

107TH CONGRESS  
1ST SESSION

# H. R. 4

---

## AN ACT

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

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

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

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

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

Sec. 1. Short title and table of contents.

Sec. 2. Energy policy.

**DIVISION A**

Sec. 100. Short title.

**TITLE I—ENERGY CONSERVATION**

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

Sec. 101. Authorization of appropriations.

**Subtitle B—Federal Leadership in Energy Conservation**

Sec. 121. Federal facilities and national energy security.

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

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

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

Sec. 125. Advanced building efficiency testbed.

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

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

Sec. 128. Capitol complex.

**Subtitle C—State Programs**

Sec. 131. Amendments to State energy programs.

Sec. 132. Reauthorization of energy conservation program for schools and hos-  
 pitals.

Sec. 133. Amendments to Weatherization Assistance Program.

Sec. 134. LIHEAP.

Sec. 135. High performance public buildings.

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

Sec. 141. Energy Star program.

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

Sec. 142. Labeling of energy efficient appliances.

Sec. 143. Appliance standards.

**Subtitle E—Energy Efficient Vehicles**

Sec. 151. High occupancy vehicle exception.

- Sec. 152. Railroad efficiency.
- Sec. 153. Biodiesel fuel use credits.
- Sec. 154. Mobile to stationary source trading.

#### Subtitle F—Other Provisions

- Sec. 161. Review of regulations to eliminate barriers to emerging energy technology.
- Sec. 162. Advanced idle elimination systems.
- Sec. 163. Study of benefits and feasibility of oil bypass filtration technology.
- Sec. 164. Gas flare study.
- Sec. 165. Telecommuting study.

### TITLE II—AUTOMOBILE FUEL ECONOMY

- Sec. 201. Average fuel economy standards for nonpassenger automobiles.
- Sec. 202. Consideration of prescribing different average fuel economy standards for nonpassenger automobiles.
- Sec. 203. Dual fueled automobiles.
- Sec. 204. Fuel economy of the Federal fleet of automobiles.
- Sec. 205. Hybrid vehicles and alternative vehicles.
- Sec. 206. Federal fleet petroleum-based nonalternative fuels.
- Sec. 207. Study of feasibility and effects of reducing use of fuel for automobiles.

### TITLE III—NUCLEAR ENERGY

- Sec. 301. License period.
- Sec. 302. Cost recovery from Government agencies.
- Sec. 303. Depleted uranium hexafluoride.
- Sec. 304. Nuclear Regulatory Commission meetings.
- Sec. 305. Cooperative research and development and special demonstration projects for the uranium mining industry.
- Sec. 306. Maintenance of a viable domestic uranium conversion industry.
- Sec. 307. Paducah decontamination and decommissioning plan.
- Sec. 308. Study to determine feasibility of developing commercial nuclear energy production facilities at existing department of energy sites.
- Sec. 309. Prohibition of commercial sales of uranium by the United States until 2009.

### TITLE IV—HYDROELECTRIC ENERGY

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

### TITLE V—FUELS

- Sec. 501. Tank draining during transition to summertime RFG.
- Sec. 502. Gasoline blendstock requirements.
- Sec. 503. Boutique fuels.
- Sec. 504. Funding for MTBE contamination.

### TITLE VI—RENEWABLE ENERGY

- Sec. 601. Assessment of renewable energy resources.
- Sec. 602. Renewable energy production incentive.
- Sec. 603. Study of ethanol from solid waste loan guarantee program.

Sec. 604. Study of renewable fuel content.

#### TITLE VII—PIPELINES

Sec. 701. Prohibition on certain pipeline route.

Sec. 702. Historic pipelines.

#### TITLE VIII—MISCELLANEOUS PROVISIONS

Sec. 801. Waste reduction and use of alternatives.

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

Sec. 803. Study of aircraft emissions.

### **DIVISION B**

Sec. 2001. Short title.

Sec. 2002. Findings.

Sec. 2003. Purposes.

Sec. 2004. Goals.

Sec. 2005. Definitions.

Sec. 2006. Authorizations.

Sec. 2007. Balance of funding priorities.

#### TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

##### Subtitle A—Alternative Fuel Vehicles

Sec. 2101. Short title.

Sec. 2102. Definitions.

Sec. 2103. Pilot program.

Sec. 2104. Reports to Congress.

Sec. 2105. Authorization of appropriations.

##### Subtitle B—Distributed Power Hybrid Energy Systems

Sec. 2121. Findings.

Sec. 2122. Definitions.

Sec. 2123. Strategy.

Sec. 2124. High power density industry program.

Sec. 2125. Micro-cogeneration energy technology.

Sec. 2126. Program plan.

Sec. 2127. Report.

Sec. 2128. Voluntary consensus standards.

##### Subtitle C—Secondary Electric Vehicle Battery Use

Sec. 2131. Definitions.

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

Sec. 2133. Authorization of appropriations.

##### Subtitle D—Green School Buses

Sec. 2141. Short title.

Sec. 2142. Establishment of pilot program.

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

Sec. 2144. Authorization of appropriations.

##### Subtitle E—Next Generation Lighting Initiative

- Sec. 2151. Short title.
- Sec. 2152. Definition.
- Sec. 2153. Next Generation Lighting Initiative.
- Sec. 2154. Study.
- Sec. 2155. Grant program.

Subtitle F—Department of Energy Authorization of Appropriations

- Sec. 2161. Authorization of appropriations.

Subtitle G—Environmental Protection Agency Office of Air and Radiation  
Authorization of Appropriations

- Sec. 2171. Short title.
- Sec. 2172. Authorization of appropriations.
- Sec. 2173. Limits on use of funds.
- Sec. 2174. Cost sharing.
- Sec. 2175. Limitation on demonstration and commercial applications of energy  
technology.
- Sec. 2176. Reprogramming.
- Sec. 2177. Budget request format.
- Sec. 2178. Other provisions.

Subtitle H—National Building Performance Initiative

- Sec. 2181. National Building Performance Initiative.

TITLE II—RENEWABLE ENERGY

Subtitle A—Hydrogen

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

Subtitle B—Bioenergy

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

Subtitle C—Transmission Infrastructure Systems

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

Subtitle D—Department of Energy Authorization of Appropriations

Sec. 2261. Authorization of appropriations.

TITLE III—NUCLEAR ENERGY

Subtitle A—University Nuclear Science and Engineering

- Sec. 2301. Short title.
- Sec. 2302. Findings.
- Sec. 2303. Department of Energy program.
- Sec. 2304. Authorization of appropriations.

Subtitle B—Advanced Fuel Recycling Technology Research and Development Program

Sec. 2321. Program.

Subtitle C—Department of Energy Authorization of Appropriations

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

TITLE IV—FOSSIL ENERGY

Subtitle A—Coal

Sec. 2401. Coal and related technologies programs.

Subtitle B—Oil and Gas

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

Subtitle C—Ultra-Deepwater and Unconventional Drilling

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

Subtitle D—Fuel Cells

Sec. 2461. Fuel cells.

Subtitle E—Department of Energy Authorization of Appropriations

Sec. 2481. Authorization of appropriations.

## TITLE V—SCIENCE

## Subtitle A—Fusion Energy Sciences

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

## Subtitle B—Spallation Neutron Source

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

## Subtitle C—Facilities, Infrastructure, and User Facilities

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

## Subtitle D—Advisory Panel on Office of Science

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

## Subtitle E—Department of Energy Authorization of Appropriations

- Sec. 2581. Authorization of appropriations.

## TITLE VI—MISCELLANEOUS

## Subtitle A—General Provisions for the Department of Energy

- Sec. 2601. Research, development, demonstration, and commercial application of energy technology programs, projects, and activities.
- Sec. 2602. Limits on use of funds.
- Sec. 2603. Cost sharing.
- Sec. 2604. Limitation on demonstration and commercial application of energy technology.
- Sec. 2605. Reprogramming.

## Subtitle B—Other Miscellaneous Provisions

- Sec. 2611. Notice of reorganization.
- Sec. 2612. Limits on general plant projects.
- Sec. 2613. Limits on construction projects.
- Sec. 2614. Authority for conceptual and construction design.
- Sec. 2615. National Energy Policy Development Group mandated reports.
- Sec. 2616. Periodic reviews and assessments.

**DIVISION C**

- Sec. 3001. Short title.

## TITLE I—CONSERVATION

- Sec. 3101. Credit for residential solar energy property.
- Sec. 3102. Extension and expansion of credit for electricity produced from renewable resources.
- Sec. 3103. Credit for qualified stationary fuel cell powerplants.
- Sec. 3104. Alternative motor vehicle credit.
- Sec. 3105. Extension of deduction for certain refueling property.
- Sec. 3106. Modification of credit for qualified electric vehicles.
- Sec. 3107. Tax credit for energy efficient appliances.
- Sec. 3108. Credit for energy efficiency improvements to existing homes.
- Sec. 3109. Business credit for construction of new energy efficient home.
- Sec. 3110. Allowance of deduction for energy efficient commercial building property.
- Sec. 3111. Allowance of deduction for qualified energy management devices and retrofitted qualified meters.
- Sec. 3112. Three-year applicable recovery period for depreciation of qualified energy management devices.
- Sec. 3113. Energy credit for combined heat and power system property.
- Sec. 3114. New nonrefundable personal credits allowed against regular and minimum taxes.
- Sec. 3115. Phaseout of 4.3-cent motor fuel excise taxes on railroads and inland waterway transportation which remain in general fund.
- Sec. 3116. Reduced motor fuel excise tax on certain mixtures of diesel fuel.
- Sec. 3117. Credit for investment in qualifying advanced clean coal technology.
- Sec. 3118. Credit for production from qualifying advanced clean coal technology.

## TITLE II—RELIABILITY

- Sec. 3201. Natural gas gathering lines treated as 7-year property.
- Sec. 3202. Natural gas distribution lines treated as 10-year property.
- Sec. 3203. Petroleum refining property treated as 7-year property.
- Sec. 3204. Expensing of capital costs incurred in complying with environmental protection agency sulfur regulations.
- Sec. 3205. Environmental tax credit.
- Sec. 3206. Determination of small refiner exception to oil depletion deduction.
- Sec. 3207. Tax-exempt bond financing of certain electric facilities.
- Sec. 3208. Sales or dispositions to implement Federal Energy Regulatory Commission or State electric restructuring policy.
- Sec. 3209. Distributions of stock to implement Federal Energy Regulatory Commission or State electric restructuring policy.
- Sec. 3210. Modifications to special rules for nuclear decommissioning costs.
- Sec. 3211. Treatment of certain income of cooperatives.
- Sec. 3212. Repeal of requirement of certain approved terminals to offer dyed diesel fuel and kerosene for nontaxable purposes.
- Sec. 3213. Arbitrage rules not to apply to prepayments for natural gas.

## TITLE III—PRODUCTION

- Sec. 3301. Oil and gas from marginal wells.
- Sec. 3302. Temporary suspension of limitation based on 65 percent of taxable income and extension of suspension of taxable income limit with respect to marginal production.
- Sec. 3303. Deduction for delay rental payments.
- Sec. 3304. Election to expense geological and geophysical expenditures.



- Sec. 3305. Five-year net operating loss carryback for losses attributable to operating mineral interests of oil and gas producers.
- Sec. 3306. Extension and modification of credit for producing fuel from a non-conventional source.
- Sec. 3307. Business related energy credits allowed against regular and minimum tax.
- Sec. 3308. Temporary repeal of alternative minimum tax preference for intangible drilling costs.
- Sec. 3309. Allowance of enhanced recovery credit against the alternative minimum tax.
- Sec. 3310. Extension of certain benefits for energy-related businesses on Indian reservations.

## **DIVISION D**

- Sec. 4101. Capacity building for energy-efficient, affordable housing.
- Sec. 4102. Increase of CDBG public services cap for energy conservation and efficiency activities.
- Sec. 4103. FHA mortgage insurance incentives for energy efficient housing.
- Sec. 4104. Public housing capital fund.
- Sec. 4105. Grants for energy-conserving improvements for assisted housing.
- Sec. 4106. North American Development Bank.

## **DIVISION E**

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

## **DIVISION F**

- Sec. 6000. Short title.

### **TITLE I—GENERAL PROTECTIONS FOR ENERGY SUPPLY AND SECURITY**

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

### **TITLE II—OIL AND GAS DEVELOPMENT**

#### **Subtitle A—Offshore Oil and Gas**

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

#### Subtitle B—Improvements to Federal Oil and Gas Management

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

#### Subtitle C—Miscellaneous

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

### TITLE III—GEOTHERMAL ENERGY DEVELOPMENT

- Sec. 6301. Royalty reduction and relief.
- Sec. 6302. Exemption from royalties for direct use of low temperature geothermal energy resources.
- Sec. 6303. Amendments relating to leasing on Forest Service lands.
- Sec. 6304. Deadline for determination on pending noncompetitive lease applications.
- Sec. 6305. Opening of public lands under military jurisdiction.
- Sec. 6306. Application of amendments.
- Sec. 6307. Review and report to Congress.
- Sec. 6308. Reimbursement for costs of NEPA analyses, documentation, and studies.

### TITLE IV—HYDROPOWER

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

### TITLE V—ARCTIC COASTAL PLAIN DOMESTIC ENERGY

- Sec. 6501. Short title.
- Sec. 6502. Definitions.
- Sec. 6503. Leasing program for lands within the Coastal Plain.
- Sec. 6504. Lease sales.
- Sec. 6505. Grant of leases by the Secretary.
- Sec. 6506. Lease terms and conditions.
- Sec. 6507. Coastal Plain environmental protection.

- Sec. 6508. Expedited judicial review.
- Sec. 6509. Rights-of-way across the Coastal Plain.
- Sec. 6510. Conveyance.
- Sec. 6511. Local government impact aid and community service assistance.
- Sec. 6512. Revenue allocation.

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

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

#### TITLE VII—COAL

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

#### TITLE VIII—INSULAR AREAS ENERGY SECURITY

- Sec. 6801. Insular areas energy security.

### DIVISION G

- Sec. 7101. Buy American.

#### **1 SEC. 2. ENERGY POLICY.**

2       It shall be the sense of the Congress that the United  
3 States should take all actions necessary in the areas of  
4 conservation, efficiency, alternative source, technology de-  
5 velopment, and domestic production to reduce the United  
6 States dependence on foreign energy sources from 56 per-  
7 cent to 45 percent by January 1, 2012, and to reduce  
8 United States dependence on Iraqi energy sources from  
9 700,000 barrels per day to 250,000 barrels per day by  
10 January 1, 2012.

## **DIVISION A**

### **SEC. 100. SHORT TITLE.**

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

## **TITLE I—ENERGY**

## **CONSERVATION**

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

### **SEC. 101. AUTHORIZATION OF APPROPRIATIONS.**

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

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

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

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

“(1) Energy Policy and Conservation Act, including section 256(d)(42 U.S.C. 6276(d)) (promote

1 export of energy efficient products), sections 321  
2 through 346 (42 U.S.C. 6291–6317) (appliances  
3 program).

4 “(2) Energy Conservation and Production Act,  
5 including sections 301 through 308 (42 U.S.C.  
6 6831–6837) (energy conservation standards for new  
7 buildings).

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

11 “(4) Energy Policy Act of 1992, including sec-  
12 tions 103 (42 U.S.C. 13458) (energy efficient light-  
13 ing and building centers), 121 (42 U.S.C. 6292  
14 note) (energy efficiency labeling for windows and  
15 window systems), 125 (42 U.S.C. 6292 note) (en-  
16 ergy efficiency information for commercial office  
17 equipment), 126 (42 U.S.C. 6292 note) (energy effi-  
18 ciency information for luminaires), 131 (42 U.S.C.  
19 6348) (energy efficiency in industrial facilities), and  
20 132 (42 U.S.C. 6349) (process-oriented industrial  
21 energy efficiency).”.

1     **Subtitle B—Federal Leadership in**  
2                     **Energy Conservation**

3     **SEC. 121. FEDERAL FACILITIES AND NATIONAL ENERGY SE-**  
4                     **CURITY.**

5             (a) PURPOSE.—Section 542 of the National Energy  
6 Conservation Policy Act (42 U.S.C. 8252) is amended by  
7 inserting “, and generally to promote the production, sup-  
8 ply, and marketing of energy efficiency products and serv-  
9 ices and the production, supply, and marketing of uncon-  
10 ventional and renewable energy resources” after “by the  
11 Federal Government”.

12            (b) ENERGY MANAGEMENT REQUIREMENTS.—Sec-  
13 tion 543 of the National Energy Conservation Policy Act  
14 (42 U.S.C. 8253) is amended as follows:

15                (1) In subsection (a)(1), by striking “during the  
16 fiscal year 1995” and all that follows through the  
17 end and inserting “during—  
18 “(1) fiscal year 1995 is at least 10 percent;  
19 “(2) fiscal year 2000 is at least 20 percent;  
20 “(3) fiscal year 2005 is at least 30 percent;  
21 “(4) fiscal year 2010 is at least 35 percent;  
22 “(5) fiscal year 2015 is at least 40 percent; and  
23 “(6) fiscal year 2020 is at least 45 percent,  
24 less than the energy consumption per gross square foot  
25 of its Federal buildings in use during fiscal year 1985.

1 To achieve the reductions required by this paragraph, an  
2 agency shall make maximum practicable use of energy effi-  
3 ciency products and services and unconventional and re-  
4 newable energy resources, using guidelines issued by the  
5 Secretary under subsection (d) of this section.”.

6           (2) In subsection (d), by inserting “Such guide-  
7 lines shall include appropriate model technical stand-  
8 ards for energy efficiency and unconventional and  
9 renewable energy resources products and services.  
10 Such standards shall reflect, to the extent prac-  
11 ticable, evaluation of both currently marketed and  
12 potentially marketable products and services that  
13 could be used by agencies to improve energy effi-  
14 ciency and increase unconventional and renewable  
15 energy resources.” after “implementation of this  
16 part.”.

17           (3) By adding at the end the following new sub-  
18 section:

19           “(e) STUDIES.—To assist in developing the guidelines  
20 issued by the Secretary under subsection (d) and in fur-  
21 therance of the purposes of this section, the Secretary  
22 shall conduct studies to identify and encourage the pro-  
23 duction and marketing of energy efficiency products and  
24 services and unconventional and renewable energy re-  
25 sources. To conduct such studies, and to provide grants

1 to accelerate the use of unconventional and renewable en-  
 2 ergy, there are authorized to be appropriated to the Sec-  
 3 retary \$20,000,000 for each of the fiscal years 2003  
 4 through 2010.”.

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

8 (1) By striking “and” at the end of paragraph  
 9 (8).

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

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

14 “(10) the term ‘unconventional and renewable  
 15 energy resources’ includes renewable energy sources,  
 16 hydrogen, fuel cells, cogeneration, combined heat  
 17 and power, heat recovery (including by use of a Stir-  
 18 ling heat engine), and distributed generation.”.

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

22 (1) In section 543(a)—

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

25 and



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

3 (2) By amending subsection (c) of such section  
4 543 to read as follows:

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

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

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

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

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

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

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

24 (3) In section 548(b)(1)(A)—

25 (A) by striking “copy of the”; and

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

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

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

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

10 “(5)(A)(i) Agencies shall select only Energy Star  
11 products when available when acquiring energy-using  
12 products. For product groups where Energy Star labels  
13 are not yet available, agencies shall select products that  
14 are in the upper 25 percent of energy efficiency as des-  
15 ignated by FEMP. In the case of electric motors of 1 to  
16 500 horsepower, agencies shall select only premium effi-  
17 ciency motors that meet a standard designated by the Sec-  
18 retary, and shall replace (not rewind) failed motors with  
19 motors meeting such standard. The Secretary shall des-  
20 ignate such standard within 90 days of the enactment of  
21 paragraph, after considering recommendations by the Na-  
22 tional Electrical Manufacturers Association. The Sec-  
23 retary of Energy shall develop guidelines within 180 days  
24 after the enactment of this paragraph for exemptions to

1 this section when equivalent products do not exist, are im-  
2 practical, or do not meet the 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 ignated 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 ignated 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 the General Services Administration and rep-  
4 resentatives from the metering industry, energy services  
5 industry, national laboratories, colleges of higher edu-  
6 cation, and federal facilities energy managers, shall estab-  
7 lish guidelines for agencies to carry out paragraph (1).  
8 Such guidelines shall take into consideration each of the  
9 following:

10           “(A) Cost.

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

14           “(C) Energy management potential.

15           “(D) Energy savings.

16           “(E) Utility contract aggregation.

17           “(F) Savings from operations and maintenance.

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

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

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

8       (h) REPORTS.—Section 548 of such Act (42 U.S.C.  
9 8258) is amended as follows:

10           (1) In subsection (a)—

11                   (A) by inserting “in accordance with guide-  
12 lines established by and” after “to the Sec-  
13 retary,”;

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

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

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

20                   “(3) an energy emergency response plan devel-  
21 oped by the agency.”.

22           (2) In subsection (b)—

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

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

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

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

7 (3) By amending subsection (c) to read as fol-  
8 lows:

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

14 (i) INSPECTOR GENERAL ENERGY AUDITS.—Section  
15 160(c) of the Energy Policy Act of 1992 (42 U.S.C.  
16 8262f(c)) is amended by striking “is encouraged to con-  
17 duct periodic” and inserting “shall conduct periodic”.

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

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

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

4 “(A) increasing energy and water con-  
5 servation, and

6 “(B) using renewable energy sources; and

7 “(2) not later than 180 days after completing  
8 the review, develop plans to achieve not less than 50  
9 percent of the potential efficiency and renewable sav-  
10 ings identified in the review.

11 The agency shall implement such measures as soon there-  
12 after as is practicable, consistent with compliance with the  
13 requirements of this section.”.

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

17 (a) COST SAVINGS FROM OPERATION AND MAINTENANCE  
18 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 “(3)(A) In the case of an energy savings contract or  
23 energy savings performance contract providing for energy  
24 savings through the construction and operation of one or  
25 more buildings or facilities to replace one or more existing



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

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

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

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

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

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

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

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

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

22 (2) ENERGY SAVINGS CONTRACT.—Section  
23 804(3) of the National Energy Conservation Policy  
24 Act (42 U.S.C. 8287c(3)) is amended to read as fol-  
25 lows:

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

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

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

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

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

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

23                   “(B) a water conservation measure that  
24           improves water efficiency, is life cycle cost effec-  
25           tive, and involves water conservation, water re-

1 cycling or reuse, improvements in operation or  
 2 maintenance efficiencies, retrofit activities, or  
 3 other related activities, not at a Federal hydro-  
 4 electric facility.”.

5 (4) CONFORMING AMENDMENT.—Section  
 6 801(a)(2)(C) of the National Energy Conservation  
 7 Policy Act (42 U.S.C. 8287(a)(2)(C)) is amended by  
 8 inserting “or water” after “financing energy”.

9 (c) EXTENSION OF AUTHORITY.—Section 801(c) of  
 10 the National Energy Conservation Policy Act (42 U.S.C.  
 11 8287(c)) is repealed.

12 (d) CONTRACTING AND AUDITING.—Section  
 13 801(a)(2) of the National Energy Conservation Policy Act  
 14 (42 U.S.C. 8287(a)(2)) is amended by adding at the end  
 15 the following new subparagraph:

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

21 **SEC. 123. CLARIFICATION AND ENHANCEMENT OF AUTHOR-**  
 22 **ITY TO ENTER UTILITY INCENTIVE PRO-**  
 23 **GRAMS FOR ENERGY SAVINGS.**

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

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

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

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

20          “(7) Federal agencies are encouraged to participate  
21          in State or regional demand side reduction programs, in-  
22          cluding those operated by wholesale market institutions  
23          such as independent system operators, regional trans-  
24          mission organizations and other entities. The availability  
25          of such programs, and the savings resulting from such

1 participation, should be included in the evaluation of en-  
 2 ergy options for Federal facilities.”.

3 **SEC. 124. FEDERAL CENTRAL AIR CONDITIONER AND HEAT**  
 4 **PUMP EFFICIENCY.**

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

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

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

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

20 (c) MODIFIED STANDARDS.—The Secretary of En-  
 21 ergy may establish, after appropriate notice and comment,  
 22 revised standards providing for reduced energy consump-  
 23 tion or increased energy efficiency of central air condi-  
 24 tioners and heat pumps acquired by the Federal Govern-

1 ment, but may not establish standards less rigorous than  
2 those established by subsection (b).

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

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

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

18 (2) space constraints or other technical factors  
19 would make compliance with this section cost-prohib-  
20 itive; or

21 (3) in the case of the Departments of Defense  
22 and Energy, compliance with this section would be  
23 inconsistent with the proper discharge of national se-  
24 curity functions.

1 **SEC. 125. ADVANCED BUILDING EFFICIENCY TESTBED.**

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

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

25 (c) AUTHORIZATION OF APPROPRIATIONS.—There  
26 are authorized to be appropriated to the Secretary of En-



1 ergy to carry out this section \$18,000,000 for fiscal year  
 2 2002, to remain available until expended, of which  
 3 \$6,000,000 shall be provided to the lead university de-  
 4 scribed in subsection (b), and the remainder shall be pro-  
 5 vided equally to each of the other participants referred to  
 6 in subsection (b).

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

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

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

1 **SEC. 127. REVIEW OF ENERGY SAVINGS PERFORMANCE**  
2 **CONTRACT PROGRAM.**

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

20 **SEC. 128. CAPITOL COMPLEX.**

21       (a) **ENERGY INFRASTRUCTURE.**—The Architect of  
22 the Capitol, building on the Master Plan Study completed  
23 in July 2000, shall commission a study to evaluate the  
24 energy infrastructure of the Capital Complex to determine  
25 how the infrastructure could be augmented to become  
26 more energy efficient, using unconventional and renewable

1 energy resources, in a way that would enable the Complex  
 2 to have reliable utility service in the event of power fluc-  
 3 tuations, shortages, or outages.

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

## 8 **Subtitle C—State Programs**

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

10 (a) STATE ENERGY CONSERVATION PLANS.—Section  
 11 362 of the Energy Policy and Conservation Act (42 U.S.C.  
 12 6322) is amended by inserting at the end the following  
 13 new subsection:

14 “(g) The Secretary shall, at least once every 3 years,  
 15 invite the Governor of each State to review and, if nec-  
 16 essary, revise the energy conservation plan of such State  
 17 submitted under subsection (b) or (e). Such reviews should  
 18 consider the energy conservation plans of other States  
 19 within the region, and identify opportunities and actions  
 20 carried out in pursuit of common energy conservation  
 21 goals.”.

22 (b) STATE ENERGY EFFICIENCY GOALS.—Section  
 23 364 of the Energy Policy and Conservation Act (42 U.S.C.  
 24 6324) is amended by inserting “Each State energy con-  
 25 servation plan with respect to which assistance is made

1 available under this part on or after the date of the enact-  
 2 ment of Energy Advancement and Conservation Act of  
 3 2001, shall contain a goal, consisting of an improvement  
 4 of 25 percent or more in the efficiency of use of energy  
 5 in the State concerned in the calendar year 2010 as com-  
 6 pared to the calendar year 1990, and may contain interim  
 7 goals.” after “contain interim goals.”.

8 (c) AUTHORIZATION OF APPROPRIATIONS.—Section  
 9 365(f) of the Energy Policy and Conservation Act (42  
 10 U.S.C. 6325(f)) is amended by striking “for fiscal years  
 11 1999 through 2003 such sums as may be necessary” and  
 12 inserting “\$75,000,000 for fiscal year 2002,  
 13 \$100,000,000 for fiscal years 2003 and 2004,  
 14 \$125,000,000 for fiscal year 2005”.

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

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

20 **SEC. 133. AMENDMENTS TO WEATHERIZATION ASSISTANCE**  
 21 **PROGRAM.**

22 Section 422 of the Energy Conservation and Produc-  
 23 tion Act (42 U.S.C. 6872) is amended by striking “for  
 24 fiscal years 1999 through 2003 such sums as may be nec-  
 25 essary” and inserting “\$273,000,000 for fiscal year 2002,

1 \$325,000,000 for fiscal year 2003, \$400,000,000 for fis-  
2 cal year 2004, and \$500,000,000 for fiscal year 2005”.

3 **SEC. 134. LIHEAP.**

4 (a) AUTHORIZATION OF APPROPRIATIONS.—Section  
5 2602(b) of the Low-Income Home Energy Assistance Act  
6 of 1981 (42 U.S.C. 8621(b)) is amended by striking the  
7 first sentence and inserting the following: “There are au-  
8 thorized to be appropriated to carry out the provisions of  
9 this title (other than section 2607A), \$3,400,000,000 for  
10 each of fiscal years 2001 through 2005.”.

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

13 (1) the extent to which Low-Income Home En-  
14 ergy Assistance (LIHEAP) and other government  
15 energy subsidies paid to consumers discourage or en-  
16 courage energy conservation and energy efficiency  
17 investments when compared to structures of the  
18 same physical description and occupancy in compat-  
19 ible geographic locations;

20 (2) the extent to which education could increase  
21 the conservation of low-income households who opt  
22 to receive supplemental income instead of Low-In-  
23 come Home Energy Assistance funds;

24 (3) the benefit in energy efficiency and energy  
25 savings that can be achieved through the annual

1 maintenance of heating and cooling appliances in the  
 2 homes of those receiving Low-Income Home Energy  
 3 Assistance funds; and

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

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

10 (a) PROGRAM ESTABLISHMENT AND ADMINISTRA-  
 11 TION.—

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

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

18 (A) to assist units of local government in  
 19 the production, through construction or renova-  
 20 tion of buildings and facilities they own and op-  
 21 erate, of high performance public buildings and  
 22 facilities that are healthful, productive, energy  
 23 efficient, and environmentally sound;

1 (B) to State energy offices to administer  
2 the program of assistance to units of local gov-  
3 ernment pursuant to this section; and

4 (C) to State energy offices to promote par-  
5 ticipation by units of local government in the  
6 Program.

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

23 (A) demonstrated a need for such grants  
24 in order to respond appropriately to increasing

1 population or to make major investments in  
2 renovation of public buildings; and

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

7 (4) OTHER GRANTS.—

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

13 (i) distributing information and mate-  
14 rials to clearly define and promote the de-  
15 velopment of high performance public  
16 buildings for both new and existing facili-  
17 ties;

18 (ii) organizing and conducting pro-  
19 grams for local government personnel, ar-  
20 chitects, engineers, and others to advance  
21 the concepts of high performance public  
22 buildings;

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



1 (iv) collecting and monitoring data  
2 and information pertaining to the high per-  
3 formance public building projects.

4 (B) GRANTS TO PROMOTE PARTICIPA-  
5 TION.—Grants under paragraph (2)(C) may be  
6 used for promotional and marketing activities,  
7 including facilitating private and public financ-  
8 ing, promoting the use of energy service compa-  
9 nies, working with public building users, and  
10 communities, and coordinating public benefit  
11 programs.

12 (5) IMPLEMENTATION.—

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

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

25 (b) ALLOCATION OF FUNDS.—

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

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

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

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

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

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

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

1       (d) REPORT TO CONGRESS.—The Secretary of En-  
2   ergy shall conduct a biennial review of State actions imple-  
3   menting this section, and the Secretary shall report to  
4   Congress on the results of such reviews. In conducting  
5   such reviews, the Secretary shall assess the effectiveness  
6   of the calculation procedures used by the States in estab-  
7   lishing eligibility of units of local government for funding  
8   under this section, and may assess other aspects of the  
9   State program to determine whether they have been effec-  
10  tively implemented.

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

12           (1) HIGH PERFORMANCE PUBLIC BUILDING.—

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

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

1           (3) UNCONVENTIONAL AND RENEWABLE EN-  
2           ERGY RESOURCES.—The term “unconventional and  
3           renewable energy resources” means renewable en-  
4           ergy, hydrogen, fuel cells, cogeneration, combined  
5           heat and power, heat recovery (including by use of  
6           a Stirling heat engine), and distributed generation.

7           **Subtitle D—Energy Efficiency for**  
8           **Consumer Products**

9           **SEC. 141. ENERGY STAR PROGRAM.**

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

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

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

1           “(1) promote Energy Star compliant tech-  
2           nologies as the preferred technologies in the market-  
3           place for achieving energy efficiency and to reduce  
4           pollution;

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

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

9   For the purposes of carrying out this section, there is au-  
10   thorized to be appropriated for fiscal years 2002 through  
11   2006 such sums as may be necessary, to remain available  
12   until expended.

13       “(b) STUDY OF CERTAIN PRODUCTS AND BUILD-  
14   INGS.—Within 180 days after the date of the enactment  
15   of this section, the Secretary and the Administrator, con-  
16   sistent with the terms of agreements between the two  
17   agencies (including existing agreements with respect to  
18   which agency shall handle a particular product or build-  
19   ing), shall determine whether the Energy Star label should  
20   be extended to additional products and buildings, includ-  
21   ing the following:

22           “(1) Air cleaners.

23           “(2) Ceiling fans.

24           “(3) Light commercial heating and cooling  
25           products.

- 1 “(4) Reach-in refrigerators and freezers.
- 2 “(5) Telephony.
- 3 “(6) Vending machines.
- 4 “(7) Residential water heaters.
- 5 “(8) Refrigerated beverage merchandisers.
- 6 “(9) Commercial ice makers.
- 7 “(10) School buildings.
- 8 “(11) Retail buildings.
- 9 “(12) Health care facilities.
- 10 “(13) Homes.
- 11 “(14) Hotels and other commercial lodging fa-
- 12 cilities.
- 13 “(15) Restaurants and other food service facili-
- 14 ties.
- 15 “(16) Solar water heaters.
- 16 “(17) Building-integrated photovoltaic systems.
- 17 “(18) Reflective pigment coatings.
- 18 “(19) Windows.
- 19 “(20) Boilers.
- 20 “(21) Devices to extend the life of motor vehicle
- 21 oil.
- 22 “(c) COOL ROOFING.—In determining whether the
- 23 Energy Star label should be extended to roofing products,
- 24 the Secretary and the Administrator shall work with the

1 roofing products industry to determine the appropriate  
2 solar reflective index of roofing products.”.

3 (b) TABLE OF CONTENTS AMENDMENT.—The table  
4 of contents of the Energy Policy and Conservation Act is  
5 amended by inserting after the item relating to section  
6 324 the following new item:

“Sec. 324A. Energy Star program.”.

7 **SEC. 141A. ENERGY SUN RENEWABLE AND ALTERNATIVE**  
8 **ENERGY PROGRAM.**

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

12 **“SEC. 324B. ENERGY SUN RENEWABLE AND ALTERNATIVE**  
13 **ENERGY PROGRAM.**

14 “(a) PROGRAM.—There is established at the Environ-  
15 mental Protection Agency and the Department of Energy  
16 a government-industry partnership program to identify  
17 and promote the purchase of renewable and alternative en-  
18 ergy products, to recognize companies that purchase re-  
19 newable and alternative energy products for the environ-  
20 mental and energy security benefits of such purchases,  
21 and to educate consumers about the environmental and  
22 energy security benefits of renewable and alternative en-  
23 ergy. Responsibilities under the program shall be divided  
24 between the Environmental Protection Agency and the  
25 Department of Energy consistent with the terms of agree-

1 ments between the two agencies. The Administrator of the  
2 Environmental Protection Agency and the Secretary of  
3 Energy—

4 “(1) establish an Energy Sun label for renew-  
5 able and alternative energy products and tech-  
6 nologies that the Administrator or the Secretary  
7 (consistent with the terms of agreements between  
8 the two agencies regarding responsibility for specific  
9 product categories) determine to have substantial  
10 environmental and energy security benefits and com-  
11 mercial marketability.

12 “(2) establish an Energy Sun Company pro-  
13 gram to recognize private companies that draw a  
14 substantial portion of their energy from renewable  
15 and alternative sources that provide substantial envi-  
16 ronmental and energy security benefits, as deter-  
17 mined by the Administrator or the Secretary.

18 “(3) promote Energy Sun compliant products  
19 and technologies as the preferred products and tech-  
20 nologies in the marketplace for reducing pollution  
21 and achieving energy security; and

22 “(4) work to enhance public awareness and pre-  
23 serve the integrity of the Energy Sun label.



1 For the purposes of carrying out this section, there is au-  
2 thorized to be appropriated \$10,000,000 for each of fiscal  
3 years 2002 through 2006.

4 “(b) STUDY OF CERTAIN PRODUCTS, TECH-  
5 NOLOGIES, AND BUILDINGS.—Within 18 months after the  
6 enactment of this section, the Administrator and the Sec-  
7 retary, consistent with the terms of agreements between  
8 the two agencies, shall conduct a study to determine  
9 whether the Energy Sun label should be authorized for  
10 products, technologies, and buildings in the following cat-  
11 egories:

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

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

17 “(3) Wind.

18 “(4) Geothermal.

19 “(5) Biomass.

20 “(6) Distributed energy (including, but not lim-  
21 ited to, microturbines, combined heat and power,  
22 fuel cells, and stirling heat engines).

23 “(7) Green power or other renewables and al-  
24 ternative based electric power products (including

1 green tag credit programs) sold to retail consumers  
2 of electricity.

3 “(8) Homes.

4 “(9) School buildings.

5 “(10) Retail buildings.

6 “(11) Health care facilities.

7 “(12) Hotels and other commercial lodging fa-  
8 cilities.

9 “(13) Restaurants and other food service facili-  
10 ties.

11 “(14) Rest area facilities along interstate high-  
12 ways.

13 “(15) Sports stadia, arenas, and concert facili-  
14 ties.

15 “(16) Any other product, technology or building  
16 category, the accelerated recognition of which the  
17 Administrator or the Secretary determines to be nec-  
18 essary or appropriate for the achievement of the  
19 purposes of this section.

20 Nothing in this subsection shall be construed to limit the  
21 discretion of the Administrator or the Secretary under  
22 subsection (a)(1) to include in the Energy Sun program  
23 additional products, technologies, and buildings not listed  
24 in this subsection. Participation by private-sector entities  
25 in programs or studies authorized by this section shall be

1 (A) voluntary, and (B) by permission of the Administrator  
 2 or Secretary, on terms and conditions the Administrator  
 3 or the Secretary (consistent with agreements between the  
 4 agencies) deems necessary or appropriate to carry out the  
 5 purposes and requirements of this section.

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

11 (b) TABLE OF CONTENTS AMENDMENT.—The table  
 12 of contents of the Energy Policy and Conservation Act is  
 13 amended by inserting after the item relating to section  
 14 324A the following new item:

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

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

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

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

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

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

1       “(2) The Secretary shall make recommendations to  
2 the Commission within 180 days of the date of the enact-  
3 ment of this paragraph regarding labeling of consumer  
4 products that are not covered products in accordance with  
5 this section, where such labeling is likely to assist con-  
6 sumers in making purchasing decisions and is techno-  
7 logically and economically feasible.”.

8       (b) NONCOVERED PRODUCTS.—Section 324(a)(2) of  
9 the Energy Policy and Conservation Act (42 U.S.C.  
10 6294(a)(2)) is amended by adding the following at the  
11 end:

12       “(F) Not later than 1 year after the date of the en-  
13 actment of this subparagraph, the Commission shall ini-  
14 tiate a rulemaking to prescribe labeling rules under this  
15 section applicable to consumer products that are not cov-  
16 ered products if it determines that labeling of such prod-  
17 ucts is likely to assist consumers in making purchasing  
18 decisions and is technologically and economically feasible.

19       “(G) Not later than 3 months after the date of the  
20 enactment of this subparagraph, the Commission shall ini-  
21 tiate a rulemaking to consider the effectiveness of the cur-  
22 rent consumer products labeling program in assisting con-  
23 sumers in making purchasing decisions and improving en-  
24 ergy efficiency and to consider changes to the label that  
25 would improve the effectiveness of the label. Such rule-

1 making shall be completed within 15 months of the date  
2 of the enactment of this subparagraph.”.

3 **SEC. 143. APPLIANCE STANDARDS.**

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

8 “(u) STANDBY MODE ELECTRIC ENERGY CONSUMP-  
9 TION BY HOUSEHOLD APPLIANCES.—(1) In this sub-  
10 section:

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

1           “(B) The term ‘standby mode’ means a mode  
2           in which a household appliance consumes the least  
3           amount of electric energy that the household appli-  
4           ance is capable of consuming without being com-  
5           pletely switched off (provided that, the amount of  
6           electric energy consumed in such mode is substan-  
7           tially less than the amount the household appliance  
8           would consume in its normal operational mode).

9           “(C) The term ‘major consumer of electricity in  
10          standby mode’ means a product for which a stand-  
11          ard prescribed under this section would result in  
12          substantial energy savings as compared to energy  
13          savings achieved or expected to be achieved by  
14          standards established by the Secretary under sub-  
15          sections (o) and (p) of this section for products that  
16          were, at the time of the enactment of this sub-  
17          section, covered products under this section.

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

24          “(B) In the case of analog televisions, the Secretary  
25          shall prescribe, on or after the date that is 2 years after

1 the date of the enactment of this subsection, in accordance  
2 with subsections (o) and (p) of section 325, an energy con-  
3 servation standard that is technologically feasible and eco-  
4 nomically justified under section 325(o)(2)(A) (in lieu of  
5 the 1 watt standard under subparagraph (A)).

6 “(3)(A) A manufacturer or importer of a household  
7 appliance may submit to the Secretary an application for  
8 an exemption of the household appliance from the stand-  
9 ard under paragraph (2).

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

14 “(i) it is not technically feasible to modify the  
15 household appliance to enable the household appli-  
16 ance to meet the standard;

17 “(ii) the standard is incompatible with an en-  
18 ergy efficiency standard applicable to the household  
19 appliance under another subsection; or

20 “(iii) the cost of electricity that a typical con-  
21 sumer would save in operating the household appli-  
22 ance meeting the standard would not equal the in-  
23 crease in the price of the household appliance that  
24 would be attributable to the modifications that

1 would be necessary to enable the household appli-  
2 ance to meet the standard by the earlier of—

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

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

7 “(C) If the Secretary determines that it is not tech-  
8 nically feasible to modify a household appliance to meet  
9 the standard under paragraph (2), the Secretary shall es-  
10 tablish a different standard for the household appliance  
11 in accordance with the criteria under subsection (l).

12 “(4)(A) Not later than 1 year after the date of the  
13 enactment of this subsection, the Secretary shall establish  
14 a test procedure for determining the amount of consump-  
15 tion of power by a household appliance operating in stand-  
16 by mode.

