

107TH CONGRESS  
1ST SESSION

# H. R. 2587

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

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## IN THE HOUSE OF REPRESENTATIVES

JULY 23, 2001

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

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## A BILL

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

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

3 **SECTION 1. SHORT TITLE AND TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the  
5 “Energy Advancement and Conservation Act of 2001”.

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

Sec. 1. Short title and table of contents.

## TITLE I—ENERGY CONSERVATION

### Subtitle A—Reauthorization of Federal Energy Conservation Programs

Sec. 101. Authorization of appropriations.

### Subtitle B—Federal Leadership in Energy Conservation

Sec. 121. Federal facilities and national energy security.

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

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

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

Sec. 125. Federal Energy Bank.

Sec. 126. Advanced building efficiency testbed.

Sec. 127. Use of interval data in Federal buildings.

Sec. 128. Review of Energy Savings Performance Contract Program.

Sec. 129. Capitol complex.

### Subtitle C—State Programs

Sec. 131. Amendments to State energy programs.

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

Sec. 133. Amendments to Weatherization Assistance Program.

Sec. 134. LIHEAP.

Sec. 135. High performance public buildings.

### Subtitle D—Energy Efficiency for Consumer Products

Sec. 141. Energy Star program.

Sec. 142. Labeling of energy efficient appliances.

Sec. 143. Appliance standards.

### Subtitle E—Energy Efficient Vehicles

Sec. 151. High occupancy vehicle exception.

Sec. 152. Railroad efficiency.

Sec. 153. Biodiesel fuel use credits.

Sec. 154. Mobile to stationary source trading.

### Subtitle F—Other Provisions

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

Sec. 162. Advanced idle elimination systems.

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

Sec. 164. Gas flare study.

Sec. 165. Telecommuting study.

## TITLE II—AUTOMOBILE FUEL ECONOMY

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

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

Sec. 203. Dual fueled automobiles.

- Sec. 204. Fuel economy of the Federal fleet of automobiles.
- Sec. 205. Hybrid vehicles and alternative vehicles.
- Sec. 206. Federal fleet petroleum-based nonalternative fuels.
- Sec. 207. Study of feasibility and effects of reducing use of fuel for automobiles.

### TITLE III—NUCLEAR ENERGY

#### Subtitle A—General Provisions

- Sec. 301. Budget status of Nuclear Waste Fund.
- Sec. 302. License period.
- Sec. 303. Cost recovery from Government agencies.
- Sec. 304. Depleted uranium hexafluoride.
- Sec. 305. Nuclear Regulatory Commission meetings.

#### Subtitle B—Domestic Uranium Fuel Cycle

- Sec. 311. Portsmouth cold standby.
- Sec. 312. Paducah funding.
- Sec. 313. Research and development.
- Sec. 314. Short-term reliability of domestic uranium enrichment capacity.
- Sec. 315. Cooperative research and development and special demonstration projects for the uranium mining industry.
- Sec. 316. Maintenance of a viable domestic uranium conversion industry.
- Sec. 317. Prohibition of commercial sales of uranium by the United States until 2009.
- Sec. 318. Paducah decontamination and decommissioning plan.

### TITLE IV—HYDROELECTRIC ENERGY

- Sec. 401. Alternative conditions and fishways.
- Sec. 402. FERC data on hydroelectric licensing.

### TITLE V—CLEAN COAL

- Sec. 501. Short title.
- Sec. 502. Findings.

#### Subtitle A—Accelerated Clean Coal Power Production Program

- Sec. 511. Definitions.
- Sec. 512. Cost and performance goals.
- Sec. 513. Study.
- Sec. 514. Production and generation of coal-based power.
- Sec. 515. Authorization of appropriations.
- Sec. 516. Clean coal power initiative.
- Sec. 517. Financial assistance.

#### Subtitle B—Credit for Emission Reductions and Efficiency Improvements in Existing Coal-Based Electricity Generation Facilities

- Sec. 521. Credit for investment in qualifying clean coal technology.
- Sec. 522. Credit for production from a qualifying clean coal technology unit.

#### Subtitle C—Incentives for Early Commercial Applications of Advanced Clean Coal Technologies

- Sec. 531. Credit for investment in qualifying advanced clean coal technology.

- Sec. 532. Credit for production from qualifying advanced clean coal technology.  
 Sec. 533. Risk pool for qualifying advanced clean coal technology.

Subtitle D—Treatment of Certain Governmental and Other Entities

- Sec. 541. Credits for certain organizations and governmental units.

TITLE VI—FUELS

- Sec. 601. Tank draining during transition to summertime RFG.  
 Sec. 602. Gasoline blendstock requirements.  
 Sec. 603. Boutique fuels.  
 Sec. 604. Funding for MTBE contamination.

TITLE VII—RENEWABLE ENERGY

- Sec. 701. Assessment of renewable energy resources.  
 Sec. 702. Renewable energy production incentive.

TITLE VIII—PIPELINE INTEGRITY

Subtitle A—Pipeline Integrity

- Sec. 801. Program for pipeline integrity research, development, and demonstration.  
 Sec. 802. Pipeline Integrity Technical Advisory Committee.  
 Sec. 803. Authorization of appropriations.

Subtitle B—Other Pipeline Provisions

- Sec. 811. Prohibition on certain pipeline route.  
 Sec. 812. Historic pipelines.

TITLE IX—MISCELLANEOUS PROVISIONS

- Sec. 901. Waste reduction and use of alternatives.  
 Sec. 902. Annual report on United States energy independence.  
 Sec. 903. Study of aircraft emissions.

1                   **TITLE I—ENERGY**  
 2                   **CONSERVATION**  
 3 **Subtitle    A—Reauthorization    of**  
 4       **Federal Energy Conservation**  
 5       **Programs**

6 **SEC. 101. AUTHORIZATION OF APPROPRIATIONS.**

7       Section 660 of the Department of Energy Organiza-  
 8 tion Act (42 U.S.C. 7270) is amended as follows:

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

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

3           “(b) There are hereby authorized to be appropriated  
4 to the Department of Energy for fiscal year 2002,  
5 \$950,000,000; for fiscal year 2003, \$1,000,000,000; for  
6 fiscal year 2004, \$1,050,000,000; for fiscal year 2005,  
7 \$1,100,000,000; and for fiscal year 2006,  
8 \$1,150,000,000, to carry out energy efficiency activities  
9 under the following laws, such sums to remain available  
10 until expended:

11           “(1) Energy Policy and Conservation Act, in-  
12 cluding section 256(d)(42 U.S.C. 6276(d)) (promote  
13 export of energy efficient products), sections 321  
14 through 346 (42 U.S.C. 6291–6317) (appliances  
15 program).

16           “(2) Energy Conservation and Production Act,  
17 including sections 301 through 308 (42 U.S.C.  
18 6831–6837) (energy conservation standards for new  
19 buildings).

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

23           “(4) Energy Policy Act of 1992, including sec-  
24 tions 103 (42 U.S.C. 13458) (energy efficient light-  
25 ing and building centers), 121 (42 U.S.C. 6292

1 note) (energy efficiency labeling for windows and  
2 window systems), 125 (42 U.S.C. 6292 note) (en-  
3 ergy efficiency information for commercial office  
4 equipment), 126 (42 U.S.C. 6292 note) (energy effi-  
5 ciency information for luminaires), 131 (42 U.S.C.  
6 6348) (energy efficiency in industrial facilities), and  
7 132 (42 U.S.C. 6349) (process-oriented industrial  
8 energy efficiency).”.

## 9 **Subtitle B—Federal Leadership in** 10 **Energy Conservation**

### 11 **SEC. 121. FEDERAL FACILITIES AND NATIONAL ENERGY SE-** 12 **CURITY.**

13 (a) PURPOSE.—Section 542 of the National Energy  
14 Conservation Policy Act (42 U.S.C. 8252) is amended by  
15 inserting “, and generally to promote the production, sup-  
16 ply, and marketing of energy efficiency products and serv-  
17 ices and the production, supply, and marketing of uncon-  
18 ventional and renewable energy resources” after “by the  
19 Federal Government”.

20 (b) ENERGY MANAGEMENT REQUIREMENTS.—Sec-  
21 tion 543 of the National Energy Conservation Policy Act  
22 (42 U.S.C. 8253) is amended as follows:

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

1 “(1) fiscal year 1995 is at least 10 percent;  
2 “(2) fiscal year 2000 is at least 20 percent;  
3 “(3) fiscal year 2005 is at least 30 percent;  
4 “(4) fiscal year 2010 is at least 35 percent;  
5 “(5) fiscal year 2015 is at least 40 percent; and  
6 “(6) fiscal year 2020 is at least 45 percent,  
7 less than the energy consumption per gross square foot  
8 of its Federal buildings in use during fiscal year 1985.  
9 To achieve the reductions required by this paragraph, an  
10 agency shall make maximum practicable use of energy effi-  
11 ciency products and services and unconventional and re-  
12 newable energy resources, using guidelines issued by the  
13 Secretary under subsection (d) of this section.”.

14 (2) In subsection (d), by inserting “Such guide-  
15 lines shall include appropriate model technical stand-  
16 ards for energy efficiency and unconventional and  
17 renewable energy resources products and services.  
18 Such standards shall reflect, to the extent prac-  
19 ticable, evaluation of both currently marketed and  
20 potentially marketable products and services that  
21 could be used by agencies to improve energy effi-  
22 ciency and increase unconventional and renewable  
23 energy resources.” after “implementation of this  
24 part.”.

1           (3) By adding at the end the following new sub-  
2           section:

3           “(e) STUDIES.—To assist in developing the guidelines  
4 issued by the Secretary under subsection (d) and in fur-  
5 therance of the purposes of this section, the Secretary  
6 shall conduct studies to identify and encourage the pro-  
7 duction and marketing of energy efficiency products and  
8 services and unconventional and renewable energy re-  
9 sources. To conduct such studies, there are authorized to  
10 be appropriated to the Secretary \$20,000,000 for each of  
11 the fiscal years 2003 through 2010.”.

12           (c) DEFINITION.—Section 551 of the National En-  
13 ergy Conservation Policy Act (42 U.S.C. 8259) is amend-  
14 ed as follows:

15           (1) By striking “and” at the end of paragraph  
16           (8).

17           (2) By striking the period at the end of para-  
18           graph (9) and inserting “; and”.

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

21           “(10) the term ‘unconventional and renewable  
22           energy resources’ includes renewable energy sources,  
23           hydrogen, fuel cells, cogeneration, combined heat  
24           and power, heat recovery (including by use of a Stir-  
25           ling heat engine), and distributed generation.”.

1 (d) EXCLUSIONS FROM REQUIREMENT.—The Na-  
2 tional Energy Conservation Policy Act (42 U.S.C. 7201  
3 and following) is amended as follows:

4 (1) In section 543(a)—

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

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

10 (2) By amending subsection (c) of such section  
11 543 to read as follows:

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

15 “(A) the President declares the building to re-  
16 quire exclusion for national security reasons; and

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

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

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

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

3           “(2) The President shall only declare buildings de-  
4           scribed in paragraph (1)(A) to be excluded, not ancillary  
5           or nearby facilities that are not in themselves national se-  
6           curity facilities.”.

7           (3) In section 548(b)(1)(A)—

8                   (A) by striking “copy of the”; and

9                   (B) by striking “sections 543(a)(2) and  
10           543(c)(3)” and inserting “section 543(c)”.

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

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

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

18           “(5)(A)(i) Agencies shall select only Energy Star  
19           products when available when acquiring energy-using  
20           products. For product groups where Energy Star labels  
21           are not yet available, agencies shall select products that  
22           are in the upper 25 percent of energy efficiency as des-  
23           ignated by FEMP. The Secretary of Energy shall develop  
24           guidelines within 180 days after the enactment of this  
25           paragraph for exemptions to this section when equivalent

1 products do not exist, are impractical, or do not meet the  
2 agency mission requirements.

3       “(ii) The Administrator of the General Services Ad-  
4 ministration and the Secretary of Defense (acting through  
5 the Defense Logistics Agency), with assistance from the  
6 Administrator of the Environmental Protection Agency  
7 and the Secretary of Energy, shall create clear catalogue  
8 listings that designate Energy Star products in both print  
9 and electronic formats. After any existing federal inven-  
10 tories are exhausted, Administrator of the General Serv-  
11 ices Administration and the Secretary of Defense (acting  
12 through the Defense Logistics Agency) shall only replace  
13 inventories with energy-using products that are Energy  
14 Star, products that are rated in the top 25 percent of en-  
15 ergy efficiency, or products that are exempted as des-  
16 igned by FEMP and defined in clause (i).

17       “(iii) Agencies shall incorporate energy-efficient cri-  
18 teria consistent with Energy Star and other FEMP des-  
19 igned energy efficiency levels into all guide specifications  
20 and project specifications developed for new construction  
21 and renovation, as well as into product specification lan-  
22 guage developed for Basic Ordering Agreements, Blanket  
23 Purchasing Agreements, Government Wide Acquisition  
24 Contracts, and all other purchasing procedures.

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

4       “(B) Not later than 6 months after the date of the  
5 enactment of this paragraph, the Secretary of Energy  
6 shall establish guidelines defining the circumstances under  
7 which an agency shall not be required to comply with sub-  
8 paragraph (A). Such circumstances may include the ab-  
9 sence of Energy Star products, systems, or designs that  
10 serve the purpose of the agency, issues relating to the com-  
11 patibility of a product, system, or design with existing  
12 buildings or equipment, and excessive cost compared to  
13 other available and appropriate products, systems, or de-  
14 signs.

15       “(C) Subparagraph (A) shall apply to agency acquisi-  
16 tions occurring on or after October 1, 2002.”.

17       (f) METERING.—Section 543 of such Act (42 U.S.C.  
18 8254) is amended by adding at the end the following new  
19 subsection:

20       “(f) METERING.—(1) By October 1, 2004, all Fed-  
21 eral buildings including buildings owned by the legislative  
22 branch and the Federal court system and other energy-  
23 using structures shall be metered or submetered in accord-  
24 ance with guidelines established by the Secretary under  
25 paragraph (2).

1       “(2) Not later than 6 months after the date of the  
2 enactment of this subsection, the Secretary, in consulta-  
3 tion with representatives from the metering industry, en-  
4 ergy services industry, national laboratories, colleges of  
5 higher education, and federal facilities energy managers,  
6 shall establish guidelines for agencies to carry out para-  
7 graph (1). Such guidelines shall take into consideration  
8 each of the following:

9               “(A) Cost.

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

13              “(C) Energy management potential.

14              “(D) Energy savings.

15              “(E) Utility contract aggregation.

16              “(F) Savings from operations and maintenance.

17       “(3) Any building excluded under subsection (c) shall  
18 be individually metered or submetered as the Secretary de-  
19 termines necessary.”.

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

23       “(e) RETENTION OF ENERGY SAVINGS.—An agency  
24 may retain any funds appropriated to that agency for en-  
25 ergy expenditures, at buildings subject to the requirements

1 of section 543(a) and (b), that are not made because of  
2 energy savings. Such funds may be used only for energy  
3 efficiency or unconventional and renewable energy re-  
4 sources projects.”.

5 (h) REPORTS.—Section 548 of such Act (42 U.S.C.  
6 8258) is amended as follows:

7 (1) In subsection (a)—

8 (A) by inserting “in accordance with guide-  
9 lines established by and” after “to the Sec-  
10 retary,”;

11 (B) by striking “and” at the end of para-  
12 graph (1);

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

15 (D) by adding at the end the following new  
16 paragraphs:

17 “(3) an energy emergency response plan devel-  
18 oped by the agency;

19 “(4) the quantity, and a description of, prod-  
20 ucts, systems, and designs acquired by the agency  
21 that are not acquired as provided in section  
22 543(b)(5)(A); and

23 “(5) the percentage of the Agency’s capital ex-  
24 penditures that are used for energy efficiency and

1 unconventional and renewable energy resources cap-  
2 ital improvements.”.

3 (2) In subsection (b)—

4 (A) by striking “and” at the end of para-  
5 graph (3);

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

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

10 “(5) all information transmitted to the Sec-  
11 retary under subsection (a).”.

12 (3) By amending subsection (c) to read as fol-  
13 lows:

14 “(c) AGENCY REPORTS TO CONGRESS.—Each agency  
15 shall annually report to the Congress, as part of the agen-  
16 cy’s annual budget request, on all of the agency’s activities  
17 implementing any Federal energy management require-  
18 ment.”.

19 (i) INSPECTOR GENERAL ENERGY AUDITS.—Section  
20 160(c) of the Energy Policy Act of 1992 (42 U.S.C.  
21 8262f(c)) is amended by striking “is encouraged to con-  
22 duct periodic” and inserting “shall conduct periodic”.

23 (j) FEDERAL ENERGY MANAGEMENT REVIEWS.—  
24 Section 543 of the National Energy Conservation Policy

1 Act (42 U.S.C. 8253) is amended by adding at the end  
2 the following:

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

5 “(1) not later than 9 months after the date of  
6 the enactment of this subsection, undertake a com-  
7 prehensive review of all practicable measures for—

8 “(A) increasing energy and water con-  
9 servation, and

10 “(B) using renewable energy sources; and

11 “(2) not later than 180 days after completing  
12 the review, implement measures to achieve not less  
13 than 50 percent of the potential efficiency and re-  
14 newable savings identified in the review.”.

15 **SEC. 122. ENHANCEMENT AND EXTENSION OF AUTHORITY**  
16 **RELATING TO FEDERAL ENERGY SAVINGS**  
17 **PERFORMANCE CONTRACTS.**

18 (a) COST SAVINGS FROM OPERATION AND MAINTENANCE EFFICIENCIES IN REPLACEMENT FACILITIES.—  
19 Section 801(a) of the National Energy Conservation Pol-  
20 icy Act (42 U.S.C. 8287(a)) is amended by adding at the  
21 end the following new paragraph:  
22

23 “(3)(A) In the case of an energy savings contract or  
24 energy savings performance contract providing for energy  
25 savings through the construction and operation of one or

1 more buildings or facilities to replace one or more existing  
2 buildings or facilities, benefits ancillary to the purpose of  
3 such contract under paragraph (1) may include savings  
4 resulting from reduced costs of operation and maintenance  
5 at such replacement buildings or facilities when compared  
6 with costs of operation and maintenance at the buildings  
7 or facilities being replaced, established through a method-  
8 ology set forth in the contract.

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

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

18 (1) ENERGY SAVINGS.—Section 804(2) of the  
19 National Energy Conservation Policy Act (42 U.S.C.  
20 8287c(2)) is amended to read as follows:

21 “(2)(A) The term ‘energy savings’ means a re-  
22 duction in the cost of energy or water, from a base  
23 cost established through a methodology set forth in  
24 the contract, used in an existing federally owned

1 building or buildings or other federally owned facili-  
2 ties as a result of—

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

6 “(ii) the increased efficient use of existing  
7 energy sources by solar and ground source geo-  
8 thermal resources, cogeneration or heat recov-  
9 ery (including by the use of a Stirling heat en-  
10 gine), excluding any cogeneration process for  
11 other than a federally owned building or build-  
12 ings or other federally owned facilities; or

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

15 “(B) The term ‘energy savings’ also means, in  
16 the case of a replacement building or facility de-  
17 scribed in section 801(a)(3), a reduction in the cost  
18 of energy, from a base cost established through a  
19 methodology set forth in the contract, that would  
20 otherwise be utilized in one or more existing feder-  
21 ally owned buildings or other federally owned facili-  
22 ties by reason of the construction and operation of  
23 the replacement building or facility.”.

24 (2) ENERGY SAVINGS CONTRACT.—Section  
25 804(3) of the National Energy Conservation Policy

1 Act (42 U.S.C. 8287c(3)) is amended to read as fol-  
2 lows:

3 “(3) The terms ‘energy savings contract’ and  
4 ‘energy savings performance contract’ mean a con-  
5 tract which provides for—

6 “(A) the performance of services for the  
7 design, acquisition, installation, testing, oper-  
8 ation, and, where appropriate, maintenance and  
9 repair, of an identified energy or water con-  
10 servation measure or series of measures at one  
11 or more locations; or

12 “(B) energy savings through the construc-  
13 tion and operation of one or more buildings or  
14 facilities to replace one or more existing build-  
15 ings or facilities.”.

16 (3) ENERGY OR WATER CONSERVATION MEAS-  
17 URE.—Section 804(4) of the National Energy Con-  
18 servation Policy Act (42 U.S.C. 8287c(4)) is amend-  
19 ed to read as follows:

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

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

1           “(B) a water conservation measure that  
2           improves water efficiency, is life cycle cost effec-  
3           tive, and involves water conservation, water re-  
4           cycling or reuse, improvements in operation or  
5           maintenance efficiencies, retrofit activities, or  
6           other related activities, not at a Federal hydro-  
7           electric facility.”.

8           (4)    CONFORMING    AMENDMENT.—Section  
9           801(a)(2)(C) of the National Energy Conservation  
10          Policy Act (42 U.S.C. 8287(a)(2)(C)) is amended by  
11          inserting “or water” after “financing energy”.

12          (c) EXTENSION OF AUTHORITY.—Section 801(c) of  
13          the National Energy Conservation Policy Act (42 U.S.C.  
14          8287(c)) is repealed.

15          (d)    CONTRACTING    AND    AUDITING.—Section  
16          801(a)(2) of the National Energy Conservation Policy Act  
17          (42 U.S.C. 8287(a)(2)) is amended by adding at the end  
18          the following new subparagraph:

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

1 **SEC. 123. CLARIFICATION AND ENHANCEMENT OF AUTHOR-**  
2 **ITY TO ENTER UTILITY INCENTIVE PRO-**  
3 **GRAMS FOR ENERGY SAVINGS.**

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

6 (1) In paragraph (3) by adding at the end the  
7 following: “Such a utility incentive program may in-  
8 clude a contract or contract term designed to pro-  
9 vide for cost-effective electricity demand manage-  
10 ment, energy efficiency, or water conservation.”.

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

13 “(6) A utility incentive program may include a con-  
14 tract or contract term for a reduction in the energy, from  
15 a base cost established through a methodology set forth  
16 in such a contract, that would otherwise be utilized in one  
17 or more federally owned buildings or other federally owned  
18 facilities by reason of the construction or operation of one  
19 or more replacement buildings or facilities, as well as ben-  
20 efits ancillary to the purpose of such contract or contract  
21 term, including savings resulting from reduced costs of op-  
22 eration and maintenance at new or additional buildings  
23 or facilities when compared with the costs of operation and  
24 maintenance at existing buildings or facilities.

25 “(7) Federal agencies are encouraged to participate  
26 in State or regional demand side reduction programs, in-

1 cluding those operated by wholesale market institutions  
2 such as independent system operators, regional trans-  
3 mission organizations and other entities. The availability  
4 of such programs, and the savings resulting from such  
5 participation, should be included in the evaluation of en-  
6 ergy options for Federal facilities.”.

7 **SEC. 124. FEDERAL CENTRAL AIR CONDITIONER AND HEAT**  
8 **PUMP EFFICIENCY.**

9 (a) REQUIREMENT.—Federal agencies shall be re-  
10 quired to acquire central air conditioners and heat pumps  
11 that meet or exceed the standards established under sub-  
12 section (b) or (c) in the case of all central air conditioners  
13 and heat pumps acquired after the date of enactment of  
14 this Act.

15 (b) STANDARDS.—The standards referred to in sub-  
16 section (a) are the following:

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

20 (2) For air-source heat pumps with cooling ca-  
21 pacities less than 65,000 Btu/hour, a Seasonal En-  
22 ergy Efficiency Ratio of 12 SEER, and a Heating  
23 Seasonal Performance Factor of 7.4.

24 (c) MODIFIED STANDARDS.—The Secretary of En-  
25 ergy may establish, after appropriate notice and comment,

1 revised standards providing for reduced energy consump-  
2 tion or increased energy efficiency of central air condi-  
3 tioners and heat pumps acquired by the Federal Govern-  
4 ment, but may not establish standards less rigorous than  
5 those established by subsection (b).

6 (d) DEFINITIONS.—For purposes of this section, the  
7 terms “Energy Efficiency Ratio”, “Seasonal Energy Effi-  
8 ciency Ratio”, “Heating Seasonal Performance Factor”,  
9 and “Coefficient of Performance” have the meanings used  
10 for those terms in Appendix M to Subpart B of Part 430  
11 of title 10 of the Code of Federal Regulations, as in effect  
12 on May 24, 2001.

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

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

21 (2) space constraints or other technical factors  
22 would make compliance with this section cost-prohib-  
23 itive; or

24 (3) in the case of the Departments of Defense  
25 and Energy, compliance with this section would be

1 inconsistent with the proper discharge of national se-  
2 curity functions.

3 **SEC. 125. FEDERAL ENERGY BANK.**

4 (a) DEFINITIONS.—In this section:

5 (1) AGENCY.—The term “agency” means each  
6 of the following:

7 (A) An Executive agency (as defined in  
8 section 105 of title 5, United States Code, ex-  
9 cept that the term also includes the United  
10 States Postal Service and the United States  
11 Patent and Trademark Office).

12 (B) Congress and any other entity in the  
13 legislative branch.

14 (C) A court and any other entity in the ju-  
15 dicial branch.

16 (2) BANK.—The term “Bank” means the Fed-  
17 eral Energy Bank established by subsection (b).

18 (3) ENERGY EFFICIENCY PROJECT.—The term  
19 “energy efficiency project” means a project that as-  
20 sists an agency in meeting or exceeding the energy  
21 efficiency requirements of—

22 (A) part 3 of title V of the National En-  
23 ergy Conservation Policy Act (42 U.S.C. 8251  
24 et seq.);

1 (B) subtitle F of title I of the Energy Pol-  
2 icy Act of 1992 and the amendments made by  
3 that subtitle (106 Stat. 2843); and

4 (C) applicable Executive orders, including  
5 Executive Order Nos. 12759 and 13123.

6 Such term shall include water conservation and re-  
7 newable energy projects.

8 (4) SECRETARY.—The term “Secretary” means  
9 the Secretary of Energy.

10 (5) TOTAL UTILITY PAYMENTS.—The term  
11 “total utility payments” means payments made to  
12 supply electricity, natural gas, water, and any other  
13 form of energy to provide the heating, ventilation,  
14 air conditioning, lighting, and other energy needs of  
15 an agency facility.

16 (b) ESTABLISHMENT OF BANK.—

17 (1) IN GENERAL.—There is established in the  
18 Treasury of the United States a trust fund to be  
19 known as the “Federal Energy Bank”, consisting  
20 of—

21 (A) such amounts as are appropriated to  
22 the Bank under subsection (f);

23 (B) such amounts as are transferred to the  
24 Bank under paragraph (2);

1 (C) such amounts as are repaid to the  
2 Bank under subsection (c)(2)(D); and

3 (D) any interest earned on investment of  
4 amounts in the Bank under paragraph (3).

5 (2) TRANSFERS TO BANK.—

6 (A) IN GENERAL.—At the beginning of  
7 each of fiscal years 2002, 2003, and 2004, each  
8 agency shall transfer to the Secretary of the  
9 Treasury, for deposit in the Bank, an amount  
10 equal to 5 percent of the total utility payments  
11 paid by the agency in the preceding fiscal year.

12 (B) UTILITIES PAID FOR AS PART OF  
13 RENTAL PAYMENTS.—The Secretary shall by  
14 regulation establish a formula by which the ap-  
15 propriate portion of a rental payment that cov-  
16 ers the cost of utilities shall be considered to be  
17 a utility payment for the purposes of subpara-  
18 graph (A).

19 (3) INVESTMENT OF FUNDS.—The Secretary of  
20 the Treasury shall invest such portion of funds in  
21 the Bank as is not, in the Secretary's judgment, re-  
22 quired to meet current withdrawals. Investments  
23 may be made only in interest-bearing obligations of  
24 the United States.

25 (c) LOANS FROM THE BANK.—

1           (1) IN GENERAL.—The Secretary of the Treas-  
2           ury shall transfer from the Bank to the Secretary  
3           such amounts as are appropriated to carry out the  
4           loan program under paragraph (2).

5           (2) LOAN PROGRAM.—

6           (A) IN GENERAL.—In accordance with  
7           subsection (d), the Secretary, in consultation  
8           with the Secretary of Defense, Administrator of  
9           the General Services Administration and the  
10          Office of Administration and Budget within the  
11          Executive Office of the President, shall estab-  
12          lish a program to loan amounts from the Bank  
13          to any agency that submits an application satis-  
14          factory to the Secretary in order to finance an  
15          energy efficiency project. The Bank is author-  
16          ized to begin operation in fiscal year 2003 and  
17          receive and approve funding for energy effi-  
18          ciency projects subject to funding availability in  
19          fiscal year 2003.

20          (B) PERFORMANCE CONTRACTING FUND-  
21          ING.—The Secretary shall not make a loan  
22          under this section for a project for which fund-  
23          ing is available and is acceptable to the request-  
24          ing agency under title VIII of the National En-

1 energy Conservation Policy Act (42 U.S.C. 8287  
2 et seq.).

3 (C) PURPOSES OF LOAN.—

4 (i) IN GENERAL.—A loan under this  
5 section may be made to pay the costs of—

6 (I) an energy efficiency project  
7 identification and design of an energy  
8 efficiency project, and energy meter-  
9 ing plans and equipment for purposes  
10 of new and existing building energy  
11 systems and verifications of energy  
12 savings of an energy savings perform-  
13 ance contract; or

14 (II) development and administra-  
15 tion of an energy savings performance  
16 contract or utility energy service  
17 agreement.

18 (ii) LIMITATION.—An agency may use  
19 not more than 15 percent of the amount of  
20 a loan under clause (i)(I) to pay the costs  
21 of administration and proposal develop-  
22 ment (including data collection and energy  
23 surveys).

24 (D) REPAYMENTS.—

1           (i) IN GENERAL.—An agency shall  
2           repay to the Bank the principal amount of  
3           the energy efficiency project loan plus in-  
4           terest at a rate determined by the Presi-  
5           dent, in consultation with the Secretary  
6           and the Secretary of the Treasury. The re-  
7           payment period shall be 10 years in the  
8           case of water conservation and renewable  
9           energy projects.

10          (ii) WAIVER.—The Secretary may  
11          waive the requirement of clause (i) if the  
12          Secretary determines that payment of in-  
13          terest by an agency is not required to sus-  
14          tain the needs of the Bank in making en-  
15          ergy efficiency project loans.

16          (E) AGENCY ENERGY BUDGETS.—Until a  
17          loan is repaid, an agency budget submitted to  
18          Congress for a fiscal year shall not be reduced  
19          by the value of energy savings accrued as a re-  
20          sult of the energy conservation measure imple-  
21          mented with funds from the Bank.

22          (F) AVAILABILITY OF FUNDS.—An agency  
23          shall not rescind or reprogram funds made  
24          available by this section. Funds loaned to an

1           agency shall be retained by the agency until ex-  
2           pended, without regard to fiscal year limitation.

3           (d) SELECTION CRITERIA.—

4           (1) IN GENERAL.—The Secretary shall establish  
5           criteria for the selection of energy efficiency projects  
6           to be awarded loans in accordance with paragraph  
7           (2).

8           (2) SELECTION CRITERIA.—The Secretary may  
9           make loans only for energy efficiency projects that—

10           (A) are technically feasible;

11           (B) are determined to be cost-effective  
12           using life cycle cost methods established by the  
13           Secretary by regulation;

14           (C) include a measurement and manage-  
15           ment component to—

16           (i) commission energy savings for new  
17           Federal facilities; and

18           (ii) monitor and improve energy effi-  
19           ciency management at existing Federal fa-  
20           cilities;

21           (D) have a project payback period of 10  
22           years or less; and

23           (E) gives funding priority to projects with  
24           the quickest payback and least total cost.

25           (e) REPORTS AND AUDITS.—

1           (1) REPORTS TO THE SECRETARY.—Not later  
2 than 1 year after the installation of an energy effi-  
3 ciency project that has a total cost of more than  
4 \$1,000,000, and each year thereafter, an agency  
5 shall submit to the Secretary a report that—

6           (A) states whether the project meets or  
7 fails to meet the energy savings projections for  
8 the project; and

9           (B) for each project that fails to meet the  
10 energy savings projections, states the reasons  
11 for the failure and describes proposed remedies.

12           (2) AUDITS.—The Secretary may audit any en-  
13 ergy efficiency project financed with funding from  
14 the Bank to assess the project’s performance.

15           (3) REPORTS TO CONGRESS.—At the end of  
16 each fiscal year, the Secretary shall submit to the  
17 Committee on Energy and Commerce of the House  
18 of Representatives and the Committee on Energy  
19 and Natural Resources of the Senate a report on the  
20 operations of the Bank, including a statement of the  
21 total receipts into the Bank, and the total expendi-  
22 tures from the Bank to each agency.

23           (f) AUTHORIZATION OF APPROPRIATIONS.—There  
24 are authorized to be appropriated such sums as may be

1 necessary for each of the fiscal years 2002 through 2008  
2 to carry out this section.

3 **SEC. 126. ADVANCED BUILDING EFFICIENCY TESTBED.**

4 (a) ESTABLISHMENT.—The Secretary of Energy  
5 shall establish an Advanced Building Efficiency Testbed  
6 program for the development, testing, and demonstration  
7 of advanced engineering systems, components, and mate-  
8 rials to enable innovations in building technologies. The  
9 program shall evaluate government and industry building  
10 efficiency concepts, and demonstrate the ability of next  
11 generation buildings to support individual and organiza-  
12 tional productivity and health as well as flexibility and  
13 technological change to improve environmental sustain-  
14 ability.

15 (b) PARTICIPANTS.—The program established under  
16 subsection (a) shall be led by a university having dem-  
17 onstrated experience with the application of intelligent  
18 workplaces and advanced building systems in improving  
19 the quality of built environments. Such university shall  
20 also have the ability to combine the expertise from more  
21 than 12 academic fields, including electrical and computer  
22 engineering, computer science, architecture, urban design,  
23 and environmental and mechanical engineering. Such uni-  
24 versity shall partner with other universities and entities

1 who have established programs and the capability of ad-  
2 vancing innovative building efficiency technologies.

3 (c) AUTHORIZATION OF APPROPRIATIONS.—There  
4 are authorized to be appropriated to the Secretary of En-  
5 ergy to carry out this section \$18,000,000 for fiscal year  
6 2002, to remain available until expended, of which  
7 \$6,000,000 shall be provided to the lead university de-  
8 scribed in subsection (b), and the remainder shall be pro-  
9 vided equally to each of the other participants referred to  
10 in subsection (b).

11 **SEC. 127. USE OF INTERVAL DATA IN FEDERAL BUILDINGS.**

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

15 “(h) USE OF INTERVAL DATA IN FEDERAL BUILD-  
16 INGS.—Not later than January 1, 2003, each agency shall  
17 utilize, to the maximum extent practicable, for the pur-  
18 poses of efficient use of energy and reduction in the cost  
19 of electricity consumed in its Federal buildings, interval  
20 consumption data that measure on a real time or daily  
21 basis consumption of electricity in its Federal buildings.  
22 To meet the requirements of this subsection each agency  
23 shall prepare and submit at the earliest opportunity pur-  
24 suant to section 548(a) to the Secretary, a plan describing  
25 how the agency intends to meet such requirements, includ-

1 ing how it will designate personnel primarily responsible  
2 for achieving such requirements, and otherwise implement  
3 this subsection.”.

4 **SEC. 128. REVIEW OF ENERGY SAVINGS PERFORMANCE**  
5 **CONTRACT PROGRAM.**

6 Within 180 days after the date of the enactment of  
7 this Act, the Secretary of Energy shall complete a review  
8 of the Energy Savings Performance Contract program to  
9 identify statutory, regulatory, and administrative obstacles  
10 that prevent Federal agencies from fully utilizing the pro-  
11 gram. In addition, this review shall identify all areas for  
12 increasing program flexibility and effectiveness, including  
13 audit and measurement verification requirements, ac-  
14 counting for energy use in determining savings, con-  
15 tracting requirements, and energy efficiency services cov-  
16 ered. The Secretary shall report these findings to the  
17 Committee on Energy and Commerce of the House of  
18 Representatives and the Committee on Energy and Nat-  
19 ural Resources of the Senate, and shall implement identi-  
20 fied administrative and regulatory changes to increase  
21 program flexibility and effectiveness to the extent that  
22 such changes are consistent with statutory authority.

23 **SEC. 129. CAPITOL COMPLEX.**

24 (a) **ENERGY INFRASTRUCTURE.**—The Architect of  
25 the Capitol, building on the Master Plan Study completed

1 in July 2000, shall commission a study to evaluate the  
2 energy infrastructure of the Capital Complex to determine  
3 how the infrastructure could be augmented to become  
4 more energy efficient, using unconventional and renewable  
5 energy resources, in a way that would enable the Complex  
6 to have reliable utility service in the event of power fluc-  
7 tuations, shortages, or outages.

8 (b) AUTHORIZATION.—There is authorized to be ap-  
9 propriated to the Architect of the Capitol to carry out this  
10 section, not more than \$2,000,000 for fiscal years after  
11 the enactment of this Act.

## 12 **Subtitle C—State Programs**

### 13 **SEC. 131. AMENDMENTS TO STATE ENERGY PROGRAMS.**

14 (a) STATE ENERGY CONSERVATION PLANS.—Section  
15 362 of the Energy Policy and Conservation Act (42 U.S.C.  
16 6322) is amended by inserting at the end the following  
17 new subsection:

18 “(g) The Secretary shall, at least once every three  
19 years, invite the Governor of each State to review and,  
20 if necessary, revise the energy conservation plan of such  
21 State submitted under subsection (b) or (e). Such reviews  
22 should consider the energy conservation plans of other  
23 States within the region, and identify opportunities and  
24 actions carried out in pursuit of common energy conserva-  
25 tion goals.”.

1 (b) STATE ENERGY EFFICIENCY GOALS.—Section  
2 364 of the Energy Policy and Conservation Act (42 U.S.C.  
3 6324) is amended by inserting “Each State energy con-  
4 servation plan with respect to which assistance is made  
5 available under this part on or after the date of the enact-  
6 ment of Energy Advancement and Conservation Act of  
7 2001, shall contain a goal, consisting of an improvement  
8 of 25 percent or more in the efficiency of use of energy  
9 in the State concerned in the calendar year 2010 as com-  
10 pared to the calendar year 1990, and may contain interim  
11 goals.” after “contain interim goals.”.

12 (c) AUTHORIZATION OF APPROPRIATIONS.—Section  
13 365(f) of the Energy Policy and Conservation Act (42  
14 U.S.C. 6325(f)) is amended by striking “for fiscal years  
15 1999 through 2003 such sums as may be necessary” and  
16 inserting “\$75,000,000 for fiscal year 2002,  
17 \$100,000,000 for fiscal years 2003 and 2004,  
18 \$125,000,000 for fiscal year 2005”.

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

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

1 **SEC. 133. AMENDMENTS TO WEATHERIZATION ASSISTANCE**  
2 **PROGRAM.**

3 Section 422 of the Energy Conservation and Produc-  
4 tion Act (42 U.S.C. 6872) is amended by striking “for  
5 fiscal years 1999 through 2003 such sums as may be nec-  
6 essary” and inserting “\$250,000,000 for fiscal year 2002,  
7 \$325,000,000 for fiscal year 2003, \$400,000,000 for fis-  
8 cal year 2004, and \$500,000,000 for fiscal year 2005”.

9 **SEC. 134. LIHEAP.**

10 (a) **AUTHORIZATION OF APPROPRIATIONS.**—Section  
11 2602(b) of the Low-Income Home Energy Assistance Act  
12 of 1981 (42 U.S.C. 8621(b)) is amended by striking the  
13 first sentence and inserting the following: “There are au-  
14 thorized to be appropriated to carry out the provisions of  
15 this title (other than section 2607A), \$3,400,000,000 for  
16 each of fiscal years 2001 through 2005.”.

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

19 (1) the extent to which Low-Income Home En-  
20 ergy Assistance (LIHEAP) and other government  
21 energy subsidies paid to consumers discourage en-  
22 ergy conservation and energy efficiency investments;  
23 and

24 (2) the extent to which the goals of conserva-  
25 tion and assistance for low income households could  
26 be simultaneously achieved through cash income

1 supplements that do not specifically target energy,  
2 thereby maintaining incentives for wise use of expen-  
3 sive forms of energy, or through other means.

4 **SEC. 135. HIGH PERFORMANCE PUBLIC BUILDINGS.**

5 (a) PROGRAM ESTABLISHMENT AND ADMINISTRA-  
6 TION.—

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

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

13 (A) to assist units of local government in  
14 the production, through construction or renova-  
15 tion of buildings and facilities they own and op-  
16 erate, of high performance public buildings and  
17 facilities that are healthful, productive, energy  
18 efficient, and environmentally sound;

19 (B) to State energy offices to administer  
20 the program of assistance to units of local gov-  
21 ernment pursuant to this section; and

22 (C) to State energy offices to promote par-  
23 ticipation by units of local government in the  
24 Program.

1           (3) GRANTS TO ASSIST UNITS OF LOCAL GOV-  
2           ERNMENT.—Grants under paragraph (2)(A) for new  
3           public buildings shall be used to achieve energy effi-  
4           ciency performance that reduces energy use at least  
5           30 percent below that of a public building con-  
6           structed in compliance with standards prescribed in  
7           Chapter 8 of the 2000 International Energy Con-  
8           servation Code, or a similar State code intended to  
9           achieve substantially equivalent results. Grants  
10          under paragraph (2)(A) for existing public buildings  
11          shall be used to achieve energy efficiency perform-  
12          ance that reduces energy use below the public build-  
13          ing baseline consumption, assuming a 3-year, weath-  
14          er-normalized average for calculating such baseline.  
15          Grants under paragraph (2)(A) shall be made to  
16          units of local government that have—

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

21                 (B) made a commitment to use the grant  
22                 funds to develop high performance public build-  
23                 ings in accordance with a plan developed and  
24                 approved pursuant to paragraph (5)(A).

25          (4) OTHER GRANTS.—

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

6 (i) distributing information and mate-  
7 rials to clearly define and promote the de-  
8 velopment of high performance public  
9 buildings for both new and existing facili-  
10 ties;

11 (ii) organizing and conducting pro-  
12 grams for local government personnel, ar-  
13 chitects, engineers, and others to advance  
14 the concepts of high performance public  
15 buildings;

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

19 (iv) collecting and monitoring data  
20 and information pertaining to the high per-  
21 formance public building projects.

22 (B) GRANTS TO PROMOTE PARTICIPA-  
23 TION.—Grants under paragraph (2)(C) may be  
24 used for promotional and marketing activities,  
25 including facilitating private and public financ-

1 ing, promoting the use of energy service compa-  
2 nies, working with public building users, and  
3 communities, and coordinating public benefit  
4 programs.

5 (5) IMPLEMENTATION.—

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

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

18 (b) ALLOCATION OF FUNDS.—

19 (1) IN GENERAL.—Except as provided in para-  
20 graph (3), funds appropriated to carry out this sec-  
21 tion shall be provided to State energy offices.

22 (2) PURPOSES.—Except as provided in para-  
23 graph (3), funds appropriated to carry out this sec-  
24 tion shall be allocated as follows:

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

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

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

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

15           (c) AUTHORIZATION OF APPROPRIATIONS.—There  
16 are authorized to be appropriated to the Secretary of En-  
17 ergy to carry out this section such sums as may be nec-  
18 essary for each of the fiscal years 2002 through 2010.

19           (d) REPORT TO CONGRESS.—The Secretary of En-  
20 ergy shall conduct a biennial review of State actions imple-  
21 menting this section, and the Secretary shall report to  
22 Congress on the results of such reviews. In conducting  
23 such reviews, the Secretary shall assess the effectiveness  
24 of the calculation procedures used by the States in estab-  
25 lishing eligibility of units of local government for funding

1 under this section, and may assess other aspects of the  
2 State program to determine whether they have been effec-  
3 tively implemented.

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

5 (1) HIGH PERFORMANCE PUBLIC BUILDING.—

6 The term “high performance public building” means  
7 a public building which, in its design, construction,  
8 operation, and maintenance, maximizes use of un-  
9 conventional and renewable energy resources and en-  
10 ergy efficiency practices, is cost-effective on a life  
11 cycle basis, uses affordable, environmentally pref-  
12 erable, durable materials, enhances indoor environ-  
13 mental quality, protects and conserves water, and  
14 optimizes site potential.

15 (2) RENEWABLE ENERGY.—The term “renew-  
16 able energy” means energy produced by solar, wind,  
17 geothermal, hydroelectric, or biomass power.

18 (3) UNCONVENTIONAL AND RENEWABLE EN-  
19 ERGY RESOURCES.—The term “unconventional and  
20 renewable energy resources” means renewable en-  
21 ergy, hydrogen, fuel cells, cogeneration, combined  
22 heat and power, heat recovery (including by use of  
23 a Stirling heat engine), and distributed generation.

1     **Subtitle D—Energy Efficiency for**  
2                     **Consumer Products**

3     **SEC. 141. ENERGY STAR PROGRAM.**

4             (a) AMENDMENT.—The Energy Policy and Conserva-  
5     tion Act (42 U.S.C. 6201 and following) is amended by  
6     inserting the following after section 324:

7     **“SEC. 324A. ENERGY STAR PROGRAM.**

8             “(a) IN GENERAL.—There is established at the De-  
9     partment of Energy and the Environmental Protection  
10    Agency a program to identify and promote energy-efficient  
11    products and buildings in order to reduce energy consump-  
12    tion, improve energy security, and reduce pollution  
13    through labeling of products and buildings that meet the  
14    highest energy efficiency standards. Responsibilities under  
15    the program shall be divided between the Department of  
16    Energy and the Environmental Protection Agency con-  
17    sistent with the terms of agreements between the two  
18    agencies. The Administrator and the Secretary shall—

19             “(1) promote Energy Star compliant tech-  
20    nologies as the preferred technologies in the market-  
21    place for achieving energy efficiency and to reduce  
22    pollution;

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

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

3 For the purposes of carrying out this section, there is au-  
4 thorized to be appropriated for fiscal years 2002 through  
5 2006 such sums as may be necessary, to remain available  
6 until expended.

7           “(b) STUDY OF CERTAIN PRODUCTS AND BUILD-  
8 INGS.—Within 180 days after the date of enactment of  
9 this section, the Secretary and the Administrator, con-  
10 sistent with the terms of agreements between the two  
11 agencies, shall determine whether the Energy Star label  
12 should be extended to additional products and buildings,  
13 including the following:

14           “(1) Air cleaners.

15           “(2) Ceiling fans.

16           “(3) Light commercial heating and cooling  
17 products.

18           “(4) Reach-in refrigerators and freezers.

19           “(5) Telephony.

20           “(6) Vending machines.

21           “(7) Residential water heaters.

22           “(8) Refrigerated beverage merchandisers.

23           “(9) Commercial ice makers.

24           “(10) School buildings.

25           “(11) Retail buildings.

1           “(12) Health care facilities.

2           “(13) Homes.

3           “(14) Hotels and other commercial lodging fa-  
4           cilities.

5           “(15) Restaurants and other food service facili-  
6           ties.

7           “(16) Solar water heaters.

8           “(17) Building-integrated photovoltaic systems.

9           “(18) Reflective pigment coatings.

10          “(19) Windows.

11          “(20) Boilers.

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

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

19          (b) TABLE OF CONTENTS AMENDMENT.—The table  
20          of contents of the Energy Policy and Conservation Act is  
21          amended by inserting after the item relating to section  
22          324 the following new item:

          “Sec. 324A. Energy Star program.”.

1 **SEC. 142. LABELING OF ENERGY EFFICIENT APPLIANCES.**

2 (a) STUDY.—Section 324(e) of the Energy Policy and  
3 Conservation Act (42 U.S.C. 6294(e)) is amended as fol-  
4 lows:

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

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

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

11 “(2) The Secretary shall make recommendations to  
12 the Commission within 180 days of the date of enactment  
13 of this paragraph regarding labeling of consumer products  
14 that are not covered products in accordance with this sec-  
15 tion, where such labeling is likely to assist consumers in  
16 making purchasing decisions and is technologically and  
17 economically feasible.”.

18 (b) NONCOVERED PRODUCTS.—Section 324(a)(2) of  
19 the Energy Policy and Conservation Act (42 U.S.C.  
20 6294(a)(2)) is amended by adding the following at the  
21 end:

22 “(F) Not later than one year after the date of enact-  
23 ment of this subparagraph, the Commission shall initiate  
24 a rulemaking to prescribe labeling rules under this section  
25 applicable to consumer products that are not covered prod-  
26 ucts if it determines that labeling of such products is likely

1 to assist consumers in making purchasing decisions and  
2 is technologically and economically feasible.

3 “(G) Not later than three months after the date of  
4 enactment of this subparagraph, the Commission shall ini-  
5 tiate a rulemaking to consider the effectiveness of the cur-  
6 rent consumer products labeling program in assisting con-  
7 sumers in making purchasing decisions and improving en-  
8 ergy efficiency and to consider changes to the label that  
9 would improve the effectiveness of the label. Such rule-  
10 making shall be completed within 15 months of the date  
11 of enactment of this subparagraph.”

12 **SEC. 143. APPLIANCE STANDARDS.**

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

17 “(u) STANDBY MODE ELECTRIC ENERGY CONSUMP-  
18 TION BY HOUSEHOLD APPLIANCES.—(1) In this sub-  
19 section:

20 “(A) The term ‘household appliance’ means any  
21 device that uses household electric current and oper-  
22 ates in a standby mode except digital televisions,  
23 digital set top boxes, and digital video recorders.

24 “(B) The term ‘standby mode’ means a mode  
25 in which a household appliance consumes the least

1 amount of electric energy that the household appli-  
2 ance is capable of consuming without being com-  
3 pletely switched off.

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

9 “(B)(i) A household appliance model that, as of the  
10 date of enactment of this subsection, is recognized under  
11 the Energy Star program administered by the Adminis-  
12 trator of the Environmental Protection Agency and the  
13 Secretary shall have until January 1, 2005, to meet the  
14 standard under subparagraph (A).

15 “(ii) In the case of analog televisions, the Secretary  
16 shall prescribe, on or after the date that is 2 years after  
17 the date of enactment of this subsection, in accordance  
18 with subsections (o) and (p) of section 325, an energy con-  
19 servation standard that is technologically feasible and eco-  
20 nomically justified under section 325(o)(2)(A) (in lieu of  
21 the 1 watt standard under subparagraph (A)).

22 “(3)(A) A manufacturer or importer of a household  
23 appliance may submit to the Secretary an application for  
24 an exemption of the household appliance from the stand-  
25 ard under paragraph (2).

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

5           “(i) it is not technically feasible to modify the  
6 household appliance to enable the household appli-  
7 ance to meet the standard;

8           “(ii) the standard is incompatible with an en-  
9 ergy efficiency standard applicable to the household  
10 appliance under another subsection; or

11           “(iii) the cost of electricity that a typical con-  
12 sumer would save in operating the household appli-  
13 ance meeting the standard would not equal the in-  
14 crease in the price of the household appliance that  
15 would be attributable to the modifications that  
16 would be necessary to enable the household appli-  
17 ance to meet the standard by the earlier of—

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

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

22       “(C) If the Secretary determines that it is not tech-  
23 nically feasible to modify a household appliance to meet  
24 the standard under paragraph (2), the Secretary shall es-

1 establish a different standard for the household appliance  
2 in accordance with the criteria under subsection (l).

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

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

10 “(i) international test procedures under devel-  
11 opment;

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

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

16 “(5) FURTHER REDUCTION OF STANDBY POWER  
17 CONSUMPTION.—The Secretary shall provide technical as-  
18 sistance to manufacturers in achieving further reductions  
19 in standby mode electric energy consumption by household  
20 appliances.

21 “(v) STANDBY MODE ELECTRIC ENERGY CONSUMP-  
22 TION BY DIGITAL TELEVISIONS, DIGITAL SET TOP  
23 BOXES, AND DIGITAL VIDEO RECORDERS.—The Sec-  
24 retary shall initiate on January 1, 2007 a rulemaking to  
25 prescribe, in accordance with subsections (o) and (p), an

1 energy conservation standard of standby mode electric en-  
2 ergy consumption by digital television sets, digital set top  
3 boxes, and digital video recorders. The Secretary shall  
4 issue a final rule prescribing such standards not later than  
5 18 months thereafter. In determining whether a standard  
6 under this section is technologically feasible and economi-  
7 cally justified under section 325(o)(2)(A), the Secretary  
8 shall consider the potential effects on market penetration  
9 by digital products covered under this section, and shall  
10 consider any recommendations by the FCC regarding such  
11 effects.”.

12 (2) Section 325(n)(1) of the Energy Policy and Con-  
13 servation Act (42 U.S.C. 6295(n)(1)) is amended by strik-  
14 ing “(11), and in paragraphs (13) and”.

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

18 (1) Inserting “(1)” before “After”.

19 (2) Inserting the following at the end:

20 (2) “Not later than one year after the date of enact-  
21 ment of the Energy Advancement and Conservation Act  
22 of 2001, the Secretary shall conduct a rulemaking to de-  
23 termine whether consumer products not classified as a  
24 covered product under section 322(a)(1) through (18)  
25 meet the criteria of section 322(b)(1). If the Secretary

1 finds that a consumer product not classified as a covered  
2 product meets the criteria of section 322(b)(1), he shall  
3 prescribe, in accordance with subsections (o) and (p), an  
4 energy conservation standard for such consumer product,  
5 if such standard is reasonably probable to be techno-  
6 logically feasible and economically justified within the  
7 meaning of subsection (o)(2)(A).”.

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

14       “(c) HVAC MAINTENANCE.—For the purpose of en-  
15 suring that installed air conditioning and heating systems  
16 operate at their maximum rated efficiency levels, the Sec-  
17 retary shall, within 180 days of the date of enactment of  
18 this subsection, develop and implement a public education  
19 campaign to educate homeowners and small business own-  
20 ers concerning the energy savings resulting from regularly  
21 scheduled maintenance of air conditioning, heating, and  
22 ventilating systems. In developing and implementing this  
23 campaign, the Secretary shall consider support by the De-  
24 partment of public education programs sponsored by trade  
25 and professional or energy efficiency organizations. The

1 public service information shall provide sufficient informa-  
2 tion to allow consumers to make informed choices from  
3 among professional, licensed (where State or local licens-  
4 ing is required) contractors. There are authorized to be  
5 appropriated to carry out this subsection \$5,000,000 for  
6 fiscal years 2002 and 2003 in addition to amounts other-  
7 wise appropriated in this part.”.

8 (d) EFFICIENCY STANDARDS FOR FURNACE FANS,  
9 CEILING FANS, AND COLD DRINK VENDING MA-  
10 CHINES.—

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

14 “(32) The term ‘residential furnace fan’ means  
15 an electric fan installed as part of a furnace for pur-  
16 poses of circulating air through the system air fil-  
17 ters, the heat exchangers or heating elements of the  
18 furnace, and the duct work.

19 “(33) The terms ‘residential central air condi-  
20 tioner fan’ and ‘heat pump circulation fan’ mean an  
21 electric fan installed as part of a central air condi-  
22 tioner or heat pump for purposes of circulating air  
23 through the system air filters, the heat exchangers  
24 of the air conditioner or heat pump, and the duct  
25 work.

1           “(34) The term ‘suspended ceiling fan’ means  
2           a fan intended to be mounted to a ceiling outlet box,  
3           ceiling building structure, or to a vertical rod sus-  
4           pended from the ceiling, and which as blades which  
5           rotate below the ceiling and consists of an electric  
6           motor, fan blades (which rotate in a direction par-  
7           allel to the floor), an optional lighting kit, and one  
8           or more electrical controls (integral or remote) gov-  
9           erning fan speed and lighting operation.

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

14           (2) TESTING REQUIREMENTS.—Section 323 of  
15           the Energy Policy and Conservation Act (42 U.S.C.  
16           6293) is amended by adding the following at the end  
17           thereof:

18           “(f) ADDITIONAL CONSUMER PRODUCTS.—The Sec-  
19           retary shall within 18 months after the date of enactment  
20           of this subsection prescribe testing requirements for resi-  
21           dential furnace fans, residential central air conditioner  
22           fans, heat pump circulation fans, suspended ceiling fans,  
23           and refrigerated bottled or canned beverage vending ma-  
24           chines. Such testing requirements shall be based on exist-  
25           ing test procedures used in industry to the extent practical

1 and reasonable. In the case of residential furnace fans,  
2 residential central air conditioner fans, heat pump circula-  
3 tion fans, and suspended ceiling fans, such test procedures  
4 shall include efficiency at both maximum output and at  
5 an output no more than 50 percent of the maximum out-  
6 put.”.

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

11       “(w) RESIDENTIAL FURNACE FANS, CENTRAL AIR  
12       AND HEAT PUMP CIRCULATION FANS, SUSPENDED CEIL-  
13       ING FANS, AND VENDING MACHINES.—(1) The Secretary  
14       shall, within 18 months after the date of enactment of this  
15       subsection, assess the current and projected future market  
16       for residential furnace fans, residential central air condi-  
17       tioner and heat pump circulation fans, suspended ceiling  
18       fans, and refrigerated bottled or canned beverage vending  
19       machines. This assessment shall include an examination  
20       of the types of products sold, the number of products in  
21       use, annual sales of these products, energy used by these  
22       products sold, the number of products in use, annual sales  
23       of these products, energy used by these products, esti-  
24       mates of the potential energy savings from specific tech-  
25       nical improvements to these products, and an examination

1 of the cost-effectiveness of these improvements. Prior to  
2 the end of this time period, the Secretary shall hold an  
3 initial scoping workshop to discuss and receive input to  
4 plans for developing minimum efficiency standards for  
5 these products.

6 “(2) The Secretary shall within 24 months after the  
7 date on which testing requirements are prescribed by the  
8 Secretary pursuant to section 323(f), prescribe, by rule,  
9 energy conservation standards for residential furnace fans,  
10 residential central air conditioner and heat pump circula-  
11 tion fans, suspended ceiling fans, and refrigerated bottled  
12 or canned beverage vending machines. In establishing  
13 these standards, the Secretary shall use the criteria and  
14 procedures contained in subsections (l) and (m). Any  
15 standard prescribed under this section shall apply to prod-  
16 ucts manufactured 36 months after the date such rule is  
17 published.”.

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

21 “(5) The Secretary shall within 6 months after the  
22 date on which energy conservation standards are pre-  
23 scribed by the Secretary for covered products referred to  
24 in section 325(w), prescribe, by rule, labeling requirements  
25 for such products. These requirements shall take effect on

1 the same date as the standards prescribed pursuant to sec-  
2 tion 325(w).”.

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

8 “(19) Beginning on the effective date for stand-  
9 ards established pursuant to subsection (v) of sec-  
10 tion 325, each product referred to in such subsection  
11 (v).”.

## 12 **Subtitle E—Energy Efficient** 13 **Vehicles**

### 14 **SEC. 151. HIGH OCCUPANCY VEHICLE EXCEPTION.**

15 (a) IN GENERAL.—Notwithstanding section  
16 102(a)(1) of title 23, United States Code, a State may,  
17 for the purpose of promoting energy conservation, permit  
18 a vehicle with fewer than 2 occupants to operate in high  
19 occupancy vehicle lanes if such vehicle is a hybrid vehicle  
20 or is fueled by an alternative fuel.

21 (b) HYBRID VEHICLE DEFINED.—In this section, the  
22 term “hybrid vehicle” means a motor vehicle—

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

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

3 (B) a rechargeable energy storage system;  
4 (2) which, in the case of a passenger automobile  
5 or light truck—

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

14 (B) for 2004 and later model vehicles, has  
15 received a certificate that such vehicle meets  
16 the Tier II emission level established in regula-  
17 tions prescribed by the Administrator of the  
18 Environmental Protection Agency under section  
19 202(i) of the Clean Air Act (42 U.S.C. 7521(i))  
20 for that make and model year vehicle; and

21 (3) which is made by a manufacturer.

22 (c) ALTERNATIVE FUEL DEFINED.—In this section,  
23 the term “alternative fuel” has the meaning such term has  
24 under section 301(2) of the Energy Policy Act of 1992  
25 (42 U.S.C. 13211(2)).

1 **SEC. 152. RAILROAD EFFICIENCY.**

2 (a) **LOCOMOTIVE TECHNOLOGY DEMONSTRATION.**—

3 The Secretary of Energy shall establish a public-private  
4 research partnership with railroad carriers, locomotive  
5 manufacturers, and a world-class research and test center  
6 dedicated to the advancement of railroad technology, effi-  
7 ciency, and safety that is owned by the Federal Railroad  
8 Administration and operated in the private sector, for the  
9 development and demonstration of locomotive technologies  
10 that increase fuel economy, reduce emissions, improve  
11 safety, and lower costs.

12 (b) **AUTHORIZATION OF APPROPRIATIONS.**—There  
13 are authorized to be appropriated to the Secretary of En-  
14 ergy \$25,000,000 for fiscal year 2002, \$30,000,000 for  
15 fiscal year 2003, and \$35,000,000 for fiscal year 2004 for  
16 carrying out this section.

17 **SEC. 153. BIODIESEL FUEL USE CREDITS.**

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

20 (1) by striking “NOT” in the subsection head-  
21 ing; and

22 (2) by striking “not”.

23 **SEC. 154. MOBILE TO STATIONARY SOURCE TRADING.**

24 Within 90 days after the enactment of this section,  
25 the Administrator of the Environmental Protection Agen-  
26 cy is directed to commence a review of the Agency’s poli-

1 cies regarding the use of mobile to stationary source trad-  
2 ing of emission credits under the Clean Air Act to deter-  
3 mine whether such trading can provide both nonattain-  
4 ment and attainment areas with additional flexibility in  
5 achieving and maintaining healthy air quality and increas-  
6 ing use of alternative fuel and advanced technology vehi-  
7 cles, thereby reducing United States dependence on for-  
8 eign oil.

## 9 **Subtitle F—Other Provisions**

### 10 **SEC. 161. REVIEW OF REGULATIONS TO ELIMINATE BAR-** 11 **RIERS TO EMERGING ENERGY TECHNOLOGY.**

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

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

24 (c) PERIODIC REVIEW.—Each agency shall subse-  
25 quently review its regulations and standards in the man-

1 ner specified in this section no less frequently than every  
2 5 years, and report their findings to Congress and the  
3 President. Such reviews shall include a detailed analysis  
4 of all agency actions taken to remove existing barriers to  
5 emerging energy technologies.

6 **SEC. 162. ADVANCED IDLE ELIMINATION SYSTEMS.**

7 (a) DEFINITIONS.—

8 (1) ADVANCED IDLE ELIMINATION SYSTEM.—

9 The term “advanced idle elimination system” means  
10 a device or system of devices that is installed at a  
11 truck stop or other location (for example, a loading,  
12 unloading, or transfer facility) where vehicles (such  
13 as trucks, trains, buses, boats, automobiles, and rec-  
14 reational vehicles) are parked and that is designed  
15 to provide to the vehicle the services (such as heat,  
16 air conditioning, and electricity) that would other-  
17 wise require the operation of the auxiliary or drive  
18 train engine or both while the vehicle is stationary  
19 and parked.

20 (2) EXTENDED IDLING.—The term “extended  
21 idling” means the idling of a motor vehicle for a pe-  
22 riod greater than 60 minutes.

23 (b) RECOGNITION OF BENEFITS OF ADVANCED IDLE  
24 ELIMINATION SYSTEMS.—Within 90 days after the date  
25 of enactment of this subsection, the Administrator of the

1 Environmental Protection Agency is directed to commence  
2 a review of the Agency's mobile source air emissions mod-  
3 els used under the Clean Air Act to determine whether  
4 such models accurately reflect the emissions resulting  
5 from extended idling of heavy-duty trucks and other vehi-  
6 cles and engines, and shall update those models as the  
7 Administrator deems appropriate. Additionally, within 90-  
8 days after the date of enactment of this subsection, the  
9 Administrator shall commence a review as to the appro-  
10 priate emissions reductions credit that should be allotted  
11 under the Clean Air Act for the use of advanced idle elimi-  
12 nation systems, and whether such credits should be sub-  
13 ject to an emissions trading system, and shall revise Agen-  
14 cy regulations and guidance as the Administrator deems  
15 appropriate.

16 **SEC. 163. STUDY OF BENEFITS AND FEASIBILITY OF OIL BY-**  
17 **PASS FILTRATION TECHNOLOGY.**

18 (a) STUDY.—The Secretary of Energy and the Ad-  
19 ministrator of the Environmental Protection Agency shall  
20 jointly conduct a study of oil bypass filtration technology  
21 in motor vehicle engines. The study shall analyze and  
22 quantify the potential benefits of such technology in terms  
23 of reduced demand for oil and the potential environmental  
24 benefits of the technology in terms of reduced waste and  
25 air pollution. The Secretary and the Administrator shall

1 also examine the feasibility of using such technology in  
2 the Federal motor vehicle fleet.

3 (b) REPORT.—Not later than 6 months after the en-  
4 actment of this Act, the Secretary of Energy and the Ad-  
5 ministrator of the Environmental Protection Agency shall  
6 jointly submit a report containing the results of the study  
7 conducted under subsection (a) to the Committee on En-  
8 ergy and Commerce of the United States House of Rep-  
9 resentatives and to the Committee on Energy and Natural  
10 Resources of the United States Senate.

11 **SEC. 164. GAS FLARE STUDY.**

12 (a) STUDY.—The Secretary of Energy shall conduct  
13 a study of the economic feasibility of installing small co-  
14 generation facilities utilizing excess gas flares at petro-  
15 chemical facilities to provide reduced electricity costs to  
16 customers living within 3 miles of the petrochemical facili-  
17 ties. The Secretary shall solicit public comment to assist  
18 in preparing the report required under subsection (b).

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

23 **SEC. 165. TELECOMMUTING STUDY.**

24 (a) STUDY REQUIRED.—The Secretary, in consulta-  
25 tion with Commission, and the NTIA, shall conduct a

1 study of the energy conservation implications of the wide-  
2 spread adoption of telecommuting in the United States.

3 (b) REQUIRED SUBJECTS OF STUDY.—The study re-  
4 quired by subsection (a) shall analyze the following sub-  
5 jects in relation to the energy saving potential of telecom-  
6 muting:

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

10 (2) Other energy reductions accomplished by  
11 telecommuting.

12 (3) Existing regulatory barriers that hamper  
13 telecommuting, including barriers to broadband tele-  
14 communications services deployment.

15 (4) Collateral benefits to the environment, fam-  
16 ily life, and other values.

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

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

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



1 is at least 5 billion gallons less than the aggregate amount  
2 of gasoline that would be used in those model years by  
3 such automobiles if they achieved only the fuel economy  
4 required under the average fuel economy standard that ap-  
5 plies under this subsection to automobiles (except pas-  
6 senger automobiles) manufactured in model year 2002.”.

7 **SEC. 202. CONSIDERATION OF PRESCRIBING DIFFERENT**  
8 **AVERAGE FUEL ECONOMY STANDARDS FOR**  
9 **NONPASSENGER AUTOMOBILES.**

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

15 (1) establishing a weight-based system for auto-  
16 mobiles, that is based on the inertia weight, curb  
17 weight, gross vehicle weight rating, or another ap-  
18 propriate measure of such automobiles; and

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

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

24 (1) shall consider any recommendations made  
25 in the National Academy of Sciences study com-

1 pleted pursuant to the Department of Transpor-  
2 tation and Related Agencies Appropriations Act,  
3 2000 (Public Law 106–346; 114 Stat. 2763 et seq.);  
4 and

5 (2) shall evaluate the merits of any weight-  
6 based system in terms of motor vehicle safety, en-  
7 ergy conservation, and competitiveness of and em-  
8 ployment in the United States automotive sector,  
9 and if a weight-based system is established by the  
10 Secretary a manufacturer may trade credits between  
11 or among the automobiles (except passenger auto-  
12 mobiles) manufactured by the manufacturer.

13 **SEC. 203. DUAL FUELED AUTOMOBILES.**

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

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

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

23 (b) AMENDMENTS.—

1           (1) MANUFACTURING INCENTIVES.—Section  
2           32905 of title 49, United States Code, is amended  
3           as follows:

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

7                   (B) Subsection (f) is amended by striking  
8                   “Not later than December 31, 2001, the Sec-  
9                   retary” and inserting “Not later than Decem-  
10                  ber 31, 2005, the Secretary”.

11                  (C) Subsection (f)(1) is amended by strik-  
12                  ing “model year 2004” and inserting “model  
13                  year 2008”.

14                  (D) Subsection (g) is amended by striking  
15                  “Not later than September 30, 2000” and in-  
16                  serting “Not later than September 30, 2004”.

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

20                   (A) Subparagraph (A) is amended by  
21                   striking “the model years 1993–2004” and in-  
22                   serting “model years 1993–2008”.

23                   (B) Subparagraph (B) is amended by  
24                   striking “the model years 2005–2008” and in-  
25                   serting “model years 2009–2012”.

1 **SEC. 204. FUEL ECONOMY OF THE FEDERAL FLEET OF**  
2 **AUTOMOBILES.**

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

5 **“§ 32917. Standards for executive agency automobiles**

6 “(a) **BASELINE AVERAGE FUEL ECONOMY.**—The  
7 head of each executive agency shall determine, for all auto-  
8 mobiles in the agency’s fleet of automobiles that were  
9 leased or bought as a new vehicle in fiscal year 1999, the  
10 average fuel economy for such automobiles. For the pur-  
11 poses of this section, the average fuel economy so deter-  
12 mined shall be the baseline average fuel economy for the  
13 agency’s fleet of automobiles.

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

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

23 “(2) not later than September 30, 2005, the av-  
24 erage fuel economy of the new automobiles in the  
25 agency’s fleet of automobiles is not less than 3 miles  
26 per gallon higher than the baseline average fuel

1 economy determined under subsection (a) for that  
2 fleet.

3 “(c) CALCULATION OF AVERAGE FUEL ECONOMY.—  
4 Average fuel economy shall be calculated for the purposes  
5 of this section in accordance with guidance which the Sec-  
6 retary of Transportation shall prescribe for the implemen-  
7 tation of this section.

8 “(d) DEFINITIONS.—In this section:

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

12 “(2) The term ‘executive agency’ has the mean-  
13 ing given that term in section 105 of title 5.

14 “(3) The term ‘new automobile’, with respect to  
15 the fleet of automobiles of an executive agency,  
16 means an automobile that is leased for at least 60  
17 consecutive days or bought, by or for the agency,  
18 after September 30, 1999.”.

19 **SEC. 205. HYBRID VEHICLES AND ALTERNATIVE VEHICLES.**

20 (a) IN GENERAL.—Section 303(b)(1) of the Energy  
21 Policy Act of 1992 is amended by adding the following  
22 at the end: “Of the total number of vehicles acquired by  
23 a Federal fleet in fiscal years 2004 and 2005, at least  
24 5 percent of the vehicles in addition to those covered by  
25 the preceding sentence shall be alternative fueled vehicles

1 or hybrid vehicles and in fiscal year 2006 and thereafter  
2 at least 10 percent of the vehicles in addition to those cov-  
3 ered by the preceding sentence shall be alternative fueled  
4 vehicles or hybrid vehicles.”.

5 (b) DEFINITION.—Section 301 of such Act is amend-  
6 ed by striking “and” at the end of paragraph (13), by  
7 striking the period at the end of paragraph (14) and in-  
8 serting “; and” and by adding at the end the following:

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

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

14 “(B) a rechargeable energy storage system.”.

15 **SEC. 206. FEDERAL FLEET PETROLEUM-BASED NONALTER-**  
16 **NATIVE FUELS.**

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

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

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

23 “(a) PURPOSES.—The purposes of this section are to  
24 complement and supplement the requirements of section  
25 303 of this Act that Federal fleets, as that term is defined

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

9 “(b) IMPLEMENTATION.—In furtherance of such pur-  
10 poses, such Federal fleets in the aggregate shall reduce  
11 the purchase of petroleum-based nonalternative fuels for  
12 such fleets beginning October 1, 2003, through September  
13 30, 2009, from the amount purchased for such fleets over  
14 a comparable period since enactment of this Act, as deter-  
15 mined by the Secretary, through the annual purchase, in  
16 accordance with section 304, and the use of alternative  
17 fuels for the light-duty motor vehicles of such Federal  
18 fleets, so as to achieve levels which reflect total reliance  
19 by such fleets on the consumptive use of alternative fuels  
20 consistent with the provisions of section 303(b) of this  
21 Act. The Secretary shall, within 120 days after the enact-  
22 ment of this section, promulgate, in consultation with the  
23 Administrator of the General Services Administration and  
24 the Director of the Office of Management and Budget and  
25 such other heads of entities referenced in section 303 with-

1 in the executive branch as such Director may designate,  
2 standards for the full and prompt implementation of this  
3 section by such entities. The Secretary shall monitor com-  
4 pliance with this section and such standards by all such  
5 fleets and shall report annually to the Congress, based on  
6 reports by the heads of such fleets, on the extent to which  
7 the requirements of this section and such standards are  
8 being achieved. The report shall include information on  
9 annual reductions achieved of petroleum-based fuels and  
10 the problems, if any, encountered in acquiring alternative  
11 fuels and in requiring their use.”.

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

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

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

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

1 **SEC. 207. STUDY OF FEASIBILITY AND EFFECTS OF REDUC-**  
2 **ING USE OF FUEL FOR AUTOMOBILES.**

3 (a) IN GENERAL.—Not later than 30 days after the  
4 date of the enactment of this Act, the Secretary of Trans-  
5 portation shall enter into an arrangement with the Na-  
6 tional Academy of Sciences under which the Academy  
7 shall study the feasibility and effects of reducing by model  
8 year 2010, by a significant percentage, the use of fuel for  
9 automobiles.

10 (b) SUBJECTS OF STUDY.—The study under this sec-  
11 tion shall include—

12 (1) examination of, and recommendation of al-  
13 ternatives to, the policy under current Federal law  
14 of establishing average fuel economy standards for  
15 automobiles and requiring each automobile manufac-  
16 turer to comply with average fuel economy standards  
17 that apply to the automobiles it manufactures;

18 (2) examination of how automobile manufactur-  
19 ers could contribute toward achieving the reduction  
20 referred to in subsection (a);

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

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

3           (A) gasoline supplies;

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

7           (C) motor vehicle safety; and

8           (D) air quality.

9           (c) REPORT.—The Secretary shall require the Na-  
10 tional Academy of Sciences to submit to the Secretary and  
11 the Congress a report on the findings, conclusion, and rec-  
12 ommendations of the study under this section by not later  
13 than 1 year after the date of the enactment of this Act.

## 14       **TITLE III—NUCLEAR ENERGY**

### 15       **Subtitle A—General Provisions**

#### 16       **SEC. 301. BUDGET STATUS OF NUCLEAR WASTE FUND.**

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

23           (1) the budget of the United States Govern-  
24 ment as submitted by the President;

25           (2) the congressional budget; or

1           (3) the Balanced Budget and Emergency Def-  
2       icit Control Act of 1985.

3       (b) EFFECT ON PAYGO SCORECARD.—Upon the en-  
4       actment of this Act, the Director of the Office of Manage-  
5       ment and Budget shall not make any estimates of changes  
6       in direct spending outlays and receipts under section  
7       252(d) of the Balanced Budget and Emergency Deficit  
8       Control Act of 1985 resulting from the enactment of sub-  
9       section (a) of this section.

10   **SEC. 302. LICENSE PERIOD.**

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

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

15       “c. LICENSE PERIOD.—

16           “(1) IN GENERAL.—Each such”; and

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

18           “(2) COMBINED LICENSES.—In the case of a  
19       combined construction and operating license issued  
20       under section 185 b., the initial duration of the li-  
21       cense may not exceed 40 years from the date on  
22       which the Commission finds, before operation of the  
23       facility, that the acceptance criteria required by sec-  
24       tion 185 b. are met.”.

1 **SEC. 303. COST RECOVERY FROM GOVERNMENT AGENCIES.**

2 Section 161 w. of the Atomic Energy Act of 1954  
3 (42 U.S.C. 2201(w)) is amended—

4 (1) by striking “for or is issued” and all that  
5 follows through “1702” and inserting “to the Com-  
6 mission for, or is issued by the Commission, a li-  
7 cense or certificate”;

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

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

12 **SEC. 304. DEPLETED URANIUM HEXAFLUORIDE.**

13 Section 1(b) of Public Law 105–204 is amended by  
14 striking “fiscal year 2002” and inserting “fiscal year  
15 2005”.

16 **SEC. 305. NUCLEAR REGULATORY COMMISSION MEETINGS.**

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

1       **Subtitle B—Domestic Uranium**  
2                               **Fuel Cycle**

3   **SEC. 311. PORTSMOUTH COLD STANDBY.**

4       The Secretary of Energy (in this subtitle referred to  
5 as the “Secretary”) may use, without need for further ap-  
6 propriations, funds from the United States Enrichment  
7 Corporation Fund established under section 1308 of the  
8 Atomic Energy Act of 1954 (other than amounts reserved  
9 under Public Law 105–204) for the implementation of  
10 cold standby status at the Portsmouth Gaseous Diffusion  
11 Plant, consistent with the plan required under section  
12 314(b), in the following amounts:

- 13                   (1) \$36,000,000 for fiscal year 2002.  
14                   (2) \$43,000,000 for fiscal year 2003.  
15                   (3) \$43,000,000 for fiscal year 2004.  
16                   (4) \$47,000,000 for fiscal year 2005.

17   **SEC. 312. PADUCAH FUNDING.**

18       The Secretary may use, without need for further ap-  
19 propriations, funds from the United States Enrichment  
20 Corporation Fund established under section 1308 of the  
21 Atomic Energy Act of 1954 (other than amounts reserved  
22 under Public Law 105–204) for the Paducah Gaseous Dif-  
23 fusion Plant for activities that do not duplicate the trans-  
24 fer and storage operations at the Portsmouth Gaseous

1 Diffusion Plant, \$169,000,000 for the period encom-  
2 passing fiscal years 2002 through 2005.

3 **SEC. 313. RESEARCH AND DEVELOPMENT.**

4 (a) PLAN.—Not later than 5 months after the date  
5 of the enactment of this Act, the Secretary shall transmit  
6 to the Congress a detailed research and development plan  
7 with respect to advanced gas centrifuge technology for  
8 uranium enrichment.

9 (b) ELEMENTS.—The plan required under subsection  
10 (a) shall—

11 (1) identify the technical obstacles to the de-  
12 ployment of an advanced gas centrifuge technology  
13 that will be cost competitive with advanced gas cen-  
14 trifuge technologies deployed in other nations, and  
15 propose a strategy to overcome those obstacles;

16 (2) include plans for the construction of a pilot  
17 facility at a Department of Energy-owned Gaseous  
18 Diffusion Plant, and for full-scale deployment of ad-  
19 vanced gas centrifuge technology, as necessary to  
20 move gas centrifuge technology for uranium enrich-  
21 ment from the laboratory to the marketplace, taking  
22 into consideration—

23 (A) confirmation of technical performance;

24 and

1 (B) initiation of preliminary plant design  
2 and engineering that validates economic projec-  
3 tions and considers cost effectiveness, accessi-  
4 bility to infrastructure, turnover activities,  
5 schedule, financing mechanisms, and risks of  
6 construction;

7 (3) provide a process to validate and dem-  
8 onstrate commercial feasibility, if the pilot facility  
9 described in paragraph (2) is not constructed;

10 (4) set forth a schedule to ensure full-scale de-  
11 ployment, and a strategy to provide a reliable and  
12 economical domestic source of uranium enrichment  
13 services until such full-scale deployment is com-  
14 pleted;

15 (5) evaluate the relative merits of full-scale de-  
16 ployment by—

17 (A) private sector companies;

18 (B) a government-owned corporation;

19 (C) a partnership between the private and  
20 public sectors; and

21 (D) the Department of Energy,

22 using facilities and property at the Portsmouth Gas-  
23 eous Diffusion Plant or the Paducah Gaseous Diffu-  
24 sion Plant; and

1           (6) provide for a competitive process for deploy-  
2           ment of the full-scale technology, and assignment of  
3           rights to use Department of Energy patents if the  
4           Department of Energy does not deploy the tech-  
5           nology.

6           (c) PUBLIC COMMENT.—Not later than 3 months  
7           after the date of the enactment of this Act, the Secretary  
8           shall make available a draft version of the plan for a public  
9           comment period of 30 days.

10          (d) IMPLEMENTATION.—One month after the plan is  
11          transmitted to the Congress under subsection (a), the Sec-  
12          retary shall begin to implement the plan.

13          (e) FUNDING.—

14                (1) AUTHORIZATION OF APPROPRIATIONS.—For  
15                the purposes of implementing the plan developed  
16                under this section, the Secretary may use, without  
17                need for further appropriations, the following  
18                amounts from the United States Enrichment Cor-  
19                poration Fund established under section 1308 of the  
20                Atomic Energy Act of 1954 (other than amounts re-  
21                served under Public Law 105–204):

22                        (A) \$27,000,000 for fiscal year 2002.

23                        (B) \$40,000,000 for fiscal year 2003.

24                        (C) \$58,000,000 for fiscal year 2004.

25                        (D) \$67,000,000 for fiscal year 2005.

1 (E) \$62,000,000 for fiscal year 2006.

2 (2) PLAN.—The Secretary may use, without  
3 need for further appropriations, funds from the  
4 United States Enrichment Corporation Fund estab-  
5 lished under section 1308 of the Atomic Energy Act  
6 of 1954 (other than amounts reserved under Public  
7 Law 105–204) to pay the costs of developing the  
8 plan under this section.

9 **SEC. 314. SHORT-TERM RELIABILITY OF DOMESTIC URA-**  
10 **NIUM ENRICHMENT CAPACITY.**

11 (a) CRITERIA.—Not later than 4 months after the  
12 date of the enactment of this Act, the Secretary shall pre-  
13 pare, and make available for a 30-day period of public  
14 comment, draft criteria for determining when the hot re-  
15 start of facilities at the Portsmouth Gaseous Diffusion  
16 Plant may be necessary, if supplies of nuclear fuel are dis-  
17 rupted or anticipated to be disrupted, to mitigate the im-  
18 pacts on—

19 (1) the supply of nuclear fuel to power plants  
20 in the United States; and

21 (2) uranium enrichment supply contracts with  
22 foreign utilities for which the United States Govern-  
23 ment is liable for performance in the event of non-  
24 performance by the United States Enrichment Cor-

1       poration or its successors, or where the United  
2       States has obligations under Federal law or treaty.

3       (b) PLAN.—Not later than 6 months after the date  
4 of the enactment of this Act, the Secretary shall prepare,  
5 and make available for a 30-day period of public comment,  
6 a plan for the hot restart of facilities at the Portsmouth  
7 Gaseous Diffusion Plant. Such plan shall—

8           (1) incorporate the criteria developed under  
9 subsection (a);

10          (2) provide for uranium enrichment capabilities  
11 of up to 3,000,000 separative work units per year;

12          (3) ensure the capability of producing both  
13 higher assay (up to 10 percent U 235) and lower  
14 assay (0.7 percent to 4.95 percent U 235) fuels;

15          (4) include options for the use of the Depart-  
16 ment of Energy's inventory of natural uranium;

17          (5) provide for the retention of sufficient R-114  
18 refrigerant to operate the Portsmouth Gaseous Dif-  
19 fusion Plant for 15 years or until there is equivalent  
20 replacement uranium enrichment capacity deployed  
21 in the United States; and

22          (6) include cost estimates for hot restart and  
23 annual operating costs of the facility.

24       (c) TRANSMITTAL TO CONGRESS.—Not later than 8  
25 months after the date of the enactment of this Act, the

1 Secretary shall transmit to the Congress the plan de-  
2 scribed in subsection (b), including the criteria developed  
3 under subsection (a).

4 (d) FUNDING.—The Secretary may use, without need  
5 for further appropriations, funds from the United States  
6 Enrichment Corporation Fund established under section  
7 1308 of the Atomic Energy Act of 1954 (other than  
8 amounts reserved under Public Law 105–204) to pay the  
9 costs of developing the criteria and plan under this section.

10 **SEC. 315. COOPERATIVE RESEARCH AND DEVELOPMENT**  
11 **AND SPECIAL DEMONSTRATION PROJECTS**  
12 **FOR THE URANIUM MINING INDUSTRY.**

13 (a) AUTHORIZATION OF APPROPRIATIONS.—There  
14 are authorized to be appropriated to the Secretary  
15 \$10,000,000 for each of fiscal years 2002, 2003, and 2004  
16 for—

17 (1) cooperative, cost-shared, agreements be-  
18 tween the Department of Energy and domestic ura-  
19 nium producers to identify, test, and develop im-  
20 proved in situ leaching mining technologies, includ-  
21 ing low-cost environmental restoration technologies  
22 that may be applied to sites after completion of in  
23 situ leaching operations; and



1 **SEC. 317. PROHIBITION OF COMMERCIAL SALES OF URA-**  
2 **NIUM BY THE UNITED STATES UNTIL 2009.**

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

6 “(g) PROHIBITION ON SALES.—Notwithstanding any  
7 other provision of law, the United States Government shall  
8 not sell or transfer any uranium (including natural ura-  
9 nium concentrates, natural uranium hexafluoride, en-  
10 riched uranium, depleted uranium, or uranium in any  
11 other form) through March 23, 2009 (except sales or  
12 transfers for use by the Tennessee Valley Authority in re-  
13 lation to the Department of Energy’s HEU or Tritium  
14 programs, or the Department of Energy research reactor  
15 sales program, or any depleted uranium hexafluoride to  
16 be transferred to a designated Department of Energy con-  
17 tractor in conjunction with the planned construction of the  
18 Depleted Uranium Hexafluoride conversion plants in  
19 Portsmouth, Ohio, and Paducah, Kentucky, or for emer-  
20 gency purposes in the event of a disruption in supply to  
21 end users in the United States). The aggregate of sales  
22 or transfers of uranium by the United States Government  
23 after March 23, 2009, shall not exceed 3,000,000 pounds  
24 U<sub>3</sub>O<sub>8</sub> per calendar year.”.

1 **SEC. 318. PADUCAH DECONTAMINATION AND DECOMMIS-**  
2 **SIONING PLAN.**

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

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

11 (2) the remediation of Department of Energy  
12 Material Storage Areas at the Paducah Gaseous Dif-  
13 fusion Plant.

14 Such plan shall inventory all surplus facilities and build-  
15 ings, and identify and rank health and safety risks associ-  
16 ated with such facilities and buildings. Such plan shall in-  
17 ventory all Department of Energy Material Storage Areas,  
18 and identify and rank health and safety risks associated  
19 with such Department of Energy Material Storage Areas.

20 The Department of Energy shall incorporate these risk  
21 factors in designing the sequence and schedule for the  
22 plan. Such plan shall identify funding requirements that  
23 are in addition to the expected outlays included in the De-  
24 partment of Energy’s Environmental Management Plan  
25 for the Paducah Gaseous Diffusion Plan.

1           **TITLE IV—HYDROELECTRIC**  
2                                   **ENERGY**

3 **SEC. 401. ALTERNATIVE CONDITIONS AND FISHWAYS.**

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

7           “(h)(1) Whenever any person applies for a license for  
8 any project works within any reservation of the United  
9 States, and the Secretary of the department under whose  
10 supervision such reservation falls deems a condition to  
11 such license to be necessary under the first proviso of sub-  
12 section (e), the license applicant or any other party to the  
13 licensing proceeding may propose an alternative condition.

14           “(2) Notwithstanding the first proviso of subsection  
15 (e), the Secretary of the department under whose super-  
16 vision the reservation falls shall accept the proposed alter-  
17 native condition referred to in paragraph (1), and the  
18 Commission shall include in the license such alternative  
19 condition, if the Secretary of the appropriate department  
20 determines, based on substantial evidence provided by the  
21 party proposing such alternative condition, that the alter-  
22 native condition—

23                           “(A) provides no less protection for the reserva-  
24 tion than provided by the condition deemed nec-  
25 essary by the Secretary; and

1           “(B) will either—  
2                   “(i) cost less to implement, or  
3                   “(ii) result in improved operation of the  
4           project works for electricity production  
5           as compared to the condition deemed necessary by  
6           the Secretary.

7           “(3) Within one year after the enactment of this sub-  
8           section, each Secretary concerned shall, by rule, establish  
9           a process to expeditiously resolve conflicts arising under  
10          this subsection.”.

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

13               (1) inserting “(a)” before the first sentence;  
14          and

15               (2) adding at the end the following:

16          “(b)(1) Whenever the Commission shall require a li-  
17          censee to construct, maintain, or operate a fishway pre-  
18          scribed by the Secretary of the Interior or the Secretary  
19          of Commerce under this section, the licensee or any other  
20          party to the proceeding may propose an alternative to such  
21          prescription to construct, maintain, or operate a fishway.

22          “(2) Notwithstanding subsection (a), the Secretary of  
23          the Interior or the Secretary of Commerce, as appropriate,  
24          shall accept and prescribe, and the Commission shall re-  
25          quire, the proposed alternative referred to in paragraph

1 (1), if the Secretary of the appropriate department deter-  
2 mines, based on substantial evidence provided by the party  
3 proposing such alternative, that the alternative—

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

6 “(B) will either—

7 “(i) cost less to implement, or

8 “(ii) result in improved operation of the  
9 project works for electricity production

10 as compared to the fishway initially prescribed by  
11 the Secretary.

12 “(3) Within one year after the enactment of this sub-  
13 section, the Secretary of the Interior and the Secretary  
14 of Commerce shall each, by rule, establish a process to  
15 expeditiously resolve conflicts arising under this sub-  
16 section.”

17 **SEC. 402. FERC DATA ON HYDROELECTRIC LICENSING.**

18 (a) DATA COLLECTION PROCEDURES.—The Federal  
19 Energy Regulatory Commission shall revise its procedures  
20 regarding the collection of data in connection with the  
21 Commission’s consideration of hydroelectric licenses under  
22 the Federal Power Act. Such revised data collection proce-  
23 dures shall be designed to provide the Commission with  
24 complete and accurate information concerning the time  
25 and costs to parties involved in the licensing process. Such

1 data shall be available for each significant stage in the  
2 licensing process and shall be designed to identify projects  
3 with similar characteristics so that analyses can be made  
4 of the time and costs involved in licensing proceedings  
5 based upon the different characteristics of those pro-  
6 ceedings.

7 (b) REPORTS.—Within 6 months after the date of en-  
8 actment of this Act, the Commission shall notify the Com-  
9 mittee on Energy and Commerce of the United States  
10 House of Representatives and the Committee on Energy  
11 and Natural Resources of the United States Senate of the  
12 progress made by the Commission under subsection (a),  
13 and within one year after such date of enactment, the  
14 Commission shall submit a report to such Committees  
15 specifying the measures taken by the Commission pursu-  
16 ant to subsection (a).

## 17 **TITLE V—CLEAN COAL**

### 18 **SEC. 501. SHORT TITLE.**

19 This title may be cited as the “National Electricity  
20 and Environmental Improvement Act”.

### 21 **SEC. 502. FINDINGS.**

22 Congress finds that—

23 (1) reliable, affordable, increasingly clean elec-  
24 tricity will continue to power the growing United  
25 States economy;

1           (2) an increasing use of electrotechnologies, the  
2           desire for continuous environmental improvement, a  
3           more competitive electricity market, and concerns  
4           about rising energy prices add importance to the  
5           need for reliable, affordable, increasingly clean elec-  
6           tricity;

7           (3) coal, which, as of the date of enactment of  
8           this Act, accounts for more than  $\frac{1}{2}$  of all electricity  
9           generated in the United States, is the most abun-  
10          dant fossil energy resource of the United States;

11          (4) coal comprises more than 85 percent of all  
12          fossil resources in the United States and exists in  
13          quantities sufficient to supply the United States for  
14          250 years at current usage rates;

15          (5) investments in electricity generating facility  
16          emissions control technology over the past 30 years  
17          have reduced the aggregate emissions of pollutants  
18          from coal-based generating facilities by 21 percent,  
19          even as coal use for electricity generation has nearly  
20          tripled;

21          (6) continuous improvement in efficiency and  
22          environmental performance from electricity gener-  
23          ating facilities would allow continued use of coal and  
24          preserve less abundant energy resources for other  
25          energy uses;

1           (7) new methods and equipment for converting  
2 coal into electricity can effectively eliminate health-  
3 threatening emissions and improve efficiency by as  
4 much as 50 percent, but initial deployment of new  
5 coal generation methods and equipment entails sig-  
6 nificant risk that generators may be unable to ac-  
7 cept in a newly competitive electricity market; and

8           (8) continued environmental improvement in  
9 coal-based generation and increasing the production  
10 and supply of power generation facilities with less  
11 air emissions, with the ultimate goal of near-zero  
12 emissions, is important and desirable.

## 13 **Subtitle A—Accelerated Clean Coal** 14 **Power Production Program**

### 15 **SEC. 511. DEFINITIONS.**

16 In this subtitle:

17           (1) **COST AND PERFORMANCE GOALS.**—The  
18 term “cost and performance goals” means the cost  
19 and performance goals established under section  
20 512.

21           (2) **SECRETARY.**—The term “Secretary” means  
22 the Secretary of Energy.

### 23 **SEC. 512. COST AND PERFORMANCE GOALS.**

24           (a) **IN GENERAL.**—The Secretary shall perform an  
25 assessment that establishes cost and performance goals

1 with respect to various coal-based electric generation fa-  
2 cilities, power production strategies, and other efforts that  
3 would permit the continued cost-competitive use of coal  
4 for electricity generation, as chemical feedstocks, and as  
5 transportation fuel in 2007, 2015, and 2020.

6 (b) CONSULTATION.—In establishing the cost and  
7 performance goals, the Secretary shall consult with rep-  
8 resentatives of—

9 (1) the United States coal industry;

10 (2) State coal development agencies;

11 (3) the electric utility industry;

12 (4) railroads and other transportation indus-  
13 tries;

14 (5) manufacturers of advanced coal-based  
15 equipment;

16 (6) organizations representing workers;

17 (7) organizations formed to—

18 (A) promote the use of coal;

19 (B) further the goals of environmental pro-  
20 tection; and

21 (C) promote the production and generation  
22 of coal-based power from advanced facilities;  
23 and

24 (8) other appropriate Federal and State agen-  
25 cies.

1 (c) TIMING.—The Secretary shall—

2 (1) not later than 120 days after the date of  
3 enactment of this Act, issue a set of draft cost and  
4 performance goals for public comment; and

5 (2) not later than 180 days after the date of  
6 enactment of this Act, after taking into consider-  
7 ation any public comments received, submit to Con-  
8 gress the final cost and performance goals.

9 **SEC. 513. STUDY.**

10 (a) IN GENERAL.—Not later than 1 year after the  
11 date of enactment of this Act, and once every 2 years  
12 thereafter through 2016, the Secretary, in cooperation  
13 with the Secretary of the Interior and the Administrator  
14 of the Environmental Protection Agency, shall transmit to  
15 the Congress a report containing the results of a study  
16 to—

17 (1) identify methods and equipment that, by  
18 themselves or in combination with other efforts, may  
19 be capable of achieving the cost and performance  
20 goals;

21 (2) assess the costs that would be incurred by,  
22 and the period of time that would be required for,  
23 the production of power generation methods and  
24 equipment that, by themselves or in combination

1 with other methods and equipment, contribute to the  
2 achievement of the cost and performance goals;

3 (3) develop recommendations for the Depart-  
4 ment of Energy, in cooperation with industry, to de-  
5 velop and implement methods and equipment that,  
6 by themselves or in combination with other efforts,  
7 achieve the production and generation of coal-based  
8 power meeting the cost and performance goals; and

9 (4) develop recommendations for additional au-  
10 thorities required to achieve the cost and perform-  
11 ance goals.

12 (b) EXPERT ADVICE.—In carrying out this section,  
13 the Secretary shall give due weight to the expert advice  
14 of representatives of the entities described in section  
15 512(b).

16 **SEC. 514. PRODUCTION AND GENERATION OF COAL-BASED**  
17 **POWER.**

18 (a) IN GENERAL.—The Secretary shall carry out a  
19 program to facilitate production and generation of coal-  
20 based power through methods and equipment under—

21 (1) this subtitle;

22 (2) the Federal Nonnuclear Energy Research  
23 and Development Act of 1974 (42 U.S.C. 5901 et  
24 seq.);

1           (3) the Energy Reorganization Act of 1974 (42  
2           U.S.C. 5801 et seq.); and

3           (4) title XIII of the Energy Policy Act of 1992  
4           (42 U.S.C. 13331 et seq.).

5           (b) CONDITIONS.—The program described in sub-  
6 section (a) shall be designed to achieve the cost and per-  
7 formance goals.

8 **SEC. 515. AUTHORIZATION OF APPROPRIATIONS.**

9           (a) IN GENERAL.—There are authorized to be appro-  
10 priated to the Secretary to carry out sections 512, 513,  
11 and 514, \$100,000,000 for each of the fiscal years 2002  
12 through 2012, to remain available until expended.

13           (b) CONDITIONS OF AUTHORIZATION.—The author-  
14 ization of appropriations under subsection (a)—

15           (1) shall be in addition to authorizations of ap-  
16 propriations in effect on the date of enactment of  
17 this Act; and

18           (2) shall not be a cap on Department of Energy  
19 fossil energy research and development and clean  
20 coal technology appropriations.

21 **SEC. 516. CLEAN COAL POWER INITIATIVE.**

22           (a) IN GENERAL.—The Secretary shall establish a  
23 clean coal power initiative to facilitate the production and  
24 generation of power from advanced coal-based methods

1 and equipment applicable to new or existing power plants,  
2 including coproduction plants.

3 (b) REQUIREMENTS.—The methods and equipment  
4 to be addressed under the initiative—

5 (1) shall be methods and equipment that, by  
6 themselves or in combination with other methods  
7 and equipment, advance efficiency and environ-  
8 mental performance, and increase the supply of  
9 power and promote cost competitiveness, well beyond  
10 that which is in operation or has been demonstrated  
11 as of the date of enactment of this Act; and

12 (2) may include methods and equipment that  
13 have not previously been envisioned for the produc-  
14 tion and generation of coal-based power.

15 (c) PLAN.—Not later than 120 days after the date  
16 of enactment of this Act, the Secretary shall transmit to  
17 Congress a plan to carry out subsection (a) that includes  
18 a description of—

19 (1) the program elements and management  
20 structure to be used;

21 (2) milestones to be achieved with respect to  
22 the production and generation of coal-based power  
23 methods and equipment; and

24 (3) the activities proposed to be conducted at  
25 facilities that serve or are located at new or existing

1 coal-based electric generation units having at least  
2 50 megawatts nameplate rating, including improve-  
3 ments to allow the units to achieve 1 or more of the  
4 following:

5 (A) An overall design efficiency improve-  
6 ment of not less than 3 percent as compared  
7 with the efficiency of the unit as operated as of  
8 the date of enactment of this Act and before  
9 any retrofit, repowering, replacement, or instal-  
10 lation.

11 (B) A significant improvement in, or new  
12 alternative method or equipment to enhance,  
13 the environmental performance related to the  
14 control of sulfur dioxide, nitrogen oxide, or mer-  
15 cury in a manner that is different and well  
16 below the cost of activities at facilities that are  
17 in operation or have been in operation as of the  
18 date of enactment of this Act.

19 (C) A means of recycling or reusing a sig-  
20 nificant portion of coal combustion or gasifi-  
21 cation wastes or byproducts produced by coal-  
22 based generating units, excluding practices that  
23 are generally available as of the date of enact-  
24 ment of this Act.

1           (D) A means to capture, separate, and  
2           reuse or dispose of carbon dioxide that is dif-  
3           ferent and well below the cost of methods and  
4           equipment that are in operation or have been in  
5           operation as of the date of enactment of this  
6           Act.

7 **SEC. 517. FINANCIAL ASSISTANCE.**

8           (a) IN GENERAL.—Not later than 180 days after the  
9           date on which the Secretary transmits to Congress the  
10          plan under section 516(c), the Secretary shall solicit pro-  
11          posals for projects that serve or are located at new or ex-  
12          isting facilities designed to achieve 1 or more of the levels  
13          of performance set forth in section 516(c)(3).

14          (b) PROJECT CRITERIA.—A solicitation under sub-  
15          section (a) may include solicitation of a proposal for a  
16          project to demonstrate—

17                (1) an overall design efficiency improvement of  
18                not less 3 percentage points as compared with the  
19                efficiency of the unit as operated as of the date of  
20                enactment of this Act and with no increase in the  
21                potential to emit sulfur dioxide, nitrogen oxide, par-  
22                ticulate matter, mercury, or carbon monoxide;

23                (2) a reduction of emissions to a level of not  
24                more than—

25                        (A)(i) in the case of sulfur dioxide—

1 (I) in the case of coal with a potential  
2 combustion concentration sulfur emission  
3 of 1.2 or more pounds per million British  
4 thermal units of heat input, 5 percent of  
5 the potential combustion concentration sul-  
6 fur dioxide emissions; or

7 (II) in the case of a coal with a poten-  
8 tial combustion concentration of less than  
9 1.2 pounds of per million British thermal  
10 units of heat input, 15 percent of the po-  
11 tential combustion concentration of sulfur  
12 dioxide emissions;

13 (ii) in the case of nitrogen oxide—

14 (I) in the case of a boiler other than  
15 a cyclone-fired boiler, emissions of 0.1  
16 pound per million British thermal units of  
17 heat; or

18 (II) in the case of a cyclone-fired boil-  
19 er, 15 percent of the uncontrolled nitrogen  
20 oxide emissions from the boiler; or

21 (iii) in the case of particulate matter, emis-  
22 sions of 0.02 pound per million British thermal  
23 units of heat input; or

24 (B) the emission levels for the pollutants  
25 identified in subparagraph (A) that are speci-

1           fied in the new source performance standards of  
2           the Clean Air Act (42 U.S.C. 7411) in effect at  
3           the time of construction, installation, or retro-  
4           fitting of the advanced coal-based method or  
5           equipment for the category of source if they are  
6           lower than the levels specified in subparagraph  
7           (A); or

8           (3) the production of coal combustion byprod-  
9           ucts that are capable of obtaining economic values  
10          significantly greater than byproducts produced as of  
11          the date of enactment of this Act with no increase  
12          in the potential to emit sulfur dioxide, nitrogen  
13          oxide, particulate matter, mercury, or carbon mon-  
14          oxide.

15          (c) FINANCIAL ASSISTANCE.—The Secretary shall  
16          provide financial assistance to projects that are likely to—

17               (1) achieve overall cost reductions in the utiliza-  
18               tion of coal to generate useful forms of energy;

19               (2) improve the competitiveness of coal among  
20               various forms of energy in order to maintain a diver-  
21               sity of fuel choices in the United States to meet elec-  
22               tricity generation requirements;

23               (3) achieve, in a cost-effective manner, 1 or  
24               more of the criteria described in the solicitation; and

1           (4) demonstrate methods and equipment that  
2           are applicable to 25 percent of the electricity gener-  
3           ating facilities that use coal as the primary feedstock  
4           as of the date of enactment of this Act.

5           (d) FEDERAL SHARE.—The Federal share of the cost  
6 of a project funded under this section shall not exceed 50  
7 percent.

8           (e) FUNDING.—To carry out this section, the Sec-  
9 retary may use any unobligated funds available to the Sec-  
10 retary and any funds obligated to any project selected  
11 under the clean coal technology program that become un-  
12 obligated.

13 **Subtitle B—Credit for Emission Re-**  
14 **ductions and Efficiency Im-**  
15 **provements in Existing Coal-**  
16 **Based Electricity Generation**  
17 **Facilities**

18 **SEC. 521. CREDIT FOR INVESTMENT IN QUALIFYING CLEAN**  
19 **COAL TECHNOLOGY.**

20           (a) ALLOWANCE OF QUALIFYING CLEAN COAL  
21 TECHNOLOGY UNIT CREDIT.—Section 46 of the Internal  
22 Revenue Code of 1986 (relating to amount of credit) is  
23 amended by striking “and” at the end of paragraph (2),  
24 by striking the period at the end of paragraph (3) and  
25 inserting “, and”, and by adding at the end the following:



1 is properly attributable to such construction, in-  
2 stallation, or retrofitting),

3 “(B) reduces the discharge into the atmos-  
4 phere of 1 or more of the following pollutants  
5 to not more than—

6 “(i) 5 percent of the potential com-  
7 bustion concentration sulfur dioxide emis-  
8 sions for a coal with a potential combus-  
9 tion concentration sulfur emission of 1.2  
10 lb/million Btu of heat input or greater,

11 “(ii) 15 percent of the potential com-  
12 bustion concentration sulfur dioxide emis-  
13 sions for a coal with a potential combus-  
14 tion concentration sulfur emission of less  
15 than 1.2 lb/million Btu of heat input,

16 “(iii) nitrogen oxide emissions of 0.1 lb  
17 per million Btu of heat input from other  
18 than cyclone-fired boilers,

19 “(iv) 15 percent of the uncontrolled  
20 nitrogen oxide emissions from cyclone-fired  
21 boilers,

22 “(v) particulate emission of 0.02 lb  
23 per million Btu of heat input, and

24 “(vi) the emission levels specified in  
25 the new source performance standards of

1 the Clean Air Act (42 U.S.C. 7411) in  
2 force at the time of construction, installa-  
3 tion or retrofitting of the qualifying system  
4 of continuous emission control for the cat-  
5 egory of source if such level is lower than  
6 the levels specified in clause (i), (ii), (iii),  
7 (iv), or (v),

8 “(C) is depreciable under section 167,

9 “(D) has a useful life of not less than 4  
10 years, and

11 “(E) is located in the United States.

12 “(2) SPECIAL RULE FOR SALE-LEASEBACKS.—  
13 For purposes of subparagraph (A) of paragraph (1),  
14 in the case of a unit which—

15 “(A) is originally placed in service by a  
16 person, and

17 “(B) is sold and leased back by such per-  
18 son, or is leased to such person, within 3  
19 months after the date such unit was originally  
20 placed in service, for a period of not less than  
21 12 years,

22 such unit shall be treated as originally placed in  
23 service not earlier than the date on which such prop-  
24 erty is used under the leaseback (or lease) referred  
25 to in subparagraph (B). The preceding sentence

1 shall not apply to any property if the lessee and les-  
2 sor of such property make an election under this  
3 sentence. Such an election, once made, may be re-  
4 voked only with the consent of the Secretary.

5 “(c) EXISTING COAL-BASED ELECTRICITY GENERA-  
6 TION UNIT.—For purposes of subsection (a), the term ‘ex-  
7 isting coal-based electricity generating unit’ means, with  
8 respect to any taxable year, a steam generator-turbine  
9 unit which uses coal to produce 75 percent or more of  
10 its output as electricity and was operated commercially be-  
11 fore the effective date of this section.

12 “(d) LIMIT ON QUALIFYING CLEAN COAL TECH-  
13 NOLOGY UNIT CREDIT.—For purposes of subsection (a),  
14 the credit shall be applicable to not more than the first  
15 \$100,000,000 of qualifying investment in a qualifying sys-  
16 tem of continuous emission control at any 1 existing coal-  
17 based electricity generating unit.

18 “(e) QUALIFIED INVESTMENT.—For purposes of sub-  
19 section (a), the term ‘qualified investment’ means, with  
20 respect to any taxable year, the basis of a qualifying sys-  
21 tem of continuous emission control placed in service by  
22 the taxpayer during such taxable year.

23 “(f) QUALIFIED PROGRESS EXPENDITURES.—

24 “(1) INCREASE IN QUALIFIED INVESTMENT.—

25 In the case of a taxpayer who has made an election

1 under paragraph (5), the amount of the qualified in-  
2 vestment of such taxpayer for the taxable year (de-  
3 termined under subsection (e) without regard to this  
4 subsection) shall be increased by an amount equal to  
5 the aggregate of each qualified progress expenditure  
6 for the taxable year with respect to progress expend-  
7 iture property.

8 “(2) PROGRESS EXPENDITURE PROPERTY DE-  
9 FINED.—For purposes of this subsection, the term  
10 ‘progress expenditure property’ means any property  
11 being constructed by or for the taxpayer and which  
12 it is reasonable to believe will qualify as a qualifying  
13 system of continuous emission control which is being  
14 constructed by or for the taxpayer when it is placed  
15 in service.

16 “(3) QUALIFIED PROGRESS EXPENDITURES DE-  
17 FINED.—For purposes of this subsection—

18 “(A) SELF-CONSTRUCTED PROPERTY.—In  
19 the case of any self-constructed property, the  
20 term ‘qualified progress expenditures’ means  
21 the amount which, for purposes of this subpart,  
22 is properly chargeable (during such taxable  
23 year) to capital account with respect to such  
24 property.

1           “(B) NONSELF-CONSTRUCTED PROP-  
2           ERTY.—In the case of nonself-constructed prop-  
3           erty, the term ‘qualified progress expenditures’  
4           means the amount paid during the taxable year  
5           to another person for the construction of such  
6           property.

7           “(4) OTHER DEFINITIONS.—For purposes of  
8           this subsection—

9           “(A) SELF-CONSTRUCTED PROPERTY.—  
10           The term ‘self-constructed property’ means  
11           property for which it is reasonable to believe  
12           that more than half of the construction expendi-  
13           tures will be made directly by the taxpayer.

14           “(B) NONSELF-CONSTRUCTED PROP-  
15           ERTY.—The term ‘nonself-constructed property’  
16           means property which is not self-constructed  
17           property.

18           “(C) CONSTRUCTION, ETC.—The term  
19           ‘construction’ includes reconstruction and erec-  
20           tion, and the term ‘constructed’ includes recon-  
21           structed and erected.

22           “(D) ONLY CONSTRUCTION OF QUALI-  
23           FYING SYSTEM OF CONTINUOUS EMISSION CON-  
24           TROL TO BE TAKEN INTO ACCOUNT.—Construc-  
25           tion shall be taken into account only if, for pur-

1           poses of this subpart, expenditures therefor are  
2           properly chargeable to capital account with re-  
3           spect to the property.

4           “(5) ELECTION.—An election under this sub-  
5           section may be made at such time and in such man-  
6           ner as the Secretary may by regulations prescribe.  
7           Such an election shall apply to the taxable year for  
8           which made and to all subsequent taxable years.  
9           Such an election, once made, may not be revoked ex-  
10          cept with the consent of the Secretary.

11          “(g) COORDINATION WITH OTHER CREDITS.—This  
12          section shall not apply to any property with respect to  
13          which the rehabilitation credit under section 47 or the en-  
14          ergy credit under section 48 is allowed unless the taxpayer  
15          elects to waive the application of such credit to such prop-  
16          erty.

17          “(h) TERMINATION.—This section shall not apply  
18          with respect to any qualified investment made more than  
19          10 years after the effective date of this section.”.

20          (c) RECAPTURE.—Section 50(a) of the Internal Rev-  
21          enue Code of 1986 (relating to other special rules) is  
22          amended by adding at the end the following:

23                  “(6) SPECIAL RULES RELATING TO QUALIFYING  
24                  SYSTEM OF CONTINUOUS EMISSION CONTROL.—For  
25                  purposes of applying this subsection in the case of

1 any credit allowable by reason of section 48A, the  
2 following shall apply:

3 “(A) GENERAL RULE.—In lieu of the  
4 amount of the increase in tax under paragraph  
5 (1), the increase in tax shall be an amount  
6 equal to the investment tax credit allowed under  
7 section 38 for all prior taxable years with re-  
8 spect to a qualifying system of continuous emis-  
9 sion control (as defined by section 48A(b)(1))  
10 multiplied by a fraction whose numerator is the  
11 number of years remaining to fully depreciate  
12 under this title the qualifying system of contin-  
13 uous emission control disposed of, and whose  
14 denominator is the total number of years over  
15 which such unit would otherwise have been sub-  
16 ject to depreciation. For purposes of the pre-  
17 ceding sentence, the year of disposition of the  
18 qualifying system of continuous emission con-  
19 trol property shall be treated as a year of re-  
20 maining depreciation.

21 “(B) PROPERTY CEASES TO QUALIFY FOR  
22 PROGRESS EXPENDITURES.—Rules similar to  
23 the rules of paragraph (2) shall apply in the  
24 case of qualified progress expenditures for a  
25 qualifying system of continuous emission con-

1           trol under section 48A, except that the amount  
2           of the increase in tax under subparagraph (A)  
3           of this paragraph shall be substituted in lieu of  
4           the amount described in such paragraph (2).

5                   “(C) APPLICATION OF PARAGRAPH.—This  
6           paragraph shall be applied separately with re-  
7           spect to the credit allowed under section 38 re-  
8           garding a qualifying system of continuous emis-  
9           sion control.”.

10           (d) TRANSITIONAL RULE.—Section 39(d) of the In-  
11          ternal Revenue Code of 1986 (relating to transitional  
12          rules) is amended by adding at the end the following:

13                   “(11) NO CARRYBACK OF SECTION 48A CREDIT  
14          BEFORE EFFECTIVE DATE.—No portion of the un-  
15          used business credit for any taxable year which is  
16          attributable to the qualifying clean coal technology  
17          unit credit determined under section 48A may be  
18          carried back to a taxable year ending before the date  
19          of enactment of section 48A.”.

20           (e) TECHNICAL AMENDMENTS.—

21                   (1) Section 49(a)(1)(C) of the Internal Revenue  
22          Code of 1986 is amended by striking “and” at the  
23          end of clause (ii), by striking the period at the end  
24          of clause (iii) and inserting “, and”, and by adding  
25          at the end the following:

1                   “(iv) the portion of the basis of any  
2                   qualifying system of continuous emission  
3                   control attributable to any qualified invest-  
4                   ment (as defined by section 48A(e)).”.

5                   (2) Section 50(a)(4) of such Code is amended  
6                   by striking “and (2)” and inserting “, (2), and (6)”.

7                   (3) Section 50(c) of such Code is amended by  
8                   adding at the end the following:

9                   “(6) NONAPPLICATION.—Paragraphs (1) and  
10                  (2) shall not apply to any qualifying clean coal tech-  
11                  nology unit credit under section 48A.”.

12                  (4) The table of sections for subpart E of part  
13                  IV of subchapter A of chapter 1 of such Code is  
14                  amended by inserting after the item relating to sec-  
15                  tion 48 the following:

                  “Sec. 48A. Qualifying clean coal technology unit credit.”.

16                  (f) EFFECTIVE DATE.—The amendments made by  
17                  this section shall apply to periods after December 31,  
18                  2001, under rules similar to the rules of section 48(m)  
19                  of the Internal Revenue Code of 1986 (as in effect on the  
20                  day before the date of enactment of the Revenue Reconcili-  
21                  ation Act of 1990).

22                  **SEC. 522. CREDIT FOR PRODUCTION FROM A QUALIFYING**  
23                  **CLEAN COAL TECHNOLOGY UNIT.**

24                  (a) CREDIT FOR PRODUCTION FROM A QUALIFYING  
25                  CLEAN COAL TECHNOLOGY UNIT.—Subpart D of part IV

1 of subchapter A of chapter 1 of the Internal Revenue Code  
2 of 1986 (relating to business related credits) is amended  
3 by adding at the end the following:

4 **“SEC. 45G. CREDIT FOR PRODUCTION FROM A QUALIFYING**  
5 **CLEAN COAL TECHNOLOGY UNIT.**

6 “(a) GENERAL RULE.—For purposes of section 38,  
7 the qualifying clean coal technology production credit of  
8 any taxpayer for any taxable year is equal to the product  
9 of—

10 “(1) the applicable amount of clean coal tech-  
11 nology production credit, multiplied by

12 “(2) the kilowatt hours of electricity produced  
13 by the taxpayer during such taxable year at a quali-  
14 fying clean coal technology unit during the 10-year  
15 period beginning on the date the unit was returned  
16 to service after retrofit, repowering, or replacement.

17 “(b) APPLICABLE AMOUNT.—

18 “(1) IN GENERAL.—For purposes of this sec-  
19 tion, the applicable amount of clean coal technology  
20 production credit is equal to \$0.0034.

21 “(2) INFLATION ADJUSTMENT FACTOR.—For  
22 calendar years after 2001, the applicable amount of  
23 clean coal technology production credit shall be ad-  
24 justed by multiplying such amount by the inflation  
25 adjustment factor for the calendar year in which the

1 amount is applied. If any amount as increased under  
2 the preceding sentence is not a multiple of 0.01 cent,  
3 such amount shall be rounded to the nearest mul-  
4 tiple of 0.01 cent.

5 “(c) DEFINITIONS AND SPECIAL RULES.—For pur-  
6 poses of this section—

7 “(1) QUALIFYING CLEAN COAL TECHNOLOGY  
8 UNIT.—The term ‘qualifying clean coal technology  
9 unit’ means a unit of the taxpayer which—

10 “(A) is an existing coal-based electricity  
11 generating steam generator-turbine unit,

12 “(B) has a nameplate capacity rating of  
13 not more than 300,000 kilowatts, and

14 “(C) has been retrofitted, repowered, or re-  
15 placed with a clean coal technology within 10  
16 years after the effective date of this section.

17 “(2) CLEAN COAL TECHNOLOGY.—The term  
18 ‘clean coal technology’ means technology which—

19 “(A) uses coal to produce 50 percent or  
20 more of its thermal output as electricity, includ-  
21 ing advanced pulverized coal or atmospheric flu-  
22 idized bed combustion, pressurized fluidized bed  
23 combustion, integrated gasification combined  
24 cycle, or any other technology for the produc-  
25 tion of electricity,

1           “(B) has a design heat rate not less than  
2           500 Btu/kWh below that of the existing unit be-  
3           fore it is retrofit, repowered, or replaced with  
4           the qualifying clean coal technology,

5           “(C) has a maximum design heat rate of  
6           not more than 9,500 Btu/kWh when the design  
7           coal has a heat content of more than 9,000 Btu  
8           per pound,

9           “(D) has a maximum design heat rate of  
10          not more than 10,500 Btu/kWh when the de-  
11          sign coal has a heat content of 9,000 Btu per  
12          pound or less, and

13          “(E) reduces the discharge into the atmos-  
14          phere of 1 or more of the following pollutants  
15          to not more than—

16                 “(i) 5 percent of the potential com-  
17                 bustion concentration sulfur dioxide emis-  
18                 sions for a coal with a potential combus-  
19                 tion concentration sulfur emission of 1.2  
20                 lb/million Btu of heat input or greater,

21                 “(ii) 15 percent of the potential com-  
22                 bustion concentration sulfur dioxide emis-  
23                 sions for a coal with a potential combus-  
24                 tion concentration sulfur emission of less  
25                 than 1.2 lb/million Btu of heat input,

1           “(iii) nitrogen oxide emissions of 0.1  
2           lb per million Btu of heat input from other  
3           than cyclone-fired boilers,

4           “(iv) 15 percent of the uncontrolled  
5           nitrogen oxide emissions from cyclone-fired  
6           boilers,

7           “(v) particulate emissions of 0.02 lb  
8           per million Btu of heat input, and

9           “(vi) the emission levels specified in  
10          the new source performance standards of  
11          the Clean Air Act (42 U.S.C. 7411) in ef-  
12          fect at the time of construction, installa-  
13          tion or retrofitting of the qualifying clean  
14          coal technology unit for the category of  
15          source if such level is lower than the levels  
16          specified in clause (i), (ii), (iii), (iv), or (v).

17          “(3) APPLICATION OF CERTAIN RULES.—The  
18          rules of paragraphs (3), (4), and (5) of section 45  
19          shall apply.

20          “(4) INFLATION ADJUSTMENT FACTOR.—The  
21          term ‘inflation adjustment factor’ means, with re-  
22          spect to a calendar year, a fraction the numerator  
23          of which is the GDP implicit price deflator for the  
24          preceding calendar year and the denominator of

1 which is the GDP implicit price deflator for the cal-  
2 endar year 2001.

3 “(5) GDP IMPLICIT PRICE DEFLATOR.—The  
4 term ‘GDP implicit price deflator’ means the most  
5 recent revision of the implicit price deflator for the  
6 gross domestic product as computed by the Depart-  
7 ment of Commerce before March 15 of the calendar  
8 year.

9 “(d) COORDINATION WITH OTHER CREDITS.—This  
10 section shall not apply to any property with respect to  
11 which the qualifying clean coal technology unit credit  
12 under section 48A is allowed unless the taxpayer elects  
13 to waive the application of such credit to such property.”.

14 (b) CREDIT TREATED AS BUSINESS CREDIT.—Sec-  
15 tion 38(b) of the Internal Revenue Code of 1986 is amend-  
16 ed by striking “plus” at the end of paragraph (14), by  
17 striking the period at the end of paragraph (15) and in-  
18 serting “, plus”, and by adding at the end the following:

19 “(16) the qualifying clean coal technology pro-  
20 duction credit determined under section 45G(a).”.

21 (c) TRANSITIONAL RULE.—Section 39(d) of the In-  
22 ternal Revenue Code of 1986 (relating to transitional  
23 rules), as amended by section 201(d), is amended by add-  
24 ing at the end the following:

1           “(12) NO CARRYBACK OF SECTION 45G CREDIT  
 2           BEFORE EFFECTIVE DATE.—No portion of the un-  
 3           used business credit for any taxable year which is  
 4           attributable to the qualifying clean coal technology  
 5           production credit determined under section 45G may  
 6           be carried back to a taxable year ending before the  
 7           date of enactment of section 45G.”.

8           (d) CLERICAL AMENDMENT.—The table of sections  
 9           for subpart D of part IV of subchapter A of chapter 1  
 10          of the Internal Revenue Code of 1986 is amended by add-  
 11          ing at the end the following:

“Sec. 45G. Credit for production from a qualifying clean coal  
 technology unit.”.

12          (e) EFFECTIVE DATE.—The amendments made by  
 13          this section shall apply to production after the date of en-  
 14          actment of this Act.

15          **Subtitle C—Incentives for Early**  
 16          **Commercial Applications of Ad-**  
 17          **vanced Clean Coal Technologies**

18          **SEC. 531. CREDIT FOR INVESTMENT IN QUALIFYING AD-**  
 19          **VANCED CLEAN COAL TECHNOLOGY.**

20          (a) ALLOWANCE OF QUALIFYING ADVANCED CLEAN  
 21          COAL TECHNOLOGY FACILITY CREDIT.—Section 46 of  
 22          the Internal Revenue Code of 1986 (relating to amount  
 23          of credit), as amended by section 201(a), is amended by  
 24          striking “and” at the end of paragraph (3), by striking

1 the period at the end of paragraph (4) and inserting “,  
2 and”, and by adding at the end the following:

3 “(5) the qualifying advanced clean coal tech-  
4 nology facility credit.”.

5 (b) AMOUNT OF QUALIFYING ADVANCED CLEAN  
6 COAL TECHNOLOGY FACILITY CREDIT.—Subpart E of  
7 part IV of subchapter A of chapter 1 of the Internal Rev-  
8 enue Code of 1986 (relating to rules for computing invest-  
9 ment credit), as amended by section 521(b), is amended  
10 by inserting after section 48A the following:

11 **“SEC. 48B. QUALIFYING ADVANCED CLEAN COAL TECH-  
12 NOLOGY FACILITY CREDIT.**

13 “(a) IN GENERAL.—For purposes of section 46, the  
14 qualifying advanced clean coal technology facility credit  
15 for any taxable year is an amount equal to 10 percent  
16 of the qualified investment in a qualifying advanced clean  
17 coal technology facility for such taxable year.

18 “(b) QUALIFYING ADVANCED CLEAN COAL TECH-  
19 NOLOGY FACILITY.—

20 “(1) IN GENERAL.—For purposes of subsection  
21 (a), the term ‘qualifying advanced clean coal tech-  
22 nology facility’ means a facility of the taxpayer  
23 which—

24 “(A)(i)(I) original use of which commences  
25 with the taxpayer, or

1           “(II) is a retrofitted or repowered conven-  
2           tional technology facility, the retrofitting or  
3           repowering of which is completed by the tax-  
4           payer (but only with respect to that portion of  
5           the basis which is properly attributable to such  
6           retrofitting or repowering), or

7           “(ii) is acquired through purchase (as de-  
8           fined by section 179(d)(2)),

9           “(B) is depreciable under section 167,

10           “(C) has a useful life of not less than 4  
11           years,

12           “(D) is located in the United States, and

13           “(E) uses qualifying advanced clean coal  
14           technology.

15           “(2) SPECIAL RULE FOR SALE-LEASEBACKS.—

16           For purposes of subparagraph (A) of paragraph (1),  
17           in the case of a facility which—

18           “(A) is originally placed in service by a  
19           person, and

20           “(B) is sold and leased back by such per-  
21           son, or is leased to such person, within 3  
22           months after the date such facility was origi-  
23           nally placed in service, for a period of not less  
24           than 12 years,

1 such facility shall be treated as originally placed in  
2 service not earlier than the date on which such prop-  
3 erty is used under the leaseback (or lease) referred  
4 to in subparagraph (B). The preceding sentence  
5 shall not apply to any property if the lessee and les-  
6 sor of such property make an election under this  
7 sentence. Such an election, once made, may be re-  
8 voked only with the consent of the Secretary.

9 “(c) QUALIFYING ADVANCED CLEAN COAL TECH-  
10 NOLOGY.—For purposes of paragraph (1)—

11 “(1) IN GENERAL.—The term ‘qualifying ad-  
12 vanced clean coal technology’ means, with respect to  
13 clean coal technology—

14 “(A) which has—

15 “(i) multiple applications, with a com-  
16 bined capacity of not more than 5,000  
17 megawatts (4,000 megawatts before 2009),  
18 of advanced pulverized coal or atmospheric  
19 fluidized bed combustion technology—

20 “(I) installed as a new, retrofit,  
21 or repowering application,

22 “(II) operated between 2000 and  
23 2012, and

24 “(III) having a design net heat  
25 rate of not more than 9,500 Btu per

1 kilowatt hour when the design coal  
2 has a heat content of more than 9,000  
3 Btu per pound, or a design net heat  
4 rate of not more than 9,900 Btu per  
5 kilowatt hour when the design coal  
6 has a heat content of 9,000 Btu per  
7 pound or less,

8 “(ii) multiple applications, with a  
9 combined capacity of not more than 1,000  
10 megawatts (500 megawatts before 2009  
11 and 750 megawatts before 2013), of pres-  
12 surized fluidized bed combustion  
13 technology—

14 “(I) installed as a new, retrofit,  
15 or repowering application,

16 “(II) operated between 2000 and  
17 2016, and

18 “(III) having a design net heat  
19 rate of not more than 8,400 Btu per  
20 kilowatt hour when the design coal  
21 has a heat content of more than 9,000  
22 Btu per pound, or a design net heat  
23 rate of not more than 9,900 Btu’s per  
24 kilowatt hour when the design coal

1 has a heat content of 9,000 Btu per  
2 pound or less, and

3 “(iii) multiple applications, with a  
4 combined capacity of not more than 2,000  
5 megawatts (1,000 megawatts before 2009  
6 and 1,500 megawatts before 2013), of in-  
7 tegrated gasification combined cycle tech-  
8 nology, with or without fuel or chemical co-  
9 production—

10 “(I) installed as a new, retrofit,  
11 or repowering application,

12 “(II) operated between 2000 and  
13 2016,

14 “(III) having a design net heat  
15 rate of not more than 8,550 Btu per  
16 kilowatt hour when the design coal  
17 has a heat content of more than 9,000  
18 Btu per pound, or a design net heat  
19 rate of not more than 9,900 Btu per  
20 kilowatt hour when the design coal  
21 has a heat content of 9,000 Btu per  
22 pound or less, and

23 “(IV) having a net thermal effi-  
24 ciency on any fuel or chemical co-pro-

1                   duction of not less than 39 percent  
2                   (higher heating value), or

3                   “(iv) multiple applications, with a  
4                   combined capacity of not more than 2,000  
5                   megawatts (1,000 megawatts before 2009  
6                   and 1,500 megawatts before 2013) of tech-  
7                   nology for the production of electricity—

8                   “(I) installed as a new, retrofit,  
9                   or repowering application,

10                  “(II) operated between 2000 and  
11                  2016, and

12                  “(III) having a carbon emission  
13                  rate which is not more than 85 per-  
14                  cent of conventional technology, and

15                  “(B) which reduces the discharge into the  
16                  atmosphere of 1 or more of the following pollut-  
17                  ants to not more than—

18                  “(i) 5 percent of the potential com-  
19                  bustion concentration sulfur dioxide emis-  
20                  sions for a coal with a potential combus-  
21                  tion concentration sulfur emission of 1.2  
22                  lb/million Btu of heat input or greater,

23                  “(ii) 15 percent of the potential com-  
24                  bustion concentration sulfur dioxide emis-  
25                  sions for a coal with a potential combus-

1           tion concentration sulfur emission of less  
2           than 1.2 lb/million Btu of heat input,

3           “(iii) nitrogen oxide emissions of 0.1  
4           lb per million Btu of heat input from other  
5           than cyclone-fired boilers,

6           “(iv) 15 percent of the uncontrolled  
7           nitrogen oxide emissions from cyclone-fired  
8           boilers,

9           “(v) particulate emissions of 0.02 lb  
10          per million Btu of heat input, and

11          “(vi) the emission levels specified in  
12          the new source performance standards of  
13          the Clean Air Act (42 U.S.C. 7411) in ef-  
14          fect at the time of retrofitting, repowering,  
15          or replacement of the qualifying clean coal  
16          technology unit for the category of source  
17          if such level is lower than the levels speci-  
18          fied in clause (i), (ii), (iii), (iv), or (v).

19          “(2) EXCEPTIONS.—Such term shall not in-  
20          clude any projects receiving or scheduled to receive  
21          funding under the Clean Coal Technology Program,  
22          or the Power Plant Improvement administered by  
23          the Secretary of the Department of Energy or a  
24          Qualifying Clean Coal Technology Unit as defined in  
25          section 45G(c)(1).

1       “(d) CLEAN COAL TECHNOLOGY.—The term ‘clean  
2 coal technology’ means advanced technology which uses  
3 coal to produce 75 percent or more of its thermal output  
4 as electricity including advanced pulverized coal or atmos-  
5 pheric fluidized bed combustion, pressurized fluidized bed  
6 combustion, integrated gasification combined cycle with or  
7 without fuel or chemical co-production, and any other  
8 technology for the production of electricity which exceeds  
9 the performance of conventional technology.

10       “(e) CONVENTIONAL TECHNOLOGY.—The term ‘con-  
11 ventional technology’ means—

12               “(1) coal-fired combustion technology with a de-  
13 sign net heat rate of not less than 9,500 Btu per kil-  
14 owatt hour (HHV) and a carbon equivalents emis-  
15 sion rate of not more than 0.54 pounds of carbon  
16 per kilowatt hour when the design coal has a heat  
17 content of more than 9,000 Btu per pound,

18               “(2) coal-fired combustion technology with a de-  
19 sign net heat rate of not less than 10,500 Btu per  
20 kilowatt hour (HHV) and a carbon equivalents emis-  
21 sion rate of not more than 0.60 pounds of carbon  
22 per kilowatt hour when the design coal has a heat  
23 content of 9,000 Btu per pound or less, or

24               “(3) natural gas-fired combustion technology  
25 with a design net heat rate of not less than 7,500

1 Btu per kilowatt hour (HHV) and a carbon equiva-  
2 lents emission rate of not more than 0.24 pounds of  
3 carbon per kilowatt hour.

4 “(f) DESIGN NET HEAT RATE.—The design net heat  
5 rate shall be based on the design annual heat input to  
6 and the design annual net electrical output from the quali-  
7 fying advanced clean coal technology (determined without  
8 regard to such technology’s co-generation of steam).

9 “(g) SELECTION CRITERIA.—Selection criteria for  
10 qualifying advanced clean coal technology facilities—

11 “(1) shall be established by the Secretary of  
12 Energy as part of a competitive solicitation,

13 “(2) shall include primary criteria of minimum  
14 design net heat rate, maximum design thermal effi-  
15 ciency, environmental performance, and lowest cost  
16 to the government, and

17 “(3) shall include supplemental criteria as de-  
18 termined appropriate by the Secretary of Energy.

19 “(h) QUALIFIED INVESTMENT.—For purposes of  
20 subsection (a), the term ‘qualified investment’ means, with  
21 respect to any taxable year, the basis of a qualifying ad-  
22 vanced clean coal technology facility placed in service by  
23 the taxpayer during such taxable year.

24 “(i) QUALIFIED PROGRESS EXPENDITURES.—

1           “(1) INCREASE IN QUALIFIED INVESTMENT.—  
2           In the case of a taxpayer who has made an election  
3           under paragraph (5), the amount of the qualified in-  
4           vestment of such taxpayer for the taxable year (de-  
5           termined under subsection (c) without regard to this  
6           section) shall be increased by an amount equal to  
7           the aggregate of each qualified progress expenditure  
8           for the taxable year with respect to progress expend-  
9           iture property.

10           “(2) PROGRESS EXPENDITURE PROPERTY DE-  
11           FINED.—For purposes of this subsection, the term  
12           ‘progress expenditure property’ means any property  
13           being constructed by or for the taxpayer and which  
14           it is reasonable to believe will qualify as a qualifying  
15           advanced clean coal technology facility which is  
16           being constructed by or for the taxpayer when it is  
17           placed in service.

18           “(3) QUALIFIED PROGRESS EXPENDITURES DE-  
19           FINED.—For purposes of this subsection—

20           “(A) SELF-CONSTRUCTED PROPERTY.—In  
21           the case of any self-constructed property, the  
22           term ‘qualified progress expenditures’ means  
23           the amount which, for purposes of this subpart,  
24           is properly chargeable (during such taxable

1 year) to capital account with respect to such  
2 property.

3 “(B) NONSELF-CONSTRUCTED PROP-  
4 ERTY.—In the case of nonself-constructed prop-  
5 erty, the term ‘qualified progress expenditures’  
6 means the amount paid during the taxable year  
7 to another person for the construction of such  
8 property.

9 “(4) OTHER DEFINITIONS.—For purposes of  
10 this subsection—

11 “(A) SELF-CONSTRUCTED PROPERTY.—  
12 The term ‘self-constructed property’ means  
13 property for which it is reasonable to believe  
14 that more than half of the construction expendi-  
15 tures will be made directly by the taxpayer.

16 “(B) NONSELF-CONSTRUCTED PROP-  
17 ERTY.—The term ‘nonself-constructed property’  
18 means property which is not self-constructed  
19 property.

20 “(C) CONSTRUCTION, ETC.—The term  
21 ‘construction’ includes reconstruction and erec-  
22 tion, and the term ‘constructed’ includes recon-  
23 structed and erected.

24 “(D) ONLY CONSTRUCTION OF QUALI-  
25 FYING ADVANCED CLEAN COAL TECHNOLOGY

1 FACILITY TO BE TAKEN INTO ACCOUNT.—Con-  
2 struction shall be taken into account only if, for  
3 purposes of this subpart, expenditures therefor  
4 are properly chargeable to capital account with  
5 respect to the property.

6 “(5) ELECTION.—An election under this sub-  
7 section may be made at such time and in such man-  
8 ner as the Secretary may by regulations prescribe.  
9 Such an election shall apply to the taxable year for  
10 which made and to all subsequent taxable years.  
11 Such an election, once made, may not be revoked ex-  
12 cept with the consent of the Secretary.

13 “(j) COORDINATION WITH OTHER CREDITS.—This  
14 section shall not apply to any property with respect to  
15 which the rehabilitation credit under section 47 or the en-  
16 ergy credit under section 48 is allowed unless the taxpayer  
17 elects to waive the application of such credit to such prop-  
18 erty.

19 “(k) TERMINATION.—This section shall not apply  
20 with respect to any qualified investment made more than  
21 10 years after the effective date of this section.”.

22 (c) RECAPTURE.—Section 50(a) of the Internal Rev-  
23 enue Code of 1986 (relating to other special rules), as  
24 amended by section 201(c), is amended by adding at the  
25 end the following:

1           “(7) SPECIAL RULES RELATING TO QUALIFYING  
2           ADVANCED CLEAN COAL TECHNOLOGY FACILITY.—  
3           For purposes of applying this subsection in the case  
4           of any credit allowable by reason of section 48B, the  
5           following shall apply:

6                   “(A) GENERAL RULE.—In lieu of the  
7                   amount of the increase in tax under paragraph  
8                   (1), the increase in tax shall be an amount  
9                   equal to the investment tax credit allowed under  
10                  section 38 for all prior taxable years with re-  
11                  spect to a qualifying advanced clean coal tech-  
12                  nology facility (as defined by section 48B(b)(1))  
13                  multiplied by a fraction whose numerator is the  
14                  number of years remaining to fully depreciate  
15                  under this title the qualifying advanced clean  
16                  coal technology facility disposed of, and whose  
17                  denominator is the total number of years over  
18                  which such facility would otherwise have been  
19                  subject to depreciation. For purposes of the  
20                  preceding sentence, the year of disposition of  
21                  the qualifying advanced clean coal technology  
22                  facility property shall be treated as a year of re-  
23                  maining depreciation.

24                   “(B) PROPERTY CEASES TO QUALIFY FOR  
25                  PROGRESS EXPENDITURES.—Rules similar to

1 the rules of paragraph (2) shall apply in the  
2 case of qualified progress expenditures for a  
3 qualifying advanced clean coal technology facil-  
4 ity under section 48B, except that the amount  
5 of the increase in tax under subparagraph (A)  
6 of this paragraph shall be substituted in lieu of  
7 the amount described in such paragraph (2).

8 “(C) APPLICATION OF PARAGRAPH.—This  
9 paragraph shall be applied separately with re-  
10 spect to the credit allowed under section 38 re-  
11 garding a qualifying advanced clean coal tech-  
12 nology facility.”.

13 (d) TRANSITIONAL RULE.—Section 39(d) of the In-  
14 ternal Revenue Code of 1986 (relating to transitional  
15 rules), as amended by section 202(c), is amended by add-  
16 ing at the end the following:

17 “(13) NO CARRYBACK OF SECTION 48B CREDIT  
18 BEFORE EFFECTIVE DATE.—No portion of the un-  
19 used business credit for any taxable year which is  
20 attributable to the qualifying advanced clean coal  
21 technology facility credit determined under section  
22 48B may be carried back to a taxable year ending  
23 before the date of enactment of section 48B.”.

24 (e) TECHNICAL AMENDMENTS.—

1           (1) Section 49(a)(1)(C) of the Internal Revenue  
2           Code of 1986, as amended by section 521(e)(1), is  
3           amended by striking “and” at the end of clause (iii),  
4           by striking the period at the end of clause (iv) and  
5           inserting “, and”, and by adding at the end the fol-  
6           lowing:

7                           “(v) the portion of the basis of any  
8                           qualifying advanced clean coal technology  
9                           facility attributable to any qualified invest-  
10                          ment (as defined by section 48B(c)).”.

11           (2) Section 50(a)(4) of such Code, is amended  
12           by striking “and (6)” and inserting “(6), and (7)”.

13           (3) Section 50(c)(6) of such Code, is amended  
14           by inserting “or any advanced clean coal technology  
15           facility credit under section 48B” after “section  
16           48A”.

17           (4) The table of sections for subpart E of part  
18           IV of subchapter A of chapter 1 of such Code, is  
19           amended by inserting after the item relating to sec-  
20           tion 48A the following:

                          “Sec. 48B. Qualifying advanced clean coal technology facility  
                          credit.”.

21           (f) EFFECTIVE DATE.—The amendments made by  
22           this section shall apply to periods after December 31,  
23           2001, under rules similar to the rules of section 48(m)  
24           of the Internal Revenue Code of 1986 (as in effect on the

1 day before the date of enactment of the Revenue Reconcili-  
2 ation Act of 1990).

3 **SEC. 532. CREDIT FOR PRODUCTION FROM QUALIFYING**  
4 **ADVANCED CLEAN COAL TECHNOLOGY.**

5 (a) CREDIT FOR PRODUCTION FROM QUALIFYING  
6 ADVANCED CLEAN COAL TECHNOLOGY.—Subpart D of  
7 part IV of subchapter A of chapter 1 of the Internal Rev-  
8 enue Code of 1986 (relating to business related credits),  
9 as amended by section 522(a), is amended by adding at  
10 the end the following:

11 **“SEC. 45H. CREDIT FOR PRODUCTION FROM QUALIFYING**  
12 **ADVANCED CLEAN COAL TECHNOLOGY.**

13 “(a) GENERAL RULE.—For purposes of section 38,  
14 the qualifying advanced clean coal technology production  
15 credit of any taxpayer for any taxable year is equal to—

16 “(1) the applicable amount of advanced clean  
17 coal technology production credit, multiplied by

18 “(2) the sum of—

19 “(A) the kilowatt hours of electricity, plus

20 “(B) each 3,413 Btu of fuels or chemicals,  
21 produced by the taxpayer during such taxable year  
22 at a qualifying advanced clean coal technology facil-  
23 ity during the 10-year period beginning on the date  
24 the facility was originally placed in service.

1 “(b) APPLICABLE AMOUNT.—For purposes of this  
 2 section, the applicable amount of advanced clean coal tech-  
 3 nology production credit with respect to production from  
 4 a qualifying advanced clean coal technology facility shall  
 5 be determined as follows:

6 “(1) Where the design coal has a heat content  
 7 of more than 9,000 Btu per pound:

8 “(A) In the case of a facility originally  
 9 placed in service before 2009, if—

“The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,400 .....	\$ .0060	\$.0038
More than 8,400 but not more than 8,550 .....	\$.0025	\$.0010
More than 8,550 but not more than 8,750 .....	\$.0010	\$.0010.

10 “(B) In the case of a facility originally  
 11 placed in service after 2008 and before 2013,  
 12 if—

“The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,770 .....	\$.0105	\$.0090
More than 7,770 but not more than 8,125 .....	\$.0085	\$.0068
More than 8,125 but not more than 8,350 .....	\$.0075	\$.0055.

13 “(C) In the case of a facility originally  
 14 placed in service after 2012 and before 2017,  
 15 if—

“The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,380 .....	\$.0140	\$.01
More than 7,380 but not more than 7,720 .....	\$.0120	\$.0090.

1           “(2) Where the design coal has a heat content  
2           of not more than 9,000 Btu per pound:

3                   “(A) In the case of a facility originally  
4                   placed in service before 2009, if—

“The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,500 .....	\$.0060	\$.0038
More than 8,500 but not more than 8,650 .....	\$.0025	\$.0010
More than 8,650 but not more than 8,750 .....	\$.0010	\$.0010.

5                   “(B) In the case of a facility originally  
6                   placed in service after 2008 and before 2013,  
7                   if—

“The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,000 .....	\$.0105	\$.009
More than 8,000 but not more than 8,250 .....	\$.0085	\$.0068
More than 8,250 but not more than 8,400 .....	\$.0075	\$.0055.

8                   “(C) In the case of a facility originally  
9                   placed in service after 2012 and before 2017,  
10                  if—

“The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,800 .....	\$.0140	\$.0115
More than 7,800 but not more than 7,950 .....	\$.0120	\$.0090.

11                  “(3) Where the clean coal technology facility is  
12                  producing fuel or chemicals:

13                   “(A) In the case of a facility originally  
14                   placed in service before 2009, if—

“The facility design net thermal efficiency (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 40.6 percent .....	\$.0060	\$.0038
Less than 40.6 but not less than 40 percent .....	\$.0025	\$.0010
Less than 40 but not less than 39 percent .....	\$.0010	\$.0010.

1                   “(B) In the case of a facility originally  
 2                   placed in service after 2008 and before 2013,  
 3                   if—

“The facility design net thermal efficiency (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 43.9 percent .....	\$.0105	\$.009
Less than 43.9 but not less than 42 percent .....	\$.0085	\$.0068
Less than 42 but not less than 40.9 percent .....	\$.0075	\$.0055.

4                   “(C) In the case of a facility originally  
 5                   placed in service after 2012 and before 2017,  
 6                   if—

“The facility design net thermal efficiency (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 44.2 percent .....	\$.0140	\$.0115
Less than 44.2 but not less than 43.6 percent .....	\$.0120	\$.0090.

7                   “(c) INFLATION ADJUSTMENT FACTOR.—For cal-  
 8                   endar years after 2001, each amount in paragraphs (1),  
 9                   (2), and (3) shall be adjusted by multiplying such amount  
 10                  by the inflation adjustment factor for the calendar year  
 11                  in which the amount is applied. If any amount as in-  
 12                  creased under the preceding sentence is not a multiple of  
 13                  0.01 cent, such amount shall be rounded to the nearest  
 14                  multiple of 0.01 cent.

1       “(d) DEFINITIONS AND SPECIAL RULES.—For pur-  
2 poses of this section—

3           “(1) IN GENERAL.—Any term used in this sec-  
4 tion which is also used in section 48B shall have the  
5 meaning given such term in section 48B.

6           “(2) APPLICABLE RULES.—The rules of para-  
7 graphs (3), (4), and (5) of section 45 shall apply.

8           “(3) INFLATION ADJUSTMENT FACTOR.—The  
9 term ‘inflation adjustment factor’ means, with re-  
10 spect to a calendar year, a fraction the numerator  
11 of which is the GDP implicit price deflator for the  
12 preceding calendar year and the denominator of  
13 which is the GDP implicit price deflator for the cal-  
14 endar year 2001.

15           “(4) GDP IMPLICIT PRICE DEFLATOR.—The  
16 term ‘GDP implicit price deflator’ means the most  
17 recent revision of the implicit price deflator for the  
18 gross domestic product as computed by the Depart-  
19 ment of Commerce before March 15 of the calendar  
20 year.”.

21       (b) CREDIT TREATED AS BUSINESS CREDIT.—Sec-  
22 tion 38(b) of the Internal Revenue Code of 1986, as  
23 amended by section 202(b), is amended by striking “plus”  
24 at the end of paragraph (15), by striking the period at

1 the end of paragraph (16) and inserting “, plus”, and by  
2 adding at the end the following:

3 “(17) the qualifying advanced clean coal tech-  
4 nology production credit determined under section  
5 45H(a).”.

6 (c) TRANSITIONAL RULE.—Section 39(d) of the In-  
7 ternal Revenue Code of 1986 (relating to transitional  
8 rules), as amended by section 301(d), is amended by add-  
9 ing at the end the following:

10 “(14) NO CARRYBACK OF SECTION 45H CREDIT  
11 BEFORE EFFECTIVE DATE.—No portion of the un-  
12 used business credit for any taxable year which is  
13 attributable to the qualifying advanced clean coal  
14 technology production credit determined under sec-  
15 tion 45H may be carried back to a taxable year end-  
16 ing before the date of enactment of section 45H.”.

17 (d) CLERICAL AMENDMENT.—The table of sections  
18 for subpart D of part IV of subchapter A of chapter 1  
19 of the Internal Revenue Code of 1986, as amended by sec-  
20 tion 202(d), is amended by adding at the end the fol-  
21 lowing:

“Sec. 45H. Credit for production from qualifying advanced clean  
coal technology.”.

22 (e) EFFECTIVE DATE.—The amendments made by  
23 this section shall apply to production after the date of en-  
24 actment of this Act.

1 **SEC. 533. RISK POOL FOR QUALIFYING ADVANCED CLEAN**  
2 **COAL TECHNOLOGY.**

3 (a) ESTABLISHMENT.—The Secretary of the Treas-  
4 ury shall establish a financial risk pool which shall be  
5 available to any United States owner of a qualifying ad-  
6 vanced clean coal technology which has qualified for an  
7 advanced clean coal technology production credit (as de-  
8 fined in section 45H of the Internal Revenue Code of  
9 1986, as added by section 302) to offset for the first 3  
10 years of the operation of such technology the costs (not  
11 to exceed 5 percent of the total cost of installation) for  
12 modifications resulting from the technology’s failure to  
13 achieve its design performance.

14 (b) AUTHORIZATION OF APPROPRIATIONS.—There is  
15 authorized to be appropriated such sums as are necessary  
16 to carry out the purposes of this section.

17 **Subtitle D—Treatment of Certain**  
18 **Governmental and Other Entities**

19 **SEC. 541. CREDITS FOR CERTAIN ORGANIZATIONS AND**  
20 **GOVERNMENTAL UNITS.**

21 Section 6401(b) of the Internal Revenue Code of  
22 1986 (relating to excessive credits) is amended by adding  
23 at the end the following:

24 “(3) CREDITS FOR CERTAIN ORGANIZATIONS  
25 AND GOVERNMENTAL UNITS.—

1           “(A) ALLOWANCE OF CREDITS.—Any cred-  
2           it which would be allowable under section 45G,  
3           45H, 48A, or 48B with respect to a facility of  
4           an entity whether or not such entity is exempt  
5           from tax, shall be treated as a credit allowable  
6           under subpart C of part IV of subchapter A of  
7           chapter 1 of subtitle A to such entity if such  
8           entity is—

9                   “(i) an organization described in sec-  
10                   tion 501(c)(12)(C) and exempt from tax  
11                   under section 501(a),

12                   “(ii) an organization described in sec-  
13                   tion 1381(a)(2)(C),

14                   “(iii) a public utility (as defined in  
15                   section 136(c)(2)(B)),

16                   “(iv) a State, the District of Colum-  
17                   bia, or a possession of the United States,  
18                   or any political subdivision thereof, or

19                   “(v) the Tennessee Valley Authority.

20           “(B) USE OF CREDIT.—

21                   “(i) TRANSFER OF CREDIT.—An enti-  
22                   ty described in clause (i), (ii), (iii), or (iv)  
23                   of subparagraph (A) may assign, trade,  
24                   sell, or otherwise transfer any credit allow-

1           able to such entity under subparagraph  
2           (A) to any other person or entity.

3           “(ii) USE OF CREDIT AS AN OFF-  
4           SET.—Notwithstanding any other provision  
5           of law, in the case of any entity described  
6           in clause (i) or (ii) of subparagraph (A),  
7           any credit allowable to such entity under  
8           subparagraph (A) may be applied by such  
9           entity, without penalty, as a prepayment of  
10          any loan, debt or other obligation the enti-  
11          ty has made, incurred or guaranteed under  
12          the Rural Electrification Act of 1936 (7  
13          U.S.C. 901 et seq.).

14          “(iii) USE BY TVA.—

15                 “(I) IN GENERAL.—Notwith-  
16                 standing any other provision of law, in  
17                 the case of an entity described in sub-  
18                 paragraph (A)(v), any credit allowable  
19                 under subparagraph (A) to such enti-  
20                 ty may be applied as a credit against  
21                 the payments required to be made in  
22                 any fiscal year under section 15d(e) of  
23                 the Tennessee Valley Authority Act of  
24                 1933 (16 U.S.C. 831n-4(e)) as an an-  
25                 nual return on the appropriations in-

1 vestment and an annual repayment  
2 sum.

3 “(II) TREATMENT OF CRED-  
4 ITS.—The aggregate amount of cred-  
5 its described in subparagraph (A)  
6 shall be treated in the same manner  
7 and to the same extent as if such  
8 credits were a payment in cash and  
9 shall be applied first against the an-  
10 nual return on the appropriations in-  
11 vestment.

12 “(III) CREDIT CARRYOVER.—  
13 With respect to any fiscal year, if the  
14 aggregate amount of the credits de-  
15 scribed in subparagraph (A) exceeds  
16 the aggregate amount of payment ob-  
17 ligations described in subclause (I),  
18 the excess amount shall remain avail-  
19 able for application as credits against  
20 the amounts of such payment obliga-  
21 tions in succeeding fiscal years in the  
22 same manner as described in this  
23 clause.

24 “(C) CREDIT NOT INCOME.—Neither a  
25 transfer under clause (i) nor a use under clause

1 (ii) of subparagraph (B) of any credit allowable  
2 under subparagraph (A) shall result in income  
3 for purposes of section 501(c)(12).

4 “(D) TRANSFER PROCEEDS TREATED AS  
5 ARISING FROM ESSENTIAL GOVERNMENT FUNC-  
6 TION.—Any proceeds derived by an entity de-  
7 scribed in clause (iii) or (iv) of subparagraph  
8 (A) from the transfer of any such credit under  
9 subparagraph (B)(I) shall be treated as arising  
10 from an essential government function.

11 “(E) TREATMENT OF UNRELATED PER-  
12 SONS.—For purposes of this title, sales among  
13 and between entities described in clauses (i),  
14 (ii), (iii), and (iv) of subparagraph (A) shall be  
15 treated as sales between unrelated parties.”.

## 16 TITLE VI—FUELS

### 17 SEC. 601. TANK DRAINING DURING TRANSITION TO SUM- 18 MERTIME RFG.

19 Not later than 60 days after the enactment of the  
20 Act, the Administrator of the Environmental Protection  
21 Agency shall commence a rulemaking to determine wheth-  
22 er modifications to the regulations set forth in 40 C.F.R.  
23 Section 80.78 and any associated regulations regarding  
24 the transition to high ozone season reformulated gasoline  
25 are necessary to ensure that the transition to high ozone

1 season reformulated gasoline is conducted in a manner  
2 that minimizes disruptions to the general availability and  
3 affordability of gasoline, and maximizes flexibility with re-  
4 gard to the draining and inventory management of gaso-  
5 line storage tanks located at refineries, terminals, whole-  
6 sale and retail outlets, consistent with the goals of the  
7 Clean Air Act. The Administrator shall propose and take  
8 final action in such rulemaking to ensure that any modi-  
9 fications are effective and implemented at least 60 days  
10 prior to the beginning of the high ozone season for the  
11 year 2002.

12 **SEC. 602. GASOLINE BLENDSTOCK REQUIREMENTS.**

13 Not later than 60 days after the enactment of this  
14 Act, the Administrator of the Environmental Protection  
15 Agency shall commence a rulemaking to determine wheth-  
16 er modifications to product transfer documentation, ac-  
17 counting, compliance calculation, and other requirements  
18 contained in the regulations of the Administrator set forth  
19 in section 80.102 of title 40 of the Code of Federal Regu-  
20 lations relating to gasoline blendstocks are necessary to  
21 facilitate the movement of gasoline and gasoline feedstocks  
22 among different regions throughout the country and to im-  
23 prove the ability of petroleum refiners and importers to  
24 respond to regional gasoline shortages and prevent unrea-  
25 sonable short-term price increases. The Administrator

1 shall take into consideration the extent to which such re-  
2 quirements have been, or will be, rendered unnecessary or  
3 inefficient by reason of subsequent environmental safe-  
4 guards that were not in effect at the time the regulations  
5 in section 80.102 of title 40 of the Code of Federal Regu-  
6 lations were promulgated. The Administrator shall pro-  
7 pose and take final action in such rulemaking to ensure  
8 that any modifications are effective and implemented at  
9 least 60 days prior to the beginning of the high ozone sea-  
10 son for the year 2002.

11 **SEC. 603. BOUTIQUE FUELS.**

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

20 (1) the effect of the variety of such require-  
21 ments on the price of motor vehicle fuels to the con-  
22 sumer;

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

1           (3) the effect of Federal, State, and local regu-  
2           lations, including multiple fuel requirements, on do-  
3           mestic refineries and the fuel distribution system;

4           (4) the effect of such requirements on local, re-  
5           gional, and national air quality requirements and  
6           goals;

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

9           (6) the feasibility of developing national or re-  
10          gional fuel specifications for the contiguous United  
11          States that would—

12                   (A) enhance flexibility in the fuel distribu-  
13                   tion infrastructure and improve fuel fungibility;

14                   (B) reduce price volatility and costs to con-  
15                   sumers and producers;

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

18                   (D) provide increased gasoline market li-  
19                   quidity; and

20          (7) the extent to which the Environmental Pro-  
21          tection Agency's Tier II requirements for conven-  
22          tional gasoline may achieve in future years the same  
23          or similar air quality results as State reformulated  
24          gasoline programs and State programs regarding  
25          gasoline volatility (RVP).

1 (b) REPORT.—By December 31, 2001, the Adminis-  
2 trator of the Environmental Protection Agency and the  
3 Secretary of Energy shall submit a report to the Congress  
4 containing the results of the study conducted under sub-  
5 section (a). Such report shall contain recommendations for  
6 legislative and administrative actions that may be taken  
7 to simplify the national distribution system for motor vehi-  
8 cle fuel, make such system more cost-effective, and reduce  
9 the costs and increase the availability of motor vehicle fuel  
10 to the end user while meeting the requirements of the  
11 Clean Air Act. Such recommendations shall take into ac-  
12 count the need to provide lead time for refinery and fuel  
13 distribution system modifications necessary to assure ade-  
14 quate fuel supply for all States.

15 **SEC. 604. FUNDING FOR MTBE CONTAMINATION.**

16 Notwithstanding any other provision of law, there is  
17 authorized to be appropriated to the Administrator of the  
18 Environmental Protection Agency from the Leaking Un-  
19 derground Storage Trust Fund not more than  
20 \$200,000,000 to be used for taking such action, limited  
21 to assessment, corrective action, inspection of under-  
22 ground storage tank systems, and groundwater monitoring  
23 in connection with MTBE contamination, as the Adminis-  
24 trator deems necessary to protect human health and the

1 environment from releases of methyl tertiary butyl ether  
2 (MTBE) from underground storage tanks.

### 3 **TITLE VII—RENEWABLE ENERGY**

#### 4 **SEC. 701. ASSESSMENT OF RENEWABLE ENERGY RE-** 5 **SOURCES.**

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

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

13 (1) A detailed inventory describing the available  
14 amount and characteristics of solar, wind, biomass,  
15 geothermal, hydroelectric and other renewable en-  
16 ergy sources.

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

1 **SEC. 702. RENEWABLE ENERGY PRODUCTION INCENTIVE.**

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

4 (1) In subsection (a) by striking “and which  
5 satisfies” and all that follows through “Secretary  
6 shall establish.” and inserting “. The Secretary shall  
7 establish other procedures necessary for efficient ad-  
8 ministration of the program. The Secretary shall not  
9 establish any criteria or procedures that have the ef-  
10 fect of assigning to proposals a higher or lower pri-  
11 ority for eligibility or allocation of appropriated  
12 funds on the basis of the energy source proposed.”.

13 (2) In subsection (b)—

14 (A) by striking “a State or any political”  
15 and all that follows through “nonprofit elec-  
16 trical cooperative” and inserting “an electricity-  
17 generating cooperative exempt from taxation  
18 under section 501(c)(12) or section  
19 1381(a)(2)(C) of the Internal Revenue Code of  
20 1986, a public utility described in section 115  
21 of such Code, a State, Commonwealth, terri-  
22 tory, or possession of the United States or the  
23 District of Columbia, or a political subdivision  
24 thereof, or an Indian tribal government or sub-  
25 division thereof,”; and

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

3           (3) In subsection (c) by striking “during the  
4           10-fiscal year period beginning with the first full fis-  
5           cal year occurring after the enactment of this sec-  
6           tion” and inserting “before October 1, 2013”.

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

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

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

17          (7) In subsection (g)—

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

20                 (B) by inserting “Funds may be appro-  
21                 priated pursuant to this subsection to remain  
22                 available until expended.” after “purposes of  
23                 this section.”.

1                   **TITLE VIII—PIPELINE**  
2                   **INTEGRITY**  
3                   **Subtitle A—Pipeline Integrity**

4   **SEC. 801. PROGRAM FOR PIPELINE INTEGRITY RESEARCH,**  
5                   **DEVELOPMENT, AND DEMONSTRATION.**

6           (a) **IN GENERAL.**—The Secretary of Transportation,  
7 in coordination with the Secretary of Energy, and in con-  
8 sultation with the Federal Energy Regulatory Commis-  
9 sion, shall develop and implement an accelerated coopera-  
10 tive program of research, development, and demonstration  
11 to ensure the integrity of natural gas and hazardous liquid  
12 pipelines. This program shall include materials inspection  
13 techniques, risk assessment methodology, and information  
14 systems surety.

15           (b) **PURPOSE.**—The purpose of the cooperative re-  
16 search program shall be to promote research, development,  
17 and demonstration to—

18                   (1) ensure long-term safety, reliability, and  
19                   service life for existing pipelines;

20                   (2) expand capabilities of internal inspection  
21                   devices to identify and accurately measure defects  
22                   and anomalies;

23                   (3) develop inspection techniques for pipelines  
24                   that cannot accommodate the internal inspection de-  
25                   vices;

1           (4) develop innovative techniques to measure  
2           the structural integrity of pipelines to prevent pipe-  
3           line failures;

4           (5) develop improved materials and coatings for  
5           use in pipelines;

6           (6) improve the capability, reliability, and prac-  
7           ticality of external leak detection devices;

8           (7) identify underground environments that  
9           might lead to shortened service life;

10          (8) enhance safety in pipeline siting and land  
11          use;

12          (9) minimize the environmental impact of pipe-  
13          lines;

14          (10) demonstrate technologies that improve  
15          pipeline safety, reliability, and integrity;

16          (11) provide risk assessment tools for opti-  
17          mizing risk mitigation strategies; and

18          (12) provide highly secure information systems  
19          for controlling the operation of pipelines.

20          (c) AREAS.—In carrying out this subtitle, the Sec-  
21          retary of Transportation, in coordination with the Sec-  
22          retary of Energy, shall consider research, development,  
23          and demonstration on natural gas, crude oil, and petro-  
24          leum product pipelines for—

- 1 (1) early crack, defect, and damage detection,  
2 including real-time damage monitoring;
- 3 (2) automated internal pipeline inspection sen-  
4 sor systems;
- 5 (3) land use guidance and set back manage-  
6 ment along pipeline rights-of-way for communities;
- 7 (4) internal corrosion control;
- 8 (5) corrosion-resistant coatings;
- 9 (6) improved cathodic protection;
- 10 (7) inspection techniques where internal inspec-  
11 tion is not feasible, including measurement of struc-  
12 tural integrity;
- 13 (8) external leak detection, including portable  
14 real-time video imaging technology, and the advance-  
15 ment of computerized control center leak detection  
16 systems utilizing real-time remote field data input;
- 17 (9) longer life, high strength, noncorrosive pipe-  
18 line materials;
- 19 (10) assessing the remaining strength of exist-  
20 ing pipes;
- 21 (11) risk and reliability analysis models, to be  
22 used to identify safety improvements that could be  
23 realized in the near term resulting from analysis of  
24 data obtained from a pipeline performance tracking  
25 initiative;

1           (12) identification, monitoring, and prevention  
2           of outside force damage, including satellite surveil-  
3           lance; and

4           (13) any other areas necessary to ensuring the  
5           public safety and protecting the environment.

6           (d) RESEARCH, DEVELOPMENT, AND DEMONSTRA-  
7           TION PROGRAM PLAN.—Within 240 days after the date  
8           of enactment of this Act, the Secretary of Transportation,  
9           in coordination with the Secretary of Energy, the Federal  
10          Energy Regulatory Commission, and the Pipeline Integ-  
11          rity Technical Advisory Committee, shall prepare and sub-  
12          mit to the Congress a 5-year program plan to guide activi-  
13          ties under this subtitle. In preparing the program plan,  
14          the Secretary shall consult with appropriate representa-  
15          tives of the natural gas, crude oil, and petroleum product  
16          pipeline industries to select and prioritize appropriate  
17          project proposals. The Secretary may also seek the advice  
18          of utilities, manufacturers, institutions of higher learning,  
19          Federal agencies, the pipeline research institutions, na-  
20          tional laboratories, State pipeline safety officials, environ-  
21          mental organizations, pipeline safety advocates, and pro-  
22          fessional and technical societies.

23          (e) IMPLEMENTATION.—The Secretary of Transpor-  
24          tation shall have primary responsibility for ensuring the

1 five-year plan provided for in subsection (d) is imple-  
2 mented as intended by this subtitle.

3 (f) **REPORTS TO CONGRESS.**—The Secretary of  
4 Transportation shall report to the Committee on Energy  
5 and Commerce and the Committee on Transportation and  
6 Infrastructure of the House of Representatives, and to the  
7 Committee on Energy and Natural Resources and the  
8 Committee on Commerce, Science, and Transportation of  
9 the Senate, annually as to the status and results to date  
10 of the implementation of the program plan. The report  
11 shall include the activities of the Departments of Trans-  
12 portation and Energy, the national laboratories, univer-  
13 sities, and any other research organizations, including in-  
14 dustry research organizations.

15 **SEC. 802. PIPELINE INTEGRITY TECHNICAL ADVISORY**  
16 **COMMITTEE.**

17 (a) **ESTABLISHMENT.**—The Secretary of Transpor-  
18 tation shall enter into appropriate arrangements with the  
19 National Academy of Sciences to establish and manage the  
20 Pipeline Integrity Technical Advisory Committee for the  
21 purpose of advising the Secretary of Transportation and  
22 the Secretary of Energy on the development and imple-  
23 mentation of the five-year research, development, and  
24 demonstration program plan under section 801(d). The  
25 Advisory Committee shall have an ongoing role in evalu-

1 ating the progress and results of the research, develop-  
2 ment, and demonstration carried out under this subtitle.

3 (b) MEMBERSHIP.—The National Academy of  
4 Sciences shall appoint the members of the Pipeline Integ-  
5 rity Technical Advisory Committee after consultation with  
6 the Secretary of Transportation and the Secretary of En-  
7 ergy. The Advisory Committee shall also have 1 member  
8 from the Federal Energy Regulatory Commission. Mem-  
9 bers appointed to the Advisory Committee should have the  
10 necessary qualifications to provide technical contributions  
11 to the purposes of the Advisory Committee.

12 **SEC. 803. AUTHORIZATION OF APPROPRIATIONS.**

13 (a) AUTHORIZATION FROM USER FEES.—There are  
14 authorized to be appropriated to the Secretary of Trans-  
15 portation for carrying out this subtitle \$3,000,000, which  
16 is to be derived from user fees under section 60125 of  
17 title 49, United States Code, for each of the fiscal years  
18 2002 through 2006.

19 (b) DETECTION, PREVENTION, AND MITIGATION.—  
20 There are authorized to be appropriated to the Secretary  
21 of Transportation from the Oil Spill Liability Trust Fund  
22 (26 U.S.C. 9509), \$3,000,000 to carry out programs for  
23 detection, prevention, and mitigation of oil spills author-  
24 ized in this subtitle for each of the fiscal years 2002  
25 through 2006.

1 (c) GENERAL AUTHORIZATION.—There are author-  
2 ized to be appropriated to the Secretary of Energy for car-  
3 rying out this subtitle such sums as may be necessary for  
4 each of the fiscal years 2002 through 2006.

5 **Subtitle B—Other Pipeline**  
6 **Provisions**

7 **SEC. 811. PROHIBITION ON CERTAIN PIPELINE ROUTE.**

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

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

17 (2) enters Canada at any point north of 68 de-  
18 grees North latitude.

19 **SEC. 812. HISTORIC PIPELINES.**

20 Section 7 of the Natural Gas Act (15 U.S.C. 717f)  
21 is amended by adding at the end the following new sub-  
22 section:

23 “(i) Notwithstanding the National Historic Preserva-  
24 tion Act, a transportation facility shall not be eligible for  
25 inclusion on the National Register of Historic Places until

1 the Commission has permitted the abandonment of the  
2 transportation facility pursuant to subsection (b) of this  
3 section.”.

## 4           **TITLE IX—MISCELLANEOUS** 5                           **PROVISIONS**

### 6 **SEC. 901. WASTE REDUCTION AND USE OF ALTERNATIVES.**

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

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

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

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

19           (b) **QUALIFIED INSTITUTION.**—For the purposes of  
20 subsection (a), a qualified institution is a research-inten-  
21 sive institution of higher learning with demonstrated ex-  
22 pertise in the fields of fiber recycling and logistical mod-  
23 eling of carpet waste collection and preparation.

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

1 ergy for carrying out this section \$275,000 for fiscal year  
2 2002, to remain available until expended.

3 **SEC. 902. ANNUAL REPORT ON UNITED STATES ENERGY**  
4 **INDEPENDENCE.**

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

12 (b) ALTERNATIVES.—The information required  
13 under this section to be included in the reports under sec-  
14 tion 801(c) of the Department of Energy Organization Act  
15 shall include a specification of what legislative or adminis-  
16 trative actions must be implemented to meet this goal and  
17 set forth a range of options and alternatives with a cost/  
18 benefit analysis for each option or alternative together  
19 with an estimate of the contribution each option or alter-  
20 native could make to reduce foreign oil imports. The Sec-  
21 retary shall solicit information from the public and request  
22 information from the Energy Information Agency and  
23 other agencies to develop the information required under  
24 this section. The information shall indicate, in detail, op-  
25 tions and alternatives to—

1           (1) increase the use of renewable domestic en-  
2           ergy sources, including conventional and nonconven-  
3           tional sources;

4           (2) conserve energy resources, including improv-  
5           ing efficiencies and decreasing consumption; and

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

10 **SEC. 903. STUDY OF AIRCRAFT EMISSIONS.**

11         The Administrator of the Environmental Protection  
12         Agency, in consultation with the Secretary of Transpor-  
13         tation shall commence a study within 60 days after the  
14         enactment of this Act to investigate the impact of aircraft  
15         emissions at all airports located within areas that are con-  
16         sidered to be in nonattainment for the national ambient  
17         air quality standard for ozone. As part of such study, the  
18         Administrator should investigate all significant factors  
19         which may serve to increase air emission levels from air-  
20         ports and use the most recent data available. Within 180  
21         days of the enactment of this Act, the Administrator shall  
22         submit a report to the Committee on Energy and Com-  
23         merce of the United States House of Representatives and  
24         to the Committee on Energy and Natural Resources of  
25         the United States Senate containing the results of the

1 study and recommendations with respect to a plan to  
2 maintain comprehensive data on aircraft emissions and  
3 methods by which such emissions may be reduced in order  
4 to assist in the attainment of the national ambient air  
5 quality standard for ozone.

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