CLEAN COAL TECHNOLOGY UNIT.—Subpart D of part IV*
 13 *of subchapter A of chapter 1 (relating to business related*
 14 *credits), as amended by this Act, is amended by adding at*
 15 *the end the following new section:*

16 **“SEC. 45I. CREDIT FOR PRODUCTION FROM A QUALIFYING**
 17 **CLEAN COAL TECHNOLOGY UNIT.**

18 “(a) *GENERAL RULE.—For purposes of section 38, the*
 19 *qualifying clean coal technology production credit of any*
 20 *taxpayer for any taxable year is equal to the product of—*

21 “(1) *the applicable amount of clean coal tech-*
 22 *nology production credit, multiplied by*

23 “(2) *the applicable percentage of the kilowatt*
 24 *hours of electricity produced by the taxpayer during*
 25 *such taxable year at a qualifying clean coal tech-*

1 *nology unit, but only if such production occurs dur-*
2 *ing the 10-year period beginning on the date the unit*
3 *was returned to service after becoming a qualifying*
4 *clean coal technology unit.*

5 “(b) *APPLICABLE AMOUNT.*—

6 “(1) *IN GENERAL.*—*For purposes of this section,*
7 *the applicable amount of clean coal technology pro-*
8 *duction credit is equal to \$0.0034.*

9 “(2) *INFLATION ADJUSTMENT.*—*For calendar*
10 *years after 2003, the applicable amount of clean coal*
11 *technology production credit shall be adjusted by mul-*
12 *tiplying such amount by the inflation adjustment fac-*
13 *tor for the calendar year in which the amount is ap-*
14 *plied. If any amount as increased under the pre-*
15 *ceding sentence is not a multiple of 0.01 cent, such*
16 *amount shall be rounded to the nearest multiple of*
17 *0.01 cent.*

18 “(c) *APPLICABLE PERCENTAGE.*—*For purposes of this*
19 *section, with respect to any qualifying clean coal technology*
20 *unit, the applicable percentage is the percentage equal to*
21 *the ratio which the portion of the national megawatt capac-*
22 *ity limitation allocated to the taxpayer with respect to such*
23 *unit under subsection (e) bears to the total megawatt capac-*
24 *ity of such unit.*

1 “(d) *DEFINITIONS AND SPECIAL RULES.—For pur-*
2 *poses of this section—*

3 “(1) *QUALIFYING CLEAN COAL TECHNOLOGY*
4 *UNIT.—The term ‘qualifying clean coal technology*
5 *unit’ means a clean coal technology unit of the tax-*
6 *payer which—*

7 “(A) *on the date of the enactment of this*
8 *section was a coal-based electricity generating*
9 *steam generator-turbine unit which was not a*
10 *clean coal technology unit,*

11 “(B) *has a nameplate capacity rating of*
12 *not more than 300,000 kilowatts,*

13 “(C) *becomes a clean coal technology unit*
14 *as the result of the retrofitting, repowering, or*
15 *replacement of the unit with clean coal tech-*
16 *nology during the 10-year period beginning on*
17 *the date of the enactment of this section,*

18 “(D) *is not receiving nor is scheduled to re-*
19 *ceive funding under the Clean Coal Technology*
20 *Program, the Power Plant Improvement Initia-*
21 *tive, or the Clean Coal Power Initiative admin-*
22 *istered by the Secretary of Energy, and*

23 “(E) *receives an allocation of a portion of*
24 *the national megawatt capacity limitation under*
25 *subsection (e).*

1 “(2) *CLEAN COAL TECHNOLOGY UNIT.*—*The term*
2 *‘clean coal technology unit’ means a unit which—*

3 “(A) *uses clean coal technology, including*
4 *advanced pulverized coal or atmospheric fluid-*
5 *ized bed combustion, pressurized fluidized bed*
6 *combustion, integrated gasification combined*
7 *cycle, or any other technology for the production*
8 *of electricity,*

9 “(B) *uses coal to produce 75 percent or*
10 *more of its thermal output as electricity,*

11 “(C) *has a design net heat rate of at least*
12 *500 less than that of such unit as described in*
13 *paragraph (1)(A),*

14 “(D) *has a maximum design net heat rate*
15 *of not more than 9,500, and*

16 “(E) *meets the pollution control require-*
17 *ments of paragraph (3).*

18 “(3) *POLLUTION CONTROL REQUIREMENTS.*—

19 “(A) *IN GENERAL.*—*A unit meets the re-*
20 *quirements of this paragraph if—*

21 “(i) *its emissions of sulfur dioxide, ni-*
22 *trogen oxide, or particulates meet the lower*
23 *of the emission levels for each such emission*
24 *specified in—*

25 “(I) *subparagraph (B), or*

1 “(II) the new source performance
2 standards of the Clean Air Act (42
3 U.S.C. 7411) which are in effect for the
4 category of source at the time of the
5 retrofitting, repowering, or replacement
6 of the unit, and

7 “(ii) its emissions do not exceed any
8 relevant emission level specified by regula-
9 tion pursuant to the hazardous air pollut-
10 ant requirements of the Clean Air Act (42
11 U.S.C. 7412) in effect at the time of the ret-
12 rofitting, repowering, or replacement.

13 “(B) SPECIFIC LEVELS.—The levels speci-
14 fied in this subparagraph are—

15 “(i) in the case of sulfur dioxide emis-
16 sions, 50 percent of the sulfur dioxide emis-
17 sion levels specified in the new source per-
18 formance standards of the Clean Air Act
19 (42 U.S.C. 7411) in effect on the date of the
20 enactment of this section for the category of
21 source,

22 “(ii) in the case of nitrogen oxide
23 emissions—

1 “(I) 0.1 pound per million Btu of
2 heat input if the unit is not a cyclone-
3 fired boiler, and

4 “(II) if the unit is a cyclone-fired
5 boiler, 15 percent of the uncontrolled
6 nitrogen oxide emissions from such
7 boilers, and

8 “(iii) in the case of particulate emis-
9 sions, 0.02 pound per million Btu of heat
10 input.

11 “(4) *DESIGN NET HEAT RATE.*—*The design net*
12 *heat rate with respect to any unit, measured in Btu*
13 *per kilowatt hour (HHV)—*

14 “(A) shall be based on the design annual
15 heat input to and the design annual net elec-
16 trical output from such unit (determined without
17 regard to such unit’s co-generation of steam),

18 “(B) shall be adjusted for the heat content
19 of the design coal to be used by the unit if it is
20 less than 12,000 Btu per pound according to the
21 following formula:

22 *Design net heat rate = Unit net heat rate X [1-*
23 *{((12,000-design coal heat content, Btu per pound)/*
24 *1,000) X 0.013}], and*

1 “(C) shall be corrected for the site reference
2 conditions of—

3 “(i) elevation above sea level of 500 feet,

4 “(ii) air pressure of 14.4 pounds per square inch
5 absolute (psia),

6 “(iii) temperature, dry bulb of 63°F,

7 “(iv) temperature, wet bulb of 54°F, and

8 “(v) relative humidity of 55 percent.

9 “(5) HHV.—The term ‘HHV’ means higher
10 heating value.

11 “(6) APPLICATION OF CERTAIN RULES.—The
12 rules of paragraphs (3), (4), and (5) of section 45(d)
13 shall apply.

14 “(7) INFLATION ADJUSTMENT FACTOR.—

15 “(A) IN GENERAL.—The term ‘inflation ad-
16 justment factor’ means, with respect to a cal-
17 endar year, a fraction the numerator of which is
18 the GDP implicit price deflator for the preceding
19 calendar year and the denominator of which is
20 the GDP implicit price deflator for the calendar
21 year 2002.

22 “(B) GDP IMPLICIT PRICE DEFLATOR.—
23 The term ‘GDP implicit price deflator’ means
24 the most recent revision of the implicit price
25 deflator for the gross domestic product as com-

1 *puted by the Department of Commerce before*
2 *March 15 of the calendar year.*

3 “(8) *NONCOMPLIANCE WITH POLLUTION LAWS.—*
4 *For purposes of this section, a unit which is not in*
5 *compliance with the applicable State and Federal pol-*
6 *lution prevention, control, and permit requirements*
7 *for any period of time shall not be considered to be*
8 *a qualifying clean coal technology unit during such*
9 *period.*

10 “(e) *NATIONAL LIMITATION ON THE AGGREGATE CA-*
11 *PACITY OF QUALIFYING CLEAN COAL TECHNOLOGY*
12 *UNITS.—*

13 “(1) *IN GENERAL.—For purposes of subsection*
14 *(d)(1)(E), the national megawatt capacity limitation*
15 *for qualifying clean coal technology units is 4,000*
16 *megawatts.*

17 “(2) *ALLOCATION OF LIMITATION.—The Sec-*
18 *retary shall allocate the national megawatt capacity*
19 *limitation for qualifying clean coal technology units*
20 *in such manner as the Secretary may prescribe under*
21 *the regulations under paragraph (3).*

22 “(3) *REGULATIONS.—Not later than 6 months*
23 *after the date of the enactment of this section, the Sec-*
24 *retary shall prescribe such regulations as may be nec-*
25 *essary or appropriate—*

1 “(A) to carry out the purposes of this sub-
2 section,

3 “(B) to limit the capacity of any qualifying
4 clean coal technology unit to which this section
5 applies so that the combined megawatt capacity
6 allocated to all such units under this subsection
7 when all such units are placed in service during
8 the 10-year period described in subsection
9 (d)(1)(C), does not exceed 4,000 megawatts,

10 “(C) to provide a certification process under
11 which the Secretary, in consultation with the
12 Secretary of Energy, shall approve and allocate
13 the national megawatt capacity limitation—

14 “(i) to encourage that units with the
15 highest thermal efficiencies, when adjusted
16 for the heat content of the design coal and
17 site reference conditions described in sub-
18 section (d)(4)(C), and environmental per-
19 formance be placed in service as soon as
20 possible,

21 “(ii) to allocate capacity to taxpayers
22 that have a definite and credible plan for
23 placing into commercial operation a quali-
24 fying clean coal technology unit,
25 including—

1 “(I) a site,

2 “(II) contractual commitments for
3 procurement and construction or, in
4 the case of regulated utilities, the
5 agreement of the State utility commis-
6 sion,

7 “(III) filings for all necessary
8 preconstruction approvals,

9 “(IV) a demonstrated record of
10 having successfully completed com-
11 parable projects on a timely basis, and

12 “(V) such other factors that the
13 Secretary determines are appropriate,

14 “(D) to allocate the national megawatt ca-
15 pacity limitation to a portion of the capacity of
16 a qualifying clean coal technology unit if the
17 Secretary determines that such an allocation
18 would maximize the amount of efficient produc-
19 tion encouraged with the available tax credits,

20 “(E) to set progress requirements and con-
21 ditional approvals so that capacity allocations
22 for clean coal technology units that become un-
23 likely to meet the necessary conditions for quali-
24 fying can be reallocated by the Secretary to other
25 clean coal technology units, and

1 “(F) to provide taxpayers with opportuni-
2 ties to correct administrative errors and omis-
3 sions with respect to allocations and record keep-
4 ing within a reasonable period after discovery,
5 taking into account the availability of regula-
6 tions and other administrative guidance from
7 the Secretary.”.

8 (b) *CREDIT TREATED AS BUSINESS CREDIT*.—Section
9 38(b), as amended by this Act, is amended by striking
10 “plus” at the end of paragraph (18), by striking the period
11 at the end of paragraph (19) and inserting “, plus”, and
12 by adding at the end the following new paragraph:

13 “(20) the qualifying clean coal technology pro-
14 duction credit determined under section 45I(a).”.

15 (c) *TRANSITIONAL RULE*.—Section 39(d) (relating to
16 transitional rules), as amended by this Act, is amended by
17 adding at the end the following new paragraph:

18 “(16) *NO CARRYBACK OF SECTION 45I CREDIT*
19 *BEFORE EFFECTIVE DATE*.—No portion of the unused
20 business credit for any taxable year which is attrib-
21 utable to the qualifying clean coal technology produc-
22 tion credit determined under section 45I may be car-
23 ried back to a taxable year ending on or before the
24 date of the enactment of section 45I.”.

1 (d) *CLERICAL AMENDMENT.*—The table of sections for
 2 subpart D of part IV of subchapter A of chapter 1, as
 3 amended by this Act, is amended by adding at the end the
 4 following new item:

“Sec. 45I. Credit for production from a qualifying clean coal technology unit.”.

5 (e) *EFFECTIVE DATE.*—The amendments made by this
 6 section shall apply to production after the date of the enact-
 7 ment of this Act, in taxable years ending after such date.

8 **Subtitle B—Incentives for Early**
 9 **Commercial Applications of Ad-**
 10 **vanced Clean Coal Technologies**

11 **SEC. 2211. CREDIT FOR INVESTMENT IN QUALIFYING AD-**
 12 **VANCED CLEAN COAL TECHNOLOGY.**

13 (a) *ALLOWANCE OF QUALIFYING ADVANCED CLEAN*
 14 *COAL TECHNOLOGY UNIT CREDIT.*—Section 46 (relating to
 15 amount of credit) is amended by striking “and” at the end
 16 of paragraph (2), by striking the period at the end of para-
 17 graph (3) and inserting “, and”, and by adding at the end
 18 the following new paragraph:

19 “(4) the qualifying advanced clean coal tech-
 20 nology unit credit.”.

21 (b) *AMOUNT OF QUALIFYING ADVANCED CLEAN COAL*
 22 *TECHNOLOGY UNIT CREDIT.*—Subpart E of part IV of sub-
 23 chapter A of chapter 1 (relating to rules for computing in-
 24 vestment credit) is amended by inserting after section 48
 25 the following new section:

1 **“SEC. 48A. QUALIFYING ADVANCED CLEAN COAL TECH-**
2 **NOLOGY UNIT CREDIT.**

3 *“(a) IN GENERAL.—For purposes of section 46, the*
4 *qualifying advanced clean coal technology unit credit for*
5 *any taxable year is an amount equal to 10 percent of the*
6 *applicable percentage of the qualified investment in a quali-*
7 *fying advanced clean coal technology unit for such taxable*
8 *year.*

9 *“(b) QUALIFYING ADVANCED CLEAN COAL TECH-*
10 *NOLOGY UNIT.—*

11 *“(1) IN GENERAL.—For purposes of subsection*
12 *(a), the term ‘qualifying advanced clean coal tech-*
13 *nology unit’ means an advanced clean coal technology*
14 *unit of the taxpayer—*

15 *“(A)(i)(I) in the case of a unit first placed*
16 *in service after the date of the enactment of this*
17 *section, the original use of which commences*
18 *with the taxpayer, or*

19 *“(II) in the case of the retrofitting or*
20 *repowering of a unit first placed in service before*
21 *such date of enactment, the retrofitting or*
22 *repowering of which is completed by the tax-*
23 *payer after such date, or*

24 *“(ii) which is acquired through purchase*
25 *(as defined by section 179(d)(2)),*

26 *“(B) which is depreciable under section 167,*

1 “(C) which has a useful life of not less than
2 4 years,

3 “(D) which is located in the United States,

4 “(E) which is not receiving nor is scheduled
5 to receive funding under the Clean Coal Tech-
6 nology Program, the Power Plant Improvement
7 Initiative, or the Clean Coal Power Initiative
8 administered by the Secretary of Energy,

9 “(F) which is not a qualifying clean coal
10 technology unit, and

11 “(G) which receives an allocation of a por-
12 tion of the national megawatt capacity limita-
13 tion under subsection (f).

14 “(2) *SPECIAL RULE FOR SALE-LEASEBACKS.*—
15 For purposes of subparagraph (A) of paragraph (1),
16 in the case of a unit which—

17 “(A) is originally placed in service by a
18 person, and

19 “(B) is sold and leased back by such person,
20 or is leased to such person, within 3 months after
21 the date such unit was originally placed in serv-
22 ice, for a period of not less than 12 years,

23 such unit shall be treated as originally placed in serv-
24 ice not earlier than the date on which such unit is
25 used under the leaseback (or lease) referred to in sub-

1 *paragraph (B). The preceding sentence shall not*
2 *apply to any property if the lessee and lessor of such*
3 *property make an election under this sentence. Such*
4 *an election, once made, may be revoked only with the*
5 *consent of the Secretary.*

6 “(3) *NONCOMPLIANCE WITH POLLUTION LAWS.—*
7 *For purposes of this subsection, a unit which is not*
8 *in compliance with the applicable State and Federal*
9 *pollution prevention, control, and permit require-*
10 *ments for any period of time shall not be considered*
11 *to be a qualifying advanced clean coal technology*
12 *unit during such period.*

13 “(c) *APPLICABLE PERCENTAGE.—For purposes of this*
14 *section, with respect to any qualifying advanced clean coal*
15 *technology unit, the applicable percentage is the percentage*
16 *equal to the ratio which the portion of the national mega-*
17 *watt capacity limitation allocated to the taxpayer with re-*
18 *spect to such unit under subsection (f) bears to the total*
19 *megawatt capacity of such unit.*

20 “(d) *ADVANCED CLEAN COAL TECHNOLOGY UNIT.—*
21 *For purposes of this section—*

22 “(1) *IN GENERAL.—The term ‘advanced clean*
23 *coal technology unit’ means a new, retrofit, or*
24 *repowering unit of the taxpayer which—*

25 “(A) *is—*

1 “(i) an eligible advanced pulverized
2 coal or atmospheric fluidized bed combus-
3 tion technology unit,

4 “(ii) an eligible pressurized fluidized
5 bed combustion technology unit,

6 “(iii) an eligible integrated gasifi-
7 cation combined cycle technology unit, or

8 “(iv) an eligible other technology unit,
9 and

10 “(B) meets the carbon emission rate require-
11 ments of paragraph (6).

12 “(2) *ELIGIBLE ADVANCED PULVERIZED COAL OR*
13 *ATMOSPHERIC FLUIDIZED BED COMBUSTION TECH-*
14 *NOLOGY UNIT.*—*The term ‘eligible advanced pulver-*
15 *ized coal or atmospheric fluidized bed combustion*
16 *technology unit’ means a clean coal technology unit*
17 *using advanced pulverized coal or atmospheric fluid-*
18 *ized bed combustion technology which—*

19 “(A) is placed in service after the date of
20 the enactment of this section and before January
21 1, 2013, and

22 “(B) has a design net heat rate of not more
23 than 8,350 (8,750 in the case of units placed in
24 service before 2009).

1 “(3) *ELIGIBLE PRESSURIZED FLUIDIZED BED*
2 *COMBUSTION TECHNOLOGY UNIT.*—*The term ‘eligible*
3 *pressurized fluidized bed combustion technology unit’*
4 *means a clean coal technology unit using pressurized*
5 *fluidized bed combustion technology which—*

6 “(A) *is placed in service after the date of*
7 *the enactment of this section and before January*
8 *1, 2017, and*

9 “(B) *has a design net heat rate of not more*
10 *than 7,720 (8,750 in the case of units placed in*
11 *service before 2009, and 8,350 in the case of*
12 *units placed in service after 2008 and before*
13 *2013).*

14 “(4) *ELIGIBLE INTEGRATED GASIFICATION COM-*
15 *BINED CYCLE TECHNOLOGY UNIT.*—*The term ‘eligible*
16 *integrated gasification combined cycle technology*
17 *unit’ means a clean coal technology unit using inte-*
18 *grated gasification combined cycle technology, with or*
19 *without fuel or chemical co-production, which—*

20 “(A) *is placed in service after the date of*
21 *the enactment of this section and before January*
22 *1, 2017,*

23 “(B) *has a design net heat rate of not more*
24 *than 7,720 (8,750 in the case of units placed in*
25 *service before 2009, and 8,350 in the case of*

1 *units placed in service after 2008 and before*
2 *2013), and*

3 “(C) *has a net thermal efficiency (HHV)*
4 *using coal with fuel or chemical co-production of*
5 *not less than 43.9 percent (39 percent in the case*
6 *of units placed in service before 2009, and 40.9*
7 *percent in the case of units placed in service*
8 *after 2008 and before 2013).*

9 “(5) *ELIGIBLE OTHER TECHNOLOGY UNIT.—The*
10 *term ‘eligible other technology unit’ means a clean*
11 *coal technology unit using any other technology for*
12 *the production of electricity which is placed in service*
13 *after the date of the enactment of this section and be-*
14 *fore January 1, 2017.*

15 “(6) *CARBON EMISSION RATE REQUIREMENTS.—*

16 “(A) *IN GENERAL.—Except as provided in*
17 *subparagraph (B), a unit meets the requirements*
18 *of this paragraph if—*

19 “(i) *in the case of a unit using design*
20 *coal with a heat content of not more than*
21 *9,000 Btu per pound, the carbon emission*
22 *rate is less than 0.60 pound of carbon per*
23 *kilowatt hour, and*

24 “(ii) *in the case of a unit using design*
25 *coal with a heat content of more than 9,000*

1 *Btu per pound, the carbon emission rate is*
2 *less than 0.54 pound of carbon per kilowatt*
3 *hour.*

4 “(B) *ELIGIBLE OTHER TECHNOLOGY*
5 *UNIT.—In the case of an eligible other technology*
6 *unit, subparagraph (A) shall be applied by sub-*
7 *stituting ‘0.51’ and ‘0.459’ for ‘0.60’ and ‘0.54’,*
8 *respectively.*

9 “(e) *GENERAL DEFINITIONS.—Any term used in this*
10 *section which is also used in section 45I shall have the*
11 *meaning given such term in section 45I.*

12 “(f) *NATIONAL LIMITATION ON THE AGGREGATE CA-*
13 *PACITY OF ADVANCED CLEAN COAL TECHNOLOGY UNITS.—*

14 “(1) *IN GENERAL.—For purposes of subsection*
15 *(b)(1)(G), the national megawatt capacity limitation*
16 *is—*

17 “(A) *for qualifying advanced clean coal*
18 *technology units using advanced pulverized coal*
19 *or atmospheric fluidized bed combustion tech-*
20 *nology, not more than 1,000 megawatts (not*
21 *more than 500 megawatts in the case of units*
22 *placed in service before 2009),*

23 “(B) *for such units using pressurized fluid-*
24 *ized bed combustion technology, not more than*

1 500 megawatts (not more than 250 megawatts in
2 the case of units placed in service before 2009),

3 “(C) for such units using integrated gasifi-
4 cation combined cycle technology, with or with-
5 out fuel or chemical co-production, not more
6 than 2,000 megawatts (not more than 1,000
7 megawatts in the case of units placed in service
8 before 2009 and not more than 1,500 megawatts
9 in the case of units placed in service after 2008
10 and before 2013), and

11 “(D) for such units using other technology
12 for the production of electricity, not more than
13 500 megawatts (not more than 250 megawatts in
14 the case of units placed in service before 2009).

15 “(2) *ALLOCATION OF LIMITATION.*—The Sec-
16 retary shall allocate the national megawatt capacity
17 limitation for qualifying advanced clean coal tech-
18 nology units in such manner as the Secretary may
19 prescribe under the regulations under paragraph (3).

20 “(3) *REGULATIONS.*—Not later than 6 months
21 after the date of the enactment of this section, the Sec-
22 retary shall prescribe such regulations as may be nec-
23 essary or appropriate—

24 “(A) to carry out the purposes of this sub-
25 section and section 45J,

1 “(B) to limit the capacity of any qualifying
2 advanced clean coal technology unit to which
3 this section applies so that the combined mega-
4 watt capacity of all such units to which this sec-
5 tion applies does not exceed 4,000 megawatts,

6 “(C) to provide a certification process de-
7 scribed in section 45I(e)(3)(C),

8 “(D) to carry out the purposes described in
9 subparagraphs (D), (E), and (F) of section
10 45I(e)(3), and

11 “(E) to reallocate capacity which is not al-
12 located to any technology described in subpara-
13 graphs (A) through (D) of paragraph (1) because
14 an insufficient number of qualifying units re-
15 quest an allocation for such technology, to an-
16 other technology described in such subparagraphs
17 in order to maximize the amount of energy effi-
18 cient production encouraged with the available
19 tax credits.

20 “(4) SELECTION CRITERIA.—For purposes of
21 paragraph (3)(C), the selection criteria for allocating
22 the national megawatt capacity limitation to quali-
23 fying advanced clean coal technology units—

24 “(A) shall be established by the Secretary of
25 Energy as part of a competitive solicitation,

1 “(B) shall include primary criteria of min-
2 imum design net heat rate, maximum design
3 thermal efficiency, environmental performance,
4 and lowest cost to the Government, and

5 “(C) shall include supplemental criteria as
6 determined appropriate by the Secretary of En-
7 ergy.

8 “(g) QUALIFIED INVESTMENT.—For purposes of sub-
9 section (a), the term ‘qualified investment’ means, with re-
10 spect to any taxable year, the basis of a qualifying advanced
11 clean coal technology unit placed in service by the taxpayer
12 during such taxable year (in the case of a unit described
13 in subsection (b)(1)(A)(i)(II), only that portion of the basis
14 of such unit which is properly attributable to the retro-
15 fitting or repowering of such unit).

16 “(h) QUALIFIED PROGRESS EXPENDITURES.—

17 “(1) INCREASE IN QUALIFIED INVESTMENT.—In
18 the case of a taxpayer who has made an election
19 under paragraph (5), the amount of the qualified in-
20 vestment of such taxpayer for the taxable year (deter-
21 mined under subsection (g) without regard to this
22 subsection) shall be increased by an amount equal to
23 the aggregate of each qualified progress expenditure
24 for the taxable year with respect to progress expendi-
25 ture property.

1 “(2) *PROGRESS EXPENDITURE PROPERTY DE-*
2 *FINED.*—For purposes of this subsection, the term
3 ‘progress expenditure property’ means any property
4 being constructed by or for the taxpayer and which it
5 is reasonable to believe will qualify as a qualifying
6 advanced clean coal technology unit which is being
7 constructed by or for the taxpayer when it is placed
8 in service.

9 “(3) *QUALIFIED PROGRESS EXPENDITURES DE-*
10 *FINED.*—For purposes of this subsection—

11 “(A) *SELF-CONSTRUCTED PROPERTY.*—In
12 the case of any self-constructed property, the
13 term ‘qualified progress expenditures’ means the
14 amount which, for purposes of this subpart, is
15 properly chargeable (during such taxable year)
16 to capital account with respect to such property.

17 “(B) *NONSELF-CONSTRUCTED PROPERTY.*—
18 In the case of nonself-constructed property, the
19 term ‘qualified progress expenditures’ means the
20 amount paid during the taxable year to another
21 person for the construction of such property.

22 “(4) *OTHER DEFINITIONS.*—For purposes of this
23 subsection—

24 “(A) *SELF-CONSTRUCTED PROPERTY.*—The
25 term ‘self-constructed property’ means property

1 *for which it is reasonable to believe that more*
2 *than half of the construction expenditures will be*
3 *made directly by the taxpayer.*

4 “(B) *NONSELF-CONSTRUCTED PROPERTY.*—
5 *The term ‘nonself-constructed property’ means*
6 *property which is not self-constructed property.*

7 “(C) *CONSTRUCTION, ETC.*—*The term ‘con-*
8 *struction’ includes reconstruction and erection,*
9 *and the term ‘constructed’ includes reconstructed*
10 *and erected.*

11 “(D) *ONLY CONSTRUCTION OF QUALIFYING*
12 *ADVANCED CLEAN COAL TECHNOLOGY UNIT TO*
13 *BE TAKEN INTO ACCOUNT.*—*Construction shall be*
14 *taken into account only if, for purposes of this*
15 *subpart, expenditures therefor are properly*
16 *chargeable to capital account with respect to the*
17 *property.*

18 “(5) *ELECTION.*—*An election under this sub-*
19 *section may be made at such time and in such man-*
20 *ner as the Secretary may by regulations prescribe.*
21 *Such an election shall apply to the taxable year for*
22 *which made and to all subsequent taxable years. Such*
23 *an election, once made, may not be revoked except*
24 *with the consent of the Secretary.*

1 “(i) *COORDINATION WITH OTHER CREDITS.*—This
2 section shall not apply to any property with respect to
3 which the rehabilitation credit under section 47 or the en-
4 ergy credit under section 48 is allowed unless the taxpayer
5 elects to waive the application of such credit to such prop-
6 erty.”.

7 (c) *RECAPTURE.*—Section 50(a) (relating to other spe-
8 cial rules) is amended by adding at the end the following
9 new paragraph:

10 “(6) *SPECIAL RULES RELATING TO QUALIFYING*
11 *ADVANCED CLEAN COAL TECHNOLOGY UNIT.*—For
12 purposes of applying this subsection in the case of
13 any credit allowable by reason of section 48A, the fol-
14 lowing shall apply:

15 “(A) *GENERAL RULE.*—In lieu of the
16 amount of the increase in tax under paragraph
17 (1), the increase in tax shall be an amount equal
18 to the investment tax credit allowed under sec-
19 tion 38 for all prior taxable years with respect
20 to a qualifying advanced clean coal technology
21 unit (as defined by section 48A(b)(1)) multiplied
22 by a fraction whose numerator is the number of
23 years remaining to fully depreciate under this
24 title the qualifying advanced clean coal tech-
25 nology unit disposed of, and whose denominator

1 is the total number of years over which such unit
2 would otherwise have been subject to deprecia-
3 tion. For purposes of the preceding sentence, the
4 year of disposition of the qualifying advanced
5 clean coal technology unit shall be treated as a
6 year of remaining depreciation.

7 “(B) *PROPERTY CEASES TO QUALIFY FOR*
8 *PROGRESS EXPENDITURES.*—Rules similar to the
9 rules of paragraph (2) shall apply in the case of
10 qualified progress expenditures for a qualifying
11 advanced clean coal technology unit under sec-
12 tion 48A, except that the amount of the increase
13 in tax under subparagraph (A) of this para-
14 graph shall be substituted for the amount de-
15 scribed in such paragraph (2).

16 “(C) *APPLICATION OF PARAGRAPH.*—This
17 paragraph shall be applied separately with re-
18 spect to the credit allowed under section 38 re-
19 garding a qualifying advanced clean coal tech-
20 nology unit.”.

21 (d) *TRANSITIONAL RULE.*—Section 39(d) (relating to
22 transitional rules), as amended by this Act, is amended by
23 adding at the end the following new paragraph:

24 “(17) *NO CARRYBACK OF SECTION 48A CREDIT*
25 *BEFORE EFFECTIVE DATE.*—No portion of the unused

1 *business credit for any taxable year which is attrib-*
2 *utable to the qualifying advanced clean coal tech-*
3 *nology unit credit determined under section 48A may*
4 *be carried back to a taxable year ending on or before*
5 *the date of the enactment of section 48A.”.*

6 *(e) TECHNICAL AMENDMENTS.—*

7 *(1) Section 49(a)(1)(C) is amended by striking*
8 *“and” at the end of clause (ii), by striking the period*
9 *at the end of clause (iii) and inserting “, and”, and*
10 *by adding at the end the following new clause:*

11 *“(iv) the portion of the basis of any*
12 *qualifying advanced clean coal technology*
13 *unit attributable to any qualified invest-*
14 *ment (as defined by section 48A(g)).”.*

15 *(2) Section 50(a)(4) is amended by striking*
16 *“and (2)” and inserting “(2), and (6)”.*

17 *(3) Section 50(c) is amended by adding at the*
18 *end the following new paragraph:*

19 *“(6) NONAPPLICATION.—Paragraphs (1) and (2)*
20 *shall not apply to any qualifying advanced clean coal*
21 *technology unit credit under section 48A.”.*

22 *(4) The table of sections for subpart E of part IV*
23 *of subchapter A of chapter 1 is amended by inserting*
24 *after the item relating to section 48 the following new*
25 *item:*

“Sec. 48A. Qualifying advanced clean coal technology unit credit.”.

1 (f) *EFFECTIVE DATE.*—*The amendments made by this*
 2 *section shall apply to periods after the date of the enactment*
 3 *of this Act, under rules similar to the rules of section 48(m)*
 4 *of the Internal Revenue Code of 1986 (as in effect on the*
 5 *day before the date of the enactment of the Revenue Rec-*
 6 *onciliation Act of 1990).*

7 **SEC. 2212. CREDIT FOR PRODUCTION FROM A QUALIFYING**
 8 **ADVANCED CLEAN COAL TECHNOLOGY UNIT.**

9 (a) *IN GENERAL.*—*Subpart D of part IV of subchapter*
 10 *A of chapter 1 (relating to business related credits), as*
 11 *amended by this Act, is amended by adding at the end the*
 12 *following new section:*

13 **“SEC. 45J. CREDIT FOR PRODUCTION FROM A QUALIFYING**
 14 **ADVANCED CLEAN COAL TECHNOLOGY UNIT.**

15 “(a) *GENERAL RULE.*—*For purposes of section 38, the*
 16 *qualifying advanced clean coal technology production credit*
 17 *of any taxpayer for any taxable year is equal to—*

18 “(1) *the applicable amount of advanced clean*
 19 *coal technology production credit, multiplied by*

20 “(2) *the applicable percentage (as determined*
 21 *under section 48A(c)) of the sum of—*

22 “(A) *the kilowatt hours of electricity, plus*

23 “(B) *each 3,413 Btu of fuels or chemicals,*
 24 *produced by the taxpayer during such taxable year at*
 25 *a qualifying advanced clean coal technology unit dur-*

1 *ing the 10-year period beginning on the date the unit*
 2 *was originally placed in service (or returned to serv-*
 3 *ice after becoming a qualifying advanced clean coal*
 4 *technology unit).*

5 *“(b) APPLICABLE AMOUNT.—For purposes of this sec-*
 6 *tion, the applicable amount of advanced clean coal tech-*
 7 *nology production credit with respect to production from*
 8 *a qualifying advanced clean coal technology unit shall be*
 9 *determined as follows:*

10 *“(1) Where the qualifying advanced clean coal*
 11 *technology unit is producing electricity only:*

12 *“(A) In the case of a unit originally placed*
 13 *in service before 2009, if—*

| <i>“The design net heat rate is:</i> | <i>The applicable amount is:</i> | |
|--|--|---------------------------------------|
| | <i>For 1st 5 years of such service</i> | <i>For 2d 5 years of such service</i> |
| <i>Not more than 8,400</i> | <i>\$.0060</i> | <i>\$.0038</i> |
| <i>More than 8,400 but not more than 8,550</i> | <i>\$.0025</i> | <i>\$.0010</i> |
| <i>More than 8,550 but less than 8,750</i> | <i>\$.0010</i> | <i>\$.0010.</i> |

14 *“(B) In the case of a unit originally placed*
 15 *in service after 2008 and before 2013, if—*

| <i>“The design net heat rate is:</i> | <i>The applicable amount is:</i> | |
|--|--|---------------------------------------|
| | <i>For 1st 5 years of such service</i> | <i>For 2d 5 years of such service</i> |
| <i>Not more than 7,770</i> | <i>\$.0105</i> | <i>\$.0090</i> |
| <i>More than 7,770 but not more than 8,125</i> | <i>\$.0085</i> | <i>\$.0068</i> |
| <i>More than 8,125 but less than 8,350</i> | <i>\$.0075</i> | <i>\$.0055.</i> |

1 “(C) *In the case of a unit originally placed*
 2 *in service after 2012 and before 2017, if—*

| <i>“The design net heat rate is:</i> | <i>The applicable amount is:</i> | |
|--|--|---------------------------------------|
| | <i>For 1st 5 years of such service</i> | <i>For 2d 5 years of such service</i> |
| <i>Not more than 7,380</i> | <i>\$.0140</i> | <i>\$.0115</i> |
| <i>More than 7,380 but not more than 7,720</i> | <i>\$.0120</i> | <i>\$.0090.</i> |

3 “(2) *Where the qualifying advanced clean coal*
 4 *technology unit is producing fuel or chemicals:*

5 “(A) *In the case of a unit originally placed*
 6 *in service before 2009, if—*

| <i>“The unit design net thermal efficiency (HHV) is:</i> | <i>The applicable amount is:</i> | |
|--|--|---------------------------------------|
| | <i>For 1st 5 years of such service</i> | <i>For 2d 5 years of such service</i> |
| <i>Not less than 40.6 percent</i> | <i>\$.0060</i> | <i>\$.0038</i> |
| <i>Less than 40.6 but not less than 40 percent</i> | <i>\$.0025</i> | <i>\$.0010</i> |
| <i>Less than 40 but not less than 39 percent</i> | <i>\$.0010</i> | <i>\$.0010.</i> |

7 “(B) *In the case of a unit originally placed*
 8 *in service after 2008 and before 2013, if—*

| <i>“The unit design net thermal efficiency (HHV) is:</i> | <i>The applicable amount is:</i> | |
|--|--|---------------------------------------|
| | <i>For 1st 5 years of such service</i> | <i>For 2d 5 years of such service</i> |
| <i>Not less than 43.6 percent</i> | <i>\$.0105</i> | <i>\$.0090</i> |
| <i>Less than 43.6 but not less than 42 percent</i> | <i>\$.0085</i> | <i>\$.0068</i> |
| <i>Less than 42 but not less than 40.9 percent</i> | <i>\$.0075</i> | <i>\$.0055.</i> |

9 “(C) *In the case of a unit originally placed*
 10 *in service after 2012 and before 2017, if—*

| <i>“The unit design net thermal efficiency (HHV) is:</i> | <i>The applicable amount is:</i> | |
|--|--|---------------------------------------|
| | <i>For 1st 5 years of such service</i> | <i>For 2d 5 years of such service</i> |
| <i>Not less than 44.2 percent</i> | <i>\$.0140</i> | <i>\$.0115</i> |
| <i>Less than 44.2 but not less than 43.9 percent</i> | <i>\$.0120</i> | <i>\$.0090.</i> |

1 “(c) *INFLATION ADJUSTMENT.*—*For calendar years*
2 *after 2003, each amount in paragraphs (1) and (2) of sub-*
3 *section (b) shall be adjusted by multiplying such amount*
4 *by the inflation adjustment factor for the calendar year in*
5 *which the amount is applied. If any amount as increased*
6 *under the preceding sentence is not a multiple of 0.01 cent,*
7 *such amount shall be rounded to the nearest multiple of 0.01*
8 *cent.*

9 “(d) *DEFINITIONS AND SPECIAL RULES.*—*For pur-*
10 *poses of this section—*

11 “(1) *IN GENERAL.*—*Any term used in this sec-*
12 *tion which is also used in section 45I or 48A shall*
13 *have the meaning given such term in such section.*

14 “(2) *APPLICABLE RULES.*—*The rules of para-*
15 *graphs (3), (4), and (5) of section 45(d) shall apply.”.*

16 “(b) *CREDIT TREATED AS BUSINESS CREDIT.*—*Section*
17 *38(b), as amended by this Act, is amended by striking*
18 *“plus” at the end of paragraph (19), by striking the period*
19 *at the end of paragraph (20) and inserting “, plus”, and*
20 *by adding at the end the following new paragraph:*

1 “(21) the qualifying advanced clean coal tech-
2 nology production credit determined under section
3 45J(a).”.

4 (c) *TRANSITIONAL RULE.*—Section 39(d) (relating to
5 transitional rules), as amended by this Act, is amended by
6 adding at the end the following new paragraph:

7 “(18) *NO CARRYBACK OF SECTION 45J CREDIT*
8 *BEFORE EFFECTIVE DATE.*—No portion of the unused
9 business credit for any taxable year which is attrib-
10 utable to the qualifying advanced clean coal tech-
11 nology production credit determined under section
12 45J may be carried back to a taxable year ending on
13 or before the date of the enactment of section 45J.”.

14 (d) *DENIAL OF DOUBLE BENEFIT.*—Section 29(d) (re-
15 lating to other definitions and special rules) is amended
16 by adding at the end the following new paragraph:

17 “(9) *DENIAL OF DOUBLE BENEFIT.*—This section
18 shall not apply with respect to any qualified fuel the
19 production of which may be taken into account for
20 purposes of determining the credit under section
21 45J.”.

22 (e) *CLERICAL AMENDMENT.*—The table of sections for
23 subpart D of part IV of subchapter A of chapter 1, as
24 amended by this Act, is amended by adding at the end the
25 following new item:

“Sec. 45J. Credit for production from a qualifying advanced clean coal technology unit.”.

1 (f) *EFFECTIVE DATE.*—*The amendments made by this*
 2 *section shall apply to production after the date of the enact-*
 3 *ment of this Act, in taxable years ending after such date.*

4 ***Subtitle C—Treatment of Persons***
 5 ***Not Able To Use Entire Credit***

6 ***SEC. 2221. TREATMENT OF PERSONS NOT ABLE TO USE EN-***
 7 ***TIRE CREDIT.***

8 (a) *IN GENERAL.*—*Section 45I, as added by this Act,*
 9 *is amended by adding at the end the following new sub-*
 10 *section:*

11 “*(f) TREATMENT OF PERSON NOT ABLE TO USE EN-*
 12 *TIRE CREDIT.*—

13 “*(1) ALLOWANCE OF CREDITS.*—

14 “*(A) IN GENERAL.*—*Any credit allowable*
 15 *under this section, section 45J, or section 48A*
 16 *with respect to a facility owned by a person de-*
 17 *scribed in subparagraph (B) may be transferred*
 18 *or used as provided in this subsection, and the*
 19 *determination as to whether the credit is allow-*
 20 *able shall be made without regard to the tax-ex-*
 21 *empt status of the person.*

22 “*(B) PERSONS DESCRIBED.*—*A person is*
 23 *described in this subparagraph if the person is—*

1 “(i) an organization described in sec-
2 tion 501(c)(12)(C) and exempt from tax
3 under section 501(a),

4 “(ii) an organization described in sec-
5 tion 1381(a)(2)(C),

6 “(iii) a public utility (as defined in
7 section 136(c)(2)(B)),

8 “(iv) any State or political subdivision
9 thereof, the District of Columbia, or any
10 agency or instrumentality of any of the
11 foregoing,

12 “(v) any Indian tribal government
13 (within the meaning of section 7871) or any
14 agency or instrumentality thereof, or

15 “(vi) the Tennessee Valley Authority.

16 “(2) TRANSFER OF CREDIT.—

17 “(A) IN GENERAL.—A person described in
18 clause (i), (ii), (iii), (iv), or (v) of paragraph
19 (1)(B) may transfer any credit to which para-
20 graph (1)(A) applies through an assignment to
21 any other person not described in paragraph
22 (1)(B). Such transfer may be revoked only with
23 the consent of the Secretary.

24 “(B) REGULATIONS.—The Secretary shall
25 prescribe such regulations as necessary to insure

1 *that any credit described in subparagraph (A) is*
2 *claimed once and not reassigned by such other*
3 *person.*

4 “(C) *TRANSFER PROCEEDS TREATED AS*
5 *ARISING FROM ESSENTIAL GOVERNMENT FUNC-*
6 *TION.—Any proceeds derived by a person de-*
7 *scribed in clause (iii), (iv), or (v) of paragraph*
8 *(1)(B) from the transfer of any credit under sub-*
9 *paragraph (A) shall be treated as arising from*
10 *the exercise of an essential government function.*

11 “(3) *USE OF CREDIT AS AN OFFSET.—Notwith-*
12 *standing any other provision of law, in the case of a*
13 *person described in clause (i), (ii), or (v) of para-*
14 *graph (1)(B), any credit to which paragraph (1)(A)*
15 *applies may be applied by such person, to the extent*
16 *provided by the Secretary of Agriculture, as a pre-*
17 *payment of any loan, debt, or other obligation the en-*
18 *tity has incurred under subchapter I of chapter 31 of*
19 *title 7 of the Rural Electrification Act of 1936 (7*
20 *U.S.C. 901 et seq.), as in effect on the date of the en-*
21 *actment of this section.*

22 “(4) *USE BY TVA.—*

23 “(A) *IN GENERAL.—Notwithstanding any*
24 *other provision of law, in the case of a person de-*
25 *scribed in paragraph (1)(B)(vi), any credit to*

1 *which paragraph (1)(A) applies may be applied*
2 *as a credit against the payments required to be*
3 *made in any fiscal year under section 15d(e) of*
4 *the Tennessee Valley Authority Act of 1933 (16*
5 *U.S.C. 831n-4(e)) as an annual return on the*
6 *appropriations investment and an annual re-*
7 *payment sum.*

8 “(B) *TREATMENT OF CREDITS.*—*The aggre-*
9 *gate amount of credits described in paragraph*
10 *(1)(A) with respect to such person shall be treat-*
11 *ed in the same manner and to the same extent*
12 *as if such credits were a payment in cash and*
13 *shall be applied first against the annual return*
14 *on the appropriations investment.*

15 “(C) *CREDIT CARRYOVER.*—*With respect to*
16 *any fiscal year, if the aggregate amount of cred-*
17 *its described paragraph (1)(A) with respect to*
18 *such person exceeds the aggregate amount of pay-*
19 *ment obligations described in subparagraph (A),*
20 *the excess amount shall remain available for ap-*
21 *plication as credits against the amounts of such*
22 *payment obligations in succeeding fiscal years in*
23 *the same manner as described in this paragraph.*

24 “(5) *CREDIT NOT INCOME.*—*Any transfer under*
25 *paragraph (2) or use under paragraph (3) of any*

1 *credit to which paragraph (1)(A) applies shall not be*
 2 *treated as income for purposes of section 501(c)(12).*

3 “(6) *TREATMENT OF UNRELATED PERSONS.—*
 4 *For purposes of this subsection, sales among and be-*
 5 *tween persons described in clauses (i), (ii), (iii), (iv),*
 6 *and (v) of paragraph (1)(A) shall be treated as sales*
 7 *between unrelated parties.”.*

8 (b) *EFFECTIVE DATE.—The amendment made by this*
 9 *section shall apply to production after the date of the enact-*
 10 *ment of this Act, in taxable years ending after such date.*

11 ***TITLE XXIII—OIL AND GAS***
 12 ***PROVISIONS***

13 ***SEC. 2301. OIL AND GAS FROM MARGINAL WELLS.***

14 (a) *IN GENERAL.—Subpart D of part IV of subchapter*
 15 *A of chapter 1 (relating to business credits), as amended*
 16 *by this Act, is amended by adding at the end the following*
 17 *new section:*

18 ***“SEC. 45K. CREDIT FOR PRODUCING OIL AND GAS FROM***
 19 ***MARGINAL WELLS.***

20 “(a) *GENERAL RULE.—For purposes of section 38, the*
 21 *marginal well production credit for any taxable year is an*
 22 *amount equal to the product of—*

23 “(1) *the credit amount, and*

1 “(2) *the qualified credit oil production and the*
2 *qualified natural gas production which is attributable*
3 *to the taxpayer.*

4 “(b) *CREDIT AMOUNT.—For purposes of this section—*

5 “(1) *IN GENERAL.—The credit amount is—*

6 “(A) *\$3 per barrel of qualified crude oil*
7 *production, and*

8 “(B) *50 cents per 1,000 cubic feet of quali-*
9 *fied natural gas production.*

10 “(2) *REDUCTION AS OIL AND GAS PRICES IN-*
11 *CREASE.—*

12 “(A) *IN GENERAL.—The \$3 and 50 cents*
13 *amounts under paragraph (1) shall each be re-*
14 *duced (but not below zero) by an amount which*
15 *bears the same ratio to such amount (determined*
16 *without regard to this paragraph) as—*

17 “(i) *the excess (if any) of the applica-*
18 *ble reference price over \$15 (\$1.67 for quali-*
19 *fied natural gas production), bears to*

20 “(ii) *\$3 (\$0.33 for qualified natural*
21 *gas production).*

22 *The applicable reference price for a taxable year*
23 *is the reference price of the calendar year pre-*
24 *ceding the calendar year in which the taxable*
25 *year begins.*

1 “(B) *INFLATION ADJUSTMENT.*—*In the case*
2 *of any taxable year beginning in a calendar year*
3 *after 2002, each of the dollar amounts contained*
4 *in subparagraph (A) shall be increased to an*
5 *amount equal to such dollar amount multiplied*
6 *by the inflation adjustment factor for such cal-*
7 *endar year (determined under section*
8 *43(b)(3)(B) by substituting ‘2001’ for ‘1990’).*

9 “(C) *REFERENCE PRICE.*—*For purposes of*
10 *this paragraph, the term ‘reference price’ means,*
11 *with respect to any calendar year—*

12 “(i) *in the case of qualified crude oil*
13 *production, the reference price determined*
14 *under section 29(d)(2)(C), and*

15 “(ii) *in the case of qualified natural*
16 *gas production, the Secretary’s estimate of*
17 *the annual average wellhead price per 1,000*
18 *cubic feet for all domestic natural gas.*

19 “(c) *QUALIFIED CRUDE OIL AND NATURAL GAS PRO-*
20 *DUCTION.*—*For purposes of this section—*

21 “(1) *IN GENERAL.*—*The terms ‘qualified crude*
22 *oil production’ and ‘qualified natural gas production’*
23 *mean domestic crude oil or natural gas which is pro-*
24 *duced from a qualified marginal well.*

1 “(2) *LIMITATION ON AMOUNT OF PRODUCTION*
2 *WHICH MAY QUALIFY.—*

3 “(A) *IN GENERAL.—Crude oil or natural*
4 *gas produced during any taxable year from any*
5 *well shall not be treated as qualified crude oil*
6 *production or qualified natural gas production*
7 *to the extent production from the well during the*
8 *taxable year exceeds 1,095 barrels or barrel*
9 *equivalents.*

10 “(B) *PROPORTIONATE REDUCTIONS.—*

11 “(i) *SHORT TAXABLE YEARS.—In the*
12 *case of a short taxable year, the limitations*
13 *under this paragraph shall be proportion-*
14 *ately reduced to reflect the ratio which the*
15 *number of days in such taxable year bears*
16 *to 365.*

17 “(ii) *WELLS NOT IN PRODUCTION EN-*
18 *TIRE YEAR.—In the case of a well which is*
19 *not capable of production during each day*
20 *of a taxable year, the limitations under this*
21 *paragraph applicable to the well shall be*
22 *proportionately reduced to reflect the ratio*
23 *which the number of days of production*
24 *bears to the total number of days in the tax-*
25 *able year.*

1 “(3) *DEFINITIONS.*—

2 “(A) *QUALIFIED MARGINAL WELL.*—*The*
3 *term ‘qualified marginal well’ means a domestic*
4 *well—*

5 “(i) *the production from which during*
6 *the taxable year is treated as marginal pro-*
7 *duction under section 613A(c)(6), or*

8 “(ii) *which, during the taxable year—*

9 “(I) *has average daily production*
10 *of not more than 25 barrel equivalents,*
11 *and*

12 “(II) *produces water at a rate not*
13 *less than 95 percent of total well efflu-*
14 *ent.*

15 “(B) *CRUDE OIL, ETC.*—*The terms ‘crude*
16 *oil’, ‘natural gas’, ‘domestic’, and ‘barrel’ have*
17 *the meanings given such terms by section*
18 *613A(e).*

19 “(C) *BARREL EQUIVALENT.*—*The term ‘bar-*
20 *rel equivalent’ means, with respect to natural*
21 *gas, a conversion ratio of 6,000 cubic feet of*
22 *natural gas to 1 barrel of crude oil.*

23 “(d) *OTHER RULES.*—

24 “(1) *PRODUCTION ATTRIBUTABLE TO THE TAX-*
25 *PAYER.*—*In the case of a qualified marginal well in*

1 *which there is more than one owner of operating in-*
2 *terests in the well and the crude oil or natural gas*
3 *production exceeds the limitation under subsection*
4 *(c)(2), qualifying crude oil production or qualifying*
5 *natural gas production attributable to the taxpayer*
6 *shall be determined on the basis of the ratio which*
7 *taxpayer's revenue interest in the production bears to*
8 *the aggregate of the revenue interests of all operating*
9 *interest owners in the production.*

10 “(2) *OPERATING INTEREST REQUIRED.—Any*
11 *credit under this section may be claimed only on pro-*
12 *duction which is attributable to the holder of an oper-*
13 *ating interest.*”

14 “(3) *PRODUCTION FROM NONCONVENTIONAL*
15 *SOURCES EXCLUDED.—In the case of production from*
16 *a qualified marginal well which is eligible for the*
17 *credit allowed under section 29 for the taxable year,*
18 *no credit shall be allowable under this section unless*
19 *the taxpayer elects not to claim the credit under sec-*
20 *tion 29 with respect to the well.*”

21 “(4) *NONCOMPLIANCE WITH POLLUTION LAWS.—*
22 *For purposes of subsection (c)(3)(A), a marginal well*
23 *which is not in compliance with the applicable State*
24 *and Federal pollution prevention, control, and permit*
25 *requirements for any period of time shall not be con-*

1 sidered to be a qualified marginal well during such
2 period.”.

3 (b) *CREDIT TREATED AS BUSINESS CREDIT.*—Section
4 38(b), as amended by this Act, is amended by striking
5 “plus” at the end of paragraph (20), by striking the period
6 at the end of paragraph (21) and inserting “, plus”, and
7 by adding at the end the following new paragraph:

8 “(22) the marginal oil and gas well production
9 credit determined under section 45K(a).”.

10 (c) *NO CARRYBACK OF MARGINAL OIL AND GAS WELL*
11 *PRODUCTION CREDIT BEFORE EFFECTIVE DATE.*—Sub-
12 section (d) of section 39, as amended by this Act, is amend-
13 ed by adding at the end the following new paragraph:

14 “(19) *NO CARRYBACK OF MARGINAL OIL AND GAS*
15 *WELL PRODUCTION CREDIT BEFORE EFFECTIVE*
16 *DATE.*—No portion of the unused business credit for
17 any taxable year which is attributable to the mar-
18 ginal oil and gas well production credit determined
19 under section 45K may be carried back to a taxable
20 year ending on or before the date of the enactment of
21 section 45K.”.

22 (d) *COORDINATION WITH SECTION 29.*—Section 29(a)
23 is amended by striking “There” and inserting “At the elec-
24 tion of the taxpayer, there”.

1 (e) *CLERICAL AMENDMENT.*—*The table of sections for*
 2 *subpart D of part IV of subchapter A of chapter 1, as*
 3 *amended by this Act, is amended by adding at the end the*
 4 *following new item:*

“Sec. 45K. Credit for producing oil and gas from marginal wells.”.

5 (f) *EFFECTIVE DATE.*—*The amendments made by this*
 6 *section shall apply to production in taxable years beginning*
 7 *after the date of the enactment of this Act.*

8 **SEC. 2302. NATURAL GAS GATHERING LINES TREATED AS 7-**
 9 **YEAR PROPERTY.**

10 (a) *IN GENERAL.*—*Subparagraph (C) of section*
 11 *168(e)(3) (relating to classification of certain property) is*
 12 *amended by striking “and” at the end of clause (i), by re-*
 13 *designating clause (ii) as clause (iii), and by inserting after*
 14 *clause (i) the following new clause:*

15 *“(ii) any natural gas gathering line,*
 16 *and”.*

17 (b) *NATURAL GAS GATHERING LINE.*—*Subsection (i)*
 18 *of section 168, as amended by this Act, is amended by add-*
 19 *ing at the end the following new paragraph:*

20 *“(16) NATURAL GAS GATHERING LINE.—The*
 21 *term ‘natural gas gathering line’ means—*

22 *“(A) the pipe, equipment, and appur-*
 23 *tenances determined to be a gathering line by the*
 24 *Federal Energy Regulatory Commission, or*

1 “(B) the pipe, equipment, and appur-
 2 tenances used to deliver natural gas from the
 3 wellhead or a commonpoint to the point at which
 4 such gas first reaches—

5 “(i) a gas processing plant,

6 “(ii) an interconnection with a trans-
 7 mission pipeline certificated by the Federal
 8 Energy Regulatory Commission as an
 9 interstate transmission pipeline,

10 “(iii) an interconnection with an
 11 intrastate transmission pipeline, or

12 “(iv) a direct interconnection with a
 13 local distribution company, a gas storage
 14 facility, or an industrial consumer.”.

15 (c) *ALTERNATIVE SYSTEM.*—The table contained in
 16 section 168(g)(3)(B) is amended by inserting after the item
 17 relating to subparagraph (C)(i) the following new item:

 “(C)(ii) 10”.

18 (d) *EFFECTIVE DATE.*—The amendments made by this
 19 section shall apply to property placed in service after the
 20 date of the enactment of this Act, in taxable years ending
 21 after such date.

1 **SEC. 2303. EXPENSING OF CAPITAL COSTS INCURRED IN**
2 **COMPLYING WITH ENVIRONMENTAL PROTEC-**
3 **TION AGENCY SULFUR REGULATIONS.**

4 (a) *IN GENERAL.*—Part VI of subchapter B of chapter
5 1 (relating to itemized deductions for individuals and cor-
6 porations), as amended by this Act, is amended by inserting
7 after section 179C the following new section:

8 **“SEC. 179D. DEDUCTION FOR CAPITAL COSTS INCURRED IN**
9 **COMPLYING WITH ENVIRONMENTAL PROTEC-**
10 **TION AGENCY SULFUR REGULATIONS.**

11 “(a) *TREATMENT AS EXPENSE.*—

12 “(1) *IN GENERAL.*—A small business refiner may
13 elect to treat any qualified capital costs as an expense
14 which is not chargeable to capital account. Any quali-
15 fied cost which is so treated shall be allowed as a de-
16 duction for the taxable year in which the cost is paid
17 or incurred.

18 “(2) *LIMITATION.*—

19 “(A) *IN GENERAL.*—The aggregate costs
20 which may be taken into account under this sub-
21 section for any taxable year may not exceed the
22 applicable percentage of the qualified capital
23 costs paid or incurred for the taxable year.

24 “(B) *APPLICABLE PERCENTAGE.*—For pur-
25 poses of subparagraph (A)—

1 “(i) *IN GENERAL.*—*Except as provided*
2 *in clause (ii), the applicable percentage is*
3 *75 percent.*

4 “(ii) *REDUCED PERCENTAGE.*—*In the*
5 *case of a small business refiner with average*
6 *daily refinery runs for the period described*
7 *in subsection (b)(2) in excess of 155,000*
8 *barrels, the percentage described in clause*
9 *(i) shall be reduced (not below zero) by the*
10 *product of such percentage (before the appli-*
11 *cation of this clause) and the ratio of such*
12 *excess to 50,000 barrels.*

13 “(b) *DEFINITIONS.*—*For purposes of this section—*

14 “(1) *QUALIFIED CAPITAL COSTS.*—*The term*
15 *‘qualified capital costs’ means any costs which—*

16 “(A) *are otherwise chargeable to capital ac-*
17 *count, and*

18 “(B) *are paid or incurred for the purpose*
19 *of complying with the Highway Diesel Fuel Sul-*
20 *fur Control Requirement of the Environmental*
21 *Protection Agency, as in effect on the date of the*
22 *enactment of this section, with respect to a facil-*
23 *ity placed in service by the taxpayer before such*
24 *date.*

1 “(2) *SMALL BUSINESS REFINER.*—*The term*
2 *‘small business refiner’ means, with respect to any*
3 *taxable year, a refiner of crude oil, which, within the*
4 *refinery operations of the business, employs not more*
5 *than 1,500 employees on any day during such taxable*
6 *year and whose average daily refinery run for the 1-*
7 *year period ending on the date of the enactment of*
8 *this section did not exceed 205,000 barrels.*

9 “(c) *COORDINATION WITH OTHER PROVISIONS.*—*Sec-*
10 *tion 280B shall not apply to amounts which are treated*
11 *as expenses under this section.*

12 “(d) *BASIS REDUCTION.*—*For purposes of this title,*
13 *the basis of any property shall be reduced by the portion*
14 *of the cost of such property taken into account under sub-*
15 *section (a).*

16 “(e) *CONTROLLED GROUPS.*—*For purposes of this sec-*
17 *tion, all persons treated as a single employer under sub-*
18 *section (b), (c), (m), or (o) of section 414 shall be treated*
19 *as a single employer.”.*

20 (b) *CONFORMING AMENDMENTS.*—

21 (1) *Section 263(a)(1), as amended by this Act, is*
22 *amended by striking “or” at the end of subparagraph*
23 *(I), by striking the period at the end of subparagraph*
24 *(J) and inserting “, or”, and by inserting after sub-*
25 *paragraph (J) the following new subparagraph:*

1 “(K) expenditures for which a deduction is
2 allowed under section 179D.”.

3 (2) Section 263A(c)(3) is amended by inserting
4 “179C,” after “section”.

5 (3) Section 312(k)(3)(B), as amended by this
6 Act, is amended by striking “or 179C” each place it
7 appears in the heading and text and inserting “,
8 179C, or 179D”.

9 (4) Section 1016(a), as amended by this Act, is
10 amended by striking “and” at the end of paragraph
11 (33), by striking the period at the end of paragraph
12 (34) and inserting “, and”, and by adding at the end
13 the following new paragraph:

14 “(35) to the extent provided in section
15 179D(d).”.

16 (5) Section 1245(a), as amended by this Act, is
17 amended by inserting “179D,” after “179C,” both
18 places it appears in paragraphs (2)(C) and (3)(C).

19 (6) The table of sections for part VI of sub-
20 chapter B of chapter 1, as amended by this Act, is
21 amended by inserting after section 179C the following
22 new item:

 “Sec. 179D. Deduction for capital costs incurred in complying with Environ-
 mental Protection Agency sulfur regulations.”.

23 (c) *EFFECTIVE DATE.*—The amendment made by this
24 section shall apply to expenses paid or incurred after the

1 *date of the enactment of this Act, in taxable years ending*
2 *after such date.*

3 **SEC. 2304. ENVIRONMENTAL TAX CREDIT.**

4 *(a) IN GENERAL.—Subpart D of part IV of subchapter*
5 *A of chapter 1 (relating to business-related credits), as*
6 *amended by this Act, is amended by adding at the end the*
7 *following new section:*

8 **“SEC. 45L. ENVIRONMENTAL TAX CREDIT.**

9 *“(a) IN GENERAL.—For purposes of section 38, the*
10 *amount of the environmental tax credit determined under*
11 *this section with respect to any small business refiner for*
12 *any taxable year is an amount equal to 5 cents for every*
13 *gallon of 15 parts per million or less sulfur diesel produced*
14 *at a facility by such small business refiner during such tax-*
15 *able year.*

16 *“(b) MAXIMUM CREDIT.—*

17 *“(1) IN GENERAL.—For any small business re-*
18 *finer, the aggregate amount determined under sub-*
19 *section (a) for any taxable year with respect to any*
20 *facility shall not exceed the applicable percentage of*
21 *the qualified capital costs paid or incurred by such*
22 *small business refiner with respect to such facility*
23 *during the applicable period, reduced by the credit al-*
24 *lowed under subsection (a) for any preceding year.*

1 “(2) *APPLICABLE PERCENTAGE.*—For purposes
2 of paragraph (1)—

3 “(A) *IN GENERAL.*—Except as provided in
4 subparagraph (B), the applicable percentage is
5 25 percent.

6 “(B) *REDUCED PERCENTAGE.*—The percent-
7 age described in subparagraph (A) shall be re-
8 duced in the same manner as under section
9 179D(a)(2)(B)(vi).

10 “(c) *DEFINITIONS.*—For purposes of this section—

11 “(1) *IN GENERAL.*—The terms ‘small business re-
12 finer’ and ‘qualified capital costs’ have the same
13 meaning as given in section 179D.

14 “(2) *APPLICABLE PERIOD.*—The term ‘applicable
15 period’ means, with respect to any facility, the period
16 beginning on the day after the date which is 1 year
17 after the date of the enactment of this section and
18 ending with the date which is 1 year after the date
19 on which the taxpayer must comply with the applica-
20 ble EPA regulations with respect to such facility.

21 “(3) *APPLICABLE EPA REGULATIONS.*—The term
22 ‘applicable EPA regulations’ means the Highway
23 Diesel Fuel Sulfur Control Requirements of the Envi-
24 ronmental Protection Agency, as in effect on the date
25 of the enactment of this section.

1 “(d) *CERTIFICATION.*—

2 “(1) *REQUIRED.*—Not later than the date which
3 is 30 months after the first day of the first taxable
4 year in which the environmental tax credit is allowed
5 with respect to qualified capital costs paid or in-
6 curred with respect to a facility, the small business
7 refiner shall obtain a certification from the Secretary,
8 in consultation with the Administrator of the Envi-
9 ronmental Protection Agency, that the taxpayer’s
10 qualified capital costs with respect to such facility
11 will result in compliance with the applicable EPA
12 regulations.

13 “(2) *CONTENTS OF APPLICATION.*—An applica-
14 tion for certification shall include relevant informa-
15 tion regarding unit capacities and operating charac-
16 teristics sufficient for the Secretary, in consultation
17 with the Administrator of the Environmental Protec-
18 tion Agency, to determine that such qualified capital
19 costs are necessary for compliance with the applicable
20 EPA regulations.

21 “(3) *REVIEW PERIOD.*—Any application shall be
22 reviewed and notice of certification, if applicable,
23 shall be made within 60 days of receipt of such appli-
24 cation. In the event the Secretary does not notify the
25 taxpayer of the results of such certification within

1 *such period, the taxpayer may presume the certifi-*
2 *cation to be issued until so notified.*

3 “(4) *STATUTE OF LIMITATIONS.*—*With respect to*
4 *the credit allowed under this section—*

5 “(A) *the statutory period for the assessment*
6 *of any deficiency attributable to such credit shall*
7 *not expire before the end of the 3-year period*
8 *ending on the date that the review period de-*
9 *scribed in paragraph (3) ends, and*

10 “(B) *such deficiency may be assessed before*
11 *the expiration of such 3-year period notwith-*
12 *standing the provisions of any other law or rule*
13 *of law which would otherwise prevent such as-*
14 *essment.*

15 “(e) *CONTROLLED GROUPS.*—*For purposes of this sec-*
16 *tion, all persons treated as a single employer under sub-*
17 *section (b), (c), (m), or (o) of section 414 shall be treated*
18 *as a single employer.*

19 “(f) *COOPERATIVE ORGANIZATIONS.*—

20 “(1) *APPORTIONMENT OF CREDIT.*—*In the case*
21 *of a cooperative organization described in section*
22 *1381(a), any portion of the credit determined under*
23 *subsection (a) of this section, for the taxable year*
24 *may, at the election of the organization, be appor-*
25 *tioned among patrons eligible to share in patronage*

1 *dividends on the basis of the quantity or value of*
2 *business done with or for such patrons for the taxable*
3 *year. Such an election shall be irrevocable for such*
4 *taxable year.*

5 “(2) *TREATMENT OF ORGANIZATIONS AND PA-*
6 *TRONS.—*

7 “(A) *ORGANIZATIONS.—The amount of the*
8 *credit not apportioned to patrons pursuant to*
9 *paragraph (1) shall be included in the amount*
10 *determined under subsection (a) for the taxable*
11 *year of the organization.*

12 “(B) *PATRONS.—The amount of the credit*
13 *apportioned to patrons pursuant to paragraph*
14 *(1) shall be included in the amount determined*
15 *under subsection (a) for the first taxable year of*
16 *each patron ending on or after the last day of*
17 *the payment period (as defined in section*
18 *1382(d)) for the taxable year of the organization*
19 *or, if earlier, for the taxable year of each patron*
20 *ending on or after the date on which the patron*
21 *receives notice from the cooperative of the appor-*
22 *tionment.”.*

23 (b) *CREDIT MADE PART OF GENERAL BUSINESS*
24 *CREDIT.—Subsection (b) of section 38 (relating to general*
25 *business credit), as amended by this Act, is amended by*

1 striking “plus” at the end of paragraph (21), by striking
2 the period at the end of paragraph (22) and inserting “,
3 plus”, and by adding at the end the following new para-
4 graph:

5 “(23) in the case of a small business refiner, the
6 environmental tax credit determined under section
7 45L(a).”.

8 (c) *DENIAL OF DOUBLE BENEFIT*.—Section 280C (re-
9 lating to certain expenses for which credits are allowable),
10 as amended by this Act, is amended by adding after sub-
11 section (d) the following new subsection:

12 “(e) *ENVIRONMENTAL TAX CREDIT*.—No deduction
13 shall be allowed for that portion of the expenses otherwise
14 allowable as a deduction for the taxable year which is equal
15 to the amount of the credit determined for the taxable year
16 under section 45L(a).”.

17 (d) *CLERICAL AMENDMENT*.—The table of sections for
18 subpart D of part IV of subchapter A of chapter 1, as
19 amended by this Act, is amended by adding at the end the
20 following new item:

 “Sec. 45L. Environmental tax credit.”.

21 (e) *EFFECTIVE DATE*.—The amendments made by this
22 section shall apply to expenses paid or incurred after the
23 date of the enactment of this Act, in taxable years ending
24 after such date.

1 **SEC. 2305. DETERMINATION OF SMALL REFINER EXCEP-**
2 **TION TO OIL DEPLETION DEDUCTION.**

3 (a) *IN GENERAL.*—Paragraph (4) of section 613A(d)
4 (relating to certain refiners excluded) is amended to read
5 as follows:

6 “(4) *CERTAIN REFINERS EXCLUDED.*—If the tax-
7 payer or 1 or more related persons engages in the re-
8 fining of crude oil, subsection (c) shall not apply to
9 the taxpayer for a taxable year if the average daily
10 refinery runs of the taxpayer and such persons for the
11 taxable year exceed 60,000 barrels. For purposes of
12 this paragraph, the average daily refinery runs for
13 any taxable year shall be determined by dividing the
14 aggregate refinery runs for the taxable year by the
15 number of days in the taxable year.”.

16 (b) *EFFECTIVE DATE.*—The amendment made by this
17 section shall apply to taxable years beginning after Decem-
18 ber 31, 2002.

19 **SEC. 2306. MARGINAL PRODUCTION INCOME LIMIT EXTEN-**
20 **SION.**

21 Section 613A(c)(6)(H) (relating to temporary suspen-
22 sion of taxable income limit with respect to marginal pro-
23 duction), as amended by section 607(a) of the Job Creation
24 and Worker Assistance Act of 2002, is amended by striking
25 “2004” and inserting “2007”.

1 **SEC. 2307. AMORTIZATION OF GEOLOGICAL AND GEO-**
2 **PHYSICAL EXPENDITURES.**

3 (a) *IN GENERAL.*—Part VI of subchapter B of chapter
4 1, as amended by this Act, is amended by adding at the
5 end the following new section:

6 **“SEC. 199. AMORTIZATION OF GEOLOGICAL AND GEO-**
7 **PHYSICAL EXPENDITURES FOR DOMESTIC**
8 **OIL AND GAS WELLS.**

9 “A taxpayer shall be entitled to an amortization de-
10 duction with respect to any geological and geophysical ex-
11 penses incurred in connection with the exploration for, or
12 development of, oil or gas within the United States (as de-
13 fined in section 638) based on a period of 24 months begin-
14 ning with the month in which such expenses were in-
15 curred.”.

16 (b) *CLERICAL AMENDMENT.*—The table of sections for
17 part VI of subchapter B of chapter 1, as amended by this
18 Act, is amended by adding at the end the following new
19 item:

“Sec. 199. Amortization of geological and geophysical expenditures for domestic
oil and gas wells.”.

20 (c) *EFFECTIVE DATE.*—The amendments made by this
21 section shall apply to costs paid or incurred in taxable
22 years beginning after December 31, 2002.

1 **SEC. 2308. AMORTIZATION OF DELAY RENTAL PAYMENTS.**

2 (a) *IN GENERAL.*—Part VI of subchapter B of chapter
3 1, as amended by this Act, is amended by adding at the
4 end the following new section:

5 **“SEC. 199A. AMORTIZATION OF DELAY RENTAL PAYMENTS**
6 **FOR DOMESTIC OIL AND GAS WELLS.**

7 “(a) *IN GENERAL.*—A taxpayer shall be entitled to an
8 amortization deduction with respect to any delay rental
9 payments incurred in connection with the development of
10 oil or gas within the United States (as defined in section
11 638) based on a period of 24 months beginning with the
12 month in which such payments were incurred.”.

13 “(b) *DELAY RENTAL PAYMENTS.*—For purposes of this
14 section, the term ‘delay rental payment’ means an amount
15 paid for the privilege of deferring development of an oil or
16 gas well under an oil or gas lease.”.

17 (b) *CLERICAL AMENDMENT.*—The table of sections for
18 part VI of subchapter B of chapter 1, as amended by this
19 Act, is amended by adding at the end the following new
20 item:

“Sec. 199A. Amortization of delay rental payments for domestic oil and gas
wells.”.

21 (c) *EFFECTIVE DATE.*—The amendments made by this
22 section shall apply to amounts paid or incurred in taxable
23 years beginning after December 31, 2002.

1 **SEC. 2309. STUDY OF COAL BED METHANE.**

2 (a) *IN GENERAL.*—*The Secretary of the Treasury shall*
3 *study the effect of section 29 of the Internal Revenue Code*
4 *of 1986 on the production of coal bed methane. Such study*
5 *shall be made in conjunction with the study to be under-*
6 *taken by the Secretary of the Interior on the effects of coal*
7 *bed methane production on surface and water resources, as*
8 *provided in section 607 of the Energy Policy Act of 2002.*

9 (b) *CONTENTS OF STUDY.*—*The study under subsection*
10 *(a) shall estimate the total amount of credits under section*
11 *29 of the Internal Revenue Code of 1986 claimed annually*
12 *and in the aggregate which are related to the production*
13 *of coal bed methane since the date of the enactment of such*
14 *section 29. Such study shall report the annual value of such*
15 *credits allowable for coal bed methane compared to the aver-*
16 *age annual wellhead price of natural gas (per thousand*
17 *cubic feet of natural gas). Such study shall also estimate*
18 *the incremental increase in production of coal bed methane*
19 *that has resulted from the enactment of such section 29, and*
20 *the cost to the Federal Government, in terms of the net tax*
21 *benefits claimed, per thousand cubic feet of incremental coal*
22 *bed methane produced annually and in the aggregate since*
23 *such enactment.*

1 **SEC. 2310. EXTENSION AND MODIFICATION OF CREDIT FOR**
2 **PRODUCING FUEL FROM A NONCONVEN-**
3 **TIONAL SOURCE.**

4 (a) *IN GENERAL.*—Section 29 is amended by adding
5 at the end the following new subsection:

6 “(h) *EXTENSION FOR OTHER FACILITIES.*—

7 “(1) *OIL AND GAS.*—In the case of a well or fa-
8 cility for producing qualified fuels described in sub-
9 paragraph (A) or (B) of subsection (c)(1) which was
10 drilled or placed in service after the date of the enact-
11 ment of this subsection and before January 1, 2005,
12 notwithstanding subsection (f), this section shall
13 apply with respect to such fuels produced at such well
14 or facility not later than the close of the 3-year period
15 beginning on the date that such well is drilled or such
16 facility is placed in service.

17 “(2) *FACILITIES PRODUCING REFINED COAL.*—

18 “(A) *IN GENERAL.*—In the case of a facility
19 described in subparagraph (C) for producing re-
20 fined coal which was placed in service after the
21 date of the enactment of this subsection and be-
22 fore January 1, 2007, this section shall apply
23 with respect to fuel produced at such facility not
24 later than the close of the 5-year period begin-
25 ning on the date such facility is placed in serv-
26 ice.

1 “(B) *REFINED COAL.*—For purposes of this
2 paragraph, the term ‘refined coal’ means a fuel
3 which is a liquid, gaseous, or solid synthetic fuel
4 produced from coal (including lignite) or high
5 carbon fly ash, including such fuel used as a
6 feedstock.

7 “(C) *COVERED FACILITIES.*—

8 “(i) *IN GENERAL.*—A facility is de-
9 scribed in this subparagraph if such facility
10 produces refined coal using a technology
11 that results in—

12 “(I) a qualified emission reduc-
13 tion, and

14 “(II) a qualified enhanced value.

15 “(ii) *QUALIFIED EMISSION REDUC-*
16 *TION.*—For purposes of this subparagraph,
17 the term ‘qualified emission reduction’
18 means a reduction of at least 20 percent of
19 the emissions of nitrogen oxide and either
20 sulfur dioxide or mercury released when
21 burning the refined coal (excluding any di-
22 lution caused by materials combined or
23 added during the production process), as
24 compared to the emissions released when
25 burning the feedstock coal or comparable

1 *coal predominantly available in the market-*
2 *place as of January 1, 2002.*

3 “(iii) *QUALIFIED ENHANCED VALUE.—*

4 *For purposes of this subparagraph, the term*
5 *‘qualified enhanced value’ means an in-*
6 *crease of at least 50 percent in the market*
7 *value of the refined coal (excluding any in-*
8 *crease caused by materials combined or*
9 *added during the production process), as*
10 *compared to the value of the feedstock coal.*

11 “(iii) *QUALIFYING ADVANCED CLEAN*

12 *COAL TECHNOLOGY FACILITIES EX-*
13 *CLUDED.—A facility described in this sub-*
14 *paragraph shall not include a qualifying*
15 *advanced clean coal technology facility (as*
16 *defined in section 48A(b)).*

17 “(3) *WELLS PRODUCING VISCOUS OIL.—*

18 “(A) *IN GENERAL.—In the case of a well for*
19 *producing viscous oil which was placed in serv-*
20 *ice after the date of the enactment of this sub-*
21 *section and before January 1, 2005, this section*
22 *shall apply with respect to fuel produced at such*
23 *well not later than the close of the 3-year period*
24 *beginning on the date such well is placed in serv-*
25 *ice.*

1 “(B) *VISCOUS OIL*.—The term “viscous oil”
2 means heavy oil, as defined in section
3 613A(c)(6), except that—

4 “(i) ‘22 degrees’ shall be substituted for
5 ‘20 degrees’ in applying subparagraph (F)
6 thereof, and

7 “(ii) in all cases, the oil gravity shall
8 be measured from the initial well-head sam-
9 ples, drill cuttings, or down hole samples.

10 “(C) *WAIVER OF UNRELATED PERSON RE-*
11 *QUIREMENT*.—In the case of viscous oil, the re-
12 quirement under subsection (a)(1)(B)(i) of a sale
13 to an unrelated person shall not apply to any
14 sale to the extent that the viscous oil is not con-
15 sumed in the immediate vicinity of the wellhead.

16 “(4) *COALMINE METHANE GAS*.—

17 “(A) *IN GENERAL*.—This section shall apply
18 to coalmine methane gas—

19 “(i) captured or extracted by the tax-
20 payer after the date of the enactment of this
21 subsection and before January 1, 2005, and

22 “(ii) utilized as a fuel source or sold by
23 or on behalf of the taxpayer to an unrelated
24 person after the date of the enactment of
25 this subsection and before January 1, 2005.

1 “(B) *COALMINE METHANE GAS.*—*For pur-*
2 *poses of this paragraph, the term ‘coalmine*
3 *methane gas’ means any methane gas which is—*

4 “(i) *liberated during qualified coal*
5 *mining operations, or*

6 “(ii) *extracted up to 5 years in ad-*
7 *vance of qualified coal mining operations as*
8 *part of a specific plan to mine a coal de-*
9 *posit.*

10 “(C) *SPECIAL RULE FOR ADVANCED EX-*
11 *TRACTION.*—*In the case of coalmine methane gas*
12 *which is captured in advance of qualified coal*
13 *mining operations, the credit under subsection*
14 *(a) shall be allowed only after the date the coal*
15 *extraction occurs in the immediate area where*
16 *the coalmine methane gas was removed.*

17 “(D) *NONCOMPLIANCE WITH POLLUTION*
18 *LAWS.*—*For purposes of subparagraphs (B) and*
19 *(C), coal mining operations which are not in*
20 *compliance with the applicable State and Fed-*
21 *eral pollution prevention, control, and permit re-*
22 *quirements for any period of time shall not be*
23 *considered to be qualified coal mining operations*
24 *during such period.*

1 “(5) *FACILITIES PRODUCING FUELS FROM AGRICULTURAL AND ANIMAL WASTE.*—

2
3 “(A) *IN GENERAL.*—*In the case of facility*
4 *for producing liquid, gaseous, or solid fuels from*
5 *qualified agricultural and animal wastes, in-*
6 *cluding such fuels when used as feedstocks, which*
7 *was placed in service after the date of the enact-*
8 *ment of this subsection and before January 1,*
9 *2005, this section shall apply with respect to fuel*
10 *produced at such facility not later than the close*
11 *of the 3-year period beginning on the date such*
12 *facility is placed in service.*

13 “(B) *QUALIFIED AGRICULTURAL AND ANI-*
14 *MAL WASTE.*—*For purposes of this paragraph,*
15 *the term ‘qualified agricultural and animal*
16 *waste’ means agriculture and animal waste, in-*
17 *cluding by-products, packaging, and any mate-*
18 *rials associated with the processing, feeding, sell-*
19 *ing, transporting, or disposal of agricultural or*
20 *animal products or wastes, including wood*
21 *shavings, straw, rice hulls, and other bedding for*
22 *the disposition of manure.*

23 “(6) *CREDIT AMOUNT.*—*In determining the*
24 *amount of credit allowable under this section solely*
25 *by reason of this subsection, the dollar amount appli-*

1 *cable under subsection (a)(1) shall be \$3 (without re-*
 2 *gard to subsection (b)(2)).”.*

3 (b) *EXTENSION FOR CERTAIN FUEL PRODUCED*
 4 *AT EXISTING FACILITIES.*—Paragraph (2) of section
 5 *29(f) (relating to application of section) is amended*
 6 *by inserting “(January 1, 2005, in the case of any*
 7 *coke, coke gas, or natural gas and byproducts pro-*
 8 *duced by coal gasification from lignite in a facility*
 9 *described in paragraph (1)(B))” after “January 1,*
 10 *2003”.*

11 (c) *EFFECTIVE DATE.*—The amendment made by this
 12 *section shall apply to fuel sold after the date of the enact-*
 13 *ment of this Act.*

14 **SEC. 2311. NATURAL GAS DISTRIBUTION LINES TREATED AS**
 15 **15-YEAR PROPERTY.**

16 (a) *IN GENERAL.*—Subparagraph (E) of section
 17 *168(e)(3) (relating to classification of certain property) is*
 18 *amended by striking “and” at the end of clause (ii), by*
 19 *striking the period at the end of clause (iii) and by insert-*
 20 *ing “, and”, and by adding at the end the following new*
 21 *clause:*

22 *“(iv) any natural gas distribution*
 23 *line.”.*

24 (b) *ALTERNATIVE SYSTEM.*—The table contained in
 25 *section 168(g)(3)(B), as amended by this Act, is amended*

1 by adding after the item relating to subparagraph (E)(iii)
 2 the following new item:

“(E)(iv) 20”.

3 (c) *EFFECTIVE DATE.*—The amendments made by this
 4 section shall apply to property placed in service after the
 5 date of the enactment of this Act, in taxable years ending
 6 after such date.

7 **TITLE XXIV—ELECTRIC UTILITY**
 8 **RESTRUCTURING PROVISIONS**

9 **SEC. 2401. ONGOING STUDY AND REPORTS REGARDING TAX**
 10 **ISSUES RESULTING FROM FUTURE RESTRUC-**
 11 **TURING DECISIONS.**

12 (a) *ONGOING STUDY.*—The Secretary of the Treasury,
 13 after consultation with the Federal Energy Regulatory
 14 Commission, shall undertake an ongoing study of Federal
 15 tax issues resulting from nontax decisions on the restruc-
 16 turing of the electric industry. In particular, the study shall
 17 focus on the effect on tax-exempt bonding authority of pub-
 18 lic power entities and on corporate restructuring which re-
 19 sults from the restructuring of the electric industry.

20 (b) *REGULATORY RELIEF.*—In connection with the
 21 study described in subsection (a), the Secretary of the Treas-
 22 ury should exercise the Secretary’s authority, as appro-
 23 priate, to modify or suspend regulations that may impede
 24 an electric utility company’s ability to reorganize its cap-
 25 ital stock structure to respond to a competitive marketplace.

1 (c) *REPORTS.*—*The Secretary of the Treasury shall re-*
2 *port to the Committee on Finance of the Senate and the*
3 *Committee on Ways and Means of the House of Representa-*
4 *tives not later than December 31, 2002, regarding Federal*
5 *tax issues identified under the study described in subsection*
6 *(a), and at least annually thereafter, regarding such issues*
7 *identified since the preceding report. Such reports shall also*
8 *include such legislative recommendations regarding changes*
9 *to the private business use rules under subpart A of part*
10 *IV of subchapter B of chapter 1 of the Internal Revenue*
11 *Code of 1986 as the Secretary of the Treasury deems nec-*
12 *essary. The reports shall continue until such time as the*
13 *Federal Energy Regulatory Commission has completed the*
14 *restructuring of the electric industry.*

15 **SEC. 2402. MODIFICATIONS TO SPECIAL RULES FOR NU-**
16 **CLEAR DECOMMISSIONING COSTS.**

17 (a) *REPEAL OF LIMITATION ON DEPOSITS INTO FUND*
18 *BASED ON COST OF SERVICE; CONTRIBUTIONS AFTER*
19 *FUNDING PERIOD.*—*Subsection (b) of section 468A is*
20 *amended to read as follows:*

21 “(b) *LIMITATION ON AMOUNTS PAID INTO FUND.*—*The*
22 *amount which a taxpayer may pay into the Fund for any*
23 *taxable year shall not exceed the ruling amount applicable*
24 *to such taxable year.”.*

1 **(b) CLARIFICATION OF TREATMENT OF FUND TRANS-**
2 **FERS.**—*Subsection (e) of section 468A is amended by add-*
3 *ing at the end the following new paragraph:*

4 **“(8) TREATMENT OF FUND TRANSFERS.**—*If, in*
5 *connection with the transfer of the taxpayer’s interest*
6 *in a nuclear power plant, the taxpayer transfers the*
7 *Fund with respect to such power plant to the trans-*
8 *feree of such interest and the transferee elects to con-*
9 *tinue the application of this section to such Fund—*

10 **“(A) the transfer of such Fund shall not**
11 *cause such Fund to be disqualified from the ap-*
12 *plication of this section, and*

13 **“(B) no amount shall be treated as distrib-**
14 *uted from such Fund, or be includible in gross*
15 *income, by reason of such transfer.”.*

16 **(c) DEDUCTION FOR NUCLEAR DECOMMISSIONING**
17 **COSTS WHEN PAID.**—*Paragraph (2) of section 468A(c) is*
18 *amended to read as follows:*

19 **“(2) DEDUCTION OF NUCLEAR DECOMMISSIONING**
20 **COSTS.**—*In addition to any deduction under sub-*
21 *section (a), nuclear decommissioning costs paid or in-*
22 *curring by the taxpayer during any taxable year shall*
23 *constitute ordinary and necessary expenses in car-*
24 *rying on a trade or business under section 162.”.*

1 (d) *EFFECTIVE DATE.*—*The amendments made by this*
2 *section shall apply to taxable years beginning after Decem-*
3 *ber 31, 2002.*

4 **SEC. 2403. TREATMENT OF CERTAIN INCOME OF COOPERA-**
5 **TIVES.**

6 (a) *INCOME FROM OPEN ACCESS AND NUCLEAR DE-*
7 *COMMISSIONING TRANSACTIONS.*—

8 (1) *IN GENERAL.*—*Subparagraph (C) of section*
9 *501(c)(12) is amended by striking “or” at the end of*
10 *clause (i), by striking clause (ii), and by adding at*
11 *the end the following new clauses:*

12 “(ii) *from any open access transaction*
13 *(other than income received or accrued di-*
14 *rectly or indirectly from a member),*

15 “(iii) *from any nuclear decommis-*
16 *sioning transaction,*

17 “(iv) *from any asset exchange or con-*
18 *version transaction, or*

19 “(v) *from the prepayment of any loan,*
20 *debt, or obligation made, insured, or guar-*
21 *anteed under the Rural Electrification Act*
22 *of 1936.”.*

23 (2) *DEFINITIONS AND SPECIAL RULES.*—*Para-*
24 *graph (12) of section 501(c) is amended by adding at*
25 *the end the following new subparagraphs:*

1 “(E) For purposes of subparagraph
2 (C)(ii)—

3 “(i) The term ‘open access transaction’
4 means any transaction meeting the open ac-
5 cess requirements of any of the following
6 subclauses with respect to a mutual or coop-
7 erative electric company:

8 “(I) The provision or sale of
9 transmission service or ancillary serv-
10 ices meets the open access requirements
11 of this subclause only if such services
12 are provided on a nondiscriminatory
13 open access basis pursuant to an open
14 access transmission tariff filed with
15 and approved by FERC, including an
16 acceptable reciprocity tariff, or under a
17 regional transmission organization
18 agreement approved by FERC.

19 “(II) The provision or sale of elec-
20 tric energy distribution services or an-
21 cillary services meets the open access
22 requirements of this subclause only if
23 such services are provided on a non-
24 discriminatory open access basis to
25 end-users served by distribution facili-

1 *ties owned by the mutual or coopera-*
2 *tive electric company (or its members).*

3 *“(III) The delivery or sale of elec-*
4 *tric energy generated by a generation*
5 *facility meets the open access require-*
6 *ments of this subclause only if such fa-*
7 *cility is directly connected to distribu-*
8 *tion facilities owned by the mutual or*
9 *cooperative electric company (or its*
10 *members) which owns the generation*
11 *facility, and such distribution facilities*
12 *meet the open access requirements of*
13 *subclause (II).*

14 *“(ii) Clause (i)(I) shall apply in the*
15 *case of a voluntarily filed tariff only if the*
16 *mutual or cooperative electric company files*
17 *a report with FERC within 90 days after*
18 *the date of the enactment of this subpara-*
19 *graph relating to whether or not such com-*
20 *pany will join a regional transmission or-*
21 *ganization.*

22 *“(iii) A mutual or cooperative electric*
23 *company shall be treated as meeting the*
24 *open access requirements of clause (i)(I) if*

1 *a regional transmission organization con-*
2 *trols the transmission facilities.*

3 “(iv) *References to FERC in this sub-*
4 *paragraph shall be treated as including ref-*
5 *erences to the Public Utility Commission of*
6 *Texas with respect to any ERCOT utility*
7 *(as defined in section 212(k)(2)(B) of the*
8 *Federal Power Act (16 U.S.C.*
9 *824k(k)(2)(B))) or references to the Rural*
10 *Utilities Service with respect to any other*
11 *facility not subject to FERC jurisdiction.*

12 “(v) *For purposes of this*
13 *subparagraph—*

14 “(I) *The term ‘transmission facil-*
15 *ity’ means an electric output facility*
16 *(other than a generation facility) that*
17 *operates at an electric voltage of 69 kV*
18 *or greater. To the extent provided in*
19 *regulations, such term includes any*
20 *output facility that FERC determines*
21 *is a transmission facility under stand-*
22 *ards applied by FERC under the Fed-*
23 *eral Power Act (as in effect on the date*
24 *of the enactment of the Energy Tax In-*
25 *centives Act of 2002).*

1 “(II) The term ‘regional trans-
2 mission organization’ includes an
3 independent system operator.

4 “(III) The term ‘FERC’ means
5 the Federal Energy Regulatory Com-
6 mission.

7 “(F) The term ‘nuclear decommissioning
8 transaction’ means—

9 “(i) any transfer into a trust, fund, or
10 instrument established to pay any nuclear
11 decommissioning costs if the transfer is in
12 connection with the transfer of the mutual
13 or cooperative electric company’s interest in
14 a nuclear power plant or nuclear power
15 plant unit,

16 “(ii) any distribution from any trust,
17 fund, or instrument established to pay any
18 nuclear decommissioning costs, or

19 “(iii) any earnings from any trust,
20 fund, or instrument established to pay any
21 nuclear decommissioning costs.

22 “(G) The term ‘asset exchange or conversion
23 transaction’ means any voluntary exchange or
24 involuntary conversion of any property related
25 to generating, transmitting, distributing, or sell-

1 *ing electric energy by a mutual or cooperative*
2 *electric company, the gain from which qualifies*
3 *for deferred recognition under section 1031 or*
4 *1033, but only if the replacement property ac-*
5 *quired by such company pursuant to such sec-*
6 *tion constitutes property which is used, or to be*
7 *used, for—*

8 *“(i) generating, transmitting, distrib-*
9 *uting, or selling electric energy, or*

10 *“(ii) producing, transmitting, distrib-*
11 *uting, or selling natural gas.”.*

12 *(b) TREATMENT OF INCOME FROM LOAD LOSS TRANS-*
13 *ACTIONS.—Paragraph (12) of section 501(c), as amended*
14 *by subsection (a)(2), is amended by adding after subpara-*
15 *graph (G) the following new subparagraph:*

16 *“(H)(i) In the case of a mutual or coopera-*
17 *tive electric company described in this para-*
18 *graph or an organization described in section*
19 *1381(a)(2)(C), income received or accrued from a*
20 *load loss transaction shall be treated as an*
21 *amount collected from members for the sole pur-*
22 *pose of meeting losses and expenses.*

23 *“(ii) For purposes of clause (i), the term*
24 *‘load loss transaction’ means any wholesale or*
25 *retail sale of electric energy (other than to mem-*

1 bers) to the extent that the aggregate sales during
2 the recovery period does not exceed the load loss
3 mitigation sales limit for such period.

4 “(iii) For purposes of clause (ii), the load
5 loss mitigation sales limit for the recovery period
6 is the sum of the annual load losses for each year
7 of such period.

8 “(iv) For purposes of clause (iii), a mutual
9 or cooperative electric company’s annual load
10 loss for each year of the recovery period is the
11 amount (if any) by which—

12 “(I) the megawatt hours of electric en-
13 ergy sold during such year to members of
14 such electric company are less than

15 “(II) the megawatt hours of electric en-
16 ergy sold during the base year to such mem-
17 bers.

18 “(v) For purposes of clause (iv)(II), the
19 term ‘base year’ means—

20 “(I) the calendar year preceding the
21 start-up year, or

22 “(II) at the election of the electric com-
23 pany, the second or third calendar years
24 preceding the start-up year.

1 “(vi) For purposes of this subparagraph, the
2 recovery period is the 7-year period beginning
3 with the start-up year.

4 “(vii) For purposes of this subparagraph,
5 the start-up year is the calendar year which in-
6 cludes the date of the enactment of this subpara-
7 graph or, if later, at the election of the mutual
8 or cooperative electric company—

9 “(I) the first year that such electric
10 company offers nondiscriminatory open ac-
11 cess, or

12 “(II) the first year in which at least 10
13 percent of such electric company’s sales are
14 not to members of such electric company.

15 “(viii) A company shall not fail to be treat-
16 ed as a mutual or cooperative company for pur-
17 poses of this paragraph or as a corporation oper-
18 ating on a cooperative basis for purposes of sec-
19 tion 1381(a)(2)(C) by reason of the treatment
20 under clause (i).

21 “(ix) In the case of a mutual or cooperative
22 electric company, income from any open access
23 transaction received, or accrued, indirectly from
24 a member shall be treated as an amount collected

1 *from members for the sole purpose of meeting*
2 *losses and expenses.”.*

3 (c) *EXCEPTION FROM UNRELATED BUSINESS TAX-*
4 *ABLE INCOME.*—*Subsection (b) of section 512 (relating to*
5 *modifications) is amended by adding at the end the fol-*
6 *lowing new paragraph:*

7 “(18) *TREATMENT OF MUTUAL OR COOPERATIVE*
8 *ELECTRIC COMPANIES.*—*In the case of a mutual or*
9 *cooperative electric company described in section*
10 *501(c)(12), there shall be excluded income which is*
11 *treated as member income under subparagraph (H)*
12 *thereof.”.*

13 (d) *CROSS REFERENCE.*—*Section 1381 is amended by*
14 *adding at the end the following new subsection:*

15 “(c) *CROSS REFERENCE.*—

“For treatment of income from load loss trans-
actions of organizations described in subsection
(a)(2)(C), see section 501(c)(12)(H).”.

16 (e) *EFFECTIVE DATE.*—*The amendments made by this*
17 *section shall apply to taxable years beginning after the date*
18 *of the enactment of this Act.*

19 **SEC. 2404. SALES OR DISPOSITIONS TO IMPLEMENT FED-**
20 **ERAL ENERGY REGULATORY COMMISSION OR**
21 **STATE ELECTRIC RESTRUCTURING POLICY.**

22 (a) *IN GENERAL.*—*Section 451 (relating to general*
23 *rule for taxable year of inclusion) is amended by adding*
24 *at the end the following new subsection:*

1 “(i) *SPECIAL RULE FOR SALES OR DISPOSITIONS TO*
2 *IMPLEMENT FEDERAL ENERGY REGULATORY COMMISSION*
3 *OR STATE ELECTRIC RESTRUCTURING POLICY.*—

4 “(1) *IN GENERAL.*—*For purposes of this subtitle,*
5 *if a taxpayer elects the application of this subsection*
6 *to a qualifying electric transmission transaction in*
7 *any taxable year—*

8 “(A) *any ordinary income derived from*
9 *such transaction which would be required to be*
10 *recognized under section 1245 or 1250 for such*
11 *taxable year (determined without regard to this*
12 *subsection), and*

13 “(B) *any income derived from such trans-*
14 *action in excess of such ordinary income which*
15 *is required to be included in gross income for*
16 *such taxable year,*
17 *shall be so recognized and included ratably over the*
18 *8-taxable year period beginning with such taxable*
19 *year.*

20 “(2) *QUALIFYING ELECTRIC TRANSMISSION*
21 *TRANSACTION.*—*For purposes of this subsection, the*
22 *term ‘qualifying electric transmission transaction’*
23 *means any sale or other disposition before January 1,*
24 *2007, of—*

1 “(A) property used by the taxpayer in the
2 trade or business of providing electric trans-
3 mission services, or

4 “(B) any stock or partnership interest in a
5 corporation or partnership, as the case may be,
6 whose principal trade or business consists of pro-
7 viding electric transmission services,
8 but only if such sale or disposition is to an inde-
9 pendent transmission company.

10 “(3) INDEPENDENT TRANSMISSION COMPANY.—
11 For purposes of this subsection, the term ‘independent
12 transmission company’ means—

13 “(A) a regional transmission organization
14 approved by the Federal Energy Regulatory
15 Commission,

16 “(B) a person—

17 “(i) who the Federal Energy Regu-
18 latory Commission determines in its au-
19 thorization of the transaction under section
20 203 of the Federal Power Act (16 U.S.C.
21 824b) is not a market participant within
22 the meaning of such Commission’s rules ap-
23 plicable to regional transmission organiza-
24 tions, and

1 “(ii) whose transmission facilities to
2 which the election under this subsection ap-
3 plies are under the operational control of a
4 Federal Energy Regulatory Commission-ap-
5 proved regional transmission organization
6 before the close of the period specified in
7 such authorization, but not later than the
8 close of the period applicable under para-
9 graph (1), or

10 “(C) in the case of facilities subject to the
11 exclusive jurisdiction of the Public Utility Com-
12 mission of Texas, a person which is approved by
13 that Commission as consistent with Texas State
14 law regarding an independent transmission or-
15 ganization.

16 “(4) *ELECTION*.—An election under paragraph
17 (1), once made, shall be irrevocable.

18 “(5) *NONAPPLICATION OF INSTALLMENT SALES*
19 *TREATMENT*.—Section 453 shall not apply to any
20 qualifying electric transmission transaction with re-
21 spect to which an election to apply this subsection is
22 made.”.

23 “(b) *EFFECTIVE DATE*.—The amendment made by this
24 section shall apply to transactions occurring after the date
25 of the enactment of this Act.

1 **SEC. 2405. APPLICATION OF TEMPORARY REGULATIONS TO**
2 **CERTAIN OUTPUT CONTRACTS.**

3 *In the application of section 1-141-7(c)(4) of the*
4 *Treasury Temporary Regulations to output contracts en-*
5 *tered into after February 22, 1998, with respect to an issuer*
6 *participating in open access with respect to the issuer's*
7 *transmission facilities, an output contract in existence on*
8 *or before such date that is amended after such date shall*
9 *be treated as a contract entered into after such date only*
10 *if the amendment increases the amount of output sold under*
11 *such contract by extending the term of the contract or in-*
12 *creasing the amount of output sold, but such treatment as*
13 *a contract entered into after such date shall begin on the*
14 *effective date of the amendment and shall apply only with*
15 *respect to the increased output to be provided under such*
16 *contract.*

17 **SEC. 2406. TREATMENT OF CERTAIN DEVELOPMENT IN-**
18 **COME OF COOPERATIVES.**

19 *(a) IN GENERAL.—Subparagraph (C) of section*
20 *501(c)(12), as amended by this Act, is amended by striking*
21 *“or” at the end of clause (iv), by striking the period at the*
22 *end of clause (v) and insert “, or”, and by adding at the*
23 *end the following new clause:*

24 *“(vi) from the receipt before January*
25 *1, 2007, of any money, property, capital, or*
26 *any other contribution in aid of construc-*

1 **SEC. 2502. STUDY OF EFFECTIVENESS OF CERTAIN PROVI-**
2 **SIONS BY GAO.**

3 (a) *STUDY.*—*The Comptroller General of the United*
4 *States shall undertake an ongoing analysis of—*

5 (1) *the effectiveness of the alternative motor vehi-*
6 *cles and fuel incentives provisions under title II and*
7 *the conservation and energy efficiency provisions*
8 *under title III, and*

9 (2) *the recipients of the tax benefits contained in*
10 *such provisions, including an identification of such*
11 *recipients by income and other appropriate measure-*
12 *ments.*

13 *Such analysis shall quantify the effectiveness of such provi-*
14 *sions by examining and comparing the Federal Govern-*
15 *ment's forgone revenue to the aggregate amount of energy*
16 *actually conserved and tangible environmental benefits*
17 *gained as a result of such provisions.*

18 (b) *REPORTS.*—*The Comptroller General of the United*
19 *States shall report the analysis required under subsection*
20 *(a) to Congress not later than December 31, 2002, and an-*
21 *nually thereafter.*

22 **SEC. 2503. CREDIT FOR PRODUCTION OF ALASKA NATURAL**
23 **GAS.**

24 (a) *IN GENERAL.*—*Subpart D of part IV of subchapter*
25 *A of chapter 1 (relating to business related credits), as*

1 *amended by this Act, is amended by adding at the end the*
2 *following new section:*

3 **“SEC. 45M. ALASKA NATURAL GAS.**

4 “(a) *IN GENERAL.*—*For purposes of section 38, the*
5 *Alaska natural gas credit of any taxpayer for any taxable*
6 *year is the credit amount per 1,000,000 Btu of Alaska nat-*
7 *ural gas entering any intake or tie-in point which was de-*
8 *rived from an area of the State of Alaska lying north of*
9 *64 degrees North latitude, which is attributable to the tax-*
10 *payer and sold by or on behalf of the taxpayer to an unre-*
11 *lated person during such taxable year (within the meaning*
12 *of section 45).*

13 “(b) *CREDIT AMOUNT.*—*For purposes of this section—*

14 “(1) *IN GENERAL.*—*The credit amount per*
15 *1,000,000 Btu of Alaska natural gas entering any in-*
16 *take or tie-in point which was derived from an area*
17 *of the State of Alaska lying north of 64 degrees North*
18 *latitude (determined in United States dollars), is the*
19 *excess of—*

20 “(A) *\$3.25, over*

21 “(B) *the average monthly price at the*
22 *AECO C Hub in Alberta, Canada, for Alaska*
23 *natural gas for the month in which occurs the*
24 *date of such entering.*

1 “(2) *INFLATION ADJUSTMENT.*—*In the case of*
2 *any taxable year beginning in a calendar year after*
3 *the first calendar year ending after the date described*
4 *in subsection (g)(1), the dollar amount contained in*
5 *paragraph (1)(A) shall be increased to an amount*
6 *equal to such dollar amount multiplied by the infla-*
7 *tion adjustment factor for such calendar year (deter-*
8 *mined under section 43(b)(3)(B) by substituting ‘the*
9 *calendar year ending before the date described in sec-*
10 *tion 45M(g)(1)’ for ‘1990’.*

11 “(c) *ALASKA NATURAL GAS.*—*For purposes of this sec-*
12 *tion, the term ‘Alaska natural gas’ means natural gas enter-*
13 *ing any intake or tie-in point which was derived from an*
14 *area of the State of Alaska lying north of 64 degrees North*
15 *latitude produced in compliance with the applicable State*
16 *and Federal pollution prevention, control, and permit re-*
17 *quirements from the area generally known as the North*
18 *Slope of Alaska (including the continental shelf thereof*
19 *within the meaning of section 638(l)), determined without*
20 *regard to the area of the Alaska National Wildlife Refuge*
21 *(including the continental shelf thereof within the meaning*
22 *of section 638(l)).*

23 “(d) *RECAPTURE.*—

24 “(1) *IN GENERAL.*—*With respect to each*
25 *1,000,000 Btu of Alaska natural gas entering any in-*

1 *take or tie-in point which was derived from an area*
2 *of the State of Alaska lying north of 64 degrees North*
3 *latitude after the date which is 3 years after the date*
4 *described in subsection (g)(1), if the average monthly*
5 *price described in subsection (b)(1)(B) exceeds 150*
6 *percent of the amount described in subsection*
7 *(b)(1)(A) for the month in which occurs the date of*
8 *such entering, the taxpayer's tax under this chapter*
9 *for the taxable year shall be increased by an amount*
10 *equal to the lesser of—*

11 *“(A) such excess, or*

12 *“(B) the aggregate decrease in the credits*
13 *allowed under section 38 for all prior taxable*
14 *years which would have resulted if the Alaska*
15 *natural gas credit received by the taxpayer for*
16 *such years had been zero.*

17 *“(2) SPECIAL RULES.—*

18 *“(A) TAX BENEFIT RULE.—The tax for the*
19 *taxable year shall be increased under paragraph*
20 *(1) only with respect to credits allowed by reason*
21 *of this section which were used to reduce tax li-*
22 *ability. In the case of credits not so used to re-*
23 *duce tax liability, the carryforwards and*
24 *carrybacks under section 39 shall be appro-*
25 *priately adjusted.*

1 “(B) *NO CREDITS AGAINST TAX.*—Any in-
2 crease in tax under this subsection shall not be
3 treated as a tax imposed by this chapter for pur-
4 poses of determining the amount of any credit
5 under this chapter or for purposes of section 55.

6 “(e) *APPLICATION OF RULES.*—For purposes of this
7 section, rules similar to the rules of paragraphs (3), (4),
8 and (5) of section 45(d) shall apply.

9 “(f) *NO DOUBLE BENEFIT.*—The amount of any de-
10 duction or other credit allowable under this chapter for any
11 fuel taken into account in computing the amount of the
12 credit determined under subsection (a) shall be reduced by
13 the amount of such credit attributable to such fuel.

14 “(g) *APPLICATION OF SECTION.*—This section shall
15 apply to Alaska natural gas entering any intake or tie-in
16 point which was derived from an area of the State of Alaska
17 lying north of 64 degrees North latitude for the period—

18 “(1) beginning with the later of—

19 “(A) January 1, 2010, or

20 “(B) the initial date for the interstate
21 transportation of such Alaska natural gas, and

22 “(2) except with respect to subsection (d), ending
23 with the date which is 15 years after the date de-
24 scribed in paragraph (1).”.

1 **(b) CREDIT TREATED AS BUSINESS CREDIT.**—Section
2 38(b), as amended by this Act, is amended by striking
3 “plus” at the end of paragraph (22), by striking the period
4 at the end of paragraph (23) and inserting “, plus”, and
5 by adding at the end the following new paragraph:

6 “(24) The Alaska natural gas credit determined
7 under section 45M(a).”.

8 **(c) ALLOWING CREDIT AGAINST ENTIRE REGULAR**
9 **TAX AND MINIMUM TAX.**—

10 **(1) IN GENERAL.**—Subsection (c) of section 38
11 (relating to limitation based on amount of tax), as
12 amended by this Act, is amended by redesignating
13 paragraph (5) as paragraph (6) and by inserting
14 after paragraph (4) the following new paragraph:

15 **“(5) SPECIAL RULES FOR ALASKA NATURAL GAS**
16 **CREDIT.**—

17 **“(A) IN GENERAL.**—In the case of the Alas-
18 ka natural gas credit—

19 “(i) this section and section 39 shall be
20 applied separately with respect to the cred-
21 it, and

22 “(ii) in applying paragraph (1) to the
23 credit—

1 “(I) the amounts in subpara-
2 graphs (A) and (B) thereof shall be
3 treated as being zero, and

4 “(II) the limitation under para-
5 graph (1) (as modified by subclause
6 (I)) shall be reduced by the credit al-
7 lowed under subsection (a) for the tax-
8 able year (other than the Alaska nat-
9 ural gas credit).

10 “(B) ALASKA NATURAL GAS CREDIT.—For
11 purposes of this subsection, the term ‘Alaska nat-
12 ural gas credit’ means the credit allowable under
13 subsection (a) by reason of section 45M(a).”.

14 (2) CONFORMING AMENDMENTS.—Subclause (II)
15 of section 38(c)(2)(A)(ii), as amended by this Act,
16 subclause (II) of section 38(c)(3)(A)(ii), as amended
17 by this Act, and subclause (II) of section
18 38(c)(4)(A)(ii), as added by this Act, are each amend-
19 ed by inserting “or the Alaska natural gas credit”
20 after “producer credit”.

21 (d) CLERICAL AMENDMENT.—The table of sections for
22 subpart D of part IV of subchapter A of chapter 1, as
23 amended by this Act, is amended by adding at the end the
24 following new item:

 “Sec. 45M. Alaska natural gas.”.

1 **SEC. 2504. SALE OF GASOLINE AND DIESEL FUEL AT DUTY-**
2 **FREE SALES ENTERPRISES.**

3 (a) *PROHIBITION.*—Section 555(b) of the Tariff Act of
4 1930 (19 U.S.C. 1555(b)) is amended—

5 (1) by redesignating paragraphs (6) through (8)
6 as paragraphs (7) through (9), respectively; and

7 (2) by inserting after paragraph (5) the fol-
8 lowing:

9 “(6) Any gasoline or diesel fuel sold at a duty-
10 free sales enterprise shall be considered to be entered
11 for consumption into the customs territory of the
12 United States.”.

13 (b) *CONSTRUCTION.*—The amendments made by this
14 section shall not be construed to create any inference with
15 respect to the interpretation of any provision of law as such
16 provision was in effect on the day before the date of enact-
17 ment of this Act.

18 (c) *EFFECTIVE DATE.*—The amendments made by this
19 section shall take effect on the date of enactment of this Act.

20 **SEC. 2505. TREATMENT OF DAIRY PROPERTY.**

21 (a) *QUALIFIED DISPOSITION OF DAIRY PROPERTY*
22 *TREATED AS INVOLUNTARY CONVERSION.*—

23 (1) *IN GENERAL.*—Section 1033 (relating to in-
24 voluntary conversions) is amended by designating
25 subsection (k) as subsection (l) and inserting after
26 subsection (j) the following new subsection:

1 “(k) *QUALIFIED DISPOSITION TO IMPLEMENT BOVINE*
2 *TUBERCULOSIS ERADICATION PROGRAM.*—

3 “(1) *IN GENERAL.*—*For purposes of this subtitle,*
4 *if a taxpayer elects the application of this subsection*
5 *to a qualified disposition:*

6 “(A) *TREATMENT AS INVOLUNTARY CONVER-*
7 *SION.*—*Such disposition shall be treated as an*
8 *involuntary conversion to which this section ap-*
9 *plies.*

10 “(B) *MODIFICATION OF SIMILAR PROPERTY*
11 *REQUIREMENT.*—*Property to be held by the tax-*
12 *payer either for productive use in a trade or*
13 *business or for investment shall be treated as*
14 *property similar or related in service or use to*
15 *the property disposed of.*

16 “(C) *EXTENSION OF PERIOD FOR REPLAC-*
17 *ING PROPERTY.*—*Subsection (a)(2)(B)(i) shall be*
18 *applied by substituting ‘4 years’ for ‘2 years’.*

19 “(D) *WAIVER OF UNRELATED PERSON RE-*
20 *QUIREMENT.*—*Subsection (i) (relating to replace-*
21 *ment property must be acquired from unrelated*
22 *person in certain cases) shall not apply.*

23 “(E) *EXPANDED CAPITAL GAIN FOR CATTLE*
24 *AND HORSES.*—*Section 1231(b)(3)(A) shall be*

1 *applied by substituting ‘1 month’ for ‘24*
2 *months’.*

3 “(2) *QUALIFIED DISPOSITION.*—

4 “(A) *IN GENERAL.*—*For purposes of this*
5 *subsection, the term ‘qualified disposition’ means*
6 *the disposition of dairy property which is cer-*
7 *tified by the Secretary of Agriculture as having*
8 *been the subject of an agreement under the bovine*
9 *tuberculosis eradication program, as imple-*
10 *mented pursuant to the Declaration of Emer-*
11 *gency Because of Bovine Tuberculosis (65 Fed-*
12 *eral Register 63,227 (2000)).*

13 “(B) *PAYMENTS RECEIVED IN CONNECTION*
14 *WITH THE BOVINE TUBERCULOSIS ERADICATION*
15 *PROGRAM.*—*For purposes of this subsection, any*
16 *amount received by a taxpayer in connection*
17 *with an agreement under such bovine tuber-*
18 *culosis eradication program shall be treated as*
19 *received in a qualified disposition.*

20 “(C) *TRANSMITTAL OF CERTIFICATIONS.*—
21 *The Secretary of Agriculture shall transmit cop-*
22 *ies of certifications under this paragraph to the*
23 *Secretary.*

24 “(3) *ALLOWANCE OF THE ADJUSTED BASIS OF*
25 *CERTIFIED DAIRY PROPERTY AS A DEPRECIATION DE-*

1 *DUCTION.—The adjusted basis of any property cer-*
2 *tified under paragraph (2)(A) shall be allowed as a*
3 *depreciation deduction under section 167 for the tax-*
4 *able year which includes the date of the certification*
5 *described in paragraph (2)(A).*

6 *“(4) DAIRY PROPERTY.—For purposes of this*
7 *subsection, the term ‘dairy property’ means all tan-*
8 *gible or intangible property used in connection with*
9 *a dairy business or a dairy processing plant.*

10 *“(5) SPECIAL RULES FOR CERTAIN BUSINESS*
11 *ORGANIZATIONS.—*

12 *“(A) S CORPORATIONS.—In the case of an*
13 *S corporation, gain on a qualified disposition*
14 *shall not be treated as recognized for the pur-*
15 *poses of section 1374 (relating to tax imposed on*
16 *certain built-in gains).*

17 *“(B) PARTNERSHIPS.—In the case of a*
18 *partnership which dissolves in anticipation of a*
19 *qualified disposition (including in anticipation*
20 *of receiving the amount described in paragraph*
21 *(2)(B)), the dairy property owned by the part-*
22 *ners of such partnership at the time of such dis-*
23 *position shall be treated, for the purposes of this*
24 *section and notwithstanding any regulation or*

1 “(1) *IN GENERAL.*—For purposes of this sub-
2 paragraph, the term ‘qualified reclamation expendi-
3 ture’ means amounts otherwise chargeable to capital
4 account and paid or incurred to convert any real
5 property certified under section 1033(k)(2) (relating
6 to qualified disposition) into unimproved land.

7 “(2) *SPECIAL RULE FOR EXPENDITURES FOR DE-*
8 *PRECIABLE PROPERTY.*—A rule similar to the rule of
9 section 198(b)(2) (relating to special rule for expendi-
10 tures for depreciable property) shall apply for pur-
11 poses of paragraph (1).

12 “(c) *DEDUCTION RECAPTURED AS ORDINARY IN-*
13 *COME.*—Rules similar to the rules of section 198(e) (relating
14 to deduction recaptured as ordinary income on sale, etc.)
15 shall apply with respect to any qualified reclamation ex-
16 penditure.

17 “(d) *TERMINATION.*—This section shall not apply to
18 expenditures paid or incurred after December 31, 2006.”.

19 (2) *CLERICAL AMENDMENT.*—The table of sec-
20 tions for part VI of subchapter B of chapter 1, as
21 amended by this Act, is amended by adding at the
22 end the following new item:

 “Sec. 199B. Expensing of dairy property reclamation costs.”.

23 (3) *EFFECTIVE DATE.*—The amendments made
24 by this subsection shall apply to expenditures paid or
25 incurred in taxable years ending after May 22, 2001.

1 **SEC. 2506. CLARIFICATION OF EXCISE TAX EXEMPTIONS**
2 **FOR AGRICULTURAL AERIAL APPLICATORS.**

3 (a) *NO WAIVER BY FARM OWNER, TENANT, OR OPER-*
4 *ATOR NECESSARY.*—*Subparagraph (B) of section*
5 *6420(c)(4) (relating to certain farming use other than by*
6 *owner, etc.) is amended to read as follows:*

7 “(B) *if the person so using the gasoline is*
8 *an aerial or other applicator of fertilizers or*
9 *other substances and is the ultimate purchaser of*
10 *the gasoline, then subparagraph (A) of this para-*
11 *graph shall not apply and the aerial or other ap-*
12 *plicator shall be treated as having used such gas-*
13 *oline on a farm for farming purposes.”.*

14 (b) *EXEMPTION INCLUDES FUEL USED BETWEEN AIR-*
15 *FIELD AND FARM.*—*Section 6420(c)(4), as amended by sub-*
16 *section (a), is amended by adding at the end the following*
17 *new flush sentence:*

18 “*For purposes of this paragraph, in the case of an*
19 *aerial applicator, gasoline shall be treated as used on*
20 *a farm for farming purposes if the gasoline is used*
21 *for the direct flight between the airfield and 1 or more*
22 *farms.”.*

23 (c) *EXEMPTION FROM TAX ON AIR TRANSPORTATION*
24 *OF PERSONS FOR FORESTRY PURPOSES EXTENDED TO*
25 *FIXED-WING AIRCRAFT.*—*Subsection (f) of section 4261 (re-*

1 *lating to tax on air transportation of persons) is amended*
2 *to read as follows:*

3 “(f) *EXEMPTION FOR CERTAIN USES.*—No tax shall be
4 *imposed under subsection (a) or (b) on air transportation—*

5 “(1) *by helicopter for the purpose of transporting*
6 *individuals, equipment, or supplies in the exploration*
7 *for, or the development or removal of, hard minerals,*
8 *oil, or gas, or*

9 “(2) *by helicopter or by fixed-wing aircraft for*
10 *the purpose of the planting, cultivation, cutting, or*
11 *transportation of, or caring for, trees (including log-*
12 *ging operations),*

13 *but only if the helicopter or fixed-wing aircraft does not*
14 *take off from, or land at, a facility eligible for assistance*
15 *under the Airport and Airway Development Act of 1970,*
16 *or otherwise use services provided pursuant to section 44509*
17 *or 44913(b) or subchapter I of chapter 471 of title 49,*
18 *United States Code, during such use. In the case of heli-*
19 *copter transportation described in paragraph (1), this sub-*
20 *section shall be applied by treating each flight segment as*
21 *a distinct flight.”.*

22 “(d) *EFFECTIVE DATE.*—*The amendments made by this*
23 *section shall apply to fuel use or air transportation after*
24 *December 31, 2001, and before January 1, 2003.*

1 **SEC. 2507. MODIFICATION OF RURAL AIRPORT DEFINITION.**

2 (a) *IN GENERAL.*—Clause (ii) of section 4261(e)(1)(B)
 3 (defining rural airport) is amended by striking the period
 4 at the end of subclause (II) and inserting “, or” and by
 5 adding at the end the following new subclause:

6 “(III) is not connected by paved
 7 roads to another airport.”.

8 (b) *EFFECTIVE DATE.*—The amendments made by this
 9 section shall apply to calendar years beginning after 2002.

10 **SEC. 2508. EXEMPTION FROM TICKET TAXES FOR TRANS-**
 11 **PORTATION PROVIDED BY SEAPLANES.**

12 (a) *IN GENERAL.*—The taxes imposed by sections 4261
 13 and 4271 shall not apply to transportation by a seaplane
 14 with respect to any segment consisting of a takeoff from,
 15 and a landing on, water.

16 (b) *EFFECTIVE DATE.*—The amendments made by this
 17 section shall apply to calendar years beginning after 2002.

18 **DIVISION I—IRAQ OIL IMPORT**
 19 **RESTRICTION**
 20 **TITLE XXVI—IRAQ OIL IMPORT**
 21 **RESTRICTION**

22 **SEC. 2601. SHORT TITLE AND FINDINGS.**

23 (a) *SHORT TITLE.*—This title can be cited as the “Iraq
 24 Petroleum Import Restriction Act of 2002”.

25 (b) *FINDINGS.*—Congress finds that—

26 (1) the Government of the Republic of Iraq—

1 (A) has failed to comply with the terms of
2 United Nations Security Council Resolution 687
3 regarding unconditional Iraqi acceptance of the
4 destruction, removal, or rendering harmless,
5 under international supervision, of all nuclear,
6 chemical and biological weapons and all stocks of
7 agents and all related subsystems and compo-
8 nents and all research, development, support and
9 manufacturing facilities, as well as all ballistic
10 missiles with a range greater than 150 kilo-
11 meters and related major parts, and repair and
12 production facilities and has failed to allow
13 United Nations inspectors access to sites used for
14 the production or storage of weapons of mass de-
15 struction;

16 (B) routinely contravenes the terms and
17 conditions of UNSC Resolution 661, authorizing
18 the export of petroleum products from Iraq in ex-
19 change for food, medicine and other humani-
20 tarian products by conducting a routine and ex-
21 tensive program to sell such products outside of
22 the channels established by UNSC Resolution
23 661 in exchange for military equipment and ma-
24 terials to be used in pursuit of its program to de-
25 velop weapons of mass destruction in order to

1 *threaten the United States and its allies in the*
2 *Persian Gulf and surrounding regions;*

3 *(C) has failed to adequately draw down*
4 *upon the amounts received in the Escrow Ac-*
5 *count established by UNSC Resolution 986 to*
6 *purchase food, medicine and other humanitarian*
7 *products required by its citizens, resulting in*
8 *massive humanitarian suffering by the Iraqi*
9 *people;*

10 *(D) conducts a periodic and systematic*
11 *campaign to harass and obstruct the enforcement*
12 *of the United States- and United Kingdom-en-*
13 *forced “No-Fly Zones” in effect in the Republic*
14 *of Iraq;*

15 *(E) routinely manipulates the petroleum ex-*
16 *port production volumes permitted under UNSC*
17 *Resolution 661 in order to create uncertainty in*
18 *global energy markets, and therefore threatens*
19 *the economic security of the United States;*

20 *(F) pays bounties to the families of suicide*
21 *bombers in order to encourage the murder of*
22 *Israeli civilians;*

23 *(2) further imports of petroleum products from*
24 *the Republic of Iraq are inconsistent with the na-*
25 *tional security and foreign policy interests of the*

1 *sistent with the national security and foreign policy*
2 *interests of the United States.*

3 **SEC. 2604. HUMANITARIAN INTERESTS.**

4 *It is the sense of the Senate that the President should*
5 *make all appropriate efforts to ensure that the humani-*
6 *tarian needs of the Iraqi people are not negatively affected*
7 *by this Act, and should encourage through public, private,*
8 *domestic and international means the direct or indirect*
9 *sale, donation or other transfer to appropriate nongovern-*
10 *mental health and humanitarian organizations and indi-*
11 *viduals within Iraq of food, medicine and other humani-*
12 *tarian products.*

13 **SEC. 2605. DEFINITIONS.**

14 (a) *661 COMMITTEE.*—*The term 661 Committee means*
15 *the Security Council Committee established by UNSC Reso-*
16 *lution 661, and persons acting for or on behalf of the Com-*
17 *mittee under its specific delegation of authority for the rel-*
18 *evant matter or category of activity, including the overseers*
19 *appointed by the United Nations Secretary-General to ex-*
20 *amine and approve agreements for purchases of petroleum*
21 *and petroleum products from the Government of Iraq pur-*
22 *suant to UNSC Resolution 986.*

23 (b) *UNSC RESOLUTION 661.*—*The term UNSC Reso-*
24 *lution 661 means United Nations Security Council Resolu-*

1 *tion No. 661, adopted August 6, 1990, prohibiting certain*
2 *transactions with respect to Iraq and Kuwait.*

3 (c) *UNSC RESOLUTION 687.—The term UNSC Reso-*
4 *lution 687 means United Nations Security Council Resolu-*
5 *tion 687, adopted April 3, 1991.*

6 (d) *UNSC RESOLUTION 986.—The term UNSC Reso-*
7 *lution 986 means United Nations Security Council Resolu-*
8 *tion 986, adopted April 14, 1995.*

9 **SEC. 2606. EFFECTIVE DATE.**

10 *The prohibition on importation of Iraqi-origin petro-*
11 *leum and petroleum products shall be effective 30 days after*
12 *enactment of this Act.*

13 ***DIVISION J—MISCELLANEOUS***
14 ***TITLE XXVII—MISCELLANEOUS***
15 ***PROVISION***

16 ***SEC. 2701. FAIR TREATMENT OF PRESIDENTIAL JUDICIAL***
17 ***NOMINEES.***

18 *It is the sense of the Senate that, in the interests of*
19 *the administration of justice, the Senate Judiciary Com-*
20 *mittee should along with its other legislative and oversight*
21 *responsibilities, continue to hold regular hearings on judi-*
22 *cial nominees and should, in accordance with the precedents*
23 *and practices of the Committee, schedule hearings on the*

- 1 *nominees submitted by the President on May 9, 2001, and*
- 2 *resubmitted on September 5, 2001, expeditiously.*

Attest:

Secretary.

107TH CONGRESS
2D SESSION

H. R. 4

AMENDMENT