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

19 “(i) international test procedures under devel-  
20 opment;

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

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



1       “(5) FURTHER REDUCTION OF STANDBY POWER  
 2 CONSUMPTION.—The Secretary shall provide technical as-  
 3 sistance to manufacturers in achieving further reductions  
 4 in standby mode electric energy consumption by household  
 5 appliances.

6       “(v) STANDBY MODE ELECTRIC ENERGY CONSUMP-  
 7 TION BY DIGITAL TELEVISIONS, DIGITAL SET TOP  
 8 BOXES, AND DIGITAL VIDEO RECORDERS.—The Sec-  
 9 retary shall initiate on January 1, 2007 a rulemaking to  
 10 prescribe, in accordance with subsections (o) and (p), an  
 11 energy conservation standard of standby mode electric en-  
 12 ergy consumption by digital television sets, digital set top  
 13 boxes, and digital video recorders. The Secretary shall  
 14 issue a final rule prescribing such standards not later than  
 15 18 months thereafter. In determining whether a standard  
 16 under this section is technologically feasible and economi-  
 17 cally justified under section 325(o)(2)(A), the Secretary  
 18 shall consider the potential effects on market penetration  
 19 by digital products covered under this section, and shall  
 20 consider any recommendations by the FCC regarding such  
 21 effects.”.

22           (2) Section 325(o)(3) of the Energy Policy and  
 23 Conservation Act (42 U.S.C. 6295(n)(1)) is amend-  
 24 ed by inserting at the end of the paragraph the fol-  
 25 lowing: “Notwithstanding any provision of this part,

1 the Secretary shall not amend a standard estab-  
2 lished under subsection (u) or (v) of this section.”.

3 (b) STANDARDS FOR NONCOVERED PRODUCTS.—

4 Section 325(m) of the Energy Policy and Conservation  
5 Act (42 U.S.C. 6295(m)) is amended as follows:

6 (1) Inserting “(1)” before “After”.

7 (2) Inserting the following at the end:

8 “(2) Not later than 1 year after the date of the enact-  
9 ment of the Energy Advancement and Conservation Act  
10 of 2001, the Secretary shall conduct a rulemaking to de-  
11 termine whether consumer products not classified as a  
12 covered product under section 322(a)(1) through (18)  
13 meet the criteria of section 322(b)(1) and is a major con-  
14 sumer of electricity. If the Secretary finds that a consumer  
15 product not classified as a covered product meets the cri-  
16 teria of section 322(b)(1), he shall prescribe, in accordance  
17 with subsections (o) and (p), an energy conservation  
18 standard for such consumer product, if such standard is  
19 reasonably probable to be technologically feasible and eco-  
20 nomically justified within the meaning of subsection  
21 (o)(2)(A). As used in this paragraph, the term ‘major con-  
22 sumer of electricity’ means a product for which a standard  
23 prescribed under this section would result in substantial  
24 aggregate energy savings as compared to energy savings  
25 achieved or expected to be achieved by standards estab-

1 lished by the Secretary under paragraphs (o) and (p) of  
2 this section for products that were, at the time of the en-  
3 actment of this paragraph, covered products under this  
4 section.”.

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

11 “(c) HVAC MAINTENANCE.—For the purpose of en-  
12 suring that installed air conditioning and heating systems  
13 operate at their maximum rated efficiency levels, the Sec-  
14 retary shall, within 180 days of the date of the enactment  
15 of this subsection, develop and implement a public edu-  
16 cation campaign to educate homeowners and small busi-  
17 ness owners concerning the energy savings resulting from  
18 regularly scheduled maintenance of air conditioning, heat-  
19 ing, and ventilating systems. In developing and imple-  
20 menting this campaign, the Secretary shall consider sup-  
21 port by the Department of public education programs  
22 sponsored by trade and professional and energy efficiency  
23 organizations. The public service information shall provide  
24 sufficient information to allow consumers to make in-  
25 formed choices from among professional, licensed (where

1 State or local licensing is required) contractors. There are  
 2 authorized to be appropriated to carry out this subsection  
 3 \$5,000,000 for fiscal years 2002 and 2003 in addition to  
 4 amounts otherwise appropriated in this part.”.

5 (d) EFFICIENCY STANDARDS FOR FURNACE FANS,  
 6 CEILING FANS, AND COLD DRINK VENDING MA-  
 7 CHINES.—

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

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

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

23 “(34) The term ‘suspended ceiling fan’ means  
 24 a fan intended to be mounted to a ceiling outlet box,  
 25 ceiling building structure, or to a vertical rod sus-

1       pended from the ceiling, and which as blades which  
2       rotate below the ceiling and consists of an electric  
3       motor, fan blades (which rotate in a direction par-  
4       allel to the floor), an optional lighting kit, and one  
5       or more electrical controls (integral or remote) gov-  
6       erning fan speed and lighting operation.

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

11              (2) TESTING REQUIREMENTS.—Section 323 of  
12      the Energy Policy and Conservation Act (42 U.S.C.  
13      6293) is amended by adding the following at the end  
14      thereof:

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

1 shall include efficiency at both maximum output and at  
2 an output no more than 50 percent of the maximum out-  
3 put.”.

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

8 “(w) RESIDENTIAL FURNACE FANS, CENTRAL AIR  
9 AND HEAT PUMP CIRCULATION FANS, SUSPENDED CEIL-  
10 ING FANS, AND VENDING MACHINES.—(1) The Secretary  
11 shall, within 18 months after the date of the enactment  
12 of this subsection, assess the current and projected future  
13 market for residential furnace fans, residential central air  
14 conditioner and heat pump circulation fans, suspended  
15 ceiling fans, and refrigerated bottled or canned beverage  
16 vending machines. This assessment shall include an exam-  
17 ination of the types of products sold, the number of prod-  
18 ucts in use, annual sales of these products, energy used  
19 by these products sold, the number of products in use,  
20 annual sales of these products, energy used by these prod-  
21 ucts, estimates of the potential energy savings from spe-  
22 cific technical improvements to these products, and an ex-  
23 amination of the cost-effectiveness of these improvements.  
24 Prior to the end of this time period, the Secretary shall  
25 hold an initial scoping workshop to discuss and receive

1 input to plans for developing minimum efficiency stand-  
2 ards for these products.

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

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

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

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

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

## 10           **Subtitle E—Energy Efficient** 11           **Vehicles**

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

13           (a) IN GENERAL.—Notwithstanding section  
 14   102(a)(1) of title 23, United States Code, a State may,  
 15   for the purpose of promoting energy conservation, permit  
 16   a vehicle with fewer than 2 occupants to operate in high  
 17   occupancy vehicle lanes if such vehicle is a hybrid vehicle  
 18   or is fueled by an alternative fuel.

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

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

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

25           (B) a rechargeable energy storage system;



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

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

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

18          (3) which is made by a manufacturer.

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

23      **SEC. 152. RAILROAD EFFICIENCY.**

24      (a) LOCOMOTIVE TECHNOLOGY DEMONSTRATION.—  
25      The Secretary of Energy shall establish a public-private

1 research partnership with railroad carriers, locomotive  
 2 manufacturers, and a world-class research and test center  
 3 dedicated to the advancement of railroad technology, effi-  
 4 ciency, and safety that is owned by the Federal Railroad  
 5 Administration and operated in the private sector, for the  
 6 development and demonstration of locomotive technologies  
 7 that increase fuel economy and reduce emissions.

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

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

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

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

18 (2) by striking “not”.

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

20 Within 90 days after the enactment of this section,  
 21 the Administrator of the Environmental Protection Agen-  
 22 cy is directed to commence a review of the Agency’s poli-  
 23 cies regarding the use of mobile to stationary source trad-  
 24 ing of emission credits under the Clean Air Act to deter-  
 25 mine whether such trading can provide both nonattain-

1 ment and attainment areas with additional flexibility in  
 2 achieving and maintaining healthy air quality and increas-  
 3 ing use of alternative fuel and advanced technology vehi-  
 4 cles, thereby reducing United States dependence on for-  
 5 eign oil.

## 6       **Subtitle F—Other Provisions**

### 7       **SEC. 161. REVIEW OF REGULATIONS TO ELIMINATE BAR-** 8               **RIERS TO EMERGING ENERGY TECHNOLOGY.**

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

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

21       (c) PERIODIC REVIEW.—Each agency shall subse-  
 22 quently review its regulations and standards in the man-  
 23 ner specified in this section no less frequently than every  
 24 5 years, and report their findings to Congress and the  
 25 President. Such reviews shall include a detailed analysis

1 of all agency actions taken to remove existing barriers to  
2 emerging energy technologies.

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

4 (a) DEFINITIONS.—

5 (1) ADVANCED IDLE ELIMINATION SYSTEM.—

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

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

20 (b) RECOGNITION OF BENEFITS OF ADVANCED IDLE  
21 ELIMINATION SYSTEMS.—Within 90 days after the date  
22 of the enactment of this subsection, the Administrator of  
23 the Environmental Protection Agency is directed to com-  
24 mence a review of the Agency’s mobile source air emis-  
25 sions models used under the Clean Air Act to determine

1 whether such models accurately reflect the emissions re-  
2 sulting from extended idling of heavy-duty trucks and  
3 other vehicles and engines, and shall update those models  
4 as the Administrator deems appropriate. Additionally,  
5 within 90-days after the date of the enactment of this sub-  
6 section, the Administrator shall commence a review as to  
7 the appropriate emissions reductions credit that should be  
8 allotted under the Clean Air Act for the use of advanced  
9 idle elimination systems, and whether such credits should  
10 be subject to an emissions trading system, and shall revise  
11 Agency regulations and guidance as the Administrator  
12 deems appropriate.

13 **SEC. 163. STUDY OF BENEFITS AND FEASIBILITY OF OIL BY-**  
14 **PASS FILTRATION TECHNOLOGY.**

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

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

9 **SEC. 164. GAS FLARE STUDY.**

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

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

21 **SEC. 165. TELECOMMUTING STUDY.**

22 (a) STUDY REQUIRED.—The Secretary, in consulta-  
23 tion with Commission, and the NTIA, shall conduct a  
24 study of the energy conservation implications of the wide-  
25 spread adoption of telecommuting in the United States.

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

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

8 (2) Other energy reductions accomplished by  
9 telecommuting.

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

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

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

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

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

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

1           (3) NTIA.—The term “NTIA” means the Na-  
 2           tional Telecommunications and Information Admin-  
 3           istration of the Department of Commerce.

4           (4) TELECOMMUTING.—The term “telecom-  
 5           muting” means the performance of work functions  
 6           using communications technologies, thereby elimi-  
 7           nating or substantially reducing the need to com-  
 8           mute to and from traditional worksites.

## 9           **TITLE II—AUTOMOBILE FUEL** 10           **ECONOMY**

### 11   **SEC. 201. AVERAGE FUEL ECONOMY STANDARDS FOR NON-** 12           **PASSENGER AUTOMOBILES.**

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

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

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

18           “(2) The Secretary shall prescribe under paragraph  
 19   (1) average fuel economy standards for automobiles (ex-  
 20   cept passenger automobiles) manufactured in model years  
 21   2004 through 2010 that are calculated to ensure that the  
 22   aggregate amount of gasoline projected to be used in those  
 23   model years by automobiles to which the standards apply  
 24   is at least 5 billion gallons less than the aggregate amount  
 25   of gasoline that would be used in those model years by



1 such automobiles if they achieved only the fuel economy  
 2 required under the average fuel economy standard that ap-  
 3 plies under this subsection to automobiles (except pas-  
 4 senger automobiles) manufactured in model year 2002.”.

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

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

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

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

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

22 (1) shall consider any recommendations made  
 23 in the National Academy of Sciences study com-  
 24 pleted pursuant to the Department of Transpor-  
 25 tation and Related Agencies Appropriations Act,

1       2000 (Public Law 106–346; 114 Stat. 2763 et seq.);  
2       and

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

11 **SEC. 203. DUAL FUELED AUTOMOBILES.**

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

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

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

21       (b) AMENDMENTS.—

22               (1) MANUFACTURING INCENTIVES.—Section  
23      32905 of title 49, United States Code, is amended  
24      as follows:

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

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

8           (C) Subsection (f)(1) is amended by strik-  
9           ing “model year 2004” and inserting “model  
10          year 2008”.

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

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

17               (A) Subparagraph (A) is amended by  
18               striking “the model years 1993–2004” and in-  
19               serting “model years 1993–2008”.

20               (B) Subparagraph (B) is amended by  
21               striking “the model years 2005–2008” and in-  
22               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 **SEC. 301. LICENSE PERIOD.**

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

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

20 “c. LICENSE PERIOD.—

21 “(1) IN GENERAL.—Each such”; and

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

23 “(2) COMBINED LICENSES.—In the case of a  
24 combined construction and operating license issued  
25 under section 185 b., the initial duration of the li-

1       cense may not exceed 40 years from the date on  
2       which the Commission finds, before operation of the  
3       facility, that the acceptance criteria required by sec-  
4       tion 185 b. are met.”.

5   **SEC. 302. COST RECOVERY FROM GOVERNMENT AGENCIES.**

6       Section 161 w. of the Atomic Energy Act of 1954  
7   (42 U.S.C. 2201(w)) is amended—

8           (1) by striking “for or is issued” and all that  
9       follows through “1702” and inserting “to the Com-  
10      mission for, or is issued by the Commission, a li-  
11      cense or certificate”;

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

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

16   **SEC. 303. DEPLETED URANIUM HEXAFLUORIDE.**

17       Section 1(b) of Public Law 105–204 is amended by  
18   striking “fiscal year 2002” and inserting “fiscal year  
19   2005”.

20   **SEC. 304. NUCLEAR REGULATORY COMMISSION MEETINGS.**

21       If a quorum of the Nuclear Regulatory Commission  
22   gathers to discuss official Commission business the discus-  
23   sions shall be recorded, and the Commission shall notify  
24   the public of such discussions within 15 days after they  
25   occur. The Commission shall promptly make a transcript

1 of the recording available to the public on request, except  
2 to the extent that public disclosure is exempted or prohib-  
3 ited by law. This section shall not apply to a meeting,  
4 within the meaning of that term under section 552b(a)(2)  
5 of title 5, United States Code.

6 **SEC. 305. COOPERATIVE RESEARCH AND DEVELOPMENT**  
7 **AND SPECIAL DEMONSTRATION PROJECTS**  
8 **FOR THE URANIUM MINING INDUSTRY.**

9 (a) AUTHORIZATION OF APPROPRIATIONS.—There  
10 are authorized to be appropriated to the Secretary  
11 \$10,000,000 for each of fiscal years 2002, 2003, and 2004  
12 for—

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

20 (2) funding for competitively selected dem-  
21 onstration projects with domestic uranium producers  
22 relating to—

23 (A) enhanced production with minimal en-  
24 vironmental impacts;

25 (B) restoration of well fields; and

1 (C) decommissioning and decontamination  
2 activities.

3 (b) DOMESTIC URANIUM PRODUCER.—For purposes  
4 of this section, the term “domestic uranium producer” has  
5 the meaning given that term in section 1018(4) of the En-  
6 ergy Policy Act of 1992 (42 U.S.C. 2296b–7(4)), except  
7 that the term shall not include any producer that has not  
8 produced uranium from domestic reserves on or after July  
9 30, 1998.

10 **SEC. 306. MAINTENANCE OF A VIABLE DOMESTIC URANIUM**  
11 **CONVERSION INDUSTRY.**

12 There are authorized to be appropriated to the Sec-  
13 retary \$800,000 for contracting with the Nation’s sole re-  
14 maining uranium converter for the purpose of performing  
15 research and development to improve the environmental  
16 and economic performance of United States uranium con-  
17 version operations.

18 **SEC. 307. PADUCAH DECONTAMINATION AND DECOMMIS-**  
19 **SIONING PLAN.**

20 The Secretary of Energy shall prepare and submit  
21 a plan to Congress within 180 days after the date of the  
22 enactment of this Act that establishes scope, cost, sched-  
23 ule, sequence of activities, and contracting strategy for—  
24 (1) the decontamination and decommissioning  
25 of the Department of Energy’s surplus buildings and

1 facilities at the Paducah Gaseous Diffusion Plant  
2 that have no future anticipated reuse; and

3 (2) the remediation of Department of Energy  
4 Material Storage Areas at the Paducah Gaseous Dif-  
5 fusion Plant.

6 Such plan shall inventory all surplus facilities and build-  
7 ings, and identify and rank health and safety risks associ-  
8 ated with such facilities and buildings. Such plan shall in-  
9 ventory all Department of Energy Material Storage Areas,  
10 and identify and rank health and safety risks associated  
11 with such Department of Energy Material Storage Areas.  
12 The Department of Energy shall incorporate these risk  
13 factors in designing the sequence and schedule for the  
14 plan. Such plan shall identify funding requirements that  
15 are in addition to the expected outlays included in the De-  
16 partment of Energy's Environmental Management Plan  
17 for the Paducah Gaseous Diffusion Plan.

18 **SEC. 308. STUDY TO DETERMINE FEASIBILITY OF DEVEL-**  
19 **OPING COMMERCIAL NUCLEAR ENERGY PRO-**  
20 **DUCTION FACILITIES AT EXISTING DEPART-**  
21 **MENT OF ENERGY SITES.**

22 (a) IN GENERAL.—The Secretary of Energy shall  
23 conduct a study to determine the feasibility of developing  
24 commercial nuclear energy production facilities at Depart-

1 ment of Energy sites in existence on the date of the enact-  
2 ment of this Act, including—

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

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

9           (3) the feasibility of incorporating new tech-  
10      nology into nuclear power plants located on Federal  
11      sites;

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

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

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

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

1 **SEC. 309. 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.—With the exception of  
7 sales pursuant to subsection (b)(2) (42 U.S.C.2297h-  
8 10(b)(2)), notwithstanding any other provision of law, the  
9 United States Government shall not sell or transfer any  
10 uranium (including natural uranium concentrates, natural  
11 uranium hexafluoride, enriched uranium, depleted ura-  
12 nium, or uranium in any other form) through March 23,  
13 2009 (except sales or transfers for use by the Tennessee  
14 Valley Authority in relation to the Department of Ener-  
15 gy’s HEU or Tritium programs, or the Department or En-  
16 ergy research reactor sales program, or any depleted ura-  
17 nium hexafluoride to be transferred to a designated De-  
18 partment of Energy contractor in conjunction with the  
19 planned construction of the Depleted Uranium  
20 Hexafluoride conversion plants in Portsmouth, Ohio, and  
21 Paducah, Kentucky, to any natural uranium transferred  
22 to the U.S. Enrichment Corporation from the Department  
23 of Energy to replace contaminated uranium received from  
24 the Department of Energy when the U.S. Enrichment  
25 Corporation was privatized in July, 1998, or for emer-  
26 gency purposes in the event of a disruption in supply to



1 end users in the United States). The aggregate of sales  
2 or transfers of uranium by the United States Government  
3 after March 23, 2009, shall not exceed 3,000,000 pounds  
4 U<sub>3</sub>O<sub>8</sub> per calendar year.”.

## 5       **TITLE IV—HYDROELECTRIC** 6                               **ENERGY**

### 7   **SEC. 401. ALTERNATIVE CONDITIONS AND FISHWAYS.**

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

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

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

1 party proposing such alternative condition, that the alter-  
2 native condition—

3 “(A) provides no less protection for the reserva-  
4 tion than provided by the condition deemed nec-  
5 essary 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 condition deemed necessary by  
11 the Secretary.

12 “(3) Within 1 year after the enactment of this sub-  
13 section, each Secretary concerned shall, by rule, establish  
14 a process to expeditiously resolve conflicts arising under  
15 this subsection.”.

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

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

19 and

20 (2) adding at the end the following:

21 “(b)(1) Whenever the Commission shall require a li-  
22 censee to construct, maintain, or operate a fishway pre-  
23 scribed by the Secretary of the Interior or the Secretary  
24 of Commerce under this section, the licensee or any other

1 party to the proceeding may propose an alternative to such  
 2 prescription to construct, maintain, or operate a fishway.

3 “(2) Notwithstanding subsection (a), the Secretary of  
 4 the Interior or the Secretary of Commerce, as appropriate,  
 5 shall accept and prescribe, and the Commission shall re-  
 6 quire, the proposed alternative referred to in paragraph  
 7 (1), if the Secretary of the appropriate department deter-  
 8 mines, based on substantial evidence provided by the party  
 9 proposing such alternative, that the alternative—

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

12 “(B) will either—

13 “(i) cost less to implement, or

14 “(ii) result in improved operation of the  
 15 project works for electricity production,  
 16 as compared to the fishway initially prescribed by  
 17 the Secretary.

18 “(3) Within 1 year after the enactment of this sub-  
 19 section, the Secretary of the Interior and the Secretary  
 20 of Commerce shall each, by rule, establish a process to  
 21 expeditiously resolve conflicts arising under this sub-  
 22 section.”.

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

24 (a) DATA COLLECTION PROCEDURES.—The Federal  
 25 Energy Regulatory Commission shall revise its procedures

1 regarding the collection of data in connection with the  
2 Commission's consideration of hydroelectric licenses under  
3 the Federal Power Act. Such revised data collection proce-  
4 dures shall be designed to provide the Commission with  
5 complete and accurate information concerning the time  
6 and costs to parties involved in the licensing process. Such  
7 data shall be available for each significant stage in the  
8 licensing process and shall be designed to identify projects  
9 with similar characteristics so that analyses can be made  
10 of the time and costs involved in licensing proceedings  
11 based upon the different characteristics of those pro-  
12 ceedings.

13 (b) REPORTS.—Within 6 months after the date of the  
14 enactment of this Act, the Commission shall notify the  
15 Committee on Energy and Commerce of the United States  
16 House of Representatives and the Committee on Energy  
17 and Natural Resources of the United States Senate of the  
18 progress made by the Commission under subsection (a),  
19 and within 1 year after such date of the enactment, the  
20 Commission shall submit a report to such Committees  
21 specifying the measures taken by the Commission pursu-  
22 ant to subsection (a).

## **TITLE V—FUELS**

### **SEC. 501. TANK DRAINING DURING TRANSITION TO SUM- MERTIME RFG.**

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

### **SEC. 502. GASOLINE BLENDSTOCK REQUIREMENTS.**

Not later than 60 days after the enactment of this Act, the Administrator of the Environmental Protection Agency shall commence a rulemaking to determine wheth-

1 er modifications to product transfer documentation, ac-  
2 counting, compliance calculation, and other requirements  
3 contained in the regulations of the Administrator set forth  
4 in section 80.102 of title 40 of the Code of Federal Regu-  
5 lations relating to gasoline blendstocks are necessary to  
6 facilitate the movement of gasoline and gasoline feedstocks  
7 among different regions throughout the country and to im-  
8 prove the ability of petroleum refiners and importers to  
9 respond to regional gasoline shortages and prevent unrea-  
10 sonable short-term price increases. The Administrator  
11 shall take into consideration the extent to which such re-  
12 quirements have been, or will be, rendered unnecessary or  
13 inefficient by reason of subsequent environmental safe-  
14 guards that were not in effect at the time the regulations  
15 in section 80.102 of title 40 of the Code of Federal Regu-  
16 lations were promulgated. The Administrator shall pro-  
17 pose and take final action in such rulemaking to ensure  
18 that any modifications are effective and implemented at  
19 least 60 days prior to the beginning of the high ozone sea-  
20 son for the year 2002.

21 **SEC. 503. BOUTIQUE FUELS.**

22 (a) **JOINT STUDY.**—The Administrator of the Envi-  
23 ronmental Protection Agency and the Secretary of Energy  
24 shall jointly conduct a study of all Federal, State, and  
25 local requirements regarding motor vehicle fuels, including

1 requirements relating to reformulated gasoline, volatility  
2 (Reid Vapor Pressure), oxygenated fuel, diesel fuel and  
3 other requirements that vary from State to State, region  
4 to region, or locality to locality. The study shall analyze—

5           (1) the effect of the variety of such require-  
6           ments on the price of motor vehicle fuels to the con-  
7           sumer;

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

10          (3) the effect of Federal, State, and local regu-  
11          lations, including multiple fuel requirements, on do-  
12          mestic refineries and the fuel distribution system;

13          (4) the effect of such requirements on local, re-  
14          gional, and national air quality requirements and  
15          goals;

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

18          (6) the feasibility of developing national or re-  
19          gional fuel specifications for the contiguous United  
20          States that would—

21                (A) enhance flexibility in the fuel distribu-  
22                tion infrastructure and improve fuel fungibility;

23                (B) reduce price volatility and costs to con-  
24                sumers and producers;

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

3 (D) provide increased gasoline market li-  
4 quidity;

5 (7) the extent to which the Environmental Pro-  
6 tection Agency's Tier II requirements for conven-  
7 tional gasoline may achieve in future years the same  
8 or similar air quality results as State reformulated  
9 gasoline programs and State programs regarding  
10 gasoline volatility (RVP); and

11 (8) the feasibility of providing incentives to pro-  
12 mote cleaner burning fuel.

13 (b) REPORT.—By December 31, 2001, the Adminis-  
14 trator of the Environmental Protection Agency and the  
15 Secretary of Energy shall submit a report to the Congress  
16 containing the results of the study conducted under sub-  
17 section (a). Such report shall contain recommendations for  
18 legislative and administrative actions that may be taken  
19 to simplify the national distribution system for motor vehi-  
20 cle fuel, make such system more cost-effective, and reduce  
21 the costs and increase the availability of motor vehicle fuel  
22 to the end user while meeting the requirements of the  
23 Clean Air Act. Such recommendations shall take into ac-  
24 count the need to provide lead time for refinery and fuel



1 distribution system modifications necessary to assure ade-  
 2 quate fuel supply for all States.

3 **SEC. 504. FUNDING FOR MTBE CONTAMINATION.**

4       Notwithstanding any other provision of law, there is  
 5 authorized to be appropriated to the Administrator of the  
 6 Environmental Protection Agency from the Leaking Un-  
 7 derground Storage Trust Fund not more than  
 8 \$200,000,000 to be used for taking such action, limited  
 9 to assessment, corrective action, inspection of under-  
 10 ground storage tank systems, and groundwater monitoring  
 11 in connection with MTBE contamination, as the Adminis-  
 12 trator deems necessary to protect human health and the  
 13 environment from releases of methyl tertiary butyl ether  
 14 (MTBE) from underground storage tanks.

15 **TITLE VI—RENEWABLE ENERGY**

16 **SEC. 601. ASSESSMENT OF RENEWABLE ENERGY RE-**  
 17 **SOURCES.**

18       (a) RESOURCE ASSESSMENT.—Not later than 1 year  
 19 after the date of the enactment of this Act, and each year  
 20 thereafter, the Secretary of Energy shall publish an as-  
 21 sessment by the National Laboratories of all renewable en-  
 22 ergy resources available within the United States.

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

1           (1) A detailed inventory describing the available  
2           amount and characteristics of solar, wind, biomass,  
3           geothermal, hydroelectric and other renewable en-  
4           ergy sources.

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

12 **SEC. 602. RENEWABLE ENERGY PRODUCTION INCENTIVE.**

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

15               (1) In subsection (a) by striking “and which  
16               satisfies” and all that follows through “Secretary  
17               shall establish.” and inserting “. The Secretary shall  
18               establish other procedures necessary for efficient ad-  
19               ministration of the program. The Secretary shall not  
20               establish any criteria or procedures that have the ef-  
21               fect of assigning to proposals a higher or lower pri-  
22               ority for eligibility or allocation of appropriated  
23               funds on the basis of the energy source proposed.”.

24               (2) In subsection (b)—

1           (A) by striking “a State or any political”  
2           and all that follows through “nonprofit elec-  
3           trical cooperative” and inserting “an electricity-  
4           generating cooperative exempt from taxation  
5           under section 501(c)(12) or section  
6           1381(a)(2)(C) of the Internal Revenue Code of  
7           1986, a public utility described in section 115  
8           of such Code, a State, Commonwealth, terri-  
9           tory, or possession of the United States or the  
10          District of Columbia, or a political subdivision  
11          thereof, or an Indian tribal government or sub-  
12          division thereof,”; and

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

15          (3) In subsection (c) by striking “during the  
16          10-fiscal year period beginning with the first full fis-  
17          cal year occurring after the enactment of this sec-  
18          tion” and inserting “before October 1, 2013”.

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

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

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

4           (7) In subsection (g)—

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

7                (B) by inserting “Funds may be appro-  
8       priated pursuant to this subsection to remain  
9       available until expended.” after “purposes of  
10      this section.”.

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

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

21 **SEC. 604. STUDY OF RENEWABLE FUEL CONTENT.**

22       (a) STUDY.—The Administrator of the Environ-  
23      mental Protection Agency and the Secretary of Energy  
24      shall jointly conduct a study of the feasibility of developing  
25      a requirement that motor vehicle fuel sold or introduced

1 into commerce in the United States in calendar year 2002  
2 or any calendar year thereafter by a refiner, blender, or  
3 importer shall, on a 6-month average basis, be comprised  
4 of a quantity of renewable fuel, measured in gasoline-  
5 equivalent gallons. As part of this study, the Adminis-  
6 trator and Secretary shall evaluate the use of a banking  
7 and trading credit system and the feasibility and desir-  
8 ability of requiring an increasing percentage of renewable  
9 fuel to be phased in over a 15-year period.

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

## 15 **TITLE VII—PIPELINES**

### 16 **SEC. 701. PROHIBITION ON CERTAIN PIPELINE ROUTE.**

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

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

1           (2) enters Canada at any point north of 68 de-  
2       grees North latitude.

3   **SEC. 702. HISTORIC PIPELINES.**

4       Section 7 of the Natural Gas Act (15 U.S.C. 717(f))  
5   is amended by adding at the end the following new sub-  
6   section:

7       “(i) Notwithstanding the National Historic Preserva-  
8   tion Act, a transportation facility shall not be eligible for  
9   inclusion on the National Register of Historic Places  
10   unless—

11           “(1) the Commission has permitted the aban-  
12       donment of the transportation facility pursuant to  
13       subsection (b) of this section, or

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

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

21       **TITLE VIII—MISCELLANEOUS**  
22                   **PROVISIONS**

23   **SEC. 801. WASTE REDUCTION AND USE OF ALTERNATIVES.**

24       (a) GRANT AUTHORITY.—The Secretary of Energy is  
25   authorized to make a single grant to a qualified institution

1 to examine and develop the feasibility of burning post-con-  
 2 sumer carpet in cement kilns as an alternative energy  
 3 source. The purposes of the grant shall include  
 4 determining—

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

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

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

11 (b) QUALIFIED INSTITUTION.—For the purposes of  
 12 subsection (a), a qualified institution is a research-inten-  
 13 sive institution of higher learning with demonstrated ex-  
 14 pertise in the fields of fiber recycling and logistical mod-  
 15 eling of carpet waste collection and preparation.

16 (c) AUTHORIZATION OF APPROPRIATIONS.—There  
 17 are authorized to be appropriated to the Secretary of En-  
 18 ergy for carrying out this section \$275,000 for fiscal year  
 19 2002, to remain available until expended.

20 **SEC. 802. ANNUAL REPORT ON UNITED STATES ENERGY**  
 21 **INDEPENDENCE.**

22 (a) REPORT.—The Secretary of Energy, in consulta-  
 23 tion with the heads of other relevant Federal agencies,  
 24 shall include in each report under section 801(c) of the  
 25 Department of Energy Organization Act a section which

1 evaluates the progress the United States has made toward  
2 obtaining the goal of not more than 50 percent dependence  
3 on foreign oil sources by 2010.

4 (b) ALTERNATIVES.—The information required  
5 under this section to be included in the reports under sec-  
6 tion 801(c) of the Department of Energy Organization Act  
7 shall include a specification of what legislative or adminis-  
8 trative actions must be implemented to meet this goal and  
9 set forth a range of options and alternatives with a cost/  
10 benefit analysis for each option or alternative together  
11 with an estimate of the contribution each option or alter-  
12 native could make to reduce foreign oil imports. The Sec-  
13 retary shall solicit information from the public and request  
14 information from the Energy Information Agency and  
15 other agencies to develop the information required under  
16 this section. The information shall indicate, in detail, op-  
17 tions and alternatives to—

18 (1) increase the use of renewable domestic en-  
19 ergy sources, including conventional and nonconven-  
20 tional sources;

21 (2) conserve energy resources, including improv-  
22 ing efficiencies and decreasing consumption; and

23 (3) increase domestic production and use of oil,  
24 natural gas, nuclear, and coal, including any actions



1        necessary to provide access to, and transportation  
2        of, these energy resources.

3    **SEC. 803. STUDY OF AIRCRAFT EMISSIONS.**

4        The Secretary of Transportation and the Adminis-  
5        trator of the Environmental Protection Agency shall joint-  
6        ly commence a study within 60 days after the enactment  
7        of this Act to investigate the impact of aircraft emissions  
8        on air quality in areas that are considered to be in non-  
9        attainment for the national ambient air quality standard  
10       for ozone. As part of this study, the Secretary and the  
11       Administrator shall focus on the impact of emissions by  
12       aircraft idling at airports and on the contribution of such  
13       emissions as a percentage of total emissions in the non-  
14       attainment area. Within 180 days of the commencement  
15       of the study, the Secretary and the Administrator shall  
16       submit a report to the Committees on Energy and Com-  
17       merce and Transportation and Infrastructure of the  
18       United States House of Representatives and to the Com-  
19       mittees on Environment and Public Works and Commerce,  
20       Science, and Transportation of the United States Senate  
21       containing the results of the study and recommendations  
22       with respect to a plan to maintain comprehensive data on  
23       aircraft emissions and methods by which such emissions  
24       may be reduced, without increasing individual aircraft

1 noise, in order to assist in the attainment of the national  
2 ambient air quality standards.

## 3 **DIVISION B**

### 4 **SEC. 2001. SHORT TITLE.**

5 This division may be cited as the “Comprehensive  
6 Energy Research and Technology Act of 2001”.

### 7 **SEC. 2002. FINDINGS.**

8 The Congress finds that—

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

11 (2) the growing imbalance between domestic en-  
12 ergy production and consumption means that the  
13 Nation is becoming increasingly reliant on imported  
14 energy, which has the potential to undermine the  
15 Nation’s economy, standard of living, and national  
16 security;

17 (3) energy conservation and energy efficiency  
18 help maximize the use of available energy resources,  
19 reduce energy shortages, lower the Nation’s reliance  
20 on energy imports, mitigate the impacts of high en-  
21 ergy prices, and help protect the environment and  
22 public health;

23 (4) development of a balanced portfolio of do-  
24 mestic energy supplies will ensure that future gen-

1       erations of Americans will have access to the energy  
2       they need;

3           (5) energy efficiency technologies, renewable  
4       and alternative energy technologies, and advanced  
5       energy systems technologies will help diversify the  
6       Nation's energy portfolio with few adverse environ-  
7       mental impacts and are vital to delivering clean en-  
8       ergy to fuel the Nation's economic growth;

9           (6) development of reliable, affordable, and en-  
10      vironmentally sound energy efficiency technologies,  
11      renewable and alternative energy technologies, and  
12      advanced energy systems technologies will require  
13      maintenance of a vibrant fundamental scientific  
14      knowledge base and continued scientific and techno-  
15      logical innovations that can be accelerated by Fed-  
16      eral funding, whereas commercial deployment of  
17      such systems and technologies are the responsibility  
18      of the private sector;

19          (7) Federal funding should focus on those pro-  
20      grams, projects, and activities that are long-term,  
21      high-risk, noncommercial, and well-managed, and  
22      that provide the potential for scientific and techno-  
23      logical advances; and

24          (8) public-private partnerships should be en-  
25      couraged to leverage scarce taxpayer dollars.

1 **SEC. 2003. PURPOSES.**

2 The purposes of this division are to—

3 (1) protect and strengthen the Nation's econ-  
4 omy, standard of living, and national security by re-  
5 ducing dependence on imported energy;

6 (2) meet future needs for energy services at the  
7 lowest total cost to the Nation, including environ-  
8 mental costs, giving balanced and comprehensive  
9 consideration to technologies that improve the effi-  
10 ciency of energy end uses and that enhance energy  
11 supply;

12 (3) reduce the air, water, and other environ-  
13 mental impacts (including emissions of greenhouse  
14 gases) of energy production, distribution, transpor-  
15 tation, and use through the development of environ-  
16 mentally sustainable energy systems;

17 (4) consider the comparative environmental im-  
18 pacts of the energy saved or produced by specific  
19 programs, projects, or activities;

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

24 (6) foster international cooperation by devel-  
25 oping international markets for domestically pro-  
26 duced sustainable energy technologies, and by trans-

1       ferring environmentally sound, advanced energy sys-  
2       tems and technologies to developing countries to pro-  
3       mote sustainable development;

4           (7) provide sufficient funding of programs,  
5       projects, and activities that are performance-based  
6       and modeled as public-private partnerships, as ap-  
7       propriate; and

8           (8) enhance the contribution of a given pro-  
9       gram, project, or activity to fundamental scientific  
10      knowledge.

11 **SEC. 2004. GOALS.**

12       (a) IN GENERAL.—Subject to subsection (b), in order  
13 to achieve the purposes of this division under section  
14 2003, the Secretary should conduct a balanced energy re-  
15 search, development, demonstration, and commercial ap-  
16 plication portfolio of programs guided by the following  
17 goals to meet the purposes of this division under section  
18 2003.

19           (1) ENERGY CONSERVATION AND ENERGY EFFI-  
20      CIENCY.—

21           (A) For the Building Technology, State  
22       and Community Sector, the program should de-  
23       velop technologies, housing components, de-  
24       signs, and production methods that will, by  
25       2010—

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

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

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

13 (B) For the Industry Sector, the program  
14 should, in cooperation with the affected indus-  
15 tries, improve the energy intensity of the major  
16 energy-consuming industries by at least 25 per-  
17 cent by 2010, compared to the energy intensity  
18 as of the date of the enactment of this Act.

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

22 (i) develop a microturbine (40 to 300  
23 kilowatt) that is more than 40 percent  
24 more efficient by 2006, and more than 50  
25 percent more efficient by 2010, compared

1 to the efficiency as of the date of the en-  
2 actment of this Act; and

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

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

12 (i) develop a production prototype  
13 passenger automobile that has fuel econ-  
14 omy equivalent to 80 miles per gallon of  
15 gasoline by 2004;

16 (ii) develop class 7 and 8 heavy duty  
17 trucks and buses with ultra low emissions  
18 and the ability to use an alternative fuel  
19 that has an average fuel economy equiva-  
20 lent to—

21 (I) 10 miles per gallon of gaso-  
22 line by 2007; and

23 (II) 13 miles per gallon of gaso-  
24 line by 2010;

1 (iii) develop a production prototype of  
2 a passenger automobile with zero equiva-  
3 lent emissions that has an average fuel  
4 economy of 100 miles per gallon of gaso-  
5 line by 2010; and

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

8 (I) in classes 1 and 2 by 300 per-  
9 cent; and

10 (II) in classes 3 through 6 by  
11 200 percent,  
12 compared to the fuel economy as of the  
13 date of the enactment of this Act.

14 (2) RENEWABLE ENERGY.—

15 (A) For Hydrogen Research, to carry out  
16 the Spark M. Matsunaga Hydrogen Research,  
17 Development, and Demonstration Act of 1990,  
18 as amended by subtitle A of title II of this divi-  
19 sion.

20 (B) For bioenergy:

21 (i) The program should reduce the  
22 cost of bioenergy relative to other energy  
23 sources to enable the United States to tri-  
24 ple bioenergy use by 2010.



1           (ii) For biopower systems, the pro-  
2           gram should reduce the cost of such sys-  
3           tems to enable commercialization of inte-  
4           grated power-generating technologies that  
5           employ gas turbines and fuel cells inte-  
6           grated with bioenergy gasifiers within 5  
7           years after the date of the enactment of  
8           this Act.

9           (iii) For biofuels, the program should  
10          accelerate research, development, and dem-  
11          onstration on advanced enzymatic hydrol-  
12          ysis technology for making ethanol from  
13          cellulosic feedstock, with the goal that be-  
14          tween 2010 and 2015 ethanol produced  
15          from energy crops would be fully competi-  
16          tive in terms of price with gasoline as a  
17          neat fuel, in either internal combustion en-  
18          gines or fuel cell vehicles.

19          (C) For Geothermal Technology Develop-  
20          ment, the program should focus on advanced  
21          concepts for the long term. The first priority  
22          should be high-grade enhanced geothermal sys-  
23          tems; the second priority should be lower grade,  
24          hot dry rock, and geopressured systems; and  
25          the third priority should be support of field

1 demonstrations of enhanced geothermal systems  
2 technology, including sites in lower grade areas  
3 to demonstrate the benefits of reservoir con-  
4 cepts to different conditions.

5 (D) For Hydropower, the program should  
6 provide a new generation of turbine tech-  
7 nologies that will increase generating capacity  
8 and will be less damaging to fish and aquatic  
9 ecosystems.

10 (E) For Concentrating Solar Power, the  
11 program should strengthen ongoing research,  
12 development, and demonstration combining  
13 high-efficiency and high-temperature receivers  
14 with advanced thermal storage and power cy-  
15 cles, with the goal of making solar-only power  
16 (including baseload solar power) widely com-  
17 petitive with fossil fuel power by 2015. The pro-  
18 gram should limit or halt its research and de-  
19 velopment on power-tower and power-trough  
20 technologies because further refinements to  
21 these concepts will not further their deploy-  
22 ment, and should assess the market prospects  
23 for solar dish/engine technologies to determine  
24 whether continued research and development is  
25 warranted.

1           (F) For Photovoltaic Energy Systems, the  
2           program should pursue research, development,  
3           and demonstration that will, by 2005, increase  
4           the efficiency of thin film modules from the cur-  
5           rent 7 percent to 11 percent in multi-million  
6           watt production; reduce the direct manufac-  
7           turing cost of photovoltaic modules by 30 per-  
8           cent from the current \$2.50 per watt to \$1.75  
9           per watt by 2005; and establish greater than a  
10          20-year lifetime of photovoltaic systems by im-  
11          proving the reliability and lifetime of balance-  
12          of-system components and reducing recurring  
13          cost by 40 percent. The program's top priority  
14          should be the development of sound manufac-  
15          turing technologies for thin-film modules, and  
16          the program should make a concerted effort to  
17          integrate fundamental research and basic engi-  
18          neering research.

19          (G) For Solar Building Technology Re-  
20          search, the program should complete research  
21          and development on new polymers and manu-  
22          facturing processes to reduce the cost of solar  
23          water heating by 50 percent by 2004, compared  
24          to the cost as of the date of the enactment of  
25          this Act.

1           (H) For Wind Energy Systems, the pro-  
2           gram should reduce the cost of wind energy to  
3           three cents per kilowatt-hour at Class 6 (15  
4           miles-per-hour annual average) wind sites by  
5           2004, and 4 cents per kilowatt-hour in Class 4  
6           (13 miles-per-hour annual average) wind sites  
7           by 2015, and further if required so that wind  
8           power can be widely competitive with fossil-fuel-  
9           based electricity in a restructured electric in-  
10          dustry. Program research on advanced wind  
11          turbine technology should focus on turbulent  
12          flow studies, durable materials to extend tur-  
13          bine life, blade efficiency, and higher efficiency  
14          operation in low quality wind regimes.

15          (I) For Electric Energy Systems and Stor-  
16          age, including High Temperature Super-  
17          conducting Research and Development, Energy  
18          Storage Systems, and Transmission Reliability,  
19          the program should develop high capacity  
20          superconducting transmission lines and genera-  
21          tors, highly reliable energy storage systems, and  
22          distributed generating systems to accommodate  
23          multiple types of energy sources under common  
24          interconnect standards.

1           (J) For the International Renewable En-  
2           ergy and Renewable Energy Production Incen-  
3           tive programs, and Renewable Program Sup-  
4           port, the program should encourage the com-  
5           mercial application of renewable energy tech-  
6           nologies by developed and developing countries,  
7           State and local governmental entities and non-  
8           profit electric cooperatives, and by the competi-  
9           tive domestic market.

10       (3) NUCLEAR ENERGY.—

11           (A) For university nuclear science and en-  
12           gineering, the program should carry out the  
13           provisions of subtitle A of title III of this divi-  
14           sion.

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

19           (C) For the Nuclear Energy Research Ini-  
20           tiative, the program should accomplish the ob-  
21           jectives of section 2341(b) of this Act.

22           (D) For the Nuclear Energy Plant Optimi-  
23           zation Program, the program should accomplish  
24           the objectives of section 2342(b) of this Act.

1           (E) For Nuclear Energy Technologies, the  
2           program should carry out the provisions of sec-  
3           tion 2343 of this Act.

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

8           (4) FOSSIL ENERGY.—

9           (A) For core fossil energy research and de-  
10          velopment, the program should achieve the  
11          goals outlined by the Department's Vision 21  
12          Program. This research should address fuel-  
13          flexible gasification and turbines, fuel cells, ad-  
14          vanced-combustion systems, advanced fuels and  
15          chemicals, advanced modeling and systems  
16          analysis, materials and heat exchangers, envi-  
17          ronmental control technologies, gas-stream pu-  
18          rification, gas-separation technology, and se-  
19          questration research and development focused  
20          on cost-effective novel concepts for capturing,  
21          reusing or storing, or otherwise mitigating car-  
22          bon and other greenhouse gas emissions.

23          (B) For offshore oil and natural gas re-  
24          sources, the program should investigate and de-  
25          velop technologies to—

1 (i) extract methane hydrates in coast-  
2 al waters of the United States, in accord-  
3 ance with the provisions of the Methane  
4 Hydrate Research and Development Act of  
5 2000; and

6 (ii) develop natural gas and oil re-  
7 serves in the ultra-deepwater of the Cen-  
8 tral and Western Gulf of Mexico. Research  
9 and development on ultra-deepwater re-  
10 source recovery shall focus on improving  
11 the safety and efficiency of such recovery  
12 and of sub-sea production technology used  
13 for such recovery, while lowering costs.

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

21 (5) SCIENCE.—The Secretary, through the Of-  
22 fice of Science, should—

23 (A) develop and maintain a robust port-  
24 folio of fundamental scientific and energy re-  
25 search, including High Energy and Nuclear

1 Physics, Biological and Environmental Re-  
2 search, Basic Energy Sciences (including Mate-  
3 rials Sciences, Chemical Sciences, Engineering  
4 and Geosciences, and Energy Biosciences), Ad-  
5 vanced Scientific Computing, Energy Research  
6 and Analysis, Multiprogram Energy Labora-  
7 tories-Facilities Support, Fusion Energy  
8 Sciences, and Facilities and Infrastructure;

9 (B) maintain, upgrade, and expand, as ap-  
10 propriate, and in accordance with the provisions  
11 of this division, the scientific user facilities  
12 maintained by the Office of Science, and ensure  
13 that they are an integral part of the Depart-  
14 ment's mission for exploring the frontiers of  
15 fundamental energy sciences; and

16 (C) ensure that its fundamental energy  
17 sciences programs, where appropriate, help in-  
18 form the applied research and development pro-  
19 grams of the Department.

20 (b) REVIEW AND ASSESSMENT.—The Secretary shall  
21 perform an assessment that establishes measurable cost  
22 and performance-based goals, or that modifies the goals  
23 under subsection (a), as appropriate, for 2005, 2010,  
24 2015, and 2020 for each of the programs authorized by  
25 this division that would enable each such program to meet



1 the purposes of this division under section 2003. Such as-  
2 sessment shall be based on the latest scientific and tech-  
3 nical knowledge, and shall also take into consideration, as  
4 appropriate, the comparative environmental impacts (in-  
5 cluding emissions of greenhouse gases) of the energy saved  
6 or produced by specific programs.

7 (c) CONSULTATION.—In establishing the measurable  
8 cost and performance-based goals under subsection (b),  
9 the Secretary shall consult with the private sector, institu-  
10 tions of higher learning, national laboratories, environ-  
11 mental organizations, professional and technical societies,  
12 and any other persons as the Secretary considers appro-  
13 priate.

14 (d) SCHEDULE.—The Secretary shall—

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

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

23 (B) in the case of a program not estab-  
24 lished before the date of the enactment of this

1 Act, not later than 120 days after the date of  
2 establishment of the program;

3 (2) not later than 60 days after the date of  
4 publication under paragraph (1), after taking into  
5 consideration any public comments received, trans-  
6 mit to the Congress and publish in the Federal Reg-  
7 ister the final measurable cost and performance-  
8 based goals; and

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

11 **SEC. 2005. DEFINITIONS.**

12 For purposes of this division, except as otherwise  
13 provided—

14 (1) the term “Administrator” means the Ad-  
15 ministrator of the Environmental Protection Agency;

16 (2) the term “appropriate congressional com-  
17 mittees” means—

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

21 (B) the Committee on Energy and Natural  
22 Resources and the Committee on Appropria-  
23 tions of the Senate;

24 (3) the term “Department” means the Depart-  
25 ment of Energy; and

1           (4) the term “Secretary” means the Secretary  
2       of Energy.

3   **SEC. 2006. AUTHORIZATIONS.**

4       Authorizations of appropriations under this division  
5   are for environmental research and development, scientific  
6   and energy research, development, and demonstration,  
7   and commercial application of energy technology pro-  
8   grams, projects, and activities.

9   **SEC. 2007. BALANCE OF FUNDING PRIORITIES.**

10       (a) SENSE OF CONGRESS.—It is the sense of the Con-  
11   gress that the funding of the various programs authorized  
12   by titles I through IV of this division should remain in  
13   the same proportion to each other as provided in this divi-  
14   sion, regardless of the total amount of funding made avail-  
15   able for those programs.

16       (b) REPORT TO CONGRESS.—If for fiscal year 2002,  
17   2003, or 2004 the amounts appropriated in general appro-  
18   priations Acts for the programs authorized in titles I  
19   through IV of this division are not in the same proportion  
20   to one another as are the authorizations for such pro-  
21   grams in this division, the Secretary and the Adminis-  
22   trator shall, within 60 days after the date of the enact-  
23   ment of the last general appropriations Act appropriating  
24   amounts for such programs, transmit to the appropriate  
25   congressional committees a report describing the pro-

1 grams, projects, and activities that would have been fund-  
 2 ed if the proportions provided for in this division had been  
 3 maintained in the appropriations. The amount appro-  
 4 priated for the program receiving the highest percentage  
 5 of its authorized funding for a fiscal year shall be used  
 6 as the baseline for calculating the proportional deficiencies  
 7 of appropriations for other programs in that fiscal year.

8 **TITLE I—ENERGY CONSERVA-**  
 9 **TION AND ENERGY EFFI-**  
 10 **CIENCY**

11 **Subtitle A—Alternative Fuel**  
 12 **Vehicles**

13 **SEC. 2101. SHORT TITLE.**

14 This subtitle may be cited as the “Alternative Fuel  
 15 Vehicle Acceleration Act of 2001”.

16 **SEC. 2102. DEFINITIONS.**

17 For the purposes of this subtitle, the following defini-  
 18 tions apply:

19 (1) **ALTERNATIVE FUEL VEHICLE.**—

20 (A) **IN GENERAL.**—Except as provided in  
 21 subparagraph (B), the term “alternative fuel  
 22 vehicle” means a motor vehicle that is  
 23 powered—

24 (i) in whole or in part by electricity,  
 25 including electricity supplied by a fuel cell;

- 1 (ii) by liquefied natural gas;
- 2 (iii) by compressed natural gas;
- 3 (iv) by liquefied petroleum gas;
- 4 (v) by hydrogen;
- 5 (vi) by methanol or ethanol at no less
- 6 than 85 percent by volume; or
- 7 (vii) by propane.

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

- 10 (i) any vehicle designed to operate
- 11 solely on gasoline or diesel derived from
- 12 fossil fuels, regardless of whether it can
- 13 also be operated on an alternative fuel; or
- 14 (ii) any vehicle that the Secretary de-
- 15 termines, by rule, does not yield substan-
- 16 tial environmental benefits over a vehicle
- 17 operating solely on gasoline or diesel de-
- 18 rived from fossil fuels.

19 (2) PILOT PROGRAM.—The term “pilot pro-  
20 gram” means the competitive grant program estab-  
21 lished under section 2103.

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

1 (A) is fueled by diesel fuel which contains  
2 sulfur at not more than 15 parts per million;  
3 and

4 (B) emits not more than the lesser of—

5 (i) for vehicles manufactured in—

6 (I) model years 2001 through  
7 2003, 3.0 grams per brake horse-  
8 power-hour of nonmethane hydro-  
9 carbons and oxides of nitrogen and  
10 .01 grams per brake horsepower-hour  
11 of particulate matter; and

12 (II) model years 2004 through  
13 2006, 2.5 grams per brake horse-  
14 power-hour of nonmethane hydro-  
15 carbons and oxides of nitrogen and  
16 .01 grams per brake horsepower-hour  
17 of particulate matter; or

18 (ii) the emissions of nonmethane hy-  
19 drocarbons, oxides of nitrogen, and partic-  
20 ulate matter of the best performing tech-  
21 nology of ultra-low sulfur diesel vehicles of  
22 the same type that are commercially avail-  
23 able.

1 **SEC. 2103. PILOT PROGRAM.**

2 (a) ESTABLISHMENT.—The Secretary shall establish  
3 a competitive grant pilot program to provide not more  
4 than 15 grants to State governments, local governments,  
5 or metropolitan transportation authorities to carry out a  
6 project or projects for the purposes described in subsection  
7 (b).

8 (b) GRANT PURPOSES.—Grants under this section  
9 may be used for the following purposes:

10 (1) The acquisition of alternative fuel vehicles,  
11 including—

12 (A) passenger vehicles;

13 (B) buses used for public transportation or  
14 transportation to and from schools;

15 (C) delivery vehicles for goods or services;

16 (D) ground support vehicles at public air-  
17 ports, including vehicles to carry baggage or  
18 push airplanes away from terminal gates; and

19 (E) motorized two-wheel bicycles, scooters,  
20 or other vehicles for use by law enforcement  
21 personnel or other State or local government or  
22 metropolitan transportation authority employ-  
23 ees.

24 (2) The acquisition of ultra-low sulfur diesel ve-  
25 hicles.

1           (3) Infrastructure necessary to directly support  
2           an alternative fuel vehicle project funded by the  
3           grant, including fueling and other support equip-  
4           ment.

5           (4) Operation and maintenance of vehicles, in-  
6           frastructure, and equipment acquired as part of a  
7           project funded by the grant.

8           (c) APPLICATIONS.—

9           (1) REQUIREMENTS.—The Secretary shall issue  
10          requirements for applying for grants under the pilot  
11          program. At a minimum, the Secretary shall require  
12          that applications be submitted by the head of a  
13          State or local government or a metropolitan trans-  
14          portation authority, or any combination thereof, and  
15          shall include—

16                (A) at least one project to enable pas-  
17                sengers or goods to be transferred directly from  
18                one alternative fuel vehicle or ultra-low sulfur  
19                diesel vehicle to another in a linked transpor-  
20                tation system;

21                (B) a description of the projects proposed  
22                in the application, including how they meet the  
23                requirements of this subtitle;



1 (C) an estimate of the ridership or degree  
2 of use of the projects proposed in the applica-  
3 tion;

4 (D) an estimate of the air pollution emis-  
5 sions reduced and fossil fuel displaced as a re-  
6 sult of the projects proposed in the application,  
7 and a plan to collect and disseminate environ-  
8 mental data, related to the projects to be fund-  
9 ed under the grant, over the life of the projects;

10 (E) a description of how the projects pro-  
11 posed in the application will be sustainable  
12 without Federal assistance after the completion  
13 of the term of the grant;

14 (F) a complete description of the costs of  
15 each project proposed in the application, includ-  
16 ing acquisition, construction, operation, and  
17 maintenance costs over the expected life of the  
18 project;

19 (G) a description of which costs of the  
20 projects proposed in the application will be sup-  
21 ported by Federal assistance under this subtitle;  
22 and

23 (H) documentation to the satisfaction of  
24 the Secretary that diesel fuel containing sulfur  
25 at not more than 15 parts per million is avail-

1           able for carrying out the projects, and a com-  
2           mitment by the applicant to use such fuel in  
3           carrying out the projects.

4           (2) PARTNERS.—An applicant under paragraph  
5           (1) may carry out projects under the pilot program  
6           in partnership with public and private entities.

7           (d) SELECTION CRITERIA.—In evaluating applica-  
8           tions under the pilot program, the Secretary shall consider  
9           each applicant’s previous experience with similar projects  
10          and shall give priority consideration to applications that—

11           (1) are most likely to maximize protection of  
12          the environment;

13           (2) demonstrate the greatest commitment on  
14          the part of the applicant to ensure funding for the  
15          proposed projects and the greatest likelihood that  
16          each project proposed in the application will be  
17          maintained or expanded after Federal assistance  
18          under this subtitle is completed; and

19           (3) exceed the minimum requirements of sub-  
20          section (c)(1)(A).

21          (e) PILOT PROJECT REQUIREMENTS.—

22           (1) MAXIMUM AMOUNT.—The Secretary shall  
23          not provide more than \$20,000,000 in Federal as-  
24          sistance under the pilot program to any applicant.

1           (2) COST SHARING.—The Secretary shall not  
2       provide more than 50 percent of the cost, incurred  
3       during the period of the grant, of any project under  
4       the pilot program.

5           (3) MAXIMUM PERIOD OF GRANTS.—The Sec-  
6       retary shall not fund any applicant under the pilot  
7       program for more than 5 years.

8           (4) DEPLOYMENT AND DISTRIBUTION.—The  
9       Secretary shall seek to the maximum extent prac-  
10      ticable to achieve nationwide deployment of alter-  
11      native fuel vehicles through the pilot program, and  
12      shall ensure a broad geographic distribution of  
13      project sites.

14          (5) TRANSFER OF INFORMATION AND KNOWL-  
15      EDGE.—The Secretary shall establish mechanisms to  
16      ensure that the information and knowledge gained  
17      by participants in the pilot program are transferred  
18      among the pilot program participants and to other  
19      interested parties, including other applicants that  
20      submitted applications.

21      (f) SCHEDULE.—

22          (1) PUBLICATION.—Not later than 3 months  
23      after the date of the enactment of this Act, the Sec-  
24      retary shall publish in the Federal Register, Com-  
25      merce Business Daily, and elsewhere as appropriate,

1 a request for applications to undertake projects  
2 under the pilot program. Applications shall be due  
3 within 6 months of the publication of the notice.

4 (2) SELECTION.—Not later than 6 months after  
5 the date by which applications for grants are due,  
6 the Secretary shall select by competitive, peer review  
7 all applications for projects to be awarded a grant  
8 under the pilot program.

9 (g) LIMIT ON FUNDING.—The Secretary shall pro-  
10 vide not less than 20 percent and not more than 25 per-  
11 cent of the grant funding made available under this sec-  
12 tion for the acquisition of ultra-low sulfur diesel vehicles.

13 **SEC. 2104. REPORTS TO CONGRESS.**

14 (a) INITIAL REPORT.—Not later than 2 months after  
15 the date grants are awarded under this subtitle, the Sec-  
16 retary shall transmit to the appropriate congressional  
17 committees a report containing—

18 (1) an identification of the grant recipients and  
19 a description of the projects to be funded;

20 (2) an identification of other applicants that  
21 submitted applications for the pilot program; and

22 (3) a description of the mechanisms used by the  
23 Secretary to ensure that the information and knowl-  
24 edge gained by participants in the pilot program are  
25 transferred among the pilot program participants

1 and to other interested parties, including other ap-  
 2 plicants that submitted applications.

3 (b) EVALUATION.—Not later than 3 years after the  
 4 date of the enactment of this Act, and annually thereafter  
 5 until the pilot program ends, the Secretary shall transmit  
 6 to the appropriate congressional committees a report con-  
 7 taining an evaluation of the effectiveness of the pilot pro-  
 8 gram, including an assessment of the benefits to the envi-  
 9 ronment derived from the projects included in the pilot  
 10 program as well as an estimate of the potential benefits  
 11 to the environment to be derived from widespread applica-  
 12 tion of alternative fuel vehicles and ultra-low sulfur diesel  
 13 vehicles.

14 **SEC. 2105. AUTHORIZATION OF APPROPRIATIONS.**

15 There are authorized to be appropriated to the Sec-  
 16 retary \$200,000,000 to carry out this subtitle, to remain  
 17 available until expended.

18 **Subtitle B—Distributed Power**  
 19 **Hybrid Energy Systems**

20 **SEC. 2121. FINDINGS.**

21 The Congress makes the following findings:

22 (1) Our ability to take advantage of our renew-  
 23 able, indigenous resources in a cost-effective manner  
 24 can be greatly advanced through systems that com-

1       pensate for the intermittent nature of these re-  
2       sources through distributed power hybrid systems.

3           (2) Distributed power hybrid systems can—

4                (A) shelter consumers from temporary en-  
5                ergy price volatility created by supply and de-  
6                mand mismatches;

7                (B) increase the reliability of energy sup-  
8                ply; and

9                (C) address significant local differences in  
10              power and economic development needs and re-  
11              source availability that exist throughout the  
12              United States.

13          (3) Realizing these benefits will require a con-  
14          certed and integrated effort to remove market bar-  
15          riers to adopting distributed power hybrid systems  
16          by—

17                (A) developing the technological foundation  
18                that enables designing, testing, certifying, and  
19                operating distributed power hybrid systems; and

20                (B) providing the policy framework that  
21                reduces such barriers.

22          (4) While many of the individual distributed  
23          power hybrid systems components are either avail-  
24          able or under development in existing private and  
25          public sector programs, the capabilities to integrate

1       these components into workable distributed power  
2       hybrid systems that maximize benefits to consumers  
3       in a safe manner often are not coherently being ad-  
4       dressed.

5   **SEC. 2122. DEFINITIONS.**

6       For purposes of this subtitle—

7           (1) the term “distributed power hybrid system”  
8       means a system using 2 or more distributed power  
9       sources, operated together with associated sup-  
10      porting equipment, including storage equipment, and  
11      software necessary to provide electric power onsite  
12      and to an electric distribution system; and

13          (2) the term “distributed power source” means  
14      an independent electric energy source of usually 10  
15      megawatts or less located close to a residential, com-  
16      mercial, or industrial load center, including—

17           (A) reciprocating engines;

18           (B) turbines;

19           (C) microturbines;

20           (D) fuel cells;

21           (E) solar electric systems;

22           (F) wind energy systems;

23           (G) biopower systems;

24           (H) geothermal power systems; or

25           (I) combined heat and power systems.

1 **SEC. 2123. STRATEGY.**

2 (a) REQUIREMENT.—Not later than 1 year after the  
3 date of the enactment of this Act, the Secretary shall de-  
4 velop and transmit to the Congress a distributed power  
5 hybrid systems strategy showing—

6 (1) needs best met with distributed power hy-  
7 brid systems configurations, especially systems in-  
8 cluding one or more solar or renewable power  
9 sources; and

10 (2) technology gaps and barriers (including bar-  
11 riers to efficient connection with the power grid)  
12 that hamper the use of distributed power hybrid sys-  
13 tems.

14 (b) ELEMENTS.—The strategy shall provide for de-  
15 velopment of—

16 (1) system integration tools (including data-  
17 bases, computer models, software, sensors, and con-  
18 trols) needed to plan, design, build, and operate dis-  
19 tributed power hybrid systems for maximum bene-  
20 fits;

21 (2) tests of distributed power hybrid systems,  
22 power parks, and microgrids, including field tests  
23 and cost-shared demonstrations with industry;

24 (3) design tools to characterize the benefits of  
25 distributed power hybrid systems for consumers, to  
26 reduce testing needs, to speed commercialization,



1 and to generate data characterizing grid operations,  
2 including interconnection requirements;

3 (4) precise resource assessment tools to map  
4 local resources for distributed power hybrid systems;  
5 and

6 (5) a comprehensive research, development,  
7 demonstration, and commercial application program  
8 to ensure the reliability, efficiency, and environ-  
9 mental integrity of distributed energy resources, fo-  
10 cused on filling gaps in distributed power hybrid sys-  
11 tems technologies identified under subsection (a)(2),  
12 which may include—

13 (A) integration of a wide variety of ad-  
14 vanced technologies into distributed power hy-  
15 brid systems;

16 (B) energy storage devices;

17 (C) environmental control technologies;

18 (D) interconnection standards, protocols,  
19 and equipment; and

20 (E) ancillary equipment for dispatch and  
21 control.

22 (c) IMPLEMENTATION AND INTEGRATION.—The Sec-  
23 retary shall implement the strategy transmitted under  
24 subsection (a) and the research program under subsection  
25 (b)(5). Activities pursuant to the strategy shall be inte-

1 grated with other activities of the Department's Office of  
2 Power Technologies.

3 **SEC. 2124. HIGH POWER DENSITY INDUSTRY PROGRAM.**

4 (a) IN GENERAL.—The Secretary shall develop and  
5 implement a comprehensive research, development, dem-  
6 onstration, and commercial application program to im-  
7 prove energy efficiency, reliability, and environmental re-  
8 sponsibility in high power density industries, such as data  
9 centers, server farms, telecommunications facilities, and  
10 heavy industry.

11 (b) AREAS.—In carrying out this section, the Sec-  
12 retary shall consider technologies that provide—

13 (1) significant improvement in efficiency of high  
14 power density facilities, and in data and tele-  
15 communications centers, using advanced thermal  
16 control technologies;

17 (2) significant improvements in air-conditioning  
18 efficiency in facilities such as data centers and tele-  
19 communications facilities;

20 (3) significant advances in peak load reduction;  
21 and

22 (4) advanced real time metering and load man-  
23 agement and control devices.

24 (c) IMPLEMENTATION AND INTEGRATION.—Activities  
25 pursuant to this program shall be integrated with other

1 activities of the Department's Office of Power Tech-  
2 nologies.

3 **SEC. 2125. MICRO-COGENERATION ENERGY TECHNOLOGY.**

4       The Secretary shall make competitive, merit-based  
5 grants to consortia of private sector entities for the devel-  
6 opment of micro-cogeneration energy technology. The con-  
7 sortia shall explore the creation of small-scale combined  
8 heat and power through the use of residential heating ap-  
9 pliances. There are authorized to be appropriated to the  
10 Secretary \$20,000,000 to carry out this section, to remain  
11 available until expended.

12 **SEC. 2126. PROGRAM PLAN.**

13       Within 4 months after the date of the enactment of  
14 this Act, the Secretary, in consultation with other appro-  
15 priate Federal agencies, shall prepare and transmit to the  
16 Congress a 5-year program plan to guide activities under  
17 this subtitle. In preparing the program plan, the Secretary  
18 shall consult with appropriate representatives of the dis-  
19 tributed energy resources, power transmission, and high  
20 power density industries to prioritize appropriate program  
21 areas. The Secretary shall also seek the advice of utilities,  
22 energy services providers, manufacturers, institutions of  
23 higher learning, other appropriate State and local agen-  
24 cies, environmental organizations, professional and tech-

1 nical societies, and any other persons the Secretary con-  
2 siders appropriate.

3 **SEC. 2127. REPORT.**

4 Two years after date of the enactment of this Act  
5 and at 2-year intervals thereafter, the Secretary, jointly  
6 with other appropriate Federal agencies, shall transmit a  
7 report to Congress describing the progress made to  
8 achieve the purposes of this subtitle.

9 **SEC. 2128. VOLUNTARY CONSENSUS STANDARDS.**

10 Not later than 2 years after the date of the enact-  
11 ment of this Act, the Secretary, in consultation with the  
12 National Institute of Standards and Technology, shall  
13 work with the Institute of Electrical and Electronic Engi-  
14 neers and other standards development organizations to-  
15 ward the development of voluntary consensus standards  
16 for distributed energy systems for use in manufacturing  
17 and using equipment and systems for connection with elec-  
18 tric distribution systems, for obtaining electricity from, or  
19 providing electricity to, such systems.

20 **Subtitle C—Secondary Electric**  
21 **Vehicle Battery Use**

22 **SEC. 2131. DEFINITIONS.**

23 For purposes of this subtitle, the term—

24 (1) “battery” means an energy storage device  
25 that previously has been used to provide motive

1 power in a vehicle powered in whole or in part by  
2 electricity; and

3 (2) “associated equipment” means equipment  
4 located at the location where the batteries will be  
5 used that is necessary to enable the use of the en-  
6 ergy stored in the batteries.

7 **SEC. 2132. ESTABLISHMENT OF SECONDARY ELECTRIC VE-**  
8 **HICLE BATTERY USE PROGRAM.**

9 (a) PROGRAM.—The Secretary shall establish and  
10 conduct a research, development, and demonstration pro-  
11 gram for the secondary use of batteries where the original  
12 use of such batteries was in transportation applications.  
13 Such program shall be—

14 (1) designed to demonstrate the use of batteries  
15 in secondary application, including utility and com-  
16 mercial power storage and power quality;

17 (2) structured to evaluate the performance, in-  
18 cluding longevity of useful service life and costs, of  
19 such batteries in field operations, and evaluate the  
20 necessary supporting infrastructure, including dis-  
21 posal and reuse of batteries; and

22 (3) coordinated with ongoing secondary battery  
23 use programs underway at the national laboratories  
24 and in industry.

1       (b) SOLICITATION.—(1) Not later than 6 months  
2 after the date of the enactment of this Act, the Secretary  
3 shall solicit proposals to demonstrate the secondary use  
4 of batteries and associated equipment and supporting in-  
5 frastructure in geographic locations throughout the  
6 United States. The Secretary may make additional solici-  
7 tations for proposals if the Secretary determines that such  
8 solicitations are necessary to carry out this section.

9       (2)(A) Proposals submitted in response to a solicita-  
10 tion under this section shall include—

11           (i) a description of the project, including the  
12 batteries to be used in the project, the proposed lo-  
13 cations and applications for the batteries, the num-  
14 ber of batteries to be demonstrated, and the type,  
15 characteristics, and estimated life-cycle costs of the  
16 batteries compared to other energy storage devices  
17 currently used;

18           (ii) the contribution, if any, of State or local  
19 governments and other persons to the demonstration  
20 project;

21           (iii) the type of associated equipment to be  
22 demonstrated and the type of supporting infrastruc-  
23 ture to be demonstrated; and

24           (iv) any other information the Secretary con-  
25 sidered appropriate.

1 (B) If the proposal includes a lease arrangement, the  
2 proposal shall indicate the terms of such lease arrange-  
3 ment for the batteries and associated equipment.

4 (c) SELECTION OF PROPOSALS.—(1)(A) The Sec-  
5 retary shall, not later than 3 months after the closing date  
6 established by the Secretary for receipt of proposals under  
7 subsection (b), select at least 5 proposals to receive finan-  
8 cial assistance under this section.

9 (B) No one project selected under this section shall  
10 receive more than 25 percent of the funds authorized  
11 under this section. No more than 3 projects selected under  
12 this section shall demonstrate the same battery type.

13 (2) In selecting a proposal under this section, the  
14 Secretary shall consider—

15 (A) the ability of the proposer to acquire the  
16 batteries and associated equipment and to success-  
17 fully manage and conduct the demonstration project,  
18 including the reporting requirements set forth in  
19 paragraph (3)(B);

20 (B) the geographic and climatic diversity of the  
21 projects selected;

22 (C) the long-term technical and competitive via-  
23 bility of the batteries to be used in the project and  
24 of the original manufacturer of such batteries;

1 (D) the suitability of the batteries for their in-  
2 tended uses;

3 (E) the technical performance of the battery,  
4 including the expected additional useful life and the  
5 battery's ability to retain energy;

6 (F) the environmental effects of the use of and  
7 disposal of the batteries proposed to be used in the  
8 project selected;

9 (G) the extent of involvement of State or local  
10 government and other persons in the demonstration  
11 project and whether such involvement will—

12 (i) permit a reduction of the Federal cost  
13 share per project; or

14 (ii) otherwise be used to allow the Federal  
15 contribution to be provided to demonstrate a  
16 greater number of batteries; and

17 (H) such other criteria as the Secretary con-  
18 siders appropriate.

19 (3) CONDITIONS.—The Secretary shall require that—

20 (A) as a part of a demonstration project, the  
21 users of the batteries provide to the proposer infor-  
22 mation regarding the operation, maintenance, per-  
23 formance, and use of the batteries, and the proposer  
24 provide such information to the battery manufac-



1 turer, for 3 years after the beginning of the dem-  
 2 onstration project;

3 (B) the proposer provide to the Secretary such  
 4 information regarding the operation, maintenance,  
 5 performance, and use of the batteries as the Sec-  
 6 retary may request during the period of the dem-  
 7 onstration project; and

8 (C) the proposer provide at least 50 percent of  
 9 the costs associated with the proposal.

10 **SEC. 2133. AUTHORIZATION OF APPROPRIATIONS.**

11 There are authorized to be appropriated to the Sec-  
 12 retary, from amounts authorized under section 2161(a),  
 13 for purposes of this subtitle—

14 (1) \$1,000,000 for fiscal year 2002;

15 (2) \$7,000,000 for fiscal year 2003; and

16 (3) \$7,000,000 for fiscal year 2004.

17 Such appropriations may remain available until expended.

18 **Subtitle D—Green School Buses**

19 **SEC. 2141. SHORT TITLE.**

20 This subtitle may be cited as the “Clean Green  
 21 School Bus Act of 2001”.

22 **SEC. 2142. ESTABLISHMENT OF PILOT PROGRAM.**

23 (a) ESTABLISHMENT.—The Secretary shall establish  
 24 a pilot program for awarding grants on a competitive basis  
 25 to eligible entities for the demonstration and commercial

1 application of alternative fuel school buses and ultra-low  
2 sulfur diesel school buses.

3 (b) REQUIREMENTS.—Not later than 3 months after  
4 the date of the enactment of this Act, the Secretary shall  
5 establish and publish in the Federal register grant require-  
6 ments on eligibility for assistance, and on implementation  
7 of the program established under subsection (a), including  
8 certification requirements to ensure compliance with this  
9 subtitle.

10 (c) SOLICITATION.—Not later than 6 months after  
11 the date of the enactment of this Act, the Secretary shall  
12 solicit proposals for grants under this section.

13 (d) ELIGIBLE RECIPIENTS.—A grant shall be award-  
14 ed under this section only—

15 (1) to a local governmental entity responsible  
16 for providing school bus service for one or more pub-  
17 lic school systems; or

18 (2) jointly to an entity described in paragraph  
19 (1) and a contracting entity that provides school bus  
20 service to the public school system or systems.

21 (e) TYPES OF GRANTS.—

22 (1) IN GENERAL.—Grants under this section  
23 shall be for the demonstration and commercial appli-  
24 cation of technologies to facilitate the use of alter-  
25 native fuel school buses and ultra-low sulfur diesel

1 school buses in lieu of buses manufactured before  
2 model year 1977 and diesel-powered buses manufac-  
3 tured before model year 1991.

4 (2) NO ECONOMIC BENEFIT.—Other than the  
5 receipt of the grant, a recipient of a grant under this  
6 section may not receive any economic benefit in con-  
7 nection with the receipt of the grant.

8 (3) PRIORITY OF GRANT APPLICATIONS.—The  
9 Secretary shall give priority to awarding grants to  
10 applicants who can demonstrate the use of alter-  
11 native fuel buses and ultra-low sulfur diesel school  
12 buses in lieu of buses manufactured before model  
13 year 1977.

14 (f) CONDITIONS OF GRANT.—A grant provided under  
15 this section shall include the following conditions:

16 (1) All buses acquired with funds provided  
17 under the grant shall be operated as part of the  
18 school bus fleet for which the grant was made for a  
19 minimum of 5 years.

20 (2) Funds provided under the grant may only  
21 be used—

22 (A) to pay the cost, except as provided in  
23 paragraph (3), of new alternative fuel school  
24 buses or ultra-low sulfur diesel school buses, in-  
25 cluding State taxes and contract fees; and

1 (B) to provide—

2 (i) up to 10 percent of the price of the  
3 alternative fuel buses acquired, for nec-  
4 essary alternative fuel infrastructure if the  
5 infrastructure will only be available to the  
6 grant recipient; and

7 (ii) up to 15 percent of the price of  
8 the alternative fuel buses acquired, for nec-  
9 essary alternative fuel infrastructure if the  
10 infrastructure will be available to the grant  
11 recipient and to other bus fleets.

12 (3) The grant recipient shall be required to pro-  
13 vide at least the lesser of 15 percent of the total cost  
14 of each bus received or \$15,000 per bus.

15 (4) In the case of a grant recipient receiving a  
16 grant to demonstrate ultra-low sulfur diesel school  
17 buses, the grant recipient shall be required to pro-  
18 vide documentation to the satisfaction of the Sec-  
19 retary that diesel fuel containing sulfur at not more  
20 than 15 parts per million is available for carrying  
21 out the purposes of the grant, and a commitment by  
22 the applicant to use such fuel in carrying out the  
23 purposes of the grant.

24 (g) BUSES.—Funding under a grant made under this  
25 section may be used to demonstrate the use only of new

1 alternative fuel school buses or ultra-low sulfur diesel  
2 school buses—

3 (1) with a gross vehicle weight of greater than  
4 14,000 pounds;

5 (2) that are powered by a heavy duty engine;

6 (3) that, in the case of alternative fuel school  
7 buses, emit not more than—

8 (A) for buses manufactured in model years  
9 2001 and 2002, 2.5 grams per brake horse-  
10 power-hour of nonmethane hydrocarbons and  
11 oxides of nitrogen and .01 grams per brake  
12 horsepower-hour of particulate matter; and

13 (B) for buses manufactured in model years  
14 2003 through 2006, 1.8 grams per brake horse-  
15 power-hour of nonmethane hydrocarbons and  
16 oxides of nitrogen and .01 grams per brake  
17 horsepower-hour of particulate matter; and

18 (4) that, in the case of ultra-low sulfur diesel  
19 school buses, emit not more than—

20 (A) for buses manufactured in model years  
21 2001 through 2003, 3.0 grams per brake horse-  
22 power-hour of nonmethane hydrocarbons and  
23 oxides of nitrogen and .01 grams per brake  
24 horsepower-hour of particulate matter; and

1 (B) for buses manufactured in model years  
2 2004 through 2006, 2.5 grams per brake horse-  
3 power-hour of nonmethane hydrocarbons and  
4 oxides of nitrogen and .01 grams per brake  
5 horsepower-hour of particulate matter,

6 except that under no circumstances shall buses be  
7 acquired under this section that emit nonmethane  
8 hydrocarbons, oxides of nitrogen, or particulate mat-  
9 ter at a rate greater than the best performing tech-  
10 nology of ultra-low sulfur diesel school buses com-  
11 mercially available at the time the grant is made.

12 (h) DEPLOYMENT AND DISTRIBUTION.—The Sec-  
13 retary shall seek to the maximum extent practicable to  
14 achieve nationwide deployment of alternative fuel school  
15 buses through the program under this section, and shall  
16 ensure a broad geographic distribution of grant awards,  
17 with a goal of no State receiving more than 10 percent  
18 of the grant funding made available under this section for  
19 a fiscal year.

20 (i) LIMIT ON FUNDING.—The Secretary shall provide  
21 not less than 20 percent and not more than 25 percent  
22 of the grant funding made available under this section for  
23 any fiscal year for the acquisition of ultra-low sulfur diesel  
24 school buses.

25 (j) DEFINITIONS.—For purposes of this section—

1           (1) the term “alternative fuel school bus”  
2       means a bus powered substantially by electricity (in-  
3       cluding electricity supplied by a fuel cell), or by liq-  
4       uefied natural gas, compressed natural gas, liquefied  
5       petroleum gas, hydrogen, propane, or methanol or  
6       ethanol at no less than 85 percent by volume; and

7           (2) the term “ultra-low sulfur diesel school  
8       bus” means a school bus powered by diesel fuel  
9       which contains sulfur at not more than 15 parts per  
10      million.

11 **SEC. 2143. FUEL CELL BUS DEVELOPMENT AND DEM-**  
12 **ONSTRATION PROGRAM.**

13       (a) ESTABLISHMENT OF PROGRAM.—The Secretary  
14      shall establish a program for entering into cooperative  
15      agreements with private sector fuel cell bus developers for  
16      the development of fuel cell-powered school buses, and  
17      subsequently with not less than 2 units of local govern-  
18      ment using natural gas-powered school buses and such  
19      private sector fuel cell bus developers to demonstrate the  
20      use of fuel cell-powered school buses.

21       (b) COST SHARING.—The non-Federal contribution  
22      for activities funded under this section shall be not less  
23      than—

24           (1) 20 percent for fuel infrastructure develop-  
25      ment activities; and

1           (2) 50 percent for demonstration activities and  
2       for development activities not described in paragraph  
3       (1).

4       (c) FUNDING.—No more than \$25,000,000 of the  
5       amounts authorized under section 2144 may be used for  
6       carrying out this section for the period encompassing fis-  
7       cal years 2002 through 2006.

8       (d) REPORTS TO CONGRESS.—Not later than 3 years  
9       after the date of the enactment of this Act, and not later  
10      than October 1, 2006, the Secretary shall transmit to the  
11      appropriate congressional committees a report that—

12           (1) evaluates the process of converting natural  
13      gas infrastructure to accommodate fuel cell-powered  
14      school buses; and

15           (2) assesses the results of the development and  
16      demonstration program under this section.

17   **SEC. 2144. AUTHORIZATION OF APPROPRIATIONS.**

18       There are authorized to be appropriated to the Sec-  
19      retary for carrying out this subtitle, to remain available  
20      until expended—

21           (1) \$40,000,000 for fiscal year 2002;

22           (2) \$50,000,000 for fiscal year 2003;

23           (3) \$60,000,000 for fiscal year 2004;

24           (4) \$70,000,000 for fiscal year 2005; and

25           (5) \$80,000,000 for fiscal year 2006.



**Subtitle E—Next Generation  
Lighting Initiative**

**SEC. 2151. SHORT TITLE.**

This subtitle may be cited as “Next Generation Lighting Initiative Act”.

**SEC. 2152. DEFINITION.**

In this subtitle, the term “Lighting Initiative” means the “Next Generation Lighting Initiative” established under section 2153(a).

**SEC. 2153. NEXT GENERATION LIGHTING INITIATIVE.**

(a) ESTABLISHMENT.—The Secretary is authorized to establish a lighting initiative to be known as the “Next Generation Lighting Initiative” to research, develop, and conduct demonstration activities on advanced lighting technologies, including white light emitting diodes.

(b) RESEARCH OBJECTIVES.—The research objectives of the Lighting Initiative shall be to develop, by 2011, advanced lighting technologies that, compared to incandescent and fluorescent lighting technologies as of the date of the enactment of this Act, are—

- (1) longer lasting;
- (2) more energy-efficient; and
- (3) cost-competitive.

1 **SEC. 2154. STUDY.**

2 (a) IN GENERAL.—Not later than 6 months after the  
3 date of the enactment of this Act, the Secretary, in con-  
4 sultation with other Federal agencies, as appropriate, shall  
5 complete a study on strategies for the development and  
6 commercial application of advanced lighting technologies.  
7 The Secretary shall request a review by the National  
8 Academies of Sciences and Engineering of the study under  
9 this subsection, and shall transmit the results of the study  
10 to the appropriate congressional committees.

11 (b) REQUIREMENTS.—The study shall—

12 (1) develop a comprehensive strategy to imple-  
13 ment the Lighting Initiative; and

14 (2) identify the research and development, man-  
15 ufacturing, deployment, and marketing barriers that  
16 must be overcome to achieve a goal of a 25 percent  
17 market penetration by advanced lighting tech-  
18 nologies into the incandescent and fluorescent light-  
19 ing market by the year 2012.

20 (c) IMPLEMENTATION.—As soon as practicable after  
21 the review of the study under subsection (a) is transmitted  
22 to the Secretary by the National Academies of Sciences  
23 and Engineering, the Secretary shall adapt the implemen-  
24 tation of the Lighting Initiative taking into consideration  
25 the recommendations of the National Academies of  
26 Sciences and Engineering.

1 **SEC. 2155. GRANT PROGRAM.**

2 (a) IN GENERAL.—Subject to section 2603 of this  
3 Act, the Secretary may make merit-based competitive  
4 grants to firms and research organizations that conduct  
5 research, development, and demonstration projects related  
6 to advanced lighting technologies.

7 (b) ANNUAL REVIEW.—

8 (1) IN GENERAL.—An annual independent re-  
9 view of the grant-related activities of firms and re-  
10 search organizations receiving a grant under this  
11 section shall be conducted by a committee appointed  
12 by the Secretary under the Federal Advisory Com-  
13 mittee Act (5 U.S.C. App.), or, at the request of the  
14 Secretary, a committee appointed by the National  
15 Academies of Sciences and Engineering.

16 (2) REQUIREMENTS.—Using clearly defined  
17 standards established by the Secretary, the review  
18 shall assess technology advances and progress to-  
19 ward commercialization of the grant-related activi-  
20 ties of firms or research organizations during each  
21 fiscal year of the grant program.

22 (c) TECHNICAL AND FINANCIAL ASSISTANCE.—The  
23 national laboratories and other Federal agencies, as ap-  
24 propriate, shall cooperate with and provide technical and  
25 financial assistance to firms and research organizations

1 conducting research, development, and demonstration  
 2 projects carried out under this subtitle.

## 3 **Subtitle F—Department of Energy** 4 **Authorization of Appropriations**

### 5 **SEC. 2161. AUTHORIZATION OF APPROPRIATIONS.**

6 (a) OPERATION AND MAINTENANCE.—In addition to  
 7 amounts authorized to be appropriated under section  
 8 2105, section 2125, and section 2144, there are author-  
 9 ized to be appropriated to the Secretary for subtitle B,  
 10 subtitle C, subtitle E, and for Energy Conservation oper-  
 11 ation and maintenance (including Building Technology,  
 12 State and Community Sector (Nongrants), Industry Sec-  
 13 tor, Transportation Sector, Power Technologies, and Pol-  
 14 icy and Management) \$625,000,000 for fiscal year 2002,  
 15 \$700,000,000 for fiscal year 2003, and \$800,000,000 for  
 16 fiscal year 2004, to remain available until expended.

17 (b) LIMITS ON USE OF FUNDS.—None of the funds  
 18 authorized to be appropriated in subsection (a) may be  
 19 used for—

20 (1) Building Technology, State and Community  
 21 Sector—

22 (A) Residential Building Energy Codes;

23 (B) Commercial Building Energy Codes;

24 (C) Lighting and Appliance Standards;

1 (D) Weatherization Assistance Program;

2 or

3 (E) State Energy Program; or

4 (2) Federal Energy Management Program.

5 **Subtitle G—Environmental Protec-**  
 6 **tion Agency Office of Air and**  
 7 **Radiation Authorization of Ap-**  
 8 **propriations**

9 **SEC. 2171. SHORT TITLE.**

10 This subtitle may be cited as the “Environmental  
 11 Protection Agency Office of Air and Radiation Authoriza-  
 12 tion Act of 2001”.

13 **SEC. 2172. AUTHORIZATION OF APPROPRIATIONS.**

14 There are authorized to be appropriated to the Ad-  
 15 ministrator for Office of Air and Radiation Climate  
 16 Change Protection Programs \$121,942,000 for fiscal year  
 17 2002, \$126,800,000 for fiscal year 2003, and  
 18 \$131,800,000 for fiscal year 2004 to remain available  
 19 until expended, of which—

20 (1) \$52,731,000 for fiscal year 2002,  
 21 \$54,800,000 for fiscal year 2003, and \$57,000,000  
 22 for fiscal year 2004 shall be for Buildings;

23 (2) \$32,441,000 for fiscal year 2002,  
 24 \$33,700,000 for fiscal year 2003, and \$35,000,000  
 25 for fiscal year 2004 shall be for Transportation;

1           (3) \$27,295,000 for fiscal year 2002,  
2       \$28,400,000 for fiscal year 2003, and \$29,500,000  
3       for fiscal year 2004 shall be for Industry;

4           (4) \$1,700,000 for fiscal year 2002, \$1,800,000  
5       for fiscal year 2003, and \$1,900,000 for fiscal year  
6       2004 shall be for Carbon Removal;

7           (5) \$2,500,000 for fiscal year 2002, \$2,600,000  
8       for fiscal year 2003, and \$2,700,000 for fiscal year  
9       2004 shall be for State and Local Climate; and

10          (6) \$5,275,000 for fiscal year 2002, \$5,500,000  
11       for fiscal year 2003, and \$5,700,000 for fiscal year  
12       2004 shall be for International Capacity Building.

13 **SEC. 2173. LIMITS ON USE OF FUNDS.**

14       (a) PRODUCTION OR PROVISION OF ARTICLES OR  
15 SERVICES.—None of the funds authorized to be appro-  
16 priated by this subtitle may be used to produce or provide  
17 articles or services for the purpose of selling the articles  
18 or services to a person outside the Federal Government,  
19 unless the Administrator determines that comparable arti-  
20 cles or services are not available from a commercial source  
21 in the United States.

22       (b) REQUESTS FOR PROPOSALS.—None of the funds  
23 authorized to be appropriated by this subtitle may be used  
24 by the Environmental Protection Agency to prepare or ini-

1 tiate Requests for Proposals for a program if the program  
2 has not been authorized by Congress.

3 **SEC. 2174. COST SHARING.**

4 (a) RESEARCH AND DEVELOPMENT.—Except as oth-  
5 erwise provided in this subtitle, for research and develop-  
6 ment programs carried out under this subtitle, the Admin-  
7 istrator shall require a commitment from non-Federal  
8 sources of at least 20 percent of the cost of the project.  
9 The Administrator may reduce or eliminate the non-Fed-  
10 eral requirement under this subsection if the Adminis-  
11 trator determines that the research and development is of  
12 a basic or fundamental nature.

13 (b) DEMONSTRATION AND COMMERCIAL APPLICA-  
14 TION.—Except as otherwise provided in this subtitle, the  
15 Administrator shall require at least 50 percent of the costs  
16 directly and specifically related to any demonstration or  
17 commercial application project under this subtitle to be  
18 provided from non-Federal sources. The Administrator  
19 may reduce the non-Federal requirement under this sub-  
20 section if the Administrator determines that the reduction  
21 is necessary and appropriate considering the technological  
22 risks involved in the project and is necessary to meet the  
23 objectives of this subtitle.

24 (c) CALCULATION OF AMOUNT.—In calculating the  
25 amount of the non-Federal commitment under subsection

1 (a) or (b), the Administrator may include personnel, serv-  
2 ices, equipment, and other resources.

3 **SEC. 2175. LIMITATION ON DEMONSTRATION AND COMMER-**  
4 **CIAL APPLICATIONS OF ENERGY TECH-**  
5 **NOLOGY.**

6 The Administrator shall provide funding for scientific  
7 or energy demonstration or commercial application of en-  
8 ergy technology programs, projects, or activities of the Of-  
9 fice of Air and Radiation only for technologies or processes  
10 that can be reasonably expected to yield new, measurable  
11 benefits to the cost, efficiency, or performance of the tech-  
12 nology or process.

13 **SEC. 2176. REPROGRAMMING.**

14 (a) **AUTHORITY.**—The Administrator may use  
15 amounts appropriated under this subtitle for a program,  
16 project, or activity other than the program, project, or ac-  
17 tivity for which such amounts were appropriated only if—

18 (1) the Administrator has transmitted to the  
19 appropriate congressional committees a report de-  
20 scribed in subsection (b) and a period of 30 days has  
21 elapsed after such committees receive the report;

22 (2) amounts used for the program, project, or  
23 activity do not exceed—

24 (A) 105 percent of the amount authorized  
25 for the program, project, or activity; or



1 (B) \$250,000 more than the amount au-  
2 thorized for the program, project, or activity,  
3 whichever is less; and

4 (3) the program, project, or activity has been  
5 presented to, or requested of, the Congress by the  
6 Administrator.

7 (b) REPORT.—(1) The report referred to in sub-  
8 section (a) is a report containing a full and complete state-  
9 ment of the action proposed to be taken and the facts and  
10 circumstances relied upon in support of the proposed ac-  
11 tion.

12 (2) In the computation of the 30-day period under  
13 subsection (a), there shall be excluded any day on which  
14 either House of Congress is not in session because of an  
15 adjournment of more than 3 days to a day certain.

16 (c) LIMITATIONS.—(1) In no event may the total  
17 amount of funds obligated pursuant to this subtitle exceed  
18 the total amount authorized to be appropriated by this  
19 subtitle.

20 (2) Funds appropriated pursuant to this subtitle may  
21 not be used for an item for which Congress has declined  
22 to authorize funds.

23 **SEC. 2177. BUDGET REQUEST FORMAT.**

24 The Administrator shall provide to the appropriate  
25 congressional committees, to be transmitted at the same

1 time as the Environmental Protection Agency's annual  
2 budget request submission, a detailed justification for  
3 budget authorization for the programs, projects, and ac-  
4 tivities for which funds are authorized by this subtitle.  
5 Each such document shall include, for the fiscal year for  
6 which funding is being requested and for the 2 previous  
7 fiscal years—

8           (1) a description of, and funding requested or  
9           allocated for, each such program, project, or activity;

10           (2) an identification of all recipients of funds to  
11           conduct such programs, projects, and activities; and

12           (3) an estimate of the amounts to be expended  
13           by each recipient of funds identified under para-  
14           graph (2).

15 **SEC. 2178. OTHER PROVISIONS.**

16           (a) ANNUAL OPERATING PLAN AND REPORTS.—The  
17 Administrator shall provide simultaneously to the Com-  
18 mittee on Science of the House of Representatives—

19           (1) any annual operating plan or other oper-  
20           ational funding document, including any additions or  
21           amendments thereto; and

22           (2) any report relating to the environmental re-  
23           search or development, scientific or energy research,  
24           development, or demonstration, or commercial appli-

1 cation of energy technology programs, projects, or  
2 activities of the Environmental Protection Agency,  
3 provided to any committee of Congress.

4 (b) NOTICE OF REORGANIZATION.—The Adminis-  
5 trator shall provide notice to the appropriate congressional  
6 committees not later than 15 days before any reorganiza-  
7 tion of any environmental research or development, sci-  
8 entific or energy research, development, or demonstration,  
9 or commercial application of energy technology program,  
10 project, or activity of the Office of Air and Radiation.

## 11 **Subtitle H—National Building** 12 **Performance Initiative**

### 13 **SEC. 2181. NATIONAL BUILDING PERFORMANCE INITIA-** 14 **TIVE.**

15 (a) INTERAGENCY GROUP.—Not later than 3 months  
16 after the date of the enactment of this Act, the Director  
17 of the Office of Science and Technology Policy shall estab-  
18 lish an Interagency Group responsible for the development  
19 and implementation of a National Building Performance  
20 Initiative to address energy conservation and research and  
21 development and related issues. The National Institute of  
22 Standards and Technology shall provide necessary admin-  
23 istrative support for the Interagency Group.

24 (b) PLAN.—Not later than 9 months after the date  
25 of the enactment of this Act, the Interagency Group shall

1 transmit to the Congress a multiyear implementation plan  
2 describing the Federal role in reducing the costs, including  
3 energy costs, of using, owning, and operating commercial,  
4 institutional, residential, and industrial buildings by 30  
5 percent by 2020. The plan shall include—

6           (1) research, development, and demonstration  
7           of systems and materials for new construction and  
8           retrofit, on the building envelope and components;  
9           and

10           (2) the collection and dissemination in a usable  
11           form of research results and other pertinent infor-  
12           mation to the design and construction industry, gov-  
13           ernment officials, and the general public.

14           (c) NATIONAL BUILDING PERFORMANCE ADVISORY  
15 COMMITTEE.—A National Building Performance Advisory  
16 Committee shall be established to advise on creation of  
17 the plan, review progress made under the plan, advise on  
18 any improvements that should be made to the plan, and  
19 report to the Congress on actions that have been taken  
20 to advance the Nation’s capability in furtherance of the  
21 plan. The members shall include representatives of a  
22 broad cross-section of interests such as the research, tech-  
23 nology transfer, architectural, engineering, and financial  
24 communities; materials and systems suppliers; State,  
25 county, and local governments; the residential, multi-

1 family, and commercial sectors of the construction indus-  
 2 try; and the insurance industry.

3 (d) REPORT.—The Interagency Group shall, within  
 4 90 days after the end of each fiscal year, transmit a report  
 5 to the Congress describing progress achieved during the  
 6 preceding fiscal year by government at all levels and by  
 7 the private sector, toward implementing the plan devel-  
 8 oped under subsection (b), and including any amendments  
 9 to the plan.

## 10 **TITLE II—RENEWABLE ENERGY**

### 11 **Subtitle A—Hydrogen**

#### 12 **SEC. 2201. SHORT TITLE.**

13 This subtitle may be cited as the “Robert S. Walker  
 14 and George E. Brown, Jr. Hydrogen Energy Act of  
 15 2001”.

#### 16 **SEC. 2202. PURPOSES.**

17 Section 102(b) of the Spark M. Matsunaga Hydrogen  
 18 Research, Development, and Demonstration Act of 1990  
 19 is amended to read as follows:

20 “(b) PURPOSES.—The purposes of this Act are—

21 “(1) to direct the Secretary to conduct re-  
 22 search, development, and demonstration activities  
 23 leading to the production, storage, transportation,  
 24 and use of hydrogen for industrial, commercial, resi-  
 25 dential, transportation, and utility applications;

1           “(2) to direct the Secretary to develop a pro-  
2           gram of technology assessment, information dissemi-  
3           nation, and education in which Federal, State, and  
4           local agencies, members of the energy, transpor-  
5           tation, and other industries, and other entities may  
6           participate; and

7           “(3) to develop methods of hydrogen production  
8           that minimize adverse environmental impacts, with  
9           emphasis on efficient and cost-effective production  
10          from renewable energy resources.”.

11 **SEC. 2203. DEFINITIONS.**

12          Section 102(c) of the Spark M. Matsunaga Hydrogen  
13          Research, Development, and Demonstration Act of 1990  
14          is amended—

15               (1) by redesignating paragraphs (1) through  
16               (3) as paragraphs (2) through (4), respectively; and

17               (2) by inserting before paragraph (2), as so re-  
18               designated by paragraph (1) of this section, the fol-  
19               lowing new paragraph:

20               “(1) ‘advisory committee’ means the advisory  
21               committee established under section 108;”.

22 **SEC. 2204. REPORTS TO CONGRESS.**

23          Section 103 of the Spark M. Matsunaga Hydrogen  
24          Research, Development, and Demonstration Act of 1990  
25          is amended to read as follows:

1   **“SEC. 103. REPORTS TO CONGRESS.**

2           “(a) REQUIREMENT.—Not later than 1 year after the  
3   date of the enactment of the Robert S. Walker and George  
4   E. Brown, Jr. Hydrogen Energy Act of 2001, and bienni-  
5   ally thereafter, the Secretary shall transmit to Congress  
6   a detailed report on the status and progress of the pro-  
7   grams and activities authorized under this Act.

8           “(b) CONTENTS.—A report under subsection (a) shall  
9   include, in addition to any views and recommendations of  
10  the Secretary—

11           “(1) an assessment of the extent to which the  
12   program is meeting the purposes specified in section  
13   102(b);

14           “(2) a determination of the effectiveness of the  
15   technology assessment, information dissemination,  
16   and education program established under section  
17   106;

18           “(3) an analysis of Federal, State, local, and  
19   private sector hydrogen-related research, develop-  
20   ment, and demonstration activities to identify pro-  
21   ductive areas for increased intergovernmental and  
22   private-public sector collaboration; and

23           “(4) recommendations of the advisory com-  
24   mittee for any improvements needed in the programs  
25   and activities authorized by this Act.”.

1 **SEC. 2205. HYDROGEN RESEARCH AND DEVELOPMENT.**

2 Section 104 of the Spark M. Matsunaga Hydrogen  
3 Research, Development, and Demonstration Act of 1990  
4 is amended to read as follows:

5 **“SEC. 104. HYDROGEN RESEARCH AND DEVELOPMENT.**

6 “(a) ESTABLISHMENT OF PROGRAM.—The Secretary  
7 shall conduct a hydrogen research and development pro-  
8 gram relating to production, storage, transportation, and  
9 use of hydrogen, with the goal of enabling the private sec-  
10 tor to demonstrate the technical feasibility of using hydro-  
11 gen for industrial, commercial, residential, transportation,  
12 and utility applications.

13 “(b) ELEMENTS.—In conducting the program au-  
14 thorized by this section, the Secretary shall—

15 “(1) give particular attention to developing an  
16 understanding and resolution of critical technical  
17 issues preventing the introduction of hydrogen as an  
18 energy carrier into the marketplace;

19 “(2) initiate or accelerate existing research and  
20 development in critical technical issues that will con-  
21 tribute to the development of more economical hy-  
22 drogen production, storage, transportation, and use,  
23 including critical technical issues with respect to  
24 production (giving priority to those production tech-  
25 niques that use renewable energy resources as their  
26 primary source of energy for hydrogen production),



1 liquefaction, transmission, distribution, storage, and  
2 use (including use of hydrogen in surface transpor-  
3 tation); and

4 “(3) survey private sector and public sector hy-  
5 drogen research and development activities world-  
6 wide, and take steps to ensure that research and de-  
7 velopment activities under this section do not—

8 “(A) duplicate any available research and  
9 development results; or

10 “(B) displace or compete with the privately  
11 funded hydrogen research and development ac-  
12 tivities of United States industry.

13 “(c) EVALUATION OF TECHNOLOGIES.—The Sec-  
14 retary shall evaluate, for the purpose of determining  
15 whether to undertake or fund research and development  
16 activities under this section, any reasonable new or im-  
17 proved technology that could lead or contribute to the de-  
18 velopment of economical hydrogen production, storage,  
19 transportation, and use.

20 “(d) RESEARCH AND DEVELOPMENT SUPPORT.—  
21 The Secretary is authorized to arrange for tests and dem-  
22 onstrations and to disseminate to researchers and devel-  
23 opers information, data, and other materials necessary to  
24 support the research and development activities authorized

1 under this section and other efforts authorized under this  
2 Act, consistent with section 106 of this Act.

3 “(e) COMPETITIVE PEER REVIEW.—The Secretary  
4 shall carry out or fund research and development activities  
5 under this section only on a competitive basis using peer  
6 review.

7 “(f) COST SHARING.—For research and development  
8 programs carried out under this section, the Secretary  
9 shall require a commitment from non-Federal sources of  
10 at least 20 percent of the cost of the project. The Sec-  
11 retary may reduce or eliminate the non-Federal require-  
12 ment under this subsection if the Secretary determines  
13 that the research and development is of a basic or funda-  
14 mental nature.”.

15 **SEC. 2206. DEMONSTRATIONS.**

16 Section 105 of the Spark M. Matsunaga Hydrogen  
17 Research, Development, and Demonstration Act of 1990  
18 is amended—

19 (1) in subsection (a), by striking “, preferably  
20 in self-contained locations,”;

21 (2) in subsection (b), by striking “at self-con-  
22 tained sites” and inserting “, which shall include a  
23 fuel cell bus demonstration program to address hy-  
24 drogen production, storage, and use in transit bus  
25 applications”; and

1           (3) in subsection (c), by inserting “NON-FED-  
2       ERAL FUNDING REQUIREMENT.—” after “(c)”.

3   **SEC. 2207. TECHNOLOGY TRANSFER.**

4       Section 106 of the Spark M. Matsunaga Hydrogen  
5   Research, Development, and Demonstration Act of 1990  
6   is amended to read as follows:

7   **“SEC. 106. TECHNOLOGY ASSESSMENT, INFORMATION DIS-**  
8               **SEMINATION, AND EDUCATION PROGRAM.**

9       “(a) PROGRAM.—The Secretary shall, in consultation  
10   with the advisory committee, conduct a program designed  
11   to accelerate wider application of hydrogen production,  
12   storage, transportation, and use technologies, including  
13   application in foreign countries to increase the global mar-  
14   ket for the technologies and foster global economic devel-  
15   opment without harmful environmental effects.

16       “(b) INFORMATION.—The Secretary, in carrying out  
17   the program authorized by subsection (a), shall—

18           “(1) undertake an update of the inventory and  
19       assessment, required under section 106(b)(1) of this  
20       Act as in effect before the date of the enactment of  
21       the Robert S. Walker and George E. Brown, Jr. Hy-  
22       drogen Energy Act of 2001, of hydrogen tech-  
23       nologies and their commercial capability to economi-  
24       cally produce, store, transport, or use hydrogen in

1 industrial, commercial, residential, transportation,  
2 and utility sector; and

3 “(2) develop, with other Federal agencies as ap-  
4 propriate and industry, an information exchange  
5 program to improve technology transfer for hydro-  
6 gen production, storage, transportation, and use,  
7 which may consist of workshops, publications, con-  
8 ferences, and a database for the use by the public  
9 and private sectors.”.

10 **SEC. 2208. COORDINATION AND CONSULTATION.**

11 Section 107 of the Spark M. Matsunaga Hydrogen  
12 Research, Development, and Demonstration Act of 1990  
13 is amended—

14 (1) by amending paragraph (1) of subsection  
15 (a) to read as follows:

16 “(1) shall establish a central point for the co-  
17 ordination of all hydrogen research, development,  
18 and demonstration activities of the Department;  
19 and”; and

20 (2) by amending subsection (c) to read as fol-  
21 lows:

22 “(c) CONSULTATION.—The Secretary shall consult  
23 with other Federal agencies as appropriate, and the advi-  
24 sory committee, in carrying out the Secretary’s authorities  
25 pursuant to this Act.”.

1 **SEC. 2209. ADVISORY COMMITTEE.**

2 Section 108 of the Spark M. Matsunaga Hydrogen  
3 Research, Development, and Demonstration Act of 1990  
4 is amended to read as follows:

5 **“SEC. 108. ADVISORY COMMITTEE.**

6 “(a) ESTABLISHMENT.—The Secretary shall enter  
7 into appropriate arrangements with the National Acad-  
8 emies of Sciences and Engineering to establish an advisory  
9 committee consisting of experts drawn from domestic in-  
10 dustry, academia, Governmental laboratories, and finan-  
11 cial, environmental, and other organizations, as appro-  
12 priate, to review and advise on the progress made through  
13 the programs and activities authorized under this Act.

14 “(b) COOPERATION.—The heads of Federal agencies  
15 shall cooperate with the advisory committee in carrying  
16 out this section and shall furnish to the advisory com-  
17 mittee such information as the advisory committee reason-  
18 ably deems necessary to carry out this section.

19 “(c) REVIEW.—The advisory committee shall review  
20 and make any necessary recommendations to the Sec-  
21 retary on—

22 “(1) the implementation and conduct of pro-  
23 grams and activities authorized under this Act; and

24 “(2) the economic, technological, and environ-  
25 mental consequences of the deployment of hydrogen  
26 production, storage, transportation, and use systems.

1       “(d) RESPONSIBILITIES OF THE SECRETARY.—The  
 2 Secretary shall consider, but need not adopt, any rec-  
 3 ommendations of the advisory committee under subsection  
 4 (c). The Secretary shall provide an explanation of the rea-  
 5 sons that any such recommendations will not be imple-  
 6 mented and include such explanation in the report to Con-  
 7 gress under section 103(a) of this Act.”.

8       **SEC. 2210. AUTHORIZATION OF APPROPRIATIONS.**

9       Section 109 of the Spark M. Matsunaga Hydrogen  
 10 Research, Development, and Demonstration Act of 1990  
 11 is amended to read as follows:

12       **“SEC. 109. AUTHORIZATION OF APPROPRIATIONS.**

13       “(a) RESEARCH AND DEVELOPMENT; ADVISORY  
 14 COMMITTEE.—There are authorized to be appropriated to  
 15 the Secretary to carry out sections 104 and 108—

16               “(1) \$40,000,000 for fiscal year 2002;

17               “(2) \$45,000,000 for fiscal year 2003;

18               “(3) \$50,000,000 for fiscal year 2004;

19               “(4) \$55,000,000 for fiscal year 2005; and

20               “(5) \$60,000,000 for fiscal year 2006.

21       “(b) DEMONSTRATION.—There are authorized to be  
 22 appropriated to the Secretary to carry out section 105—

23               “(1) \$20,000,000 for fiscal year 2002;

24               “(2) \$25,000,000 for fiscal year 2003;

25               “(3) \$30,000,000 for fiscal year 2004;

1 “(4) \$35,000,000 for fiscal year 2005; and

2 “(5) \$40,000,000 for fiscal year 2006.”.

3 **SEC. 2211. REPEAL.**

4 (a) REPEAL.—Title II of the Hydrogen Future Act  
5 of 1996 is repealed.

6 (b) CONFORMING AMENDMENT.—Section 2 of the  
7 Hydrogen Future Act of 1996 is amended by striking “ti-  
8 tles II and III” and inserting “title III”.

9 **Subtitle B—Bioenergy**

10 **SEC. 2221. SHORT TITLE.**

11 This subtitle may be cited as the “Bioenergy Act of  
12 2001”.

13 **SEC. 2222. FINDINGS.**

14 Congress finds that bioenergy has potential to help—

15 (1) meet the Nation’s energy needs;

16 (2) reduce reliance on imported fuels;

17 (3) promote rural economic development;

18 (4) provide for productive utilization of agricul-  
19 tural residues and waste materials, and forestry resi-  
20 dues and byproducts; and

21 (5) protect the environment.

22 **SEC. 2223. DEFINITIONS.**

23 For purposes of this subtitle—

24 (1) the term “bioenergy” means energy derived  
25 from any organic matter that is available on a re-

1 newable or recurring basis, including agricultural  
2 crops and trees, wood and wood wastes and residues,  
3 plants (including aquatic plants), grasses, residues,  
4 fibers, and animal and other organic wastes;

5 (2) the term “biofuels” includes liquid or gas-  
6 eous fuels, industrial chemicals, or both;

7 (3) the term “biopower” includes the generation  
8 of electricity or process steam or both; and

9 (4) the term “integrated bioenergy research and  
10 development” includes biopower and biofuels applica-  
11 tions.

12 **SEC. 2224. AUTHORIZATION.**

13 The Secretary is authorized to conduct environmental  
14 research and development, scientific and energy research,  
15 development, and demonstration, and commercial applica-  
16 tion of energy technology programs, projects, and activi-  
17 ties related to bioenergy, including biopower energy sys-  
18 tems, biofuels energy systems, and integrated bioenergy  
19 research and development.

20 **SEC. 2225. AUTHORIZATION OF APPROPRIATIONS.**

21 (a) BIOPOWER ENERGY SYSTEMS.—There are au-  
22 thorized to be appropriated to the Secretary for Biopower  
23 Energy Systems programs, projects, and activities—

24 (1) \$45,700,000 for fiscal year 2002;

25 (2) \$52,500,000 for fiscal year 2003;



1 (3) \$60,300,000 for fiscal year 2004;

2 (4) \$69,300,000 for fiscal year 2005; and

3 (5) \$79,600,000 for fiscal year 2006.

4 (b) BIOFUELS ENERGY SYSTEMS.—There are au-  
5 thorized to be appropriated to the Secretary for biofuels  
6 energy systems programs, projects, and activities—

7 (1) \$53,500,000 for fiscal year 2002;

8 (2) \$61,400,000 for fiscal year 2003;

9 (3) \$70,600,000 for fiscal year 2004;

10 (4) \$81,100,000 for fiscal year 2005; and

11 (5) \$93,200,000 for fiscal year 2006.

12 (c) INTEGRATED BIOENERGY RESEARCH AND DE-  
13 VELOPMENT.—There are authorized to be appropriated to  
14 the Secretary for integrated bioenergy research and devel-  
15 opment programs, projects, and activities, \$49,000,000  
16 for each of the fiscal years 2002 through 2006. Activities  
17 funded under this subsection shall be coordinated with on-  
18 going related programs of other Federal agencies, includ-  
19 ing the Plant Genome Program of the National Science  
20 Foundation. Of the funds authorized under this sub-  
21 section, at least \$5,000,000 for each fiscal year shall be  
22 for training and education targeted to minority and social  
23 disadvantaged farmers and ranchers.

24 (d) INTEGRATED APPLICATIONS.—Amounts author-  
25 ized to be appropriated under this subtitle may be used

1 to assist in the planning, design, and implementation of  
 2 projects to convert rice straw and barley grain into  
 3 biopower or biofuels.

## 4                   **Subtitle C—Transmission** 5                   **Infrastructure Systems**

6 **SEC. 2241. TRANSMISSION INFRASTRUCTURE SYSTEMS RE-**  
 7                   **SEARCH, DEVELOPMENT, DEMONSTRATION,**  
 8                   **AND COMMERCIAL APPLICATION.**

9           (a) IN GENERAL.—The Secretary shall develop and  
 10 implement a comprehensive research, development, dem-  
 11 onstration, and commercial application program to ensure  
 12 the reliability, efficiency, and environmental integrity of  
 13 electrical transmission systems. Such program shall in-  
 14 clude advanced energy technologies and systems, high ca-  
 15 pacity superconducting transmission lines and generators,  
 16 advanced grid reliability and efficiency technologies devel-  
 17 opment, technologies contributing to significant load re-  
 18 ductions, advanced metering, load management and con-  
 19 trol technologies, and technology transfer and education.

20           (b) TECHNOLOGY.—In carrying out this subtitle, the  
 21 Secretary may include research, development, and dem-  
 22 onstration on and commercial application of improved  
 23 transmission technologies including the integration of the  
 24 following technologies into improved transmission systems:

25                   (1) High temperature superconductivity.

1           (2) Advanced transmission materials.

2           (3) Self-adjusting equipment, processes, or soft-  
3       ware for survivability, security, and failure contain-  
4       ment.

5           (4) Enhancements of energy transfer over exist-  
6       ing lines.

7           (5) Any other infrastructure technologies, as  
8       appropriate.

9   **SEC. 2242. PROGRAM PLAN.**

10       Within 4 months after the date of the enactment of  
11   this Act, the Secretary, in consultation with other appro-  
12   priate Federal agencies, shall prepare and transmit to  
13   Congress a 5-year program plan to guide activities under  
14   this subtitle. In preparing the program plan, the Secretary  
15   shall consult with appropriate representatives of the trans-  
16   mission infrastructure systems industry to select and  
17   prioritize appropriate program areas. The Secretary shall  
18   also seek the advice of utilities, energy services providers,  
19   manufacturers, institutions of higher learning, other ap-  
20   propriate State and local agencies, environmental organi-  
21   zations, professional and technical societies, and any other  
22   persons as the Secretary considers appropriate.

23   **SEC. 2243. REPORT.**

24       Two years after the date of the enactment of this Act,  
25   and at 2-year intervals thereafter, the Secretary, in con-

1 sultation with other appropriate Federal agencies, shall  
2 transmit a report to Congress describing the progress  
3 made to achieve the purposes of this subtitle and identi-  
4 fying any additional resources needed to continue the de-  
5 velopment and commercial application of transmission in-  
6 frastructure technologies.

## 7 **Subtitle D—Department of Energy** 8 **Authorization of Appropriations**

### 9 **SEC. 2261. AUTHORIZATION OF APPROPRIATIONS.**

10 (a) OPERATION AND MAINTENANCE.—There are au-  
11 thorized to be appropriated to the Secretary for Renewable  
12 Energy operation and maintenance, including activities  
13 under subtitle C, Geothermal Technology Development,  
14 Hydropower, Concentrating Solar Power, Photovoltaic  
15 Energy Systems, Solar Building Technology Research,  
16 Wind Energy Systems, High Temperature Super-  
17 conducting Research and Development, Energy Storage  
18 Systems, Transmission Reliability, International Renew-  
19 able Energy Program, Renewable Energy Production In-  
20 centive Program, Renewable Program Support, National  
21 Renewable Energy Laboratory, and Program Direction,  
22 and including amounts authorized under the amendment  
23 made by section 2210 and amounts authorized under sec-  
24 tion 2225, \$535,000,000 for fiscal year 2002,

1 \$639,000,000 for fiscal year 2003, and \$683,000,000 for  
2 fiscal year 2004, to remain available until expended.

3 (b) WAVE POWERED ELECTRIC GENERATION.—  
4 Within the amounts authorized to be appropriated to the  
5 Secretary under subsection (a), the Secretary shall carry  
6 out a research program, in conjunction with other appro-  
7 priate Federal agencies, on wave powered electric genera-  
8 tion.

9 (c) ASSESSMENT OF RENEWABLE ENERGY RE-  
10 SOURCES.—

11 (1) IN GENERAL.—Using funds authorized in  
12 subsection (a), of this section, the Secretary shall  
13 transmit to the Congress, within 1 year after the  
14 date of the enactment of this Act, an assessment of  
15 all renewable energy resources available within the  
16 United States.

17 (2) RESOURCE ASSESSMENT.—Such report  
18 shall include a detailed inventory describing the  
19 available amount and characteristics of solar, wind,  
20 biomass, geothermal, hydroelectric, and other renew-  
21 able energy sources, and an estimate of the costs  
22 needed to develop each resource. The report shall  
23 also include such other information as the Secretary  
24 believes would be useful in siting renewable energy  
25 generation, such as appropriate terrain, population

1 and load centers, nearby energy infrastructure, and  
 2 location of energy resources.

3 (3) AVAILABILITY.—The information and cost  
 4 estimates in this report shall be updated annually  
 5 and made available to the public, along with the  
 6 data used to create the report.

7 (4) SUNSET.—This subsection shall expire at  
 8 the end of fiscal year 2004.

9 (d) LIMITS ON USE OF FUNDS.—None of the funds  
 10 authorized to be appropriated in subsection (a) may be  
 11 used for—

12 (1) Departmental Energy Management Pro-  
 13 gram; or

14 (2) Renewable Indian Energy Resources.

15 **TITLE III—NUCLEAR ENERGY**  
 16 **Subtitle A—University Nuclear**  
 17 **Science and Engineering**

18 **SEC. 2301. SHORT TITLE.**

19 This subtitle may be cited as “Department of Energy  
 20 University Nuclear Science and Engineering Act”.

21 **SEC. 2302. FINDINGS.**

22 The Congress finds the following:

23 (1) United States university nuclear science and  
 24 engineering programs are in a state of serious de-  
 25 cline, with nuclear engineering enrollment at a 35-

1 year low. Since 1980, the number of nuclear engi-  
2 neering university programs has declined nearly 40  
3 percent, and over two-thirds of the faculty in these  
4 programs are 45 years of age or older. Also, since  
5 1980, the number of university research and train-  
6 ing reactors in the United States has declined by  
7 over 50 percent. Most of these reactors were built in  
8 the late 1950s and 1960s with 30-year to 40-year  
9 operating licenses, and many will require relicensing  
10 in the next several years.

11 (2) A decline in a competent nuclear workforce,  
12 and the lack of adequately trained nuclear scientists  
13 and engineers, will affect the ability of the United  
14 States to solve future nuclear waste storage issues,  
15 operate existing and design future fission reactors in  
16 the United States, respond to future nuclear events  
17 worldwide, help stem the proliferation of nuclear  
18 weapons, and design and operate naval nuclear reac-  
19 tors.

20 (3) The Department of Energy's Office of Nu-  
21 clear Energy, Science and Technology, a principal  
22 Federal agency for civilian research in nuclear  
23 science and engineering, is well suited to help main-  
24 tain tomorrow's human resource and training invest-  
25 ment in the nuclear sciences and engineering.

1 **SEC. 2303. DEPARTMENT OF ENERGY PROGRAM.**

2 (a) ESTABLISHMENT.—The Secretary, through the  
3 Office of Nuclear Energy, Science and Technology, shall  
4 support a program to maintain the Nation’s human re-  
5 source investment and infrastructure in the nuclear  
6 sciences and engineering consistent with the Department’s  
7 statutory authorities related to civilian nuclear research,  
8 development, and demonstration and commercial applica-  
9 tion of energy technology.

10 (b) DUTIES OF THE OFFICE OF NUCLEAR ENERGY,  
11 SCIENCE AND TECHNOLOGY.—In carrying out the pro-  
12 gram under this subtitle, the Director of the Office of Nu-  
13 clear Energy, Science and Technology shall—

14 (1) develop a robust graduate and under-  
15 graduate fellowship program to attract new and tal-  
16 ented students;

17 (2) assist universities in recruiting and retain-  
18 ing new faculty in the nuclear sciences and engineer-  
19 ing through a Junior Faculty Research Initiation  
20 Grant Program;

21 (3) maintain a robust investment in the funda-  
22 mental nuclear sciences and engineering through the  
23 Nuclear Engineering Education Research Program;

24 (4) encourage collaborative nuclear research  
25 among industry, national laboratories, and univer-



1       sities through the Nuclear Energy Research Initia-  
2       tive;

3           (5) assist universities in maintaining reactor in-  
4       frastructure; and

5           (6) support communication and outreach re-  
6       lated to nuclear science and engineering.

7       (c) MAINTAINING UNIVERSITY RESEARCH AND  
8       TRAINING REACTORS AND ASSOCIATED INFRASTRUC-  
9       TURE.—The Secretary, through the Office of Nuclear En-  
10      ergy, Science and Technology, shall provide for the fol-  
11      lowing university research and training reactor infrastruc-  
12      ture maintenance and research activities:

13           (1) Refueling of university research reactors  
14      with low enriched fuels, upgrade of operational in-  
15      strumentation, and sharing of reactors among uni-  
16      versities.

17           (2) In collaboration with the United States nu-  
18      clear industry, assistance, where necessary, in reli-  
19      censing and upgrading university training reactors  
20      as part of a student training program.

21           (3) A university reactor research and training  
22      award program that provides for reactor improve-  
23      ments as part of a focused effort that emphasizes re-  
24      search, training, and education.

1       (d)     UNIVERSITY-DOE     LABORATORY     INTER-  
2 ACTIONS.—The Secretary, through the Office of Nuclear  
3 Energy, Science and Technology, shall develop—

4             (1) a sabbatical fellowship program for univer-  
5 sity faculty to spend extended periods of time at De-  
6 partment of Energy laboratories in the areas of nu-  
7 clear science and technology; and

8             (2) a visiting scientist program in which labora-  
9 tory staff can spend time in academic nuclear  
10 science and engineering departments.

11 The Secretary may under subsection (b)(1) provide for fel-  
12 lowships for students to spend time at Department of En-  
13 ergy laboratories in the areas of nuclear science and tech-  
14 nology under the mentorship of laboratory staff.

15       (e) OPERATIONS AND MAINTENANCE.—To the extent  
16 that the use of a university research reactor is funded  
17 under this subtitle, funds authorized under this subtitle  
18 may be used to supplement operation of the research reac-  
19 tor during the investigator’s proposed effort. The host in-  
20 stitution shall provide at least 50 percent of the cost of  
21 the reactor’s operation.

22       (f) MERIT REVIEW REQUIRED.—All grants, con-  
23 tracts, cooperative agreements, or other financial assist-  
24 ance awards under this subtitle shall be made only after  
25 independent merit review.

1 (g) REPORT.—Not later than 6 months after the date  
2 of the enactment of this Act, the Secretary shall prepare  
3 and transmit to the appropriate congressional committees  
4 a 5-year plan on how the programs authorized in this sub-  
5 title will be implemented. The plan shall include a review  
6 of the projected personnel needs in the fields of nuclear  
7 science and engineering and of the scope of nuclear science  
8 and engineering education programs at the Department  
9 and other Federal agencies.

10 **SEC. 2304. AUTHORIZATION OF APPROPRIATIONS.**

11 (a) TOTAL AUTHORIZATION.—The following sums  
12 are authorized to be appropriated to the Secretary, to re-  
13 main available until expended, for the purposes of carrying  
14 out this subtitle:

15 (1) \$30,200,000 for fiscal year 2002.

16 (2) \$41,000,000 for fiscal year 2003.

17 (3) \$47,900,000 for fiscal year 2004.

18 (4) \$55,600,000 for fiscal year 2005.

19 (5) \$64,100,000 for fiscal year 2006.

20 (b) GRADUATE AND UNDERGRADUATE FELLOW-  
21 SHIPS.—Of the funds authorized by subsection (a), the fol-  
22 lowing sums are authorized to be appropriated to carry  
23 out section 2303(b)(1):

24 (1) \$3,000,000 for fiscal year 2002.

25 (2) \$3,100,000 for fiscal year 2003.

1           (3) \$3,200,000 for fiscal year 2004.

2           (4) \$3,200,000 for fiscal year 2005.

3           (5) \$3,200,000 for fiscal year 2006.

4           (c) JUNIOR FACULTY RESEARCH INITIATION GRANT

5 PROGRAM.—Of the funds authorized by subsection (a),

6 the following sums are authorized to be appropriated to

7 carry out section 2303(b)(2):

8           (1) \$5,000,000 for fiscal year 2002.

9           (2) \$7,000,000 for fiscal year 2003.

10          (3) \$8,000,000 for fiscal year 2004.

11          (4) \$9,000,000 for fiscal year 2005.

12          (5) \$10,000,000 for fiscal year 2006.

13          (d) NUCLEAR ENGINEERING EDUCATION RESEARCH

14 PROGRAM.—Of the funds authorized by subsection (a),

15 the following sums are authorized to be appropriated to

16 carry out section 2303(b)(3):

17          (1) \$8,000,000 for fiscal year 2002.

18          (2) \$12,000,000 for fiscal year 2003.

19          (3) \$13,000,000 for fiscal year 2004.

20          (4) \$15,000,000 for fiscal year 2005.

21          (5) \$20,000,000 for fiscal year 2006.

22          (e) COMMUNICATION AND OUTREACH RELATED TO

23 NUCLEAR SCIENCE AND ENGINEERING.—Of the funds

24 authorized by subsection (a), the following sums are au-

1 thorized to be appropriated to carry out section  
2 2303(b)(5):

3 (1) \$200,000 for fiscal year 2002.

4 (2) \$200,000 for fiscal year 2003.

5 (3) \$300,000 for fiscal year 2004.

6 (4) \$300,000 for fiscal year 2005.

7 (5) \$300,000 for fiscal year 2006.

8 (f) REFUELING OF UNIVERSITY RESEARCH REAC-  
9 TORS AND INSTRUMENTATION UPGRADES.—Of the funds  
10 authorized by subsection (a), the following sums are au-  
11 thorized to be appropriated to carry out section  
12 2303(c)(1):

13 (1) \$6,000,000 for fiscal year 2002.

14 (2) \$6,500,000 for fiscal year 2003.

15 (3) \$7,000,000 for fiscal year 2004.

16 (4) \$7,500,000 for fiscal year 2005.

17 (5) \$8,000,000 for fiscal year 2006.

18 (g) RELICENSING ASSISTANCE.—Of the funds au-  
19 thorized by subsection (a), the following sums are author-  
20 ized to be appropriated to carry out section 2303(c)(2):

21 (1) \$1,000,000 for fiscal year 2002.

22 (2) \$1,100,000 for fiscal year 2003.

23 (3) \$1,200,000 for fiscal year 2004.

24 (4) \$1,300,000 for fiscal year 2005.

25 (5) \$1,300,000 for fiscal year 2006.

1 (h) REACTOR RESEARCH AND TRAINING AWARD  
 2 PROGRAM.—Of the funds authorized by subsection (a),  
 3 the following sums are authorized to be appropriated to  
 4 carry out section 2303(c)(3):

- 5 (1) \$6,000,000 for fiscal year 2002.
- 6 (2) \$10,000,000 for fiscal year 2003.
- 7 (3) \$14,000,000 for fiscal year 2004.
- 8 (4) \$18,000,000 for fiscal year 2005.
- 9 (5) \$20,000,000 for fiscal year 2006.

10 (i) UNIVERSITY-DOE LABORATORY INTER-  
 11 ACTIONS.—Of the funds authorized by subsection (a), the  
 12 following sums are authorized to be appropriated to carry  
 13 out section 2303(d):

- 14 (1) \$1,000,000 for fiscal year 2002.
- 15 (2) \$1,100,000 for fiscal year 2003.
- 16 (3) \$1,200,000 for fiscal year 2004.
- 17 (4) \$1,300,000 for fiscal year 2005.
- 18 (5) \$1,300,000 for fiscal year 2006.

19 **Subtitle B—Advanced Fuel Recy-**  
 20 **cling Technology Research and**  
 21 **Development Program**

22 **SEC. 2321. PROGRAM.**

23 (a) IN GENERAL.—The Secretary, through the Direc-  
 24 tor of the Office of Nuclear Energy, Science and Tech-  
 25 nology, shall conduct an advanced fuel recycling tech-

1 nology research and development program to further the  
2 availability of proliferation-resistant fuel recycling tech-  
3 nologies as an alternative to aqueous reprocessing in sup-  
4 port of evaluation of alternative national strategies for  
5 spent nuclear fuel and the Generation IV advanced reactor  
6 concepts, subject to annual review by the Secretary's Nu-  
7 clear Energy Research Advisory Committee or other inde-  
8 pendent entity, as appropriate.

9 (b) REPORTS.—The Secretary shall report on the ac-  
10 tivities of the advanced fuel recycling technology research  
11 and development program, as part of the Department's  
12 annual budget submission.

13 (c) AUTHORIZATION OF APPROPRIATIONS.—There  
14 are authorized to be appropriated to the Secretary to carry  
15 out this section—

16 (1) \$10,000,000 for fiscal year 2002; and

17 (2) such sums as are necessary for fiscal year  
18 2003 and fiscal year 2004.

## 19 **Subtitle C—Department of Energy** 20 **Authorization of Appropriations**

### 21 **SEC. 2341. NUCLEAR ENERGY RESEARCH INITIATIVE.**

22 (a) PROGRAM.—The Secretary, through the Office of  
23 Nuclear Energy, Science and Technology, shall conduct a  
24 Nuclear Energy Research Initiative for grants to be com-

1 petitively awarded and subject to peer review for research  
2 relating to nuclear energy.

3 (b) OBJECTIVES.—The program shall be directed to—  
4 ward accomplishing the objectives of—

5 (1) developing advanced concepts and scientific  
6 breakthroughs in nuclear fission and reactor tech-  
7 nology to address and overcome the principal tech-  
8 nical and scientific obstacles to the expanded use of  
9 nuclear energy in the United States;

10 (2) advancing the state of nuclear technology to  
11 maintain a competitive position in foreign markets  
12 and a future domestic market;

13 (3) promoting and maintaining a United States  
14 nuclear science and engineering infrastructure to  
15 meet future technical challenges;

16 (4) providing an effective means to collaborate  
17 on a cost-shared basis with international agencies  
18 and research organizations to address and influence  
19 nuclear technology development worldwide; and

20 (5) promoting United States leadership and  
21 partnerships in bilateral and multilateral nuclear en-  
22 ergy research.

23 (c) AUTHORIZATION OF APPROPRIATIONS.—There  
24 are authorized to be appropriated to the Secretary to carry  
25 out this section—



- 1 (1) \$60,000,000 for fiscal year 2002; and
- 2 (2) such sums as are necessary for fiscal year
- 3 2003 and fiscal year 2004.

4 **SEC. 2342. NUCLEAR ENERGY PLANT OPTIMIZATION PRO-**  
5 **GRAM.**

6 (a) PROGRAM.—The Secretary, through the Office of  
7 Nuclear Energy, Science and Technology, shall conduct a  
8 Nuclear Energy Plant Optimization research and develop-  
9 ment program jointly with industry and cost-shared by in-  
10 dustry by at least 50 percent and subject to annual review  
11 by the Secretary's Nuclear Energy Research Advisory  
12 Committee or other independent entity, as appropriate.

13 (b) OBJECTIVES.—The program shall be directed to-  
14 ward accomplishing the objectives of—

- 15 (1) managing long-term effects of component
- 16 aging; and
- 17 (2) improving the efficiency and productivity of
- 18 existing nuclear power stations.

19 (c) AUTHORIZATION OF APPROPRIATIONS.—There  
20 are authorized to be appropriated to the Secretary to carry  
21 out this section—

- 22 (1) \$15,000,000 for fiscal year 2002; and
- 23 (2) such sums as are necessary for fiscal years
- 24 2003 and 2004.

1 **SEC. 2343. NUCLEAR ENERGY TECHNOLOGIES.**

2 (a) IN GENERAL.—The Secretary, through the Office  
3 of Nuclear Energy, Science and Technology, shall conduct  
4 a study of Generation IV nuclear energy systems, includ-  
5 ing development of a technology roadmap and perform-  
6 ance of research and development necessary to make an  
7 informed technical decision regarding the most promising  
8 candidates for commercial application.

9 (b) REACTOR CHARACTERISTICS.—To the extent  
10 practicable, in conducting the study under subsection (a),  
11 the Secretary shall study nuclear energy systems that offer  
12 the highest probability of achieving the goals for Genera-  
13 tion IV nuclear energy systems, including—

14 (1) economics competitive with any other gen-  
15 erators;

16 (2) enhanced safety features, including passive  
17 safety features;

18 (3) substantially reduced production of high-  
19 level waste, as compared with the quantity of waste  
20 produced by reactors in operation on the date of the  
21 enactment of this Act;

22 (4) highly proliferation-resistant fuel and waste;

23 (5) sustainable energy generation including op-  
24 timized fuel utilization; and

1           (6) substantially improved thermal efficiency, as  
2           compared with the thermal efficiency of reactors in  
3           operation on the date of the enactment of this Act.

4           (c) CONSULTATION.—In conducting the study under  
5           subsection (a), the Secretary shall consult with appro-  
6           priate representatives of industry, institutions of higher  
7           education, Federal agencies, and international, profes-  
8           sional, and technical organizations.

9           (d) REPORT.—

10           (1) IN GENERAL.—Not later than December 31,  
11           2002, the Secretary shall transmit to the appro-  
12           priate congressional committees a report describing  
13           the activities of the Secretary under this section, and  
14           plans for research and development leading to a  
15           public/private cooperative demonstration of one or  
16           more Generation IV nuclear energy systems.

17           (2) CONTENTS.—The report shall contain—

18                   (A) an assessment of all available tech-  
19                   nologies;

20                   (B) a summary of actions needed for the  
21                   most promising candidates to be considered as  
22                   viable commercial options within the five to ten  
23                   years after the date of the report, with consid-  
24                   eration of regulatory, economic, and technical  
25                   issues;

1 (C) a recommendation of not more than  
2 three promising Generation IV nuclear energy  
3 system concepts for further development;

4 (D) an evaluation of opportunities for pub-  
5 lic/private partnerships;

6 (E) a recommendation for structure of a  
7 public/private partnership to share in develop-  
8 ment and construction costs;

9 (F) a plan leading to the selection and con-  
10 ceptual design, by September 30, 2004, of at  
11 least one Generation IV nuclear energy system  
12 concept recommended under subparagraph (C)  
13 for demonstration through a public/private  
14 partnership;

15 (G) an evaluation of opportunities for  
16 siting demonstration facilities on Department of  
17 Energy land; and

18 (H) a recommendation for appropriate in-  
19 volvement of other Federal agencies.

20 (e) AUTHORIZATION OF APPROPRIATIONS.—There  
21 are authorized to be appropriated to the Secretary to carry  
22 out this section and to carry out the recommendations in  
23 the report transmitted under subsection (d)—

24 (1) \$20,000,000 for fiscal year 2002; and

1           (2) such sums as are necessary for fiscal year  
2       2003 and fiscal year 2004.

3   **SEC. 2344. AUTHORIZATION OF APPROPRIATIONS.**

4       (a) OPERATION AND MAINTENANCE.—There are au-  
5   thorized to be appropriated to the Secretary to carry out  
6   activities authorized under this title for nuclear energy op-  
7   eration and maintenance, including amounts authorized  
8   under sections 2304(a), 2321(c), 2341(c), 2342(c), and  
9   2343(e), and including Advanced Radioisotope Power Sys-  
10   tems, Test Reactor Landlord, and Program Direction,  
11   \$191,200,000 for fiscal year 2002, \$199,000,000 for fis-  
12   cal year 2003, and \$207,000,000 for fiscal year 2004, to  
13   remain available until expended.

14       (b) CONSTRUCTION.—There are authorized to be ap-  
15   propriated to the Secretary—

16           (1) \$950,000 for fiscal year 2002, \$2,200,000  
17       for fiscal year 2003, \$1,246,000 for fiscal year  
18       2004, and \$1,699,000 for fiscal year 2005 for com-  
19       pletion of construction of Project 99-E-200, Test  
20       Reactor Area Electric Utility Upgrade, Idaho Na-  
21       tional Engineering and Environmental Laboratory;  
22       and

23           (2) \$500,000 for fiscal year 2002, \$500,000 for  
24       fiscal year 2003, \$500,000 for fiscal year 2004, and  
25       \$500,000 for fiscal year 2005, for completion of con-

1 construction of Project 95-E-201, Test Reactor Area  
2 Fire and Life Safety Improvements, Idaho National  
3 Engineering and Environmental Laboratory.

4 (c) LIMITS ON USE OF FUNDS.—None of the funds  
5 authorized to be appropriated in subsection (a) may be  
6 used for—

7 (1) Nuclear Energy Isotope Support and Pro-  
8 duction;

9 (2) Argonne National Laboratory-West Oper-  
10 ations;

11 (3) Fast Flux Test Facility; or

12 (4) Nuclear Facilities Management.

## 13 **TITLE IV—FOSSIL ENERGY**

### 14 **Subtitle A—Coal**

#### 15 **SEC. 2401. COAL AND RELATED TECHNOLOGIES PRO-** 16 **GRAMS.**

17 (a) AUTHORIZATION OF APPROPRIATIONS.—There  
18 are authorized to be appropriated to the Secretary  
19 \$172,000,000 for fiscal year 2002, \$179,000,000 for fis-  
20 cal year 2003, and \$186,000,000 for fiscal year 2004, to  
21 remain available until expended, for other coal and related  
22 technologies research and development programs, which  
23 shall include—

24 (1) Innovations for Existing Plants;

25 (2) Integrated Gasification Combined Cycle;

- 1 (3) advanced combustion systems;
- 2 (4) Turbines;
- 3 (5) Sequestration Research and Development;
- 4 (6) innovative technologies for demonstration;
- 5 (7) Transportation Fuels and Chemicals;
- 6 (8) Solid Fuels and Feedstocks;
- 7 (9) Advanced Fuels Research; and
- 8 (10) Advanced Research.

9 (b) LIMIT ON USE OF FUNDS.—Notwithstanding sub-  
10 section (a), no funds may be used to carry out the activi-  
11 ties authorized by this section after September 30, 2002,  
12 unless the Secretary has transmitted to the Congress the  
13 report required by this subsection and 1 month has  
14 elapsed since that transmission. The report shall include  
15 a plan containing—

16 (1) a detailed description of how proposals will  
17 be solicited and evaluated, including a list of all ac-  
18 tivities expected to be undertaken;

19 (2) a detailed list of technical milestones for  
20 each coal and related technology that will be pur-  
21 sued;

22 (3) a description of how the programs author-  
23 ized in this section will be carried out so as to com-  
24 plement and not duplicate activities authorized  
25 under division E.

1 (c) GASIFICATION.—The Secretary shall fund at least  
2 one gasification project with the funds authorized under  
3 this section.

## 4 **Subtitle B—Oil and Gas**

### 5 **SEC. 2421. PETROLEUM-OIL TECHNOLOGY.**

6 The Secretary shall conduct a program of research,  
7 development, demonstration, and commercial application  
8 on petroleum-oil technology. The program shall address—

9 (1) Exploration and Production Supporting Re-  
10 search;

11 (2) Oil Technology Reservoir Management/Ex-  
12 tension; and

13 (3) Effective Environmental Protection.

### 14 **SEC. 2422. GAS.**

15 The Secretary shall conduct a program of research,  
16 development, demonstration, and commercial application  
17 on natural gas technologies. The program shall address—

18 (1) Exploration and Production;

19 (2) Infrastructure; and

20 (3) Effective Environmental Protection.

### 21 **SEC. 2423. NATURAL GAS AND OIL DEPOSITS REPORT.**

22 Two years after the date of the enactment of this Act,  
23 and at 2-year intervals thereafter, the Secretary of the In-  
24 terior, in consultation with other appropriate Federal  
25 agencies, shall transmit a report to the Congress assessing



1 the contents of natural gas and oil deposits at existing  
2 drilling sites off the coast of Louisiana and Texas.

3 **SEC. 2424. OIL SHALE RESEARCH.**

4 There are authorized to be appropriated to the Sec-  
5 retary of Energy for fiscal year 2002 \$10,000,000, to be  
6 divided equally between grants for research on Eastern oil  
7 shale and grants for research on Western oil shale.

8 **Subtitle C—Ultra-Deepwater and**  
9 **Unconventional Drilling**

10 **SEC. 2441. SHORT TITLE.**

11 This subtitle may be cited as the “Natural Gas and  
12 Other Petroleum Research, Development, and Demonstra-  
13 tion Act of 2001”.

14 **SEC. 2442. DEFINITIONS.**

15 For purposes of this subtitle—

16 (1) the term “deepwater” means water depths  
17 greater than 200 meters but less than 1,500 meters;

18 (2) the term “Fund” means the Ultra-Deep-  
19 water and Unconventional Gas Research Fund es-  
20 tablished under section 2450;

21 (3) the term “institution of higher education”  
22 has the meaning given that term in section 101 of  
23 the Higher Education Act of 1965 (20 U.S.C.  
24 1001);

1           (4) the term “Research Organization” means  
2           the Research Organization created pursuant to sec-  
3           tion 2446(a);

4           (5) the term “ultra-deepwater” means water  
5           depths greater than 1,500 meters; and

6           (6) the term “unconventional” means located in  
7           heretofore inaccessible or uneconomic formations on  
8           land.

9   **SEC. 2443. ULTRA-DEEPWATER PROGRAM.**

10          The Secretary shall establish a program of research,  
11          development, and demonstration of ultra-deepwater nat-  
12          ural gas and other petroleum exploration and production  
13          technologies, in areas currently available for Outer Conti-  
14          nental Shelf leasing. The program shall be carried out by  
15          the Research Organization as provided in this subtitle.

16   **SEC. 2444. NATIONAL ENERGY TECHNOLOGY LABORATORY.**

17          The National Energy Technology Laboratory and the  
18          United States Geological Survey, when appropriate, shall  
19          carry out programs of long-term research into new natural  
20          gas and other petroleum exploration and production tech-  
21          nologies and environmental mitigation technologies for  
22          production from unconventional and ultra-deepwater re-  
23          sources, including methane hydrates. Such Laboratory  
24          shall also conduct a program of research, development,  
25          and demonstration of new technologies for the reduction

1 of greenhouse gas emissions from unconventional and  
2 ultra-deepwater natural gas or other petroleum explo-  
3 ration and production activities, including sub-sea floor  
4 carbon sequestration technologies.

5 **SEC. 2445. ADVISORY COMMITTEE.**

6 (a) ESTABLISHMENT.—The Secretary shall, within 3  
7 months after the date of the enactment of this Act, estab-  
8 lish an Advisory Committee consisting of 7 members, each  
9 having extensive operational knowledge of and experience  
10 in the natural gas and other petroleum exploration and  
11 production industry who are not Federal Government em-  
12 ployees or contractors. A minimum of 4 members shall  
13 have extensive knowledge of ultra-deepwater natural gas  
14 or other petroleum exploration and production tech-  
15 nologies, a minimum of 2 members shall have extensive  
16 knowledge of unconventional natural gas or other petro-  
17 leum exploration and production technologies, and at least  
18 1 member shall have extensive knowledge of greenhouse  
19 gas emission reduction technologies, including carbon se-  
20 questration.

21 (b) FUNCTION.—The Advisory Committee shall ad-  
22 vise the Secretary on the selection of an organization to  
23 create the Research Organization and on the implementa-  
24 tion of this subtitle.

1       (c) COMPENSATION.—Members of the Advisory Com-  
2       mittee shall serve without compensation but shall receive  
3       travel expenses, including per diem in lieu of subsistence,  
4       in accordance with applicable provisions under subchapter  
5       I of chapter 57 of title 5, United States Code.

6       (d) ADMINISTRATIVE COSTS.—The costs of activities  
7       carried out by the Secretary and the Advisory Committee  
8       under this subtitle shall be paid or reimbursed from the  
9       Fund.

10       (e) DURATION OF ADVISORY COMMITTEE.—Section  
11       14 of the Federal Advisory Committee Act shall not apply  
12       to the Advisory Committee.

13       **SEC. 2446. RESEARCH ORGANIZATION.**

14       (a) SELECTION OF RESEARCH ORGANIZATION.—The  
15       Secretary, within 6 months after the date of the enactment  
16       of this Act, shall solicit proposals from eligible entities for  
17       the creation of the Research Organization, and within 3  
18       months after such solicitation, shall select an entity to cre-  
19       ate the Research Organization.

20       (b) ELIGIBLE ENTITIES.—Entities eligible to create  
21       the Research Organization shall—

22               (1) have been in existence as of the date of the  
23       enactment of this Act;

1           (2) be entities exempt from tax under section  
2       501(c)(3) of the Internal Revenue Code of 1986;  
3       and

4           (3) be experienced in planning and managing  
5       programs in natural gas or other petroleum explo-  
6       ration and production research, development, and  
7       demonstration.

8       (c) PROPOSALS.—A proposal from an entity seeking  
9       to create the Research Organization shall include a de-  
10      tailed description of the proposed membership and struc-  
11      ture of the Research Organization.

12      (d) FUNCTIONS.—The Research Organization shall—

13           (1) award grants on a competitive basis to  
14      qualified—

15                   (A) research institutions;

16                   (B) institutions of higher education;

17                   (C) companies; and

18                   (D) consortia formed among institutions  
19      and companies described in subparagraphs (A)  
20      through (C) for the purpose of conducting re-  
21      search, development, and demonstration of un-  
22      conventional and ultra-deepwater natural gas or  
23      other petroleum exploration and production  
24      technologies; and

1           (2) review activities under those grants to en-  
2           sure that they comply with the requirements of this  
3           subtitle and serve the purposes for which the grant  
4           was made.

5 **SEC. 2447. GRANTS.**

6           (a) TYPES OF GRANTS.—

7           (1) UNCONVENTIONAL.—The Research Organi-  
8           zation shall award grants for research, development,  
9           and demonstration of technologies to maximize the  
10          value of the Government’s natural gas and other pe-  
11          troleum resources in unconventional reservoirs, and  
12          to develop technologies to increase the supply of nat-  
13          ural gas and other petroleum resources by lowering  
14          the cost and improving the efficiency of exploration  
15          and production of unconventional reservoirs, while  
16          improving safety and minimizing environmental im-  
17          pacts.

18          (2) ULTRA-DEEPWATER.—The Research Orga-  
19          nization shall award grants for research, develop-  
20          ment, and demonstration of natural gas or other pe-  
21          troleum exploration and production technologies  
22          to—

23                (A) maximize the value of the Federal  
24                Government’s natural gas and other petroleum  
25                resources in the ultra-deepwater areas;

1           (B) increase the supply of natural gas and  
2           other petroleum resources by lowering the cost  
3           and improving the efficiency of exploration and  
4           production of ultra-deepwater reservoirs; and

5           (C) improve safety and minimize the envi-  
6           ronmental impacts of ultra-deepwater develop-  
7           ments.

8           (3) ULTRA-DEEPWATER ARCHITECTURE.—The  
9           Research Organization shall award a grant to one or  
10          more consortia described in section 2446(d)(1)(D)  
11          for the purpose of developing and demonstrating the  
12          next generation architecture for ultra-deepwater pro-  
13          duction of natural gas and other petroleum in fur-  
14          therance of the purposes stated in paragraph (2)(A)  
15          through (C).

16          (b) CONDITIONS FOR GRANTS.—Grants provided  
17          under this section shall contain the following conditions:

18               (1) If the grant recipient consists of more than  
19               one entity, the recipient shall provide a signed con-  
20               tract agreed to by all participating members clearly  
21               defining all rights to intellectual property for exist-  
22               ing technology and for future inventions conceived  
23               and developed using funds provided under the grant,  
24               in a manner that is consistent with applicable laws.

1           (2) There shall be a repayment schedule for  
2       Federal dollars provided for demonstration projects  
3       under the grant in the event of a successful commer-  
4       cialization of the demonstrated technology. Such re-  
5       payment schedule shall provide that the payments  
6       are made to the Secretary with the express intent  
7       that these payments not impede the adoption of the  
8       demonstrated technology in the marketplace. In the  
9       event that such impedance occurs due to market  
10      forces or other factors, the Research Organization  
11      shall renegotiate the grant agreement so that the ac-  
12      ceptance of the technology in the marketplace is en-  
13      abled.

14           (3) Applications for grants for demonstration  
15      projects shall clearly state the intended commercial  
16      applications of the technology demonstrated.

17           (4) The total amount of funds made available  
18      under a grant provided under subsection (a)(3) shall  
19      not exceed 50 percent of the total cost of the activi-  
20      ties for which the grant is provided.

21           (5) The total amount of funds made available  
22      under a grant provided under subsection (a)(1) or  
23      (2) shall not exceed 50 percent of the total cost of  
24      the activities covered by the grant, except that the  
25      Research Organization may elect to provide grants



1 covering a higher percentage, not to exceed 90 per-  
2 cent, of total project costs in the case of grants  
3 made solely to independent producers.

4 (6) An appropriate amount of funds provided  
5 under a grant shall be used for the broad dissemina-  
6 tion of technologies developed under the grant to in-  
7 terested institutions of higher education, industry,  
8 and appropriate Federal and State technology enti-  
9 ties to ensure the greatest possible benefits for the  
10 public and use of government resources.

11 (7) Demonstrations of ultra-deepwater tech-  
12 nologies for which funds are provided under a grant  
13 may be conducted in ultra-deepwater or deepwater  
14 locations.

15 (c) ALLOCATION OF FUNDS.—Funds available for  
16 grants under this subtitle shall be allocated as follows:

17 (1) 15 percent shall be for grants under sub-  
18 section (a)(1).

19 (2) 15 percent shall be for grants under sub-  
20 section (a)(2).

21 (3) 60 percent shall be for grants under sub-  
22 section (a)(3).

23 (4) 10 percent shall be for carrying out section  
24 2444.

1 **SEC. 2448. PLAN AND FUNDING.**

2 (a) TRANSMITTAL TO SECRETARY.—The Research  
3 Organization shall transmit to the Secretary an annual  
4 plan proposing projects and funding of activities under  
5 each paragraph of section 2447(a).

6 (b) REVIEW.—The Secretary shall have 1 month to  
7 review the annual plan, and shall approve the plan, if it  
8 is consistent with this subtitle. If the Secretary approves  
9 the plan, the Secretary shall provide funding as proposed  
10 in the plan.

11 (c) DISAPPROVAL.—If the Secretary does not approve  
12 the plan, the Secretary shall notify the Research Organi-  
13 zation of the reasons for disapproval and shall withhold  
14 funding until a new plan is submitted which the Secretary  
15 approves. Within 1 month after notifying the Research Or-  
16 ganization of a disapproval, the Secretary shall notify the  
17 appropriate congressional committees of the disapproval.

18 **SEC. 2449. AUDIT.**

19 The Secretary shall retain an independent, commer-  
20 cial auditor to determine the extent to which the funds  
21 authorized by this subtitle have been expended in a man-  
22 ner consistent with the purposes of this subtitle. The audi-  
23 tor shall transmit a report annually to the Secretary, who  
24 shall transmit the report to the appropriate congressional  
25 committees, along with a plan to remedy any deficiencies  
26 cited in the report.

1 **SEC. 2450. FUND.**

2 (a) ESTABLISHMENT.—There is established in the  
3 Treasury of the United States a fund to be known as the  
4 “Ultra-Deepwater and Unconventional Gas Research  
5 Fund” which shall be available for obligation to the extent  
6 provided in advance in appropriations Acts for allocation  
7 under section 2447(c).

8 (b) FUNDING SOURCES.—

9 (1) LOANS FROM TREASURY.—There are au-  
10 thorized to be appropriated to the Secretary  
11 \$900,000,000 for the period encompassing fiscal  
12 years 2002 through 2009. Such amounts shall be  
13 deposited by the Secretary in the Fund, and shall be  
14 considered loans from the Treasury. Income received  
15 by the United States in connection with any ultra-  
16 deepwater oil and gas leases shall be deposited in  
17 the Treasury and considered as repayment for the  
18 loans under this paragraph.

19 (2) ADDITIONAL APPROPRIATIONS.—There are  
20 authorized to be appropriated to the Secretary such  
21 sums as may be necessary for the fiscal years 2002  
22 through 2009, to be deposited in the Fund.

23 (3) OIL AND GAS LEASE INCOME.—To the ex-  
24 tent provided in advance in appropriations Acts, not  
25 more than 7.5 percent of the income of the United  
26 States from Federal oil and gas leases may be de-

1       posited in the Fund for fiscal years 2002 through  
2       2009.

3   **SEC. 2451. SUNSET.**

4       No funds are authorized to be appropriated for car-  
5   rying out this subtitle after fiscal year 2009. The Research  
6   Organization shall be terminated when it has expended all  
7   funds made available pursuant to this subtitle.

8                   **Subtitle D—Fuel Cells**

9   **SEC. 2461. FUEL CELLS.**

10       (a) IN GENERAL.—The Secretary shall conduct a  
11   program of research, development, demonstration, and  
12   commercial application on fuel cells. The program shall  
13   address—

- 14               (1) Advanced Research;  
15               (2) Systems Development;  
16               (3) Vision 21-Hybrids; and  
17               (4) Innovative Concepts.

18       (b) MANUFACTURING PRODUCTION AND PROC-  
19   ESSES.—In addition to the program under subsection (a),  
20   the Secretary, in consultation other Federal agencies, as  
21   appropriate, shall establish a program for the demonstra-  
22   tion of fuel cell technologies, including fuel cell proton ex-  
23   change membrane technology, for commercial, residential,  
24   and transportation applications. The program shall spe-  
25   cifically focus on promoting the application of and im-

1 proved manufacturing production and processes for fuel  
2 cell technologies.

3 (c) AUTHORIZATION OF APPROPRIATIONS.—Within  
4 the amounts authorized to be appropriated under section  
5 2481(a), there are authorized to be appropriated to the  
6 Secretary for the purpose of carrying out subsection (b),  
7 \$28,000,000 for each of fiscal years 2002 through 2004.

## 8 **Subtitle E—Department of Energy** 9 **Authorization of Appropriations**

### 10 **SEC. 2481. AUTHORIZATION OF APPROPRIATIONS.**

11 (a) OPERATION AND MAINTENANCE.—There are au-  
12 thorized to be appropriated to the Secretary for operation  
13 and maintenance for subtitle B and subtitle D, and for  
14 Fossil Energy Research and Development Headquarters  
15 Program Direction, Field Program Direction, Plant and  
16 Capital Equipment, Cooperative Research and Develop-  
17 ment, Import/Export Authorization, and Advanced Met-  
18 allurgical Processes \$282,000,000 for fiscal year 2002,  
19 \$293,000,000 for fiscal year 2003, and \$305,000,000 for  
20 fiscal year 2004, to remain available until expended.

21 (b) LIMITS ON USE OF FUNDS.—None of the funds  
22 authorized to be appropriated in subsection (a) may be  
23 used for—

24 (1) Gas Hydrates.

- 1           (2) Fossil Energy Environmental Restoration;  
2       or  
3           (3) research, development, demonstration, and  
4       commercial application on coal and related tech-  
5       nologies, including activities under subtitle A.

6                   **TITLE V—SCIENCE**  
7           **Subtitle A—Fusion Energy**  
8                   **Sciences**

9   **SEC. 2501. SHORT TITLE.**

10       This subtitle may be cited as the “Fusion Energy  
11   Sciences Act of 2001”.

12   **SEC. 2502. FINDINGS.**

13       The Congress finds that—

14           (1) economic prosperity is closely linked to an  
15       affordable and ample energy supply;

16           (2) environmental quality is closely linked to en-  
17       ergy production and use;

18           (3) population, worldwide economic develop-  
19       ment, energy consumption, and stress on the envi-  
20       ronment are all expected to increase substantially in  
21       the coming decades;

22           (4) the few energy options with the potential to  
23       meet economic and environmental needs for the  
24       long-term future should be pursued as part of a bal-  
25       anced national energy plan;

1           (5) fusion energy is an attractive long-term en-  
2       ergy source because of the virtually inexhaustible  
3       supply of fuel, and the promise of minimal adverse  
4       environmental impact and inherent safety;

5           (6) the National Research Council, the Presi-  
6       dent's Committee of Advisers on Science and Tech-  
7       nology, and the Secretary of Energy Advisory Board  
8       have each recently reviewed the Fusion Energy  
9       Sciences Program and each strongly supports the  
10      fundamental science and creative innovation of the  
11      program, and has confirmed that progress toward  
12      the goal of producing practical fusion energy has  
13      been excellent, although much scientific and engi-  
14      neering work remains to be done;

15          (7) each of these reviews stressed the need for  
16      a magnetic fusion burning plasma experiment to ad-  
17      dress key scientific issues and as a necessary step in  
18      the development of fusion energy;

19          (8) the National Research Council has also  
20      called for a broadening of the Fusion Energy  
21      Sciences Program research base as a means to more  
22      fully integrate the fusion science community into the  
23      broader scientific community; and

24          (9) the Fusion Energy Sciences Program budg-  
25      et is inadequate to support the necessary science and

1 innovation for the present generation of experiments,  
2 and cannot accommodate the cost of a burning plas-  
3 ma experiment constructed by the United States, or  
4 even the cost of key participation by the United  
5 States in an international effort.

6 **SEC. 2503. PLAN FOR FUSION EXPERIMENT.**

7 (a) PLAN FOR UNITED STATES FUSION EXPERI-  
8 MENT.—The Secretary, on the basis of full consultation  
9 with the Fusion Energy Sciences Advisory Committee and  
10 the Secretary of Energy Advisory Board, as appropriate,  
11 shall develop a plan for United States construction of a  
12 magnetic fusion burning plasma experiment for the pur-  
13 pose of accelerating scientific understanding of fusion  
14 plasmas. The Secretary shall request a review of the plan  
15 by the National Academy of Sciences, and shall transmit  
16 the plan and the review to the Congress by July 1, 2004.

17 (b) REQUIREMENTS OF PLAN.—The plan described  
18 in subsection (a) shall—

19 (1) address key burning plasma physics issues;  
20 and

21 (2) include specific information on the scientific  
22 capabilities of the proposed experiment, the rel-  
23 evance of these capabilities to the goal of practical  
24 fusion energy, and the overall design of the experi-



1       ment including its estimated cost and potential con-  
2       struction sites.

3       (c) UNITED STATES PARTICIPATION IN AN INTER-  
4 NATIONAL EXPERIMENT.—In addition to the plan de-  
5 scribed in subsection (a), the Secretary, on the basis of  
6 full consultation with the Fusion Energy Sciences Advi-  
7 sory Committee and the Secretary of Energy Advisory  
8 Board, as appropriate, may also develop a plan for United  
9 States participation in an international burning plasma  
10 experiment for the same purpose, whose construction is  
11 found by the Secretary to be highly likely and where  
12 United States participation is cost effective relative to the  
13 cost and scientific benefits of a domestic experiment de-  
14 scribed in subsection (a). If the Secretary elects to develop  
15 a plan under this subsection, he shall include the informa-  
16 tion described in subsection (b), and an estimate of the  
17 cost of United States participation in such an inter-  
18 national experiment. The Secretary shall request a review  
19 by the National Academies of Sciences and Engineering  
20 of a plan developed under this subsection, and shall trans-  
21 mit the plan and the review to the Congress not later than  
22 July 1, 2004.

23       (d) AUTHORIZATION OF RESEARCH AND DEVELOP-  
24 MENT.—The Secretary, through the Fusion Energy  
25 Sciences Program, may conduct any research and develop-

1 ment necessary to fully develop the plans described in this  
2 section.

3 **SEC. 2504. PLAN FOR FUSION ENERGY SCIENCES PRO-**  
4 **GRAM.**

5 Not later than 6 months after the date of the enact-  
6 ment of this Act, the Secretary, in full consultation with  
7 FESAC, shall develop and transmit to the Congress a plan  
8 for the purpose of ensuring a strong scientific base for  
9 the Fusion Energy Sciences Program and to enable the  
10 experiments described in section 2503. Such plan shall in-  
11 clude as its objectives—

12 (1) to ensure that existing fusion research fa-  
13 cilities and equipment are more fully utilized with  
14 appropriate measurements and control tools;

15 (2) to ensure a strengthened fusion science the-  
16 ory and computational base;

17 (3) to ensure that the selection of and funding  
18 for new magnetic and inertial fusion research facili-  
19 ties is based on scientific innovation and cost effec-  
20 tiveness;

21 (4) to improve the communication of scientific  
22 results and methods between the fusion science com-  
23 munity and the wider scientific community;

1           (5) to ensure that adequate support is provided  
2           to optimize the design of the magnetic fusion burn-  
3           ing plasma experiments referred to in section 2503;

4           (6) to ensure that inertial confinement fusion  
5           facilities are utilized to the extent practicable for the  
6           purpose of inertial fusion energy research and devel-  
7           opment;

8           (7) to develop a roadmap for a fusion-based en-  
9           ergy source that shows the important scientific ques-  
10          tions, the evolution of confinement configurations,  
11          the relation between these two features, and their re-  
12          lation to the fusion energy goal;

13          (8) to establish several new centers of excel-  
14          lence, selected through a competitive peer-review  
15          process and devoted to exploring the frontiers of fu-  
16          sion science;

17          (9) to ensure that the National Science Foun-  
18          dation, and other agencies, as appropriate, play a  
19          role in extending the reach of fusion science and in  
20          sponsoring general plasma science; and

21          (10) to ensure that there be continuing broad  
22          assessments of the outlook for fusion energy and  
23          periodic external reviews of fusion energy sciences.

1 **SEC. 2505. AUTHORIZATION OF APPROPRIATIONS.**

2       There are authorized to be appropriated to the Sec-  
 3 retary for the development and review, but not for imple-  
 4 mentation, of the plans described in this subtitle and for  
 5 activities of the Fusion Energy Sciences Program  
 6 \$320,000,000 for fiscal year 2002 and \$335,000,000 for  
 7 fiscal year 2003, of which up to \$15,000,000 for each of  
 8 fiscal year 2002 and fiscal year 2003 may be used to es-  
 9 tablish several new centers of excellence, selected through  
 10 a competitive peer-review process and devoted to exploring  
 11 the frontiers of fusion science.

12       **Subtitle B—Spallation Neutron**  
 13                                   **Source**

14 **SEC. 2521. DEFINITION.**

15       For the purposes of this subtitle, the term “Spall-  
 16 ation Neutron Source” means Department Project 99–E–  
 17 334, Oak Ridge National Laboratory, Oak Ridge, Ten-  
 18 nessee.

19 **SEC. 2522. AUTHORIZATION OF APPROPRIATIONS.**

20       (a) AUTHORIZATION OF CONSTRUCTION FUNDING.—  
 21 There are authorized to be appropriated to the Secretary  
 22 for construction of the Spallation Neutron Source—

- 23               (1) \$276,300,000 for fiscal year 2002;
- 24               (2) \$210,571,000 for fiscal year 2003;
- 25               (3) \$124,600,000 for fiscal year 2004;
- 26               (4) \$79,800,000 for fiscal year 2005; and

1           (5) \$41,100,000 for fiscal year 2006 for com-  
2       pletion of construction.

3       (b) AUTHORIZATION OF OTHER PROJECT FUND-  
4       ING.—There are authorized to be appropriated to the Sec-  
5       retary for other project costs (including research and de-  
6       velopment necessary to complete the project, preoperations  
7       costs, and capital equipment not related to construction)  
8       of the Spallation Neutron Source \$15,353,000 for fiscal  
9       year 2002 and \$103,279,000 for the period encompassing  
10      fiscal years 2003 through 2006, to remain available until  
11      expended through September 30, 2006.

12   **SEC. 2523. REPORT.**

13       The Secretary shall report on the Spallation Neutron  
14      Source as part of the Department’s annual budget submis-  
15      sion, including a description of the achievement of mile-  
16      stones, a comparison of actual costs to estimated costs,  
17      and any changes in estimated project costs or schedule.

18   **SEC. 2524. LIMITATIONS.**

19       The total amount obligated by the Department, in-  
20      cluding prior year appropriations, for the Spallation Neu-  
21      tron Source may not exceed—

- 22           (1) \$1,192,700,000 for costs of construction;  
23           (2) \$219,000,000 for other project costs; and  
24           (3) \$1,411,700,000 for total project cost.

1                   **Subtitle C—Facilities,**  
2   **Infrastructure, and User Facilities**

3   **SEC. 2541. DEFINITION.**

4           For purposes of this subtitle—

5                   (1) the term “nonmilitary energy laboratory”  
6           means—

7                           (A) Ames Laboratory;

8                           (B) Argonne National Laboratory;

9                           (C) Brookhaven National Laboratory;

10                          (D) Fermi National Accelerator Labora-  
11                   tory;

12                          (E) Lawrence Berkeley National Labora-  
13                   tory;

14                          (F) Oak Ridge National Laboratory;

15                          (G) Pacific Northwest National Labora-  
16                   tory;

17                          (H) Princeton Plasma Physics Laboratory;

18                          (I) Stanford Linear Accelerator Center;

19                          (J) Thomas Jefferson National Accelerator  
20                   Facility; or

21                          (K) any other facility of the Department  
22                   that the Secretary, in consultation with the Di-  
23                   rector, Office of Science and the appropriate  
24                   congressional committees, determines to be con-

1           sistent with the mission of the Office of  
2           Science; and

3           (2) the term “user facility” means—

4                   (A) an Office of Science facility at a non-  
5           military energy laboratory that provides special  
6           scientific and research capabilities, including  
7           technical expertise and support as appropriate,  
8           to serve the research needs of the Nation’s uni-  
9           versities, industry, private laboratories, Federal  
10          laboratories, and others, including research in-  
11          stitutions or individuals from other nations  
12          where reciprocal accommodations are provided  
13          to United States research institutions and indi-  
14          viduals or where the Secretary considers such  
15          accommodation to be in the national interest;  
16          and

17                   (B) any other Office of Science funded fa-  
18          cility designated by the Secretary as a user fa-  
19          cility.

20   **SEC. 2542. FACILITY AND INFRASTRUCTURE SUPPORT FOR**  
21                   **NONMILITARY ENERGY LABORATORIES.**

22          (a) FACILITY POLICY.—The Secretary shall develop  
23          and implement a least-cost nonmilitary energy laboratory  
24          facility and infrastructure strategy for—

1           (1) maintaining existing facilities and infra-  
2       structure, as needed;

3           (2) closing unneeded facilities;

4           (3) making facility modifications; and

5           (4) building new facilities.

6       (b) PLAN.—The Secretary shall prepare a com-  
7       prehensive 10-year plan for conducting future facility  
8       maintenance, making repairs, modifications, and new ad-  
9       ditions, and constructing new facilities at each nonmilitary  
10      energy laboratory. Such plan shall provide for facilities  
11      work in accordance with the following priorities:

12           (1) Providing for the safety and health of em-  
13      ployees, visitors, and the general public with regard  
14      to correcting existing structural, mechanical, elec-  
15      trical, and environmental deficiencies.

16           (2) Providing for the repair and rehabilitation  
17      of existing facilities to keep them in use and prevent  
18      deterioration, if feasible.

19           (3) Providing engineering design and construc-  
20      tion services for those facilities that require modi-  
21      fication or additions in order to meet the needs of  
22      new or expanded programs.

23      (c) REPORT.—

24           (1) TRANSMITTAL.—Within 1 year after the  
25      date of the enactment of this Act, the Secretary



1 shall prepare and transmit to the appropriate con-  
2 gressional committees a report containing the plan  
3 prepared under subsection (b).

4 (2) CONTENTS.—For each nonmilitary energy  
5 laboratory, such report shall contain—

6 (A) the current priority list of proposed fa-  
7 cilities and infrastructure projects, including  
8 cost and schedule requirements;

9 (B) a current ten-year plan that dem-  
10 onstrates the reconfiguration of its facilities and  
11 infrastructure to meet its missions and to ad-  
12 dress its long-term operational costs and return  
13 on investment;

14 (C) the total current budget for all facili-  
15 ties and infrastructure funding; and

16 (D) the current status of each facilities  
17 and infrastructure project compared to the  
18 original baseline cost, schedule, and scope.

19 (3) ADDITIONAL ELEMENTS.—The report shall  
20 also—

21 (A) include a plan for new facilities and fa-  
22 cility modifications at each nonmilitary energy  
23 laboratory that will be required to meet the De-  
24 partment's changing missions of the twenty-  
25 first century, including schedules and estimates

1 for implementation, and including a section out-  
2 lining long-term funding requirements con-  
3 sistent with anticipated budgets and annual au-  
4 thorization of appropriations;

5 (B) address the coordination of moderniza-  
6 tion and consolidation of facilities among the  
7 nonmilitary energy laboratories in order to meet  
8 changing mission requirements; and

9 (C) provide for annual reports to the ap-  
10 propriate congressional committees on accom-  
11 plishments, conformance to schedules, commit-  
12 ments, and expenditures.

13 **SEC. 2543. USER FACILITIES.**

14 (a) NOTICE REQUIREMENT.—When the Department  
15 makes a user facility available to universities and other  
16 potential users, or seeks input from universities and other  
17 potential users regarding significant characteristics or  
18 equipment in a user facility or a proposed user facility,  
19 the Department shall ensure broad public notice of such  
20 availability or such need for input to universities and other  
21 potential users.

22 (b) COMPETITION REQUIREMENT.—When the De-  
23 partment considers the participation of a university or  
24 other potential user in the establishment or operation of

1 a user facility, the Department shall employ full and open  
2 competition in selecting such a participant.

3 (c) PROHIBITION.—The Department may not redes-  
4 ignate a user facility, as defined by section 2541(b) as  
5 something other than a user facility for avoid the require-  
6 ments of subsections (a) and (b).

7 **Subtitle D—Advisory Panel on**  
8 **Office of Science**

9 **SEC. 2561. ESTABLISHMENT.**

10 The Director of the Office of Science and Technology  
11 Policy, in consultation with the Secretary, shall establish  
12 an Advisory Panel on the Office of Science comprised of  
13 knowledgeable individuals to—

14 (1) address concerns about the current status  
15 and the future of scientific research supported by  
16 the Office;

17 (2) examine alternatives to the current organi-  
18 zational structure of the Office within the Depart-  
19 ment, taking into consideration existing structures  
20 for the support of scientific research in other Fed-  
21 eral agencies and the private sector; and

22 (3) suggest actions to strengthen the scientific  
23 research supported by the Office that might be  
24 taken jointly by the Department and Congress.

1 **SEC. 2562. REPORT.**

2       Within 6 months after the date of the enactment of  
3 this Act, the Advisory Panel shall transmit its findings  
4 and recommendations in a report to the Director of the  
5 Office of Science and Technology Policy and the Sec-  
6 retary. The Director and the Secretary shall jointly—

7           (1) consider each of the Panel’s findings and  
8       recommendations, and comment on each as they  
9       consider appropriate; and

10          (2) transmit the Panel’s report and the com-  
11       ments of the Director and the Secretary on the re-  
12       port to the appropriate congressional committees  
13       within 9 months after the date of the enactment of  
14       this Act.

15 **Subtitle E—Department of Energy**  
16 **Authorization of Appropriations**

17 **SEC. 2581. AUTHORIZATION OF APPROPRIATIONS.**

18       (a) OPERATION AND MAINTENANCE.—Including the  
19 amounts authorized to be appropriated for fiscal year  
20 2002 under section 2505 for Fusion Energy Sciences and  
21 under section 2522(b) for the Spallation Neutron Source,  
22 there are authorized to be appropriated to the Secretary  
23 for the Office of Science (also including subtitle C, High  
24 Energy Physics, Nuclear Physics, Biological and Environ-  
25 mental Research, Basic Energy Sciences (except for the  
26 Spallation Neutron Source), Advanced Scientific Com-

1 puting Research, Energy Research Analysis, Multipro-  
2 gram Energy Laboratories-Facilities Support, Facilities  
3 and Infrastructure, Safeguards and Security, and Pro-  
4 gram Direction) operation and maintenance  
5 \$3,299,558,000 for fiscal year 2002, to remain available  
6 until expended.

7 (b) RESEARCH REGARDING PRECIOUS METAL CA-  
8 TALYSIS.—Within the amounts authorized to be appro-  
9 priated to the Secretary under subsection (a), \$5,000,000  
10 for fiscal year 2002 may be used to carry out research  
11 in the use of precious metals (excluding platinum, palla-  
12 dium, and rhodium) in catalysis, either directly through na-  
13 tional laboratories, or through the award of grants, coop-  
14 erative agreements, or contracts with public or nonprofit  
15 entities.

16 (c) CONSTRUCTION.—In addition to the amounts au-  
17 thorized to be appropriated under section 2522(a) for con-  
18 struction of the Spallation Neutron Source, there are au-  
19 thorized to be appropriated to the Secretary for Science—

20 (1) \$19,400,000 for fiscal year 2002,  
21 \$14,800,000 for fiscal year 2003, and \$8,900,000  
22 for fiscal year 2004 for completion of construction of  
23 Project 98–G–304, Neutrinos at the Main Injector,  
24 Fermi National Accelerator Laboratory;

1           (2) \$11,405,000 for fiscal year 2002 for com-  
2           pletion of construction of Project 01-E-300, Labora-  
3           tory for Comparative and Functional Genomics, Oak  
4           Ridge National Laboratory;

5           (3) \$4,000,000 for fiscal year 2002, \$8,000,000  
6           for fiscal year 2003, and \$2,000,000 for fiscal year  
7           2004 for completion of construction of Project 02-  
8           SC-002, Project Engineering Design (PED), Var-  
9           ious Locations;

10          (4) \$3,183,000 for fiscal year 2002 for comple-  
11          tion of construction of Project 02-SC-002, Multipro-  
12          gram Energy Laboratories Infrastructure Project  
13          Engineering Design (PED), Various Locations; and

14          (5) \$18,633,000 for fiscal year 2002 and  
15          \$13,029,000 for fiscal year 2003 for completion of  
16          construction of Project MEL-001, Multiprogram En-  
17          ergy Laboratories, Infrastructure, Various Loca-  
18          tions.

19          (d) LIMITS ON USE OF FUNDS.—None of the funds  
20          authorized to be appropriated in subsection (c) may be  
21          used for construction at any national security laboratory  
22          as defined in section 3281(1) of the National Defense Au-  
23          thorization Act for Fiscal Year 2000 (50 U.S.C. 2471(1))  
24          or at any nuclear weapons production facility as defined

1 in section 3281(2) of the National Defense Authorization  
2 Act for Fiscal Year 2000 (50 U.S.C. 2471(2)).

3       **TITLE VI—MISCELLANEOUS**  
4       **Subtitle A—General Provisions for**  
5       **the Department of Energy**

6       **SEC. 2601. RESEARCH, DEVELOPMENT, DEMONSTRATION,**  
7                       **AND COMMERCIAL APPLICATION OF ENERGY**  
8                       **TECHNOLOGY PROGRAMS, PROJECTS, AND**  
9                       **ACTIVITIES.**

10       (a) AUTHORIZED ACTIVITIES.—Except as otherwise  
11 provided in this division, research, development, dem-  
12 onstration, and commercial application programs,  
13 projects, and activities for which appropriations are au-  
14 thorized under this division may be carried out under the  
15 procedures of the Federal Nonnuclear Energy Research  
16 and Development Act of 1974 (42 U.S.C. 5901 et seq.),  
17 the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.),  
18 or any other Act under which the Secretary is authorized  
19 to carry out such programs, projects, and activities, but  
20 only to the extent the Secretary is authorized to carry out  
21 such activities under each such Act.

22       (b) AUTHORIZED AGREEMENTS.—Except as other-  
23 wise provided in this division, in carrying out research,  
24 development, demonstration, and commercial application  
25 programs, projects, and activities for which appropriations

1 are authorized under this division, the Secretary may use,  
2 to the extent authorized under applicable provisions of  
3 law, contracts, cooperative agreements, cooperative re-  
4 search and development agreements under the Stevenson-  
5 Wydler Technology Innovation Act of 1980 (15 U.S.C.  
6 3701 et seq.), grants, joint ventures, and any other form  
7 of agreement available to the Secretary.

8 (c) DEFINITION.—For purposes of this section, the  
9 term “joint venture” has the meaning given that term  
10 under section 2 of the National Cooperative Research and  
11 Production Act of 1993 (15 U.S.C. 4301), except that  
12 such term may apply under this section to research, devel-  
13 opment, demonstration, and commercial application of en-  
14 ergy technology joint ventures.

15 (d) PROTECTION OF INFORMATION.—Section  
16 12(c)(7) of the Stevenson-Wydler Technology Innovation  
17 Act of 1980 (15 U.S.C. 3710a(c)(7)), relating to the pro-  
18 tection of information, shall apply to research, develop-  
19 ment, demonstration, and commercial application of en-  
20 ergy technology programs, projects, and activities for  
21 which appropriations are authorized under this division.

22 (e) INVENTIONS.—An invention conceived and devel-  
23 oped by any person using funds provided through a grant  
24 under this division shall be considered a subject invention



1 for the purposes of chapter 18 of title 35, United States  
2 Code (commonly referred to as the Bayh-Dole Act).

3 (f) OUTREACH.—The Secretary shall ensure that  
4 each program authorized by this division includes an out-  
5 reach component to provide information, as appropriate,  
6 to manufacturers, consumers, engineers, architects, build-  
7 ers, energy service companies, universities, facility plan-  
8 ners and managers, State and local governments, and  
9 other entities.

10 (g) GUIDELINES AND PROCEDURES.—The Secretary  
11 shall provide guidelines and procedures for the transition,  
12 where appropriate, of energy technologies from research  
13 through development and demonstration to commercial  
14 application of energy technology. Nothing in this section  
15 shall preclude the Secretary from—

16 (1) entering into a contract, cooperative agree-  
17 ment, cooperative research and development agree-  
18 ment under the Stevenson-Wydler Technology Inno-  
19 vation Act of 1980 (15 U.S.C. 3701 et seq.), grant,  
20 joint venture, or any other form of agreement avail-  
21 able to the Secretary under this section that relates  
22 to research, development, demonstration, and com-  
23 mercial application of energy technology; or

24 (2) extending a contract, cooperative agree-  
25 ment, cooperative research and development agree-

1       ment under the Stevenson-Wydler Technology Inno-  
2       vation Act of 1980, grant, joint venture, or any  
3       other form of agreement available to the Secretary  
4       that relates to research, development, and dem-  
5       onstration to cover commercial application of energy  
6       technology.

7       (h) APPLICATION OF SECTION.—This section shall  
8       not apply to any contract, cooperative agreement, coopera-  
9       tive research and development agreement under the Ste-  
10      venson-Wydler Technology Innovation Act of 1980 (15  
11      U.S.C. 3701 et seq.), grant, joint venture, or any other  
12      form of agreement available to the Secretary that is in  
13      effect as of the date of the enactment of this Act.

14   **SEC. 2602. LIMITS ON USE OF FUNDS.**

15       (a) MANAGEMENT AND OPERATING CONTRACTS.—

16           (1) COMPETITIVE PROCEDURE REQUIRE-  
17      MENT.—None of the funds authorized to be appro-  
18      priated to the Secretary by this division may be used  
19      to award a management and operating contract for  
20      a federally owned or operated nonmilitary energy  
21      laboratory of the Department unless such contract is  
22      awarded using competitive procedures or the Sec-  
23      retary grants, on a case-by-case basis, a waiver to  
24      allow for such a deviation. The Secretary may not  
25      delegate the authority to grant such a waiver.

1           (2) CONGRESSIONAL NOTICE.—At least 2  
2       months before a contract award, amendment, or  
3       modification for which the Secretary intends to  
4       grant such a waiver, the Secretary shall submit to  
5       the appropriate congressional committees a report  
6       notifying the committees of the waiver and setting  
7       forth the reasons for the waiver.

8       (b) PRODUCTION OR PROVISION OF ARTICLES OR  
9       SERVICES.—None of the funds authorized to be appro-  
10      priated to the Secretary by this division may be used to  
11      produce or provide articles or services for the purpose of  
12      selling the articles or services to a person outside the Fed-  
13      eral Government, unless the Secretary determines that  
14      comparable articles or services are not available from a  
15      commercial source in the United States.

16      (c) REQUESTS FOR PROPOSALS.—None of the funds  
17      authorized to be appropriated to the Secretary by this divi-  
18      sion may be used by the Department to prepare or initiate  
19      Requests for Proposals for a program if the program has  
20      not been authorized by Congress.

21      **SEC. 2603. COST SHARING.**

22      (a) RESEARCH AND DEVELOPMENT.—Except as oth-  
23      erwise provided in this division, for research and develop-  
24      ment programs carried out under this division, the Sec-  
25      retary shall require a commitment from non-Federal

1 sources of at least 20 percent of the cost of the project.  
2 The Secretary may reduce or eliminate the non-Federal  
3 requirement under this subsection if the Secretary deter-  
4 mines that the research and development is of a basic or  
5 fundamental nature.

6 (b) DEMONSTRATION AND COMMERCIAL APPLICA-  
7 TION.—Except as otherwise provided in this division, the  
8 Secretary shall require at least 50 percent of the costs di-  
9 rectly and specifically related to any demonstration or  
10 commercial application project under this division to be  
11 provided from non-Federal sources. The Secretary may re-  
12 duce the non-Federal requirement under this subsection  
13 if the Secretary determines that the reduction is necessary  
14 and appropriate considering the technological risks in-  
15 volved in the project and is necessary to meet the objec-  
16 tives of this division.

17 (c) CALCULATION OF AMOUNT.—In calculating the  
18 amount of the non-Federal commitment under subsection  
19 (a) or (b), the Secretary may include personnel, services,  
20 equipment, and other resources.

21 **SEC. 2604. LIMITATION ON DEMONSTRATION AND COMMER-**  
22 **CIAL APPLICATION OF ENERGY TECH-**  
23 **NOLOGY.**

24 Except as otherwise provided in this division, the Sec-  
25 retary shall provide funding for scientific or energy dem-

1 onstration and commercial application of energy tech-  
2 nology programs, projects, or activities only for tech-  
3 nologies or processes that can be reasonably expected to  
4 yield new, measurable benefits to the cost, efficiency, or  
5 performance of the technology or process.

6 **SEC. 2605. REPROGRAMMING.**

7 (a) **AUTHORITY.**—The Secretary may use amounts  
8 appropriated under this division for a program, project,  
9 or activity other than the program, project, or activity for  
10 which such amounts were appropriated only if—

11 (1) the Secretary has transmitted to the appro-  
12 priate congressional committees a report described  
13 in subsection (b) and a period of 30 days has  
14 elapsed after such committees receive the report;

15 (2) amounts used for the program, project, or  
16 activity do not exceed—

17 (A) 105 percent of the amount authorized  
18 for the program, project, or activity; or

19 (B) \$250,000 more than the amount au-  
20 thorized for the program, project, or activity,  
21 whichever is less; and

22 (3) the program, project, or activity has been  
23 presented to, or requested of, the Congress by the  
24 Secretary.

1 (b) REPORT.—(1) The report referred to in sub-  
2 section (a) is a report containing a full and complete state-  
3 ment of the action proposed to be taken and the facts and  
4 circumstances relied upon in support of the proposed ac-  
5 tion.

6 (2) In the computation of the 30-day period under  
7 subsection (a), there shall be excluded any day on which  
8 either House of Congress is not in session because of an  
9 adjournment of more than 3 days to a day certain.

10 (c) LIMITATIONS.—(1) In no event may the total  
11 amount of funds obligated by the Secretary pursuant to  
12 this division exceed the total amount authorized to be ap-  
13 propriated to the Secretary by this division.

14 (2) Funds appropriated to the Secretary pursuant to  
15 this division may not be used for an item for which Con-  
16 gress has declined to authorize funds.

17 **Subtitle B—Other Miscellaneous**  
18 **Provisions**

19 **SEC. 2611. NOTICE OF REORGANIZATION.**

20 The Secretary shall provide notice to the appropriate  
21 congressional committees not later than 15 days before  
22 any reorganization of any environmental research or devel-  
23 opment, scientific or energy research, development, or  
24 demonstration, or commercial application of energy tech-  
25 nology program, project, or activity of the Department.

1 **SEC. 2612. LIMITS ON GENERAL PLANT PROJECTS.**

2 If, at any time during the construction of a civilian  
3 environmental research and development, scientific or en-  
4 ergy research, development, or demonstration, or commer-  
5 cial application of energy technology project of the Depart-  
6 ment for which no specific funding level is provided by  
7 law, the estimated cost (including any revision thereof) of  
8 the project exceeds \$5,000,000, the Secretary may not  
9 continue such construction unless the Secretary has fur-  
10 nished a complete report to the appropriate congressional  
11 committees explaining the project and the reasons for the  
12 estimate or revision.

13 **SEC. 2613. LIMITS ON CONSTRUCTION PROJECTS.**

14 (a) LIMITATION.—Except as provided in subsection  
15 (b), construction on a civilian environmental research and  
16 development, scientific or energy research, development, or  
17 demonstration, or commercial application of energy tech-  
18 nology project of the Department for which funding has  
19 been specifically provided by law may not be started, and  
20 additional obligations may not be incurred in connection  
21 with the project above the authorized funding amount,  
22 whenever the current estimated cost of the construction  
23 project exceeds by more than 10 percent the higher of—

24 (1) the amount authorized for the project, if the  
25 entire project has been funded by the Congress; or

1           (2) the amount of the total estimated cost for  
2           the project as shown in the most recent budget jus-  
3           tification data submitted to Congress.

4           (b) NOTICE.—An action described in subsection (a)  
5           may be taken if—

6           (1) the Secretary has submitted to the appro-  
7           priate congressional committees a report on the pro-  
8           posed actions and the circumstances making such  
9           actions necessary; and

10          (2) a period of 30 days has elapsed after the  
11          date on which the report is received by the commit-  
12          tees.

13          (c) EXCLUSION.—In the computation of the 30-day  
14          period described in subsection (b)(2), there shall be ex-  
15          cluded any day on which either House of Congress is not  
16          in session because of an adjournment of more than 3 days  
17          to a day certain.

18          (d) EXCEPTION.—Subsections (a) and (b) shall not  
19          apply to any construction project that has a current esti-  
20          mated cost of less than \$5,000,000.

21       **SEC. 2614. AUTHORITY FOR CONCEPTUAL AND CONSTRUC-**  
22       **TION DESIGN.**

23          (a) REQUIREMENT FOR CONCEPTUAL DESIGN.—(1)  
24          Subject to paragraph (2) and except as provided in para-  
25          graph (3), before submitting to Congress a request for



1 funds for a construction project that is in support of a  
2 civilian environmental research and development, scientific  
3 or energy research, development, or demonstration, or  
4 commercial application of energy technology program,  
5 project, or activity of the Department, the Secretary shall  
6 complete a conceptual design for that project.

7       (2) If the estimated cost of completing a conceptual  
8 design for a construction project exceeds \$750,000, the  
9 Secretary shall submit to Congress a request for funds for  
10 the conceptual design before submitting a request for  
11 funds for the construction project.

12       (3) The requirement in paragraph (1) does not apply  
13 to a request for funds for a construction project, the total  
14 estimated cost of which is less than \$5,000,000.

15       (b) **AUTHORITY FOR CONSTRUCTION DESIGN.**—(1)  
16 The Secretary may carry out construction design (includ-  
17 ing architectural and engineering services) in connection  
18 with any proposed construction project that is in support  
19 of a civilian environmental research and development, sci-  
20 entific or energy research, development, and demonstra-  
21 tion, or commercial application of energy technology pro-  
22 gram, project, or activity of the Department if the total  
23 estimated cost for such design does not exceed \$250,000.

24       (2) If the total estimated cost for construction design  
25 in connection with any construction project described in

1 paragraph (1) exceeds \$250,000, funds for such design  
2 must be specifically authorized by law.

3 **SEC. 2615. NATIONAL ENERGY POLICY DEVELOPMENT**  
4 **GROUP MANDATED REPORTS.**

5 (a) THE SECRETARY'S REVIEW OF ENERGY EFFI-  
6 CIENCY RENEWABLE ENERGY, AND ALTERNATIVE EN-  
7 ERGY RESEARCH AND DEVELOPMENT.—Upon completion  
8 of the Secretary's review of current funding and historic  
9 performance of the Department's energy efficiency, renew-  
10 able energy, and alternative energy research and develop-  
11 ment programs in response to the recommendations of the  
12 May 16, 2001, Report of the National Energy Policy De-  
13 velopment Group, the Secretary shall transmit a report  
14 containing the results of such review to the appropriate  
15 congressional committees.

16 (b) REVIEW AND RECOMMENDATIONS ON USING THE  
17 NATION'S ENERGY RESOURCES MORE EFFICIENTLY.—  
18 Upon completion of the Office of Science and Technology  
19 Policy and the President's Council of Advisors on Science  
20 and Technology reviewing and making recommendations  
21 on using the Nation's energy resources more efficiently,  
22 in response to the recommendation of the May 16, 2001,  
23 Report of the National Energy Policy Development Group,  
24 the Director of the Office of Science and Technology Pol-  
25 icy shall transmit a report containing the results of such

1 review and recommendations to the appropriate congres-  
2 sional committees.

3 **SEC. 2616. PERIODIC REVIEWS AND ASSESSMENTS.**

4       The Secretary shall enter into appropriate arrange-  
5 ments with the National Academies of Sciences and Engi-  
6 neering to ensure that there be periodic reviews and as-  
7 sessments of the programs authorized by this division, as  
8 well as the measurable cost and performance-based goals  
9 for such programs as established under section 2004, and  
10 the progress on meeting such goals. Such reviews and as-  
11 sessments shall be conducted at least every 5 years, or  
12 more often as the Secretary considers necessary, and the  
13 Secretary shall transmit to the appropriate congressional  
14 committees reports containing the results of such reviews  
15 and assessments.

16 **DIVISION C**

17 **SEC. 3001. SHORT TITLE.**

18       (a) **SHORT TITLE.**—This division may be cited as the  
19 “Energy Tax Policy Act of 2001”.

20       (b) **AMENDMENT OF 1986 CODE.**—Except as other-  
21 wise expressly provided, whenever in this division an  
22 amendment or repeal is expressed in terms of an amend-  
23 ment to, or repeal of, a section or other provision, the ref-  
24 erence shall be considered to be made to a section or other  
25 provision of the Internal Revenue Code of 1986.

# **TITLE I—CONSERVATION**

## **SEC. 3101. CREDIT FOR RESIDENTIAL SOLAR ENERGY PROPERTY.**

(a) IN GENERAL.—Subpart A of part IV of subchapter A of chapter 1 (relating to nonrefundable personal credits) is amended by inserting after section 25B the following new section:

### **“SEC. 25C. RESIDENTIAL SOLAR ENERGY PROPERTY.**

“(a) ALLOWANCE OF CREDIT.—In the case of an individual, there shall be allowed as a credit against the tax imposed by this chapter for the taxable year an amount equal to the sum of—

“(1) 15 percent of the qualified photovoltaic property expenditures made by the taxpayer during such year, and

“(2) 15 percent of the qualified solar water heating property expenditures made by the taxpayer during the taxable year.

“(b) LIMITATIONS.—

“(1) MAXIMUM CREDIT.—The credit allowed under subsection (a) shall not exceed—

“(A) \$2,000 for each system of property described in subsection (c)(1), and

“(B) \$2,000 for each system of property described in subsection (c)(2).

1           “(2) SAFETY CERTIFICATIONS.—No credit shall  
2       be allowed under this section for an item of property  
3       unless—

4           “(A) in the case of solar water heating  
5       equipment, such equipment is certified for per-  
6       formance and safety by the non-profit Solar  
7       Rating Certification Corporation or a com-  
8       parable entity endorsed by the government of  
9       the State in which such property is installed,  
10      and

11          “(B) in the case of a photovoltaic system,  
12      such system meets appropriate fire and electric  
13      code requirements.

14          “(3) LIMITATION BASED ON AMOUNT OF  
15      TAX.—The credit allowed under subsection (a) for  
16      the taxable year shall not exceed the excess of—

17          “(A) the sum of the regular tax liability  
18      (as defined in section 26(b)) plus the tax im-  
19      posed by section 55, over

20          “(B) the sum of the credits allowable  
21      under this subpart (other than this section and  
22      sections 23, 25D, and 25E) and section 27 for  
23      the taxable year.

24          “(c) DEFINITIONS.—For purposes of this section—

1           “(1) QUALIFIED SOLAR WATER HEATING PROP-  
2       ERTY EXPENDITURE.—The term ‘qualified solar  
3       water heating property expenditure’ means an ex-  
4       penditure for property to heat water for use in a  
5       dwelling unit located in the United States and used  
6       as a residence if at least half of the energy used by  
7       such property for such purpose is derived from the  
8       sun.

9           “(2) QUALIFIED PHOTOVOLTAIC PROPERTY EX-  
10      PENDITURE.—The term ‘qualified photovoltaic prop-  
11      erty expenditure’ means an expenditure for property  
12      that uses solar energy to generate electricity for use  
13      in a dwelling unit.

14          “(3) SOLAR PANELS.—No expenditure relating  
15      to a solar panel or other property installed as a roof  
16      (or portion thereof) shall fail to be treated as prop-  
17      erty described in paragraph (1) or (2) solely because  
18      it constitutes a structural component of the struc-  
19      ture on which it is installed.

20          “(4) LABOR COSTS.—Expenditures for labor  
21      costs properly allocable to the onsite preparation, as-  
22      sembly, or original installation of the property de-  
23      scribed in paragraph (1) or (2) and for piping or  
24      wiring to interconnect such property to the dwelling

1 unit shall be taken into account for purposes of this  
2 section.

3 “(5) SWIMMING POOLS, ETC., USED AS STOR-  
4 AGE MEDIUM.—Expenditures which are properly al-  
5 locable to a swimming pool, hot tub, or any other  
6 energy storage medium which has a function other  
7 than the function of such storage shall not be taken  
8 into account for purposes of this section.

9 “(d) SPECIAL RULES.—

10 “(1) DOLLAR AMOUNTS IN CASE OF JOINT OC-  
11 CUPANCY.—In the case of any dwelling unit which is  
12 jointly occupied and used during any calendar year  
13 as a residence by 2 or more individuals the following  
14 shall apply:

15 “(A) The amount of the credit allowable  
16 under subsection (a) by reason of expenditures  
17 (as the case may be) made during such cal-  
18 endar year by any of such individuals with re-  
19 spect to such dwelling unit shall be determined  
20 by treating all of such individuals as 1 taxpayer  
21 whose taxable year is such calendar year.

22 “(B) There shall be allowable with respect  
23 to such expenditures to each of such individ-  
24 uals, a credit under subsection (a) for the tax-  
25 able year in which such calendar year ends in

1           an amount which bears the same ratio to the  
2           amount determined under subparagraph (A) as  
3           the amount of such expenditures made by such  
4           individual during such calendar year bears to  
5           the aggregate of such expenditures made by all  
6           of such individuals during such calendar year.

7           “(2) TENANT-STOCKHOLDER IN COOPERATIVE  
8           HOUSING CORPORATION.—In the case of an indi-  
9           vidual who is a tenant-stockholder (as defined in sec-  
10          tion 216) in a cooperative housing corporation (as  
11          defined in such section), such individual shall be  
12          treated as having made his tenant-stockholder’s pro-  
13          portionate share (as defined in section 216(b)(3)) of  
14          any expenditures of such corporation.

15          “(3) CONDOMINIUMS.—

16                 “(A) IN GENERAL.—In the case of an indi-  
17                 vidual who is a member of a condominium man-  
18                 agement association with respect to a condo-  
19                 minium which he owns, such individual shall be  
20                 treated as having made his proportionate share  
21                 of any expenditures of such association.

22                 “(B) CONDOMINIUM MANAGEMENT ASSO-  
23                 CIATION.—For purposes of this paragraph, the  
24                 term ‘condominium management association’  
25                 means an organization which meets the require-



1           ments of paragraph (1) of section 528(c) (other  
2           than subparagraph (E) thereof) with respect to  
3           a condominium project substantially all of the  
4           units of which are used as residences.

5           “(4) ALLOCATION IN CERTAIN CASES.—If less  
6           than 80 percent of the use of an item is for nonbusi-  
7           ness purposes, only that portion of the expenditures  
8           for such item which is properly allocable to use for  
9           nonbusiness purposes shall be taken into account.

10           “(5) WHEN EXPENDITURE MADE; AMOUNT OF  
11           EXPENDITURE.—

12           “(A) IN GENERAL.—Except as provided in  
13           subparagraph (B), an expenditure with respect  
14           to an item shall be treated as made when the  
15           original installation of the item is completed.

16           “(B) EXPENDITURES PART OF BUILDING  
17           CONSTRUCTION.—In the case of an expenditure  
18           in connection with the construction or recon-  
19           struction of a structure, such expenditure shall  
20           be treated as made when the original use of the  
21           constructed or reconstructed structure by the  
22           taxpayer begins.

23           “(C) AMOUNT.—The amount of any ex-  
24           penditure shall be the cost thereof.

1           “(6) PROPERTY FINANCED BY SUBSIDIZED EN-  
2           ERGY FINANCING.—For purposes of determining the  
3           amount of expenditures made by any individual with  
4           respect to any dwelling unit, there shall not be taken  
5           in to account expenditures which are made from  
6           subsidized energy financing (as defined in section  
7           48(a)(4)(A)).

8           “(e) BASIS ADJUSTMENTS.—For purposes of this  
9           subtitle, if a credit is allowed under this section for any  
10          expenditure with respect to any property, the increase in  
11          the basis of such property which would (but for this sub-  
12          section) result from such expenditure shall be reduced by  
13          the amount of the credit so allowed.

14          “(f) TERMINATION.—The credit allowed under this  
15          section shall not apply to taxable years beginning after  
16          December 31, 2006 (December 31, 2008, with respect to  
17          qualified photovoltaic property expenditures).”.

18          (b) CONFORMING AMENDMENTS.—

19                 (1) Subsection (a) of section 1016 is amended  
20                 by striking “and” at the end of paragraph (27), by  
21                 striking the period at the end of paragraph (28) and  
22                 inserting “, and”, and by adding at the end the fol-  
23                 lowing new paragraph:

1 “(29) to the extent provided in section 25C(e),  
 2 in the case of amounts with respect to which a credit  
 3 has been allowed under section 25C.”.

4 (2) The table of sections for subpart A of part  
 5 IV of subchapter A of chapter 1 is amended by in-  
 6 serting after the item relating to section 25B the fol-  
 7 lowing new item:

“Sec. 25C. Residential solar energy property.”.

8 (c) EFFECTIVE DATE.—The amendments made by  
 9 this section shall apply to taxable years ending after De-  
 10 cember 31, 2001.

11 **SEC. 3102. EXTENSION AND EXPANSION OF CREDIT FOR**  
 12 **ELECTRICITY PRODUCED FROM RENEWABLE**  
 13 **RESOURCES.**

14 (a) EXTENSION OF CREDIT FOR WIND AND CLOSED-  
 15 LOOP BIOMASS FACILITIES.—Subparagraphs (A) and (B)  
 16 of section 45(c)(3) are each amended by striking “2002”  
 17 and inserting “2007”.

18 (b) EXPANSION OF CREDIT FOR OPEN-LOOP BIOMASS  
 19 AND LANDFILL GAS FACILITIES.—Paragraph (3) of sec-  
 20 tion 45(c) is amended by adding at the end the following  
 21 new subparagraphs:

22 “(D) OPEN-LOOP BIOMASS FACILITIES.—  
 23 In the case of a facility using open-loop biomass  
 24 to produce electricity, the term ‘qualified facil-  
 25 ity’ means any facility owned by the taxpayer

1 which is originally placed in service before Jan-  
2 uary 1, 2007.

3 “(E) LANDFILL GAS FACILITIES.—In the  
4 case of a facility producing electricity from gas  
5 derived from the biodegradation of municipal  
6 solid waste, the term ‘qualified facility’ means  
7 any facility owned by the taxpayer which is  
8 originally placed in service before January 1,  
9 2007.’”.

10 (c) DEFINITION AND SPECIAL RULES.—Subsection  
11 (c) of section 45 is amended by adding at the end the  
12 following new paragraphs:

13 “(5) OPEN-LOOP BIOMASS.—The term ‘open-  
14 loop biomass’ means any solid, nonhazardous, cel-  
15 lulosic waste material which is segregated from other  
16 waste materials and which is derived from—

17 “(A) any of the following forest-related re-  
18 sources: mill residues, precommercial thinnings,  
19 slash, and brush, but not including old-growth  
20 timber,

21 “(B) solid wood waste materials, including  
22 waste pallets, crates, dunnage, manufacturing  
23 and construction wood wastes (other than pres-  
24 sure-treated, chemically-treated, or painted  
25 wood wastes), and landscape or right-of-way

1 tree trimmings, but not including municipal  
2 solid waste (garbage), gas derived from the bio-  
3 degradation of solid waste, or paper that is  
4 commonly recycled, or

5 “(C) agriculture sources, including orchard  
6 tree crops, vineyard, grain, legumes, sugar, and  
7 other crop by-products or residues.

8 Such term shall not include closed-loop biomass.

9 “(6) REDUCED CREDIT FOR CERTAIN  
10 PREEFFECTIVE DATE FACILITIES.—In the case of  
11 any facility described in subparagraph (D) or (E) of  
12 paragraph (3) which is placed in service before the  
13 date of the enactment of this subparagraph—

14 “(A) subsection (a)(1) shall be applied by  
15 substituting ‘1.0 cents’ for ‘1.5 cents’, and

16 “(B) the 5-year period beginning on the  
17 date of the enactment of this paragraph shall  
18 be substituted in lieu of the 10-year period in  
19 subsection (a)(2)(A)(ii).

20 “(7) LIMIT ON REDUCTIONS FOR GRANTS, ETC.,  
21 FOR OPEN-LOOP BIOMASS FACILITIES.—If the  
22 amount of the credit determined under subsection  
23 (a) with respect to any open-loop biomass facility is  
24 required to be reduced under paragraph (3) of sub-

1 section (b), the fraction under such paragraph shall  
2 in no event be greater than  $\frac{4}{5}$ .

3 “(8) COORDINATION WITH SECTION 29.—The  
4 term ‘qualified facility’ shall not include any facility  
5 the production from which is allowed as a credit  
6 under section 29 for the taxable year or any prior  
7 taxable year.”.

8 (d) EFFECTIVE DATE.—The amendments made by  
9 this section shall apply to electricity sold after the date  
10 of the enactment of this Act.

11 **SEC. 3103. CREDIT FOR QUALIFIED STATIONARY FUEL**  
12 **CELL POWERPLANTS.**

13 (a) BUSINESS PROPERTY.—

14 (1) IN GENERAL.—Subparagraph (A) of section  
15 48(a)(3) (defining energy property) is amended by  
16 striking “or” at the end of clause (i), by adding  
17 “or” at the end of clause (ii), and by inserting after  
18 clause (ii) the following new clause:

19 “(iii) equipment which is part of a  
20 qualified stationary fuel cell powerplant,”.

21 (2) QUALIFIED STATIONARY FUEL CELL POW-  
22 ERPLANT.—Subsection (a) of section 48 is amended  
23 by redesignating paragraphs (4) and (5) as para-  
24 graphs (5) and (6), respectively, and by inserting  
25 after paragraph (3) the following new paragraph:

1           “(4) QUALIFIED STATIONARY FUEL CELL POW-  
2           ERPLANT.—For purposes of this subsection—

3                   “(A) IN GENERAL.—The term ‘qualified  
4                   stationary fuel cell powerplant’ means a sta-  
5                   tionary fuel cell power plant that has an elec-  
6                   tricity-only generation efficiency greater than  
7                   30 percent.

8                   “(B) LIMITATION.—In the case of quali-  
9                   fied stationary fuel cell powerplant placed in  
10                  service during the taxable year, the credit under  
11                  subsection (a) for such year may not exceed  
12                  \$1,000 for each kilowatt of capacity.

13                  “(C) STATIONARY FUEL CELL POWER  
14                  PLANT.—The term ‘stationary fuel cell power  
15                  plant’ means an integrated system comprised of  
16                  a fuel cell stack assembly and associated bal-  
17                  ance of plant components that converts a fuel  
18                  into electricity using electrochemical means.

19                  “(D) TERMINATION.—Such term shall not  
20                  include any property placed in service after De-  
21                  cember 31, 2006.”.

22           (3) EFFECTIVE DATE.—The amendments made  
23           by this subsection shall apply to property placed in  
24           service after December 31, 2001, under rules similar  
25           to the rules of section 48(m) of the Internal Revenue

1 Code of 1986 (as in effect on the day before the  
2 date of the enactment of the Revenue Reconciliation  
3 Act of 1990).

4 (b) NONBUSINESS PROPERTY.—

5 (1) IN GENERAL.—Subpart A of part IV of sub-  
6 chapter A of chapter 1 (relating to nonrefundable  
7 personal credits) is amended by inserting after sec-  
8 tion 25C the following new section:

9 **“SEC. 25D. NONBUSINESS QUALIFIED STATIONARY FUEL**  
10 **CELL POWERPLANT.**

11 “(a) IN GENERAL.—In the case of an individual,  
12 there shall be allowed as a credit against the tax imposed  
13 by this chapter for the taxable year an amount equal to  
14 10 percent of the qualified stationary fuel cell powerplant  
15 expenditures which are paid or incurred during such year.

16 “(b) LIMITATIONS.—

17 “(1) IN GENERAL.—The credit allowed under  
18 subsection (a) for the taxable year and all prior tax-  
19 able years shall not exceed \$1,000 for each kilowatt  
20 of capacity.

21 “(2) LIMITATION BASED ON AMOUNT OF  
22 TAX.—The credit allowed under subsection (a) for  
23 the taxable year shall not exceed the excess of—



1           “(A) the sum of the regular tax liability  
2           (as defined in section 26(b)) plus the tax im-  
3           posed by section 55, over

4           “(B) the sum of the credits allowable  
5           under this subpart (other than this section and  
6           sections 23 and 25E) and section 27 for the  
7           taxable year.

8           “(c) QUALIFIED STATIONARY FUEL CELL POWER-  
9           PLANT EXPENDITURES.—For purposes of this section, the  
10          term ‘qualified stationary fuel cell powerplant expendi-  
11          tures’ means expenditures by the taxpayer for any quali-  
12          fied stationary fuel cell powerplant (as defined in section  
13          48(a)(4))—

14               “(1) which meets the requirements of subpara-  
15              graphs (B) and (D) of section 48(a)(3), and

16               “(2) which is installed on or in connection with  
17              a dwelling unit—

18                       “(A) which is located in the United States,  
19                      and

20                       “(B) which is used by the taxpayer as a  
21                      residence.

22          Such term includes expenditures for labor costs properly  
23          allocable to the onsite preparation, assembly, or original  
24          installation of the property.

1       “(d) SPECIAL RULES.—For purposes of this section,  
2 rules similar to the rules of section 25C(d) shall apply.

3       “(e) BASIS ADJUSTMENTS.—For purposes of this  
4 subtitle, if a credit is allowed under this section for any  
5 expenditure with respect to any property, the increase in  
6 the basis of such property which would (but for this sub-  
7 section) result from such expenditure shall be reduced by  
8 the amount of the credit so allowed.

9       “(f) TERMINATION.—This section shall not apply to  
10 any expenditure made after December 31, 2006.”.

11               (2) CONFORMING AMENDMENTS.—

12                       (A) Subsection (a) of section 1016 is  
13 amended by striking “and” at the end of para-  
14 graph (28), by striking the period at the end of  
15 paragraph (29) and inserting “, and”, and by  
16 adding at the end the following new paragraph:

17                       “(30) to the extent provided in section 25D(e),  
18 in the case of amounts with respect to which a credit  
19 has been allowed under section 25D.”.

20                       (B) The table of sections for subpart A of  
21 part IV of subchapter A of chapter 1 is amend-  
22 ed by inserting after the item relating to section  
23 25C the following new item:

“Sec. 25D. Nonbusiness qualified stationary fuel cell power-  
plant.”.

1           (3) EFFECTIVE DATE.—The amendments made  
2       by this subsection shall apply to expenditures paid  
3       or incurred after December 31, 2001.

4   **SEC. 3104. ALTERNATIVE MOTOR VEHICLE CREDIT.**

5       (a) IN GENERAL.—Subpart B of part IV of sub-  
6   chapter A of chapter 1 (relating to foreign tax credit, etc.)  
7   is amended by adding at the end the following:

8   **“SEC. 30B. ALTERNATIVE MOTOR VEHICLE CREDIT.**

9       “(a) ALLOWANCE OF CREDIT.—There shall be al-  
10   lowed as a credit against the tax imposed by this chapter  
11   for the taxable year an amount equal to the sum of—

12           “(1) the new qualified fuel cell motor vehicle  
13       credit determined under subsection (b),

14           “(2) the new qualified hybrid motor vehicle  
15       credit determined under subsection (c),

16           “(3) the new qualified alternative fuel motor ve-  
17       hicle credit determined under subsection (d), and

18           “(4) the advanced lean burn technology motor  
19       vehicle credit determined under subsection (e).

20       “(b) NEW QUALIFIED FUEL CELL MOTOR VEHICLE  
21   CREDIT.—

22           “(1) IN GENERAL.—For purposes of subsection  
23       (a), the new qualified fuel cell motor vehicle credit  
24       determined under this subsection with respect to a

1 new qualified fuel cell motor vehicle placed in service  
2 by the taxpayer during the taxable year is—

3 “(A) \$4,000, if such vehicle has a gross ve-  
4 hicle weight rating of not more than 8,500  
5 pounds,

6 “(B) \$10,000, if such vehicle has a gross  
7 vehicle weight rating of more than 8,500  
8 pounds but not more than 14,000 pounds,

9 “(C) \$20,000, if such vehicle has a gross  
10 vehicle weight rating of more than 14,000  
11 pounds but not more than 26,000 pounds, and

12 “(D) \$40,000, if such vehicle has a gross  
13 vehicle weight rating of more than 26,000  
14 pounds.

15 “(2) INCREASE FOR FUEL EFFICIENCY.—

16 “(A) IN GENERAL.—The amount deter-  
17 mined under paragraph (1)(A) with respect to  
18 a new qualified fuel cell motor vehicle which is  
19 a passenger automobile or light truck shall be  
20 increased by—

21 “(i) \$1,000, if such vehicle achieves at  
22 least 150 percent but less than 175 per-  
23 cent of the 2000 model year city fuel econ-  
24 omy,

1           “(ii) \$1,500, if such vehicle achieves  
2           at least 175 percent but less than 200 per-  
3           cent of the 2000 model year city fuel econ-  
4           omy,

5           “(iii) \$2,000, if such vehicle achieves  
6           at least 200 percent but less than 225 per-  
7           cent of the 2000 model year city fuel econ-  
8           omy,

9           “(iv) \$2,500, if such vehicle achieves  
10          at least 225 percent but less than 250 per-  
11          cent of the 2000 model year city fuel econ-  
12          omy,

13          “(v) \$3,000, if such vehicle achieves  
14          at least 250 percent but less than 275 per-  
15          cent of the 2000 model year city fuel econ-  
16          omy,

17          “(vi) \$3,500, if such vehicle achieves  
18          at least 275 percent but less than 300 per-  
19          cent of the 2000 model year city fuel econ-  
20          omy, and

21          “(vii) \$4,000, if such vehicle achieves  
22          at least 300 percent of the 2000 model  
23          year city fuel economy.

24          “(B) 2000 MODEL YEAR CITY FUEL ECON-  
25          OMY.—For purposes of subparagraph (A), the

1           2000 model year city fuel economy with respect  
 2           to a vehicle shall be determined in accordance  
 3           with the following tables:

4                       “(i) In the case of a passenger auto-  
 5                       mobile:

<b>“If vehicle inertia weight</b>	<b>The 2000 model year city fuel</b>
<b>class is:</b>	<b>economy is:</b>
1,500 or 1,750 lbs .....	43.7 mpg
2,000 lbs .....	38.3 mpg
2,250 lbs .....	34.1 mpg
2,500 lbs .....	30.7 mpg
2,750 lbs .....	27.9 mpg
3,000 lbs .....	25.6 mpg
3,500 lbs .....	22.0 mpg
4,000 lbs .....	19.3 mpg
4,500 lbs .....	17.2 mpg
5,000 lbs .....	15.5 mpg
5,500 lbs .....	14.1 mpg
6,000 lbs .....	12.9 mpg
6,500 lbs .....	11.9 mpg
7,000 or 8,500 lbs .....	11.1 mpg.

6                       “(ii) In the case of a light truck:

<b>“If vehicle inertia weight</b>	<b>The 2000 model year city fuel</b>
<b>class is:</b>	<b>economy is:</b>
1,500 or 1,750 lbs .....	37.6 mpg
2,000 lbs .....	33.7 mpg
2,250 lbs .....	30.6 mpg
2,500 lbs .....	28.0 mpg
2,750 lbs .....	25.9 mpg
3,000 lbs .....	24.1 mpg
3,500 lbs .....	21.3 mpg
4,000 lbs .....	19.0 mpg
4,500 lbs .....	17.3 mpg
5,000 lbs .....	15.8 mpg
5,500 lbs .....	14.6 mpg
6,000 lbs .....	13.6 mpg
6,500 lbs .....	12.8 mpg
7,000 or 8,500 lbs .....	12.0 mpg.

7                       “(C) VEHICLE INERTIA WEIGHT CLASS.—

8           For purposes of subparagraph (B), the term  
 9           ‘vehicle inertia weight class’ has the same  
 10          meaning as when defined in regulations pre-

scribed by the Administrator of the Environmental Protection Agency for purposes of the administration of title II of the Clean Air Act (42 U.S.C. 7521 et seq.).

“(3) NEW QUALIFIED FUEL CELL MOTOR VEHICLE.—For purposes of this subsection, the term ‘new qualified fuel cell motor vehicle’ means a motor vehicle—

“(A) which is propelled by power derived from one or more cells which convert chemical energy directly into electricity by combining oxygen with hydrogen fuel which is stored on board the vehicle in any form and may or may not require reformation prior to use,

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

“(i) for 2002 and later model vehicles, has received a certificate of conformity under the Clean Air Act and meets or exceeds the equivalent qualifying California low emission vehicle standard under section 243(e)(2) of the Clean Air Act for that make and model year, and

“(ii) for 2004 and later model vehicles, has received a certificate that such ve-

1            hicle meets or exceeds the Tier II emission  
 2            level established in regulations prescribed  
 3            by the Administrator of the Environmental  
 4            Protection Agency under section 202(i) of  
 5            the Clean Air Act for that make and model  
 6            year vehicle,

7            “(C) the original use of which commences  
 8            with the taxpayer,

9            “(D) which is acquired for use or lease by  
 10           the taxpayer and not for resale, and

11           “(E) which is made by a manufacturer.

12           “(c) NEW QUALIFIED HYBRID MOTOR VEHICLE  
 13 CREDIT.—

14           “(1) IN GENERAL.—For purposes of subsection  
 15           (a), the new qualified hybrid motor vehicle credit de-  
 16           termined under this subsection with respect to a new  
 17           qualified hybrid motor vehicle placed in service by  
 18           the taxpayer during the taxable year is the credit  
 19           amount determined under paragraph (2).

20           “(2) CREDIT AMOUNT.—

21           “(A) IN GENERAL.—The credit amount de-  
 22           termined under this paragraph shall be deter-  
 23           mined in accordance with the following tables:

24           “(i) In the case of a new qualified hy-  
 25           brid motor vehicle which is a passenger



1                    automobile or light truck and which pro-  
 2                    vides the following percentage of the max-  
 3                    imum available power:

**“If percentage of the max-    The credit amount is:  
 imum available power is:**

At least 2.5 percent but less than 10 percent .....	\$250
At least 10 percent but less than 20 percent .....	\$500
At least 20 percent but less than 30 percent .....	\$750
At least 30 percent .....	\$1,000.

4                    “(ii) In the case of a new qualified hy-  
 5                    brid motor vehicle which is a heavy duty  
 6                    hybrid motor vehicle and which provides  
 7                    the following percentage of the maximum  
 8                    available power:

9                    “(I) If such vehicle has a gross  
 10                    vehicle weight rating of not more than  
 11                    14,000 pounds:

**“If percentage of the max-    The credit amount is:  
 imum available power is:**

At least 20 percent but less than 30 percent .....	\$1,500
At least 30 percent but less than 40 percent .....	\$1,750
At least 40 percent but less than 50 percent .....	\$2,000
At least 50 percent but less than 60 percent .....	\$2,250
At least 60 percent .....	\$2,500.

12                    “(II) If such vehicle has a gross  
 13                    vehicle weight rating of more than  
 14                    14,000 but not more than 26,000  
 15                    pounds:

**“If percentage of the max-    The credit amount is:  
 imum available power is:**

At least 20 percent but less than 30 percent .....	\$4,000
At least 30 percent but less than 40 percent .....	\$4,500
At least 40 percent but less than 50 percent .....	\$5,000
At least 50 percent but less than 60 percent .....	\$5,500
At least 60 percent .....	\$6,000.

1                   “(III) If such vehicle has a gross  
 2                   vehicle weight rating of more than  
 3                   26,000 pounds:

**“If percentage of the maximum available power is:   The credit amount is:**

At least 20 percent but less than 30 percent .....	\$6,000
At least 30 percent but less than 40 percent .....	\$7,000
At least 40 percent but less than 50 percent .....	\$8,000
At least 50 percent but less than 60 percent .....	\$9,000
At least 60 percent .....	\$10,000.

4                   “(B) INCREASE FOR FUEL EFFICIENCY.—

5                   “(i) AMOUNT.—The amount deter-  
 6                   mined under subparagraph (A)(i) with re-  
 7                   spect to a passenger automobile or light  
 8                   truck shall be increased by—

9                   “(I) \$1,000, if such vehicle  
 10                  achieves at least 125 percent but less  
 11                  than 150 percent of the 2000 model  
 12                  year city fuel economy,

13                  “(II) \$1,500, if such vehicle  
 14                  achieves at least 150 percent but less  
 15                  than 175 percent of the 2000 model  
 16                  year city fuel economy,

17                  “(III) \$2,000, if such vehicle  
 18                  achieves at least 175 percent but less  
 19                  than 200 percent of the 2000 model  
 20                  year city fuel economy,

21                  “(IV) \$2,500, if such vehicle  
 22                  achieves at least 200 percent but less

1           than 225 percent of the 2000 model  
2           year city fuel economy,

3           “(V) \$3,000, if such vehicle  
4           achieves at least 225 percent but less  
5           than 250 percent of the 2000 model  
6           year city fuel economy, and

7           “(VI) \$3,500, if such vehicle  
8           achieves at least 250 percent of the  
9           2000 model year city fuel economy.

10          “(ii) 2000 MODEL YEAR CITY FUEL  
11          ECONOMY.—For purposes of clause (i), the  
12          2000 model year city fuel economy with re-  
13          spect to a vehicle shall be determined using  
14          the tables provided in subsection (b)(2)(B)  
15          with respect to such vehicle.

16          “(iii) OPTION TO USE LIKE VEHI-  
17          CLE.—For purposes of clause (i), at the  
18          option of the vehicle manufacturer, the in-  
19          crease for fuel efficiency may be calculated  
20          by comparing the new qualified hybrid  
21          motor vehicle to a ‘like vehicle’.

22          “(C) INCREASE FOR ACCELERATED EMIS-  
23          SIONS PERFORMANCE.—The amount deter-  
24          mined under subparagraph (A)(ii) with respect  
25          to an applicable heavy duty hybrid motor vehi-

1           cle shall be increased by the increase credit  
2           amount determined in accordance with the fol-  
3           lowing tables:

4                   “(i) In the case of a vehicle which has  
5                   a gross vehicle weight rating of not more  
6                   than 14,000 pounds:

<b>“If the model year is:</b>	<b>The increase credit amount is:</b>
2002 .....	\$3,500
2003 .....	\$3,000
2004 .....	\$2,500
2005 .....	\$2,000
2006 .....	\$1,500.

7                   “(ii) In the case of a vehicle which  
8                   has a gross vehicle weight rating of more  
9                   than 14,000 pounds but not more than  
10                  26,000 pounds:

<b>“If the model year is:</b>	<b>The increase credit amount is:</b>
2002 .....	\$9,000
2003 .....	\$7,750
2004 .....	\$6,500
2005 .....	\$5,250
2006 .....	\$4,000.

11                  “(iii) In the case of a vehicle which  
12                  has a gross vehicle weight rating of more  
13                  than 26,000 pounds:

<b>“If the model year is:</b>	<b>The increase credit amount is:</b>
2002 .....	\$14,000
2003 .....	\$12,000
2004 .....	\$10,000
2005 .....	\$8,000
2006 .....	\$6,000.

14                  “(D) CONSERVATION CREDIT.—

15                   “(i) AMOUNT.—The amount deter-  
16                   mined under subparagraph (A)(i) with re-

1           spect to a passenger automobile or light  
2           truck shall be increased by—

3                   “(I)   \$250,   if   such   vehicle  
4                   achieves a lifetime fuel savings of at  
5                   least 1,500 gallons of gasoline, and

6                   “(II)   \$500,   if   such   vehicle  
7                   achieves a lifetime fuel savings of at  
8                   least 2,500 gallons of gasoline.

9                   “(ii)   LIFETIME FUEL SAVINGS FOR  
10                  LIKE VEHICLE.—For purposes of clause  
11                  (i), at the option of the vehicle manufac-  
12                  turer, the lifetime fuel savings fuel may be  
13                  calculated by comparing the new qualified  
14                  hybrid motor vehicle to a ‘like vehicle’.

15               “(E)   DEFINITIONS.—

16                   “(i)   APPLICABLE HEAVY DUTY HY-  
17                  BRID MOTOR VEHICLE.—For purposes of  
18                  subparagraph (C), the term ‘applicable  
19                  heavy duty hybrid motor vehicle’ means a  
20                  heavy duty hybrid motor vehicle which is  
21                  powered by an internal combustion or heat  
22                  engine which is certified as meeting the  
23                  emission standards set in the regulations  
24                  prescribed by the Administrator of the En-  
25                  vironmental Protection Agency for 2007

1 and later model year diesel heavy duty en-  
2 gines or 2008 and later model year  
3 otto-cycle heavy duty engines, as applicable.

4 “(ii) HEAVY DUTY HYBRID MOTOR VE-  
5 HICLE.—For purposes of this paragraph,  
6 the term ‘heavy duty hybrid motor vehicle’  
7 means a new qualified hybrid motor vehicle  
8 which has a gross vehicle weight rating of  
9 more than 10,000 pounds and draws pro-  
10 pulsion energy from both of the following  
11 onboard sources of stored energy:

12 “(I) An internal combustion or  
13 heat engine using consumable fuel  
14 which, for 2002 and later model vehi-  
15 cles, has received a certificate of con-  
16 formity under the Clean Air Act and  
17 meets or exceeds a level of not greater  
18 than 3.0 grams per brake horsepower-  
19 hour of oxides of nitrogen and 0.01  
20 per brake horsepower-hour of particu-  
21 late matter.

22 “(II) A rechargeable energy stor-  
23 age system.

24 “(iii) MAXIMUM AVAILABLE POWER.—

1                   “(I) PASSENGER AUTOMOBILE  
2                   OR LIGHT TRUCK.—For purposes of  
3                   subparagraph (A)(i), the term ‘max-  
4                   imum available power’ means the  
5                   maximum power available from the  
6                   battery or other electrical storage de-  
7                   vice, during a standard 10 second  
8                   pulse power test, divided by the sum  
9                   of the battery or other electrical stor-  
10                  age device and the SAE net power of  
11                  the heat engine.

12                 “(II) HEAVY DUTY HYBRID  
13                 MOTOR VEHICLE.—For purposes of  
14                 subparagraph (A)(ii), the term ‘max-  
15                 imum available power’ means the  
16                 maximum power available from the  
17                 battery or other electrical storage de-  
18                 vice, during a standard 10 second  
19                 pulse power test, divided by the vehi-  
20                 cle’s total traction power. The term  
21                 ‘total traction power’ means the sum  
22                 of the electric motor peak power and  
23                 the heat engine peak power of the ve-  
24                 hicle, except that if the electric motor  
25                 is the sole means by which the vehicle

1 can be driven, the total traction power  
2 is the peak electric motor power.

3 “(iv) LIKE VEHICLE.—For purposes  
4 of subparagraph (B)(iii), the term ‘like ve-  
5 hicle’ for a new qualified hybrid motor ve-  
6 hicle derived from a conventional produc-  
7 tion vehicle produced in the same model  
8 year means a model that is equivalent in  
9 the following areas:

10 “(I) Body style (2-door or 4-  
11 door).

12 “(II) Transmission (automatic or  
13 manual).

14 “(III) Acceleration performance  
15 ( $\pm$  0.05 seconds).

16 “(IV) Drivetrain (2-wheel drive  
17 or 4-wheel drive).

18 “(V) Certification by the Admin-  
19 istrator of the Environmental Protec-  
20 tion Agency.

21 “(v) LIFETIME FUEL SAVINGS.—For  
22 purposes of subsection (c)(2)(D), the term  
23 ‘lifetime fuel savings’ shall be calculated by  
24 dividing 120,000 by the difference between  
25 the 2000 model year city fuel economy for



1           the vehicle inertia weight class and the city  
2           fuel economy for the new qualified hybrid  
3           motor vehicle.

4           “(3) NEW QUALIFIED HYBRID MOTOR VEHI-  
5           CLE.—For purposes of this subsection, the term  
6           ‘new qualified hybrid motor vehicle’ means a motor  
7           vehicle—

8                 “(A) which draws propulsion energy from  
9                 onboard sources of stored energy which are  
10                both—

11                         “(i) an internal combustion or heat  
12                        engine using combustible fuel, and

13                         “(ii) a rechargeable energy storage  
14                        system,

15                 “(B) which, in the case of a passenger  
16                 automobile or light truck, for 2002 and later  
17                 model vehicles, has received a certificate of con-  
18                 formity under the Clean Air Act and meets or  
19                 exceeds the equivalent qualifying California low  
20                 emission vehicle standard under section  
21                 243(e)(2) of the Clean Air Act for that make  
22                 and model year,

23                 “(C) the original use of which commences  
24                 with the taxpayer,

1           “(D) which is acquired for use or lease by  
2           the taxpayer and not for resale, and

3           “(E) which is made by a manufacturer.

4           “(d) NEW QUALIFIED ALTERNATIVE FUEL MOTOR  
5 VEHICLE CREDIT.—

6           “(1) ALLOWANCE OF CREDIT.—Except as pro-  
7           vided in paragraph (5), the credit determined under  
8           this subsection is an amount equal to the applicable  
9           percentage of the incremental cost of any new quali-  
10          fied alternative fuel motor vehicle placed in service  
11          by the taxpayer during the taxable year.

12          “(2) APPLICABLE PERCENTAGE.—For purposes  
13          of paragraph (1), the applicable percentage with re-  
14          spect to any new qualified alternative fuel motor ve-  
15          hicle is—

16               “(A) 50 percent, plus

17               “(B) 30 percent, if such vehicle—

18                       “(i) has received a certificate of con-  
19                       formity under the Clean Air Act and meets  
20                       or exceeds the most stringent standard  
21                       available for certification under the Clean  
22                       Air Act for that make and model year vehi-  
23                       cle (other than a zero emission standard),  
24                       or

1                   “(ii) has received an order from an  
2                   applicable State certifying the vehicle for  
3                   sale or lease in California and meets or ex-  
4                   ceeds the most stringent standard available  
5                   for certification under the State laws of  
6                   California (enacted in accordance with a  
7                   waiver granted under section 209(b) of the  
8                   Clean Air Act) for that make and model  
9                   year vehicle (other than a zero emission  
10                  standard).

11               “(3) INCREMENTAL COST.—For purposes of  
12               this subsection, the incremental cost of any new  
13               qualified alternative fuel motor vehicle is equal to  
14               the amount of the excess of the manufacturer’s sug-  
15               gested retail price for such vehicle over such price  
16               for a gasoline or diesel fuel motor vehicle of the  
17               same model, to the extent such amount does not  
18               exceed—

19               “(A) \$5,000, if such vehicle has a gross ve-  
20               hicle weight rating of not more than 8,500  
21               pounds,

22               “(B) \$10,000, if such vehicle has a gross  
23               vehicle weight rating of more than 8,500  
24               pounds but not more than 14,000 pounds,

1           “(C) \$25,000, if such vehicle has a gross  
2           vehicle weight rating of more than 14,000  
3           pounds but not more than 26,000 pounds, and

4           “(D) \$40,000, if such vehicle has a gross  
5           vehicle weight rating of more than 26,000  
6           pounds.

7           “(4) QUALIFIED ALTERNATIVE FUEL MOTOR  
8           VEHICLE DEFINED.—For purposes of this  
9           subsection—

10           “(A) IN GENERAL.—The term ‘qualified  
11           alternative fuel motor vehicle’ means any motor  
12           vehicle—

13                   “(i) which is only capable of operating  
14                   on an alternative fuel,

15                   “(ii) the original use of which com-  
16                   mences with the taxpayer,

17                   “(iii) which is acquired by the tax-  
18                   payer for use or lease, but not for resale,  
19                   and

20                   “(iv) which is made by a manufac-  
21                   turer.

22           “(B) ALTERNATIVE FUEL.—The term ‘al-  
23           ternative fuel’ means compressed natural gas,  
24           liquefied natural gas, liquefied petroleum gas,

hydrogen, and any liquid at least 85 percent of the volume of which consists of methanol.

“(5) CREDIT FOR MIXED-FUEL VEHICLES.—

“(A) IN GENERAL.—In the case of a mixed-fuel vehicle placed in service by the taxpayer during the taxable year, the credit determined under this subsection is an amount equal to—

“(i) in the case of a 75/25 mixed-fuel vehicle, 70 percent of the credit which would have been allowed under this subsection if such vehicle was a qualified alternative fuel motor vehicle, and

“(ii) in the case of a 95/5 mixed-fuel vehicle, 95 percent of the credit which would have been allowed under this subsection if such vehicle was a qualified alternative fuel motor vehicle.

“(B) MIXED-FUEL VEHICLE.—For purposes of this subsection, the term ‘mixed-fuel vehicle’ means any motor vehicle described in subparagraph (C) or (D) of paragraph (3), which—

“(i) is certified by the manufacturer as being able to perform efficiently in nor-

mal operation on a combination of an alternative fuel and a petroleum-based fuel,

“(ii) either—

“(I) has received a certificate of conformity under the Clean Air Act, or

“(II) has received an order from an applicable State certifying the vehicle for sale or lease in California and meets or exceeds the low emission vehicle standard under section 88.105–94 of title 40, Code of Federal Regulations, for that make and model year vehicle,

“(iii) the original use of which commences with the taxpayer,

“(iv) which is acquired by the taxpayer for use or lease, but not for resale, and

“(v) which is made by a manufacturer.

“(C) 75/25 MIXED-FUEL VEHICLE.—For purposes of this subsection, the term ‘75/25 mixed-fuel vehicle’ means a mixed-fuel vehicle which operates using at least 75 percent alter-

1           native fuel and not more than 25 percent petro-  
2           leum-based fuel.

3           “(D) 95/5 MIXED-FUEL VEHICLE.—For  
4           purposes of this subsection, the term ‘95/5  
5           mixed-fuel vehicle’ means a mixed-fuel vehicle  
6           which operates using at least 95 percent alter-  
7           native fuel and not more than 5 percent petro-  
8           leum-based fuel.

9           “(e) ADVANCED LEAN BURN TECHNOLOGY MOTOR  
10          VEHICLE CREDIT.—

11           “(1) IN GENERAL.—For purposes of subsection  
12          (a), the advanced lean burn technology motor vehicle  
13          credit determined under this subsection with respect  
14          to a new qualified advanced lean burn technology  
15          motor vehicle placed in service by the taxpayer dur-  
16          ing the taxable year is the credit amount determined  
17          under paragraph (2).

18           “(2) CREDIT AMOUNT.—

19           “(A) INCREASE FOR FUEL EFFICIENCY.—  
20          The credit amount determined under this para-  
21          graph shall be—

22           “(i) \$1,000, if such vehicle achieves at  
23           least 125 percent but less than 150 per-  
24           cent of the 2000 model year city fuel econ-  
25           omy,

1                   “(ii) \$1,500, if such vehicle achieves  
2                   at least 150 percent but less than 175 per-  
3                   cent of the 2000 model year city fuel econ-  
4                   omy,

5                   “(iii) \$2,000, if such vehicle achieves  
6                   at least 175 percent but less than 200 per-  
7                   cent of the 2000 model year city fuel econ-  
8                   omy,

9                   “(iv) \$2,500, if such vehicle achieves  
10                  at least 200 percent but less than 225 per-  
11                  cent of the 2000 model year city fuel econ-  
12                  omy,

13                  “(v) \$3,000, if such vehicle achieves  
14                  at least 225 percent but less than 250 per-  
15                  cent of the 2000 model year city fuel econ-  
16                  omy, and

17                  “(vi) \$3,500, if such vehicle achieves  
18                  at least 250 percent of the 2000 model  
19                  year city fuel economy.

20                  For purposes of clause (i), the 2000 model year  
21                  city fuel economy with respect to a vehicle shall  
22                  be determined using the tables provided in sub-  
23                  section (b)(2)(B) with respect to such vehicle.

24                  “(B)       CONSERVATION       CREDIT.—The  
25                  amount determined under subparagraph (A)



1 with respect to an advanced lean burn tech-  
2 nology motor vehicle shall be increased by—

3 “(i) \$250, if such vehicle achieves a  
4 lifetime fuel savings of at least 1,500 gal-  
5 lons of gasoline, and

6 “(ii) \$500, if such vehicle achieves a  
7 lifetime fuel savings of at least 2,500 gal-  
8 lons of gasoline.

9 “(C) OPTION TO USE LIKE VEHICLE.—At  
10 the option of the vehicle manufacturer, the in-  
11 crease for fuel efficiency and conservation credit  
12 may be calculated by comparing the new ad-  
13 vanced lean-burn technology motor vehicle to a  
14 like vehicle.

15 “(3) DEFINITIONS.—For purposes of this sub-  
16 section.—

17 “(A) ADVANCED LEAN BURN TECHNOLOGY  
18 MOTOR VEHICLE.—The term ‘advanced lean  
19 burn technology motor vehicle’ means a motor  
20 vehicle with an internal combustion engine  
21 that—

22 “(i) is designed to operate primarily  
23 using more air than is necessary for com-  
24 plete combustion of the fuel,

25 “(ii) incorporates direct injection,

1 “(iii) achieves at least 125 percent of  
2 the 2000 model year city fuel economy,  
3 and

4 “(iv) for 2004 and later model vehi-  
5 cles, has received a certificate that such ve-  
6 hicle meets or exceeds the Bin 5, Tier 2  
7 emission levels (for passenger vehicles) or  
8 Bin 8, Tier 2 emission levels (for light  
9 trucks) established in regulations pre-  
10 scribed by the Administrator of the Envi-  
11 ronmental Protection Agency under section  
12 202(i) of the Clean Air Act for that make  
13 and model year vehicle.

14 “(B) LIKE VEHICLE.—The term ‘like vehi-  
15 cle’ for an advanced lean burn technology motor  
16 vehicle derived from a conventional production  
17 vehicle produced in the same model year means  
18 a model that is equivalent in the following  
19 areas:

20 “(i) Body style (2-door or 4-door),

21 “(ii) Transmission (automatic or man-  
22 ual),

23 “(iii) Acceleration performance ( $\pm$   
24 0.05 seconds).

1                   “(iv) Drivetrain (2-wheel drive or 4-  
2                   wheel drive).

3                   “(v) Certification by the Adminis-  
4                   trator of the Environmental Protection  
5                   Agency.

6                   “(C) LIFETIME FUEL SAVINGS.—The term  
7                   ‘lifetime fuel savings’ shall be calculated by di-  
8                   viding 120,000 by the difference between the  
9                   2000 model year city fuel economy for the vehi-  
10                  cle inertia weight class and the city fuel econ-  
11                  omy for the new qualified hybrid motor vehicle.

12                  “(f) LIMITATION BASED ON AMOUNT OF TAX.—The  
13                  credit allowed under subsection (a) for the taxable year  
14                  shall not exceed the excess of—

15                  “(1) the sum of the regular tax liability (as de-  
16                  fined in section 26(b)) plus the tax imposed by sec-  
17                  tion 55, over

18                  “(2) the sum of the credits allowable under sub-  
19                  part A and sections 27, 29, and 30A for the taxable  
20                  year.

21                  “(g) OTHER DEFINITIONS AND SPECIAL RULES.—  
22                  For purposes of this section—

23                  “(1) CONSUMABLE FUEL.—The term  
24                  ‘consumable fuel’ means any solid, liquid, or gaseous

1 matter which releases energy when consumed by an  
2 auxiliary power unit.

3 “(2) MOTOR VEHICLE.—The term ‘motor vehi-  
4 cle’ has the meaning given such term by section  
5 30(c)(2).

6 “(3) 2000 MODEL YEAR CITY FUEL ECON-  
7 OMY.—The 2000 model year city fuel economy with  
8 respect to any vehicle shall be measured under rules  
9 similar to the rules under section 4064(c).

10 “(4) OTHER TERMS.—The terms ‘automobile’,  
11 ‘passenger automobile’, ‘light truck’, and ‘manufac-  
12 turer’ have the meanings given such terms in regula-  
13 tions prescribed by the Administrator of the Envi-  
14 ronmental Protection Agency for purposes of the ad-  
15 ministration of title II of the Clean Air Act (42  
16 U.S.C. 7521 et seq.).

17 “(5) REDUCTION IN BASIS.—For purposes of  
18 this subtitle, the basis of any property for which a  
19 credit is allowable under subsection (a) shall be re-  
20 duced by the amount of such credit so allowed.

21 “(6) NO DOUBLE BENEFIT.—The amount of  
22 any deduction or credit allowable under this chapter  
23 (other than the credit allowable under this sec-  
24 tion)—

1           “(A) for any incremental cost taken into  
2           account in computing the amount of the credit  
3           determined under subsection (d) shall be re-  
4           duced by the amount of such credit attributable  
5           to such cost, and

6           “(B) with respect to a vehicle described  
7           under subsection (b) or (c), shall be reduced by  
8           the amount of credit allowed under subsection  
9           (a) for such vehicle for the taxable year.

10          “(7) PROPERTY USED BY TAX-EXEMPT ENTI-  
11          TIES.—In the case of a credit amount which is al-  
12          lowable with respect to a motor vehicle which is ac-  
13          quired by an entity exempt from tax under this  
14          chapter, the person which sells or leases such vehicle  
15          to the entity shall be treated as the taxpayer with  
16          respect to the vehicle for purposes of this section  
17          and the credit shall be allowed to such person, but  
18          only if the person clearly discloses to the entity in  
19          any sale or lease document the specific amount of  
20          any credit otherwise allowable to the entity under  
21          this section and reduces the sale or lease price of  
22          such vehicle by an equivalent amount of such credit.

23          “(8) RECAPTURE.—The Secretary shall, by reg-  
24          ulations, provide for recapturing the benefit of any  
25          credit allowable under subsection (a) with respect to

1       any property which ceases to be property eligible for  
2       such credit (including recapture in the case of a  
3       lease period of less than the economic life of a vehi-  
4       cle).

5           “(9) PROPERTY USED OUTSIDE UNITED  
6       STATES, ETC., NOT QUALIFIED.—No credit shall be  
7       allowed under subsection (a) with respect to any  
8       property referred to in section 50(b) or with respect  
9       to the portion of the cost of any property taken into  
10      account under section 179.

11          “(10) ELECTION TO NOT TAKE CREDIT.—No  
12      credit shall be allowed under subsection (a) for any  
13      vehicle if the taxpayer elects to not have this section  
14      apply to such vehicle.

15          “(11) CARRYFORWARD ALLOWED.—

16           “(A) IN GENERAL.—If the credit amount  
17      allowable under subsection (a) for a taxable  
18      year exceeds the amount of the limitation under  
19      subsection (f) for such taxable year (referred to  
20      as the ‘unused credit year’ in this paragraph),  
21      such excess shall be allowed as a credit  
22      carryforward for each of the 20 taxable years  
23      following the unused credit year.

1           “(B) RULES.—Rules similar to the rules of  
2           section 39 shall apply with respect to the credit  
3           carryforward under subparagraph (A).

4           “(12) INTERACTION WITH AIR QUALITY AND  
5           MOTOR VEHICLE SAFETY STANDARDS.—Unless oth-  
6           erwise provided in this section, a motor vehicle shall  
7           not be considered eligible for a credit under this sec-  
8           tion unless such vehicle is in compliance with—

9           “(A) the applicable provisions of the Clean  
10          Air Act for the applicable make and model year  
11          of the vehicle (or applicable air quality provi-  
12          sions of State law in the case of a State which  
13          has adopted such provision under a waiver  
14          under section 209(b) of the Clean Air Act), and

15          “(B) the motor vehicle safety provisions of  
16          sections 30101 through 30169 of title 49,  
17          United States Code.

18          “(h) REGULATIONS.—

19                 “(1) IN GENERAL.—The Secretary shall pro-  
20                 mulgate such regulations as necessary to carry out  
21                 the provisions of this section.

22                 “(2) ADMINISTRATOR OF ENVIRONMENTAL  
23                 PROTECTION AGENCY.—The Administrator of the  
24                 Environmental Protection Agency, in coordination  
25                 with the Secretary of Transportation and the Sec-

1       retary of the Treasury, shall prescribe such regula-  
 2       tions as necessary to determine whether a motor ve-  
 3       hicle meets the requirements to be eligible for a  
 4       credit under this section.

5       “(i) TERMINATION.—This section shall not apply to  
 6 any property placed in service after—

7               “(1) in the case of a new qualified fuel cell  
 8       motor vehicle (as described in subsection (b)), De-  
 9       cember 31, 2011, and

10              “(2) in the case of any other property, Decem-  
 11       ber 31, 2007.”.

12       (b) CONFORMING AMENDMENTS.—

13              (1) Section 1016(a) is amended by striking  
 14       “and” at the end of paragraph (29), by striking the  
 15       period at the end of paragraph (30) and inserting “,  
 16       and”, and by adding at the end the following:

17              “(31) to the extent provided in section  
 18       30B(g)(5).”.

19              (2) Section 6501(m) is amended by inserting  
 20       “30B(g)(10),” after “30(d)(4),”.

21              (3) The table of sections for subpart B of part  
 22       IV of subchapter A of chapter 1 is amended by in-  
 23       serting after the item relating to section 30A the fol-  
 24       lowing:

      “Sec. 30B. Alternative motor vehicle credit.”.



1 (c) EFFECTIVE DATE.—The amendments made by  
2 this section shall apply to property placed in service after  
3 December 31, 2001, in taxable years ending after such  
4 date.

5 **SEC. 3105. EXTENSION OF DEDUCTION FOR CERTAIN RE-**  
6 **FUELING PROPERTY.**

7 (a) IN GENERAL.—Section 179A(f) (relating to ter-  
8 mination) is amended by striking “2004” and inserting  
9 “2007”.

10 (b) MODIFICATION OF PHASEOUT.—Subparagraph  
11 (B) of section 179A(b)(1) is amended—

12 (1) in clause (i), by striking “2002” and insert-  
13 ing “2005”,

14 (2) in clause (ii), by striking “2003” and in-  
15 serting “2006”, and

16 (3) in clause (iii), by striking “2004” and in-  
17 serting “2007”.

18 **SEC. 3106. MODIFICATION OF CREDIT FOR QUALIFIED**  
19 **ELECTRIC VEHICLES.**

20 (a) AMOUNT OF CREDIT.—

21 (1) IN GENERAL.—Section 30(a) (relating to al-  
22 lowance of credit) is amended by striking “10 per-  
23 cent of”.

1           (2) LIMITATION OF CREDIT ACCORDING TO  
2       TYPE OF VEHICLE.—Section 30(b) (relating to limi-  
3       tations) is amended—

4           (A) by striking paragraphs (1) and (2) and  
5       inserting the following:

6           “(1) LIMITATION ACCORDING TO TYPE OF VE-  
7       HICLE.—The amount of the credit allowed under  
8       subsection (a) for any vehicle shall not exceed the  
9       greatest of the following amounts applicable to such  
10      vehicle:

11           “(A) In the case of a vehicle which con-  
12      forms to the Motor Vehicle Safety Standard  
13      500 prescribed by the Secretary of Transpor-  
14      tation, the lesser of—

15           “(i) 10 percent of the manufacturer’s  
16      suggested retail price of the vehicle, or

17           “(ii) \$4,000.

18           “(B) In the case of a vehicle not described  
19      in subparagraph (A) with a gross vehicle weight  
20      rating not exceeding 8,500 pounds—

21           “(i) \$4,000, or

22           “(ii) \$5,000, if such vehicle is—

23           “(I) capable of a driving range of  
24      at least 70 miles on a single charge of  
25      the vehicle’s rechargeable batteries

1 and measured pursuant to the urban  
2 dynamometer schedules under appen-  
3 dix I to part 86 of title 40, Code of  
4 Federal Regulations, or

5 “(II) capable of a payload capac-  
6 ity of at least 1,000 pounds.

7 “(C) In the case of a vehicle with a gross  
8 vehicle weight rating exceeding 8,500 pounds  
9 but not exceeding 14,000 pounds, \$10,000.

10 “(D) In the case of a vehicle with a gross  
11 vehicle weight rating exceeding 14,000 pounds  
12 but not exceeding 26,000 pounds, \$20,000.

13 “(E) In the case of a vehicle with a gross  
14 vehicle weight rating exceeding 26,000 pounds,  
15 \$40,000.”, and

16 (B) by redesignating paragraph (3) as  
17 paragraph (2).

18 (3) CONFORMING AMENDMENTS.—

19 (A) Section 53(d)(1)(B)(iii) is amended by  
20 striking “section 30(b)(3)(B)” and inserting  
21 “section 30(b)(2)(B)”.

22 (B) Section 55(c)(2) is amended by strik-  
23 ing “30(b)(3)” and inserting “30(b)(2)”.

24 (b) QUALIFIED BATTERY ELECTRIC VEHICLE.—

1           (1) IN GENERAL.—Section 30(c)(1)(A) (defin-  
2           ing qualified electric vehicle) is amended to read as  
3           follows:

4                   “(A) which is—

5                           “(i) operated solely by use of a bat-  
6                           tery or battery pack, or

7                           “(ii) powered primarily through the  
8                           use of an electric battery or battery pack  
9                           using a flywheel or capacitor which stores  
10                          energy produced by an electric motor  
11                          through regenerative braking to assist in  
12                          vehicle operation,”.

13           (2) LEASED VEHICLES.—Section 30(c)(1)(C) is  
14           amended by inserting “or lease” after “use”.

15           (3) CONFORMING AMENDMENTS.—

16                   (A) Subsections (a), and (c) of section 30  
17                   are each amended by inserting “battery” after  
18                   “qualified” each place it appears.

19                   (B) The heading of subsection (c) of sec-  
20                   tion 30 is amended by inserting “BATTERY”  
21                   after “QUALIFIED”.

22                   (C) The heading of section 30 is amended  
23                   by inserting “**BATTERY**” after “**QUALIFIED**”.

24                   (D) The item relating to section 30 in the  
25                   table of sections for subpart B of part IV of

1 subchapter A of chapter 1 is amended by in-  
2 serting “battery” after “qualified”.

3 (E) Section 179A(c)(3) is amended by in-  
4 serting “battery” before “electric”.

5 (F) The heading of paragraph (3) of sec-  
6 tion 179A(c) is amended by inserting “BAT-  
7 TERY” before “ELECTRIC”.

8 (c) ADDITIONAL SPECIAL RULES.—Section 30(d)  
9 (relating to special rules) is amended by adding at the end  
10 the following:

11 “(5) NO DOUBLE BENEFIT.—The amount of  
12 any deduction or credit allowable under this chapter  
13 for any cost taken into account in computing the  
14 amount of the credit determined under subsection  
15 (a) shall be reduced by the amount of such credit at-  
16 tributable to such cost.

17 “(6) PROPERTY USED BY TAX-EXEMPT ENTI-  
18 TIES.—In the case of a credit amount which is al-  
19 lowable with respect to a vehicle which is acquired  
20 by an entity exempt from tax under this chapter, the  
21 person which sells or leases such vehicle to the entity  
22 shall be treated as the taxpayer with respect to the  
23 vehicle for purposes of this section and the credit  
24 shall be allowed to such person, but only if the per-  
25 son clearly discloses to the entity in any sale or lease

1 contract the specific amount of any credit otherwise  
2 allowable to the entity under this section and re-  
3 duces the sale or lease price of such vehicle by an  
4 equivalent amount of such credit.

5 “(7) CARRYFORWARD ALLOWED.—

6 “(A) IN GENERAL.—If the credit amount  
7 allowable under subsection (a) for a taxable  
8 year exceeds the amount of the limitation under  
9 subsection (b)(3) for such taxable year, such ex-  
10 cess shall be allowed as a credit carryforward  
11 for each of the 20 taxable years following such  
12 taxable year.

13 “(B) RULES.—Rules similar to the rules of  
14 section 39 shall apply with respect to the credit  
15 carryforward under subparagraph (A).”.

16 (d) EXTENSION.—Section 30(e) (relating to termi-  
17 nation) is amended by striking “2004” and inserting  
18 “2007”.

19 (e) EFFECTIVE DATE.—The amendments made by  
20 this section shall apply to property placed in service after  
21 December 31, 2001, in taxable years ending after such  
22 date.

1 **SEC. 3107. TAX CREDIT FOR ENERGY EFFICIENT APPLI-**  
 2 **ANCES.**

3 (a) IN GENERAL.—Subpart D of part IV of sub-  
 4 chapter A of chapter 1 (relating to business-related cred-  
 5 its) is amended by adding at the end the following new  
 6 section:

7 **“SEC. 45G. ENERGY EFFICIENT APPLIANCE CREDIT.**

8 “(a) GENERAL RULE.—For purposes of section 38,  
 9 the energy efficient appliance credit determined under this  
 10 section for the taxable year is an amount equal to the ap-  
 11 plicable amount determined under subsection (b) with re-  
 12 spect to the eligible production of qualified energy efficient  
 13 appliances produced by the taxpayer during the calendar  
 14 year ending with or within the taxable year.

15 “(b) APPLICABLE AMOUNT; ELIGIBLE PRODUC-  
 16 TION.—For purposes of subsection (a)—

17 “(1) APPLICABLE AMOUNT.—The applicable  
 18 amount is—

19 “(A) \$50 in the case of an energy efficient  
 20 clothes washer described in subsection (d)(2)(A)  
 21 or an energy efficient refrigerator described in  
 22 subsection (d)(3)(B)(i), and

23 “(B) \$100 in the case of any other energy  
 24 efficient clothes washer or energy efficient re-  
 25 frigerator.

26 “(2) ELIGIBLE PRODUCTION.—

1           “(A) IN GENERAL.—The eligible produc-  
2           tion of each category of qualified energy effi-  
3           cient appliances is the excess of—

4                   “(i) the number of appliances in such  
5                   category which are produced by the tax-  
6                   payer during such calendar year, over

7                   “(ii) the average number of appliances  
8                   in such category which were produced by  
9                   the taxpayer during calendar years 1998,  
10                  1999, and 2000.

11           “(B) CATEGORIES.—For purposes of sub-  
12           paragraph (A), the categories are—

13                   “(i) energy efficient clothes washers  
14                   described in subsection (d)(2)(A),

15                   “(ii) energy efficient clothes washers  
16                   described in subsection (d)(2)(B),

17                   “(iii) energy efficient refrigerators de-  
18                   scribed in subsection (d)(3)(B)(i), and

19                   “(iv) energy efficient refrigerators de-  
20                   scribed in subsection (d)(3)(B)(ii).

21           “(C) SPECIAL RULE FOR 2001 PRODUC-  
22           TION.—For purposes of determining eligible  
23           production for calendar year 2001—

24                   “(i) only production after the date of  
25                   the enactment of this section shall be



1 taken into account under subparagraph  
2 (A)(i), and

3 “(ii) the amount taken into account  
4 under subparagraph (A)(ii) shall be an  
5 amount which bears the same ratio to the  
6 amount which would (but for this subpara-  
7 graph) be taken into account under sub-  
8 paragraph (A)(ii) as—

9 “(I) the number of days in cal-  
10 endar year 2001 after the date of the  
11 enactment of this section, bears to

12 “(II) 365.

13 “(c) LIMITATION ON MAXIMUM CREDIT.—

14 “(1) IN GENERAL.—The maximum amount of  
15 credit allowed under subsection (a) with respect to  
16 a taxpayer for all taxable years shall be—

17 “(A) \$30,000,000 with respect to the cred-  
18 it determined under subsection (b)(1)(A), and

19 “(B) \$30,000,000 with respect to the cred-  
20 it determined under subsection (b)(1)(B).

21 “(2) LIMITATION BASED ON GROSS RE-  
22 CEIPTS.—The credit allowed under subsection (a)  
23 with respect to a taxpayer for the taxable year shall  
24 not exceed an amount equal to 2 percent of the aver-  
25 age annual gross receipts of the taxpayer for the 3

1 taxable years preceding the taxable year in which  
2 the credit is determined.

3 “(3) GROSS RECEIPTS.—For purposes of this  
4 subsection, the rules of paragraphs (2) and (3) of  
5 section 448(c) shall apply.

6 “(d) QUALIFIED ENERGY EFFICIENT APPLIANCE.—  
7 For purposes of this section:

8 “(1) IN GENERAL.—The term ‘qualified energy  
9 efficient appliance’ means—

10 “(A) an energy efficient clothes washer, or

11 “(B) an energy efficient refrigerator.

12 “(2) ENERGY EFFICIENT CLOTHES WASHER.—

13 The term ‘energy efficient clothes washer’ means a  
14 residential clothes washer, including a residential  
15 style coin operated washer, which is manufactured  
16 with—

17 “(A) a 1.26 MEF or greater, or

18 “(B) a 1.42 MEF (1.5 MEF for washers  
19 produced after 2004) or greater.

20 “(3) ENERGY EFFICIENT REFRIGERATOR.—The  
21 term ‘energy efficient refrigerator’ means an auto-  
22 matic defrost refrigerator-freezer which—

23 “(A) has an internal volume of at least  
24 16.5 cubic feet, and

25 “(B) consumes—

1                   “(i) 10 percent less kw/hr/yr than the  
2                   energy conservation standards promulgated  
3                   by the Department of Energy for refrig-  
4                   erators produced during 2001, and

5                   “(ii) 15 percent less kw/hr/yr than  
6                   such energy conservation standards for re-  
7                   frigerators produced after 2001.

8                   “(4) MEF.—The term ‘MEF’ means Modified  
9                   Energy Factor (as determined by the Secretary of  
10                  Energy).

11                  “(e) SPECIAL RULES.—

12                  “(1) IN GENERAL.—Rules similar to the rules  
13                  of subsections (c), (d), and (e) of section 52 shall  
14                  apply for purposes of this section.

15                  “(2) AGGREGATION RULES.—All persons treat-  
16                  ed as a single employer under subsection (a) or (b)  
17                  of section 52 or subsection (m) or (o) of section 414  
18                  shall be treated as 1 person for purposes of sub-  
19                  section (a).

20                  “(f) VERIFICATION.—The taxpayer shall submit such  
21                  information or certification as the Secretary, in consulta-  
22                  tion with the Secretary of Energy, determines necessary  
23                  to claim the credit amount under subsection (a).

24                  “(g) TERMINATION.—This section shall not apply—

1           “(1) with respect to energy efficient refrig-  
2           erators described in subsection (d)(3)(B)(i) produced  
3           after 2004, and

4           “(2) with respect to all other qualified energy  
5           efficient appliances produced after 2006.”.

6           (b) LIMITATION ON CARRYBACK.—Section 39(d) (re-  
7           lating to transition rules) is amended by adding at the  
8           end the following new paragraph:

9           “(11) NO CARRYBACK OF ENERGY EFFICIENT  
10          APPLIANCE CREDIT BEFORE EFFECTIVE DATE.—No  
11          portion of the unused business credit for any taxable  
12          year which is attributable to the energy efficient ap-  
13          pliance credit determined under section 45G may be  
14          carried to a taxable year ending before the date of  
15          the enactment of section 45G.”.

16          (c) CONFORMING AMENDMENT.—Section 38(b) (re-  
17          lating to general business credit) is amended by striking  
18          “plus” at the end of paragraph (14), by striking the period  
19          at the end of paragraph (15) and inserting “, plus”, and  
20          by adding at the end the following new paragraph:

21          “(16) the energy efficient appliance credit de-  
22          termined under section 45G(a).”.

23          (d) CLERICAL AMENDMENT.—The table of sections  
24          for subpart D of part IV of subchapter A of chapter 1

1 is amended by inserting after the item relating to section  
2 45F the following new item:

“Sec. 45G. Energy efficient appliance credit.”.

3 (e) EFFECTIVE DATE.—The amendments made by  
4 this section shall apply to taxable years ending after the  
5 date of the enactment of this Act.

6 **SEC. 3108. CREDIT FOR ENERGY EFFICIENCY IMPROVE-**  
7 **MENTS TO EXISTING HOMES.**

8 (a) IN GENERAL.—Subpart A of part IV of sub-  
9 chapter A of chapter 1 (relating to nonrefundable personal  
10 credits) is amended by inserting after section 25D the fol-  
11 lowing new section:

12 **“SEC. 25E. ENERGY EFFICIENCY IMPROVEMENTS TO EXIST-**  
13 **ING HOMES.**

14 “(a) ALLOWANCE OF CREDIT.—In the case of an in-  
15 dividual, there shall be allowed as a credit against the tax  
16 imposed by this chapter for the taxable year an amount  
17 equal to 20 percent of the amount paid or incurred by  
18 the taxpayer for qualified energy efficiency improvements  
19 installed during such taxable year.

20 “(b) LIMITATIONS.—

21 “(1) MAXIMUM CREDIT.—The credit allowed by  
22 this section with respect to a dwelling shall not ex-  
23 ceed \$2,000.

24 “(2) PRIOR CREDIT AMOUNTS FOR TAXPAYER  
25 ON SAME DWELLING TAKEN INTO ACCOUNT.—If a

1 credit was allowed to the taxpayer under subsection  
2 (a) with respect to a dwelling in 1 or more prior tax-  
3 able years, the amount of the credit otherwise allow-  
4 able for the taxable year with respect to that dwell-  
5 ing shall not exceed the amount of \$2,000 reduced  
6 by the sum of the credits allowed under subsection  
7 (a) to the taxpayer with respect to the dwelling for  
8 all prior taxable years.

9 “(3) LIMITATION BASED ON AMOUNT OF  
10 TAX.—The credit allowed under subsection (a) for  
11 the taxable year shall not exceed the excess of—

12 “(A) the sum of the regular tax liability  
13 (as defined in section 26(b)) plus the tax im-  
14 posed by section 55, over

15 “(B) the sum of the credits allowable  
16 under this subpart (other than this section and  
17 section 23) and section 27 for the taxable year.

18 “(c) CARRYFORWARD OF UNUSED CREDIT.—If the  
19 credit allowable under subsection (a) exceeds the limita-  
20 tion imposed by subsection (b)(3) for such taxable year,  
21 such excess shall be carried to the succeeding taxable year  
22 and added to the credit allowable under subsection (a) for  
23 such succeeding taxable year.

24 “(d) QUALIFIED ENERGY EFFICIENCY IMPROVE-  
25 MENTS.—For purposes of this section, the term ‘qualified

1 energy efficiency improvements’ means any energy effi-  
2 cient building envelope component which meets the pre-  
3 scriptive criteria for such component established by the  
4 1998 International Energy Conservation Code, if—

5 “(1) such component is installed in or on a  
6 dwelling—

7 “(A) located in the United States, and

8 “(B) owned and used by the taxpayer as  
9 the taxpayer’s principal residence (within the  
10 meaning of section 121),

11 “(2) the original use of such component com-  
12 mences with the taxpayer, and

13 “(3) such component reasonably can be ex-  
14 pected to remain in use for at least 5 years.

15 If the aggregate cost of such components with respect to  
16 any dwelling exceeds \$1,000, such components shall be  
17 treated as qualified energy efficiency improvements only  
18 if such components are also certified in accordance with  
19 subsection (e) as meeting such criteria.

20 “(e) CERTIFICATION.—The certification described in  
21 subsection (d) shall be—

22 “(1) determined on the basis of the technical  
23 specifications or applicable ratings (including prod-  
24 uct labeling requirements) for the measurement of  
25 energy efficiency, based upon energy use or building

1 envelope component performance, for the energy effi-  
2 cient building envelope component,

3 “(2) provided by a local building regulatory au-  
4 thority, a utility, a manufactured home production  
5 inspection primary inspection agency (IPLA), or an  
6 accredited home energy rating system provider who  
7 is accredited by or otherwise authorized to use ap-  
8 proved energy performance measurement methods by  
9 the Home Energy Ratings Systems Council or the  
10 National Association of State Energy Officials, and

11 “(3) made in writing in a manner that specifies  
12 in readily verifiable fashion the energy efficient  
13 building envelope components installed and their re-  
14 spective energy efficiency levels.

15 “(f) DEFINITIONS AND SPECIAL RULES.—

16 “(1) TENANT-STOCKHOLDER IN COOPERATIVE  
17 HOUSING CORPORATION.—In the case of an indi-  
18 vidual who is a tenant-stockholder (as defined in sec-  
19 tion 216) in a cooperative housing corporation (as  
20 defined in such section), such individual shall be  
21 treated as having paid his tenant-stockholder’s pro-  
22 portionate share (as defined in section 216(b)(3)) of  
23 the cost of qualified energy efficiency improvements  
24 made by such corporation.

25 “(2) CONDOMINIUMS.—



1           “(A) IN GENERAL.—In the case of an indi-  
2           vidual who is a member of a condominium man-  
3           agement association with respect to a condo-  
4           minium which he owns, such individual shall be  
5           treated as having paid his proportionate share  
6           of the cost of qualified energy efficiency im-  
7           provements made by such association.

8           “(B) CONDOMINIUM MANAGEMENT ASSO-  
9           CIATION.—For purposes of this paragraph, the  
10          term ‘condominium management association’  
11          means an organization which meets the require-  
12          ments of paragraph (1) of section 528(c) (other  
13          than subparagraph (E) thereof) with respect to  
14          a condominium project substantially all of the  
15          units of which are used as residences.

16          “(3) BUILDING ENVELOPE COMPONENT.—The  
17          term ‘building envelope component’ means insulation  
18          material or system which is specifically and pri-  
19          marily designed to reduce the heat loss or gain of a  
20          dwelling when installed in or on such dwelling, exte-  
21          rior windows (including skylights) and doors, and  
22          metal roofs with appropriate pigmented coatings  
23          which are specifically and primarily designed to re-  
24          duce the heat gain of a dwelling when installed in  
25          or on such dwelling.

1           “(4) MANUFACTURED HOMES INCLUDED.—For  
2       purposes of this section, the term ‘dwelling’ includes  
3       a manufactured home which conforms to Federal  
4       Manufactured Home Construction and Safety Stand-  
5       ards (24 CFR 3280).

6           “(g) BASIS ADJUSTMENT.—For purposes of this sub-  
7       title, if a credit is allowed under this section for any ex-  
8       penditure with respect to any property, the increase in the  
9       basis of such property which would (but for this sub-  
10      section) result from such expenditure shall be reduced by  
11      the amount of the credit so allowed.

12          “(h) APPLICATION OF SECTION.—This section shall  
13      apply to qualified energy efficiency improvements installed  
14      after December 31, 2001 and before January 1, 2007.”.

15          (b) CONFORMING AMENDMENTS.—

16              (1) Subsection (a) of section 1016 is amended  
17      by striking “and” at the end of paragraph (30), by  
18      striking the period at the end of paragraph (31) and  
19      inserting “, and”, and by adding at the end the fol-  
20      lowing new paragraph:

21              “(32) to the extent provided in section 25E(g),  
22      in the case of amounts with respect to which a credit  
23      has been allowed under section 25E.”.

24              (2) The table of sections for subpart A of part  
25      IV of subchapter A of chapter 1 is amended by in-

1       serting after the item relating to section 25D the  
2       following new item:

“Sec. 25E. Energy efficiency improvements to existing homes.”.

3       (c) EFFECTIVE DATE.—The amendments made by  
4       this section shall apply to taxable years ending after De-  
5       cember 31, 2001.

6       **SEC. 3109. BUSINESS CREDIT FOR CONSTRUCTION OF NEW**  
7                                   **ENERGY EFFICIENT HOME.**

8       (a) IN GENERAL.—Subpart D of part IV of sub-  
9       chapter A of chapter 1 (relating to business related cred-  
10      its) is amended by inserting after section 45G the fol-  
11      lowing new section:

12      **“SEC. 45H. NEW ENERGY EFFICIENT HOME CREDIT.**

13          “(a) IN GENERAL.—For purposes of section 38, in  
14      the case of an eligible contractor, the credit determined  
15      under this section for the taxable year is an amount equal  
16      to the aggregate adjusted bases of all energy efficient  
17      property installed in a qualified new energy efficient home  
18      during construction of such home.

19          “(b) LIMITATIONS.—

20                  “(1) MAXIMUM CREDIT.—

21                          “(A) IN GENERAL.—The credit allowed by  
22                      this section with respect to a dwelling shall not  
23                      exceed \$2,000.

24                          “(B) PRIOR CREDIT AMOUNTS ON SAME  
25                      DWELLING TAKEN INTO ACCOUNT.—If a credit

1 was allowed under subsection (a) with respect  
2 to a dwelling in 1 or more prior taxable years,  
3 the amount of the credit otherwise allowable for  
4 the taxable year with respect to that dwelling  
5 shall not exceed the amount of \$2,000 reduced  
6 by the sum of the credits allowed under sub-  
7 section (a) with respect to the dwelling for all  
8 prior taxable years.

9 “(2) COORDINATION WITH REHABILITATION  
10 AND ENERGY CREDITS.—For purposes of this  
11 section—

12 “(A) the basis of any property referred to  
13 in subsection (a) shall be reduced by that por-  
14 tion of the basis of any property which is attrib-  
15 utable to qualified rehabilitation expenditures  
16 (as defined in section 47(c)(2)) or to the energy  
17 percentage of energy property (as determined  
18 under section 48(a)), and

19 “(B) expenditures taken into account  
20 under either section 47 or 48(a) shall not be  
21 taken into account under this section.

22 “(c) DEFINITIONS.—For purposes of this section—

23 “(1) ELIGIBLE CONTRACTOR.—The term ‘eligi-  
24 ble contractor’ means the person who constructed  
25 the new energy efficient home, or in the case of a

1       manufactured home which conforms to Federal  
2       Manufactured Home Construction and Safety Stand-  
3       ards (24 CFR 3280), the manufactured home pro-  
4       ducer of such home.

5           “(2) ENERGY EFFICIENT PROPERTY.—The  
6       term ‘energy efficient property’ means any energy  
7       efficient building envelope component, and any en-  
8       ergy efficient heating or cooling appliance.

9           “(3) QUALIFIED NEW ENERGY EFFICIENT  
10      HOME.—The term ‘qualified new energy efficient  
11      home’ means a dwelling—

12           “(A) located in the United States,

13           “(B) the construction of which is substan-  
14      tially completed after December 31, 2001,

15           “(C) the original use of which is as a prin-  
16      cipal residence (within the meaning of section  
17      121) which commences with the person who ac-  
18      quires such dwelling from the eligible con-  
19      tractor, and

20           “(D) which is certified to have a level of  
21      annual heating and cooling energy consumption  
22      that is at least 30 percent below the annual  
23      level of heating and cooling energy consumption  
24      of a comparable dwelling constructed in accord-

1           ance with the standards of the 1998 Inter-  
2           national Energy Conservation Code.

3           “(4) CONSTRUCTION.—The term ‘construction’  
4           includes reconstruction and rehabilitation.

5           “(5) ACQUIRE.—The term ‘acquire’ includes  
6           purchase and, in the case of reconstruction and re-  
7           habilitation, such term includes a binding written  
8           contract for such reconstruction or rehabilitation.

9           “(6) BUILDING ENVELOPE COMPONENT.—The  
10          term ‘building envelope component’ means insulation  
11          material or system which is specifically and pri-  
12          marily designed to reduce the heat loss or gain of a  
13          dwelling when installed in or on such dwelling, exte-  
14          rior windows (including skylights) and doors, and  
15          metal roofs with appropriate pigmented coatings  
16          which are specifically and primarily designed to re-  
17          duce the heat gain of a dwelling when installed in  
18          or on such dwelling.

19          “(7) MANUFACTURED HOME INCLUDED.—The  
20          term ‘dwelling’ includes a manufactured home con-  
21          forming to Federal Manufactured Home Construc-  
22          tion and Safety Standards (24 CFR 3280).

23          “(d) CERTIFICATION.—

1           “(1) METHOD.—A certification described in  
2           subsection (c)(3)(D) shall be determined on the  
3           basis of one of the following methods:

4                   “(A) The technical specifications or appli-  
5                   cable ratings (including product labeling re-  
6                   quirements) for the measurement of energy effi-  
7                   ciency for the energy efficient building envelope  
8                   component or energy efficient heating or cooling  
9                   appliance, based upon energy use or building  
10                  envelope component performance.

11                  “(B) An energy performance measurement  
12                  method that utilizes computer software ap-  
13                  proved by organizations designated by the Sec-  
14                  retary.

15           “(2) PROVIDER.—Such certification shall be  
16           provided by—

17                   “(A) in the case of a method described in  
18                   paragraph (1)(A), a local building regulatory  
19                   authority, a utility, a manufactured home pro-  
20                   duction inspection primary inspection agency  
21                   (IPIA), or an accredited home energy rating  
22                   systems provider who is accredited by, or other-  
23                   wise authorized to use, approved energy per-  
24                   formance measurement methods by the Home

1 Energy Ratings Systems Council or the Na-  
2 tional Association of State Energy Officials, or

3 “(B) in the case of a method described in  
4 paragraph (1)(B), an individual recognized by  
5 an organization designated by the Secretary for  
6 such purposes.

7 “(3) FORM.—Such certification shall be made  
8 in writing in a manner that specifies in readily  
9 verifiable fashion the energy efficient building enve-  
10 lope components and energy efficient heating or  
11 cooling appliances installed and their respective en-  
12 ergy efficiency levels, and in the case of a method  
13 described in subparagraph (B) of paragraph (1), ac-  
14 companied by written analysis documenting the  
15 proper application of a permissible energy perform-  
16 ance measurement method to the specific cir-  
17 cumstances of such dwelling.

18 “(4) REGULATIONS.—

19 “(A) IN GENERAL.—In prescribing regula-  
20 tions under this subsection for energy perform-  
21 ance measurement methods, the Secretary shall  
22 prescribe procedures for calculating annual en-  
23 ergy costs for heating and cooling and cost sav-  
24 ings and for the reporting of the results. Such  
25 regulations shall—



1 “(i) be based on the National Home  
2 Energy Rating Technical Guidelines of the  
3 National Association of State Energy Offi-  
4 cials, the Home Energy Rating Guidelines  
5 of the Home Energy Rating Systems  
6 Council, or the modified 1998 California  
7 Residential ACM manual,

8 “(ii) provide that any calculation pro-  
9 cedures be developed such that the same  
10 energy efficiency measures allow a home to  
11 qualify for the credit under this section re-  
12 gardless of whether the house uses a gas  
13 or oil furnace or boiler or an electric heat  
14 pump, and

15 “(iii) require that any computer soft-  
16 ware allow for the printing of the Federal  
17 tax forms necessary for the credit under  
18 this section and explanations for the home-  
19 buyer of the energy efficient features that  
20 were used to comply with the requirements  
21 of this section.

22 “(B) PROVIDERS.—For purposes of para-  
23 graph (2)(B), the Secretary shall establish re-  
24 quirements for the designation of individuals  
25 based on the requirements for energy consult-

1           ants and home energy raters specified by the  
2           National Association of State Energy Officials.

3           “(e) BASIS ADJUSTMENT.—For purposes of this sub-  
4 title, if a credit is allowed under this section for any ex-  
5 penditure with respect to any property, the increase in the  
6 basis of such property which would (but for this sub-  
7 section) result from such expenditure shall be reduced by  
8 the amount of the credit so allowed.

9           “(f) APPLICATION OF SECTION.—Subsection (a) shall  
10 apply to dwellings purchased during the period beginning  
11 on January 1, 2002, and ending on December 31, 2006.”.

12           (b) CREDIT MADE PART OF GENERAL BUSINESS  
13 CREDIT.—Subsection (b) of section 38 (relating to current  
14 year business credit) is amended by striking “plus” at the  
15 end of paragraph (15), by striking the period at the end  
16 of paragraph (16) and inserting “, plus”, and by adding  
17 at the end thereof the following new paragraph:

18                   “(17) the new energy efficient home credit de-  
19 termined under section 45H.”.

20           (c) DENIAL OF DOUBLE BENEFIT.—Section 280C  
21 (relating to certain expenses for which credits are allow-  
22 able) is amended by adding at the end thereof the fol-  
23 lowing new subsection:

24           “(d) NEW ENERGY EFFICIENT HOME EXPENSES.—  
25 No deduction shall be allowed for that portion of expenses

1 for a new energy efficient home otherwise allowable as a  
2 deduction for the taxable year which is equal to the  
3 amount of the credit determined for such taxable year  
4 under section 45H.”.

5 (d) LIMITATION ON CARRYBACK.—Subsection (d) of  
6 section 39 is amended by adding at the end the following  
7 new paragraph:

8 “(12) NO CARRYBACK OF NEW ENERGY EFFI-  
9 CIENT HOME CREDIT BEFORE EFFECTIVE DATE.—  
10 No portion of the unused business credit for any  
11 taxable year which is attributable to the credit deter-  
12 mined under section 45H may be carried back to  
13 any taxable year ending before January 1, 2002.”.

14 (e) DEDUCTION FOR CERTAIN UNUSED BUSINESS  
15 CREDITS.—Subsection (c) of section 196 is amended by  
16 striking “and” at the end of paragraph (9), by striking  
17 the period at the end of paragraph (10) and inserting “,  
18 and”, and by adding after paragraph (10) the following  
19 new paragraph:

20 “(11) the new energy efficient home credit de-  
21 termined under section 45H.”.

22 (f) CLERICAL AMENDMENT.—The table of sections  
23 for subpart D of part IV of subchapter A of chapter 1  
24 is amended by inserting after the item relating to section  
25 45G the following new item:

“Sec. 45H. New energy efficient home credit.”.

1 (g) EFFECTIVE DATE.—The amendments made by  
2 this section shall apply to taxable years ending after De-  
3 cember 31, 2001.

4 **SEC. 3110. ALLOWANCE OF DEDUCTION FOR ENERGY EFFI-**  
5 **CIENT COMMERCIAL BUILDING PROPERTY.**

6 (a) IN GENERAL.—Part VI of subchapter B of chap-  
7 ter 1 (relating to itemized deductions for individuals and  
8 corporations) is amended by inserting after section 179A  
9 the following new section:

10 **“SEC. 179B. DEDUCTION FOR ENERGY EFFICIENT COMMER-**  
11 **CIAL BUILDING PROPERTY.**

12 “(a) ALLOWANCE OF DEDUCTION.—

13 “(1) IN GENERAL.—There shall be allowed as a  
14 deduction an amount equal to energy efficient com-  
15 mercial building property expenditures made by a  
16 taxpayer for the taxable year.

17 “(2) MAXIMUM AMOUNT OF DEDUCTION.—The  
18 amount of energy efficient commercial building prop-  
19 erty expenditures taken into account under para-  
20 graph (1) shall not exceed an amount equal to the  
21 product of—

22 “(A) \$2.25, and

23 “(B) the square footage of the building  
24 with respect to which the expenditures are  
25 made.

1           “(3) YEAR DEDUCTION ALLOWED.—The deduc-  
2           tion under paragraph (1) shall be allowed for the  
3           taxable year in which the building is placed in serv-  
4           ice.

5           “(b) ENERGY EFFICIENT COMMERCIAL BUILDING  
6           PROPERTY EXPENDITURES.—For purposes of this sec-  
7           tion, the term ‘energy efficient commercial building prop-  
8           erty expenditures’ means an amount paid or incurred for  
9           energy efficient commercial building property installed on  
10          or in connection with new construction or reconstruction  
11          of property—

12                 “(1) for which depreciation is allowable under  
13                 section 167,

14                 “(2) which is located in the United States, and

15                 “(3) the construction or erection of which is  
16                 completed by the taxpayer.

17          Such property includes all residential rental property, in-  
18          cluding low-rise multifamily structures and single family  
19          housing property which is not within the scope of Stand-  
20          ard 90.1–1999 (described in subsection (c)). Such term  
21          includes expenditures for labor costs properly allocable to  
22          the onsite preparation, assembly, or original installation  
23          of the property.

24           “(c) ENERGY EFFICIENT COMMERCIAL BUILDING  
25          PROPERTY.—For purposes of subsection (b)—

1           “(1) IN GENERAL.—The term ‘energy efficient  
2       commercial building property’ means any property  
3       which reduces total annual energy and power costs  
4       with respect to the lighting, heating, cooling, ventila-  
5       tion, and hot water supply systems of the building  
6       by 50 percent or more in comparison to a reference  
7       building which meets the requirements of Standard  
8       90.1–1999 of the American Society of Heating, Re-  
9       frigerating, and Air Conditioning Engineers and the  
10      Illuminating Engineering Society of North America  
11      using methods of calculation under paragraph (2)  
12      and certified by qualified professionals as provided  
13      under subsection (f).

14           “(2) METHODS OF CALCULATION.—The Sec-  
15      retary, in consultation with the Secretary of Energy,  
16      shall promulgate regulations which describe in detail  
17      methods for calculating and verifying energy and  
18      power consumption and cost, taking into consider-  
19      ation the provisions of the 1998 California Nonresi-  
20      dential ACM Manual. These procedures shall meet  
21      the following requirements:

22           “(A) In calculating tradeoffs and energy  
23      performance, the regulations shall prescribe the  
24      costs per unit of energy and power, such as kil-  
25      owatt hour, kilowatt, gallon of fuel oil, and

1 cubic foot or Btu of natural gas, which may be  
2 dependent on time of usage.

3 “(B) The calculational methodology shall  
4 require that compliance be demonstrated for a  
5 whole building. If some systems of the building,  
6 such as lighting, are designed later than other  
7 systems of the building, the method shall pro-  
8 vide that either—

9 “(i) the expenses taken into account  
10 under subsection (a) shall not occur until  
11 the date designs for all energy-using sys-  
12 tems of the building are completed,

13 “(ii) the energy performance of all  
14 systems and components not yet designed  
15 shall be assumed to comply minimally with  
16 the requirements of such Standard 90.1–  
17 1999, or

18 “(iii) the expenses taken into account  
19 under subsection (a) shall be a fraction of  
20 such expenses based on the performance of  
21 less than all energy-using systems in ac-  
22 cordance with subparagraph (C).

23 “(C) The expenditures in connection with  
24 the design of subsystems in the building, such  
25 as the envelope, the heating, ventilation, air

1 conditioning and water heating system, and the  
2 lighting system shall be allocated to the appro-  
3 priate building subsystem based on system-spe-  
4 cific energy cost savings targets in regulations  
5 promulgated by the Secretary of Energy which  
6 are equivalent, using the calculation method-  
7 ology, to the whole building requirement of 50  
8 percent savings.

9 “(D) The calculational methods under this  
10 subparagraph need not comply fully with sec-  
11 tion 11 of such Standard 90.1–1999.

12 “(E) The calculational methods shall be  
13 fuel neutral, such that the same energy effi-  
14 ciency features shall qualify a building for the  
15 deduction under this subsection regardless of  
16 whether the heating source is a gas or oil fur-  
17 nace or an electric heat pump.

18 “(F) The calculational methods shall pro-  
19 vide appropriate calculated energy savings for  
20 design methods and technologies not otherwise  
21 credited in either such Standard 90.1–1999 or  
22 in the 1998 California Nonresidential ACM  
23 Manual, including the following:

24 “(i) Natural ventilation.

25 “(ii) Evaporative cooling.



1                   “(iii) Automatic lighting controls such  
2                   as occupancy sensors, photocells, and time-  
3                   clocks.

4                   “(iv) Daylighting.

5                   “(v) Designs utilizing semi-condi-  
6                   tioned spaces that maintain adequate com-  
7                   fort conditions without air conditioning or  
8                   without heating.

9                   “(vi) Improved fan system efficiency,  
10                  including reductions in static pressure.

11                  “(vii) Advanced unloading mecha-  
12                  nisms for mechanical cooling, such as mul-  
13                  tiple or variable speed compressors.

14                  “(viii) The calculational methods may  
15                  take into account the extent of commis-  
16                  sioning in the building, and allow the tax-  
17                  payer to take into account measured per-  
18                  formance that exceeds typical performance.

19                  “(3) COMPUTER SOFTWARE.—

20                  “(A) IN GENERAL.—Any calculation under  
21                  this subsection shall be prepared by qualified  
22                  computer software.

23                  “(B) QUALIFIED COMPUTER SOFTWARE.—

24                  For purposes of this paragraph, the term  
25                  ‘qualified computer software’ means software—

1                   “(i) for which the software designer  
2                   has certified that the software meets all  
3                   procedures and detailed methods for calcu-  
4                   lating energy and power consumption and  
5                   costs as required by the Secretary,

6                   “(ii) which provides such forms as re-  
7                   quired to be filed by the Secretary in con-  
8                   nection with energy efficiency of property  
9                   and the deduction allowed under this sec-  
10                  tion, and

11                  “(iii) which provides a notice form  
12                  which summarizes the energy efficiency  
13                  features of the building and its projected  
14                  annual energy costs.

15           “(d) ALLOCATION OF DEDUCTION FOR PUBLIC  
16 PROPERTY.—In the case of energy efficient commercial  
17 building property installed on or in public property, the  
18 Secretary shall promulgate a regulation to allow the allo-  
19 cation of the deduction to the person primarily responsible  
20 for designing the property in lieu of the public entity which  
21 is the owner of such property. Such person shall be treated  
22 as the taxpayer for purposes of this section.

23           “(e) NOTICE TO OWNER.—The qualified individual  
24 shall provide an explanation to the owner of the building  
25 regarding the energy efficiency features of the building

1 and its projected annual energy costs as provided in the  
2 notice under subsection (c)(3)(B)(iii).

3 “(f) CERTIFICATION.—The Secretary, in consultation  
4 with the Secretary of Energy, shall establish requirements  
5 for certification and compliance procedures similar to the  
6 procedures under section 45H(d).

7 “(g) BASIS REDUCTION.—For purposes of this title,  
8 the basis of any property shall be reduced by the amount  
9 of the deduction with respect to such property which is  
10 allowed by subsection (a).

11 “(h) TERMINATION.—This section shall not apply to  
12 property placed in service after December 31, 2006.”.

13 (b) CONFORMING AMENDMENTS.—

14 (1) Section 1016(a) is amended by striking  
15 “and” at the end of paragraph (31), by striking the  
16 period at the end of paragraph (32) and inserting “,  
17 and”, and by inserting the following new paragraph:

18 “(33) to the extent provided in section  
19 179B(g).”.

20 (2) Section 1245(a) is amended by inserting  
21 “179B,” after “179A,” both places it appears in  
22 paragraphs (2)(C) and (3)(C).

23 (3) Section 1250(b)(3) is amended by inserting  
24 before the period at the end of the first sentence “or  
25 by section 179B”.

1           (4) Section 263(a)(1) is amended by striking  
 2           “or” at the end of subparagraph (G), by striking the  
 3           period at the end of subparagraph (H) and inserting  
 4           “, or”, and by inserting after subparagraph (H) the  
 5           following new subparagraph:

6                       “(I) expenditures for which a deduction is  
 7                       allowed under section 179B.”.

8           (5) Section 312(k)(3)(B) is amended by strik-  
 9           ing “or 179A” each place it appears in the heading  
 10          and text and inserting “, 179A, or 179B”.

11          (c) CLERICAL AMENDMENT.—The table of sections  
 12          for part VI of subchapter B of chapter 1 is amended by  
 13          adding after section 179A the following new item:

                          “Sec. 179B. Deduction for energy efficient commercial building  
                           property.”.

14          (d) EFFECTIVE DATE.—The amendments made by  
 15          this section shall apply to taxable years beginning after  
 16          December 31, 2001.

17   **SEC. 3111. ALLOWANCE OF DEDUCTION FOR QUALIFIED EN-**  
 18                       **ERGY MANAGEMENT DEVICES AND RETRO-**  
 19                       **FITTED QUALIFIED METERS.**

20          (a) IN GENERAL.—Part VI of subchapter B of chap-  
 21          ter 1 (relating to itemized deductions for individuals and  
 22          corporations) is amended by inserting after section 179B  
 23          the following new section:

1   **“SEC. 179C. DEDUCTION FOR QUALIFIED ENERGY MANAGE-**  
2                   **MENT DEVICES AND RETROFITTED METERS.**

3           “(a) ALLOWANCE OF DEDUCTION.—In the case of a  
4 taxpayer who is a supplier of electric energy or natural  
5 gas or a provider of electric energy or natural gas services,  
6 there shall be allowed as a deduction an amount equal to  
7 the cost of each qualified energy management device  
8 placed in service during the taxable year.

9           “(b) MAXIMUM DEDUCTION.—The deduction allowed  
10 by this section with respect to each qualified energy man-  
11 agement device shall not exceed \$30.

12          “(c) QUALIFIED ENERGY MANAGEMENT DEVICE.—  
13 The term ‘qualified energy management device’ means any  
14 tangible property to which section 168 applies if such  
15 property is a meter or metering device—

16               “(1) which is acquired and used by the tax-  
17 payer to enable consumers to manage their purchase  
18 or use of electricity or natural gas in response to en-  
19 ergy price and usage signals, and

20               “(2) which permits reading of energy price and  
21 usage signals on at least a daily basis.

22          “(d) PROPERTY USED OUTSIDE THE UNITED  
23 STATES NOT QUALIFIED.—No deduction shall be allowed  
24 under subsection (a) with respect to property which is  
25 used predominantly outside the United States or with re-

1 spect to the portion of the cost of any property taken into  
2 account under section 179.

3 “(e) BASIS REDUCTION.—

4 “(1) IN GENERAL.—For purposes of this title,  
5 the basis of any property shall be reduced by the  
6 amount of the deduction with respect to such prop-  
7 erty which is allowed by subsection (a).

8 “(2) ORDINARY INCOME RECAPTURE.—For  
9 purposes of section 1245, the amount of the deduc-  
10 tion allowable under subsection (a) with respect to  
11 any property that is of a character subject to the al-  
12 lowance for depreciation shall be treated as a deduc-  
13 tion allowed for depreciation under section 167.”.

14 (b) CONFORMING AMENDMENTS.—

15 (1) Section 263(a)(1) is amended by striking  
16 “or” at the end of subparagraph (H), by striking  
17 the period at the end of subparagraph (I) and in-  
18 serting “, or”, and by inserting after subparagraph  
19 (I) the following new subparagraph:

20 “(J) expenditures for which a deduction is  
21 allowed under section 179C.”.

22 (2) Section 312(k)(3)(B) is amended by strik-  
23 ing “or 179B” each place it appears in the heading  
24 and text and inserting “, 179B, or 179C”.

1           (3) Section 1016(a) is amended by striking  
 2           “and” at the end of paragraph (32), by striking the  
 3           period at the end of paragraph (33) and inserting “,  
 4           and”, and by inserting after paragraph (33) the fol-  
 5           lowing new paragraph:

6           “(34) to the extent provided in section  
 7           179C(e)(1).”.

8           (4) Section 1245(a) is amended by inserting  
 9           “179C,” after “179B,” both places it appears in  
 10          paragraphs (2)(C) and (3)(C).

11          (5) The table of contents for subpart B of part  
 12          IV of subchapter A of chapter 1 is amended by in-  
 13          serting after the item relating to section 179B the  
 14          following new item:

                  “Sec. 179C. Deduction for qualified energy management devices  
                   and retrofitted meters.”.

15          (c) EFFECTIVE DATE.—The amendments made by  
 16          this section shall apply to qualified energy management  
 17          devices placed in service after the date of the enactment  
 18          of this Act.

19      **SEC. 3112. THREE-YEAR APPLICABLE RECOVERY PERIOD**  
 20                              **FOR DEPRECIATION OF QUALIFIED ENERGY**  
 21                              **MANAGEMENT DEVICES.**

22          (a) IN GENERAL.—Subparagraph (A) of section  
 23          168(e)(3) (relating to classification of property) is amend-  
 24          ed by striking “and” at the end of clause (ii), by striking

1 the period at the end of clause (iii) and inserting “, and”,  
 2 and by adding at the end the following new clause:

3 “(iv) any qualified energy manage-  
 4 ment device.”.

5 (b) DEFINITION OF QUALIFIED ENERGY MANAGE-  
 6 MENT DEVICE.—Section 168(i) (relating to definitions  
 7 and special rules) is amended by inserting at the end the  
 8 following new paragraph:

9 “(15) QUALIFIED ENERGY MANAGEMENT DE-  
 10 VICE.—The term ‘qualified energy management de-  
 11 vice’ means any qualified energy management device  
 12 as defined in section 179C(c) which is placed in  
 13 service by a taxpayer who is a supplier of electric en-  
 14 ergy or natural gas or a provider of electric energy  
 15 or natural gas services.”.

16 (c) EFFECTIVE DATE.—The amendments made by  
 17 this section shall apply to property placed in service after  
 18 the date of the enactment of this Act.

19 **SEC. 3113. ENERGY CREDIT FOR COMBINED HEAT AND**  
 20 **POWER SYSTEM PROPERTY.**

21 (a) IN GENERAL.—Subparagraph (A) of section  
 22 48(a)(3) (defining energy property) is amended by strik-  
 23 ing “or” at the end of clause (ii), by adding “or” at the  
 24 end of clause (iii), and by inserting after clause (iii) the  
 25 following new clause:



1 “(iv) combined heat and power system  
2 property,”.

3 (b) COMBINED HEAT AND POWER SYSTEM PROP-  
4 erty.—Subsection (a) of section 48 is amended by redes-  
5 ignating paragraphs (5) and (6) as paragraphs (6) and  
6 (7), respectively, and by inserting after paragraph (4) the  
7 following new paragraph:

8 “(5) COMBINED HEAT AND POWER SYSTEM  
9 PROPERTY.—For purposes of this subsection—

10 “(A) COMBINED HEAT AND POWER SYS-  
11 TEM PROPERTY.—The term ‘combined heat and  
12 power system property’ means property com-  
13 prising a system—

14 “(i) which uses the same energy  
15 source for the simultaneous or sequential  
16 generation of electrical power, mechanical  
17 shaft power, or both, in combination with  
18 the generation of steam or other forms of  
19 useful thermal energy (including heating  
20 and cooling applications),

21 “(ii) which has an electrical capacity  
22 of more than 50 kilowatts or a mechanical  
23 energy capacity of more than 67 horse-  
24 power or an equivalent combination of elec-  
25 trical and mechanical energy capacities,

1 “(iii) which produces—

2 “(I) at least 20 percent of its  
3 total useful energy in the form of  
4 thermal energy, and

5 “(II) at least 20 percent of its  
6 total useful energy in the form of elec-  
7 trical or mechanical power (or com-  
8 bination thereof),

9 “(iv) the energy efficiency percentage  
10 of which exceeds 60 percent (70 percent in  
11 the case of a system with an electrical ca-  
12 pacity in excess of 50 megawatts or a me-  
13 chanical energy capacity in excess of  
14 67,000 horsepower, or an equivalent com-  
15 bination of electrical and mechanical en-  
16 ergy capacities), and

17 “(v) which is placed in service after  
18 December 31, 2001, and before January 1,  
19 2007.

20 “(B) SPECIAL RULES.—

21 “(i) ENERGY EFFICIENCY PERCENT-  
22 AGE.—For purposes of subparagraph  
23 (A)(iv), the energy efficiency percentage of  
24 a system is the fraction—

1                   “(I) the numerator of which is  
2                   the total useful electrical, thermal,  
3                   and mechanical power produced by  
4                   the system at normal operating rates,  
5                   and

6                   “(II) the denominator of which is  
7                   the lower heating value of the primary  
8                   fuel source for the system.

9                   “(ii) DETERMINATIONS MADE ON BTU  
10                  BASIS.—The energy efficiency percentage  
11                  and the percentages under subparagraph  
12                  (A)(iii) shall be determined on a Btu basis.

13                  “(iii) INPUT AND OUTPUT PROPERTY  
14                  NOT INCLUDED.—The term ‘combined heat  
15                  and power system property’ does not in-  
16                  clude property used to transport the en-  
17                  ergy source to the facility or to distribute  
18                  energy produced by the facility.

19                  “(iv) PUBLIC UTILITY PROPERTY.—

20                  “(I) ACCOUNTING RULE FOR  
21                  PUBLIC UTILITY PROPERTY.—If the  
22                  combined heat and power system  
23                  property is public utility property (as  
24                  defined in section 168(i)(1)), the tax-  
25                  payer may only claim the credit under

1 the subsection if, with respect to such  
 2 property, the taxpayer uses a normal-  
 3 ization method of accounting.

4 “(II) CERTAIN EXCEPTION NOT  
 5 TO APPLY.—The matter in paragraph  
 6 (3) which follows subparagraph (D)  
 7 shall not apply to combined heat and  
 8 power system property.

9 “(C) EXTENSION OF DEPRECIATION RE-  
 10 COVERY PERIOD.—If a taxpayer is allowed cred-  
 11 it under this section for combined heat and  
 12 power system property and such property would  
 13 (but for this subparagraph) have a class life of  
 14 15 years or less under section 168, such prop-  
 15 erty shall be treated as having a 22-year class  
 16 life for purposes of section 168.”.

17 (c) NO CARRYBACK OF ENERGY CREDIT BEFORE  
 18 EFFECTIVE DATE.—Subsection (d) of section 39 is  
 19 amended by adding at the end the following new para-  
 20 graph:

21 “(13) NO CARRYBACK OF ENERGY CREDIT BE-  
 22 FORE EFFECTIVE DATE.—No portion of the unused  
 23 business credit for any taxable year which is attrib-  
 24 utable to the energy credit with respect to property

1 described in section 48(a)(5) may be carried back to  
2 a taxable year ending before January 1, 2002.”.

3 (d) EFFECTIVE DATE.—The amendments made by  
4 this section shall apply to property placed in service after  
5 December 31, 2001.

6 **SEC. 3114. NEW NONREFUNDABLE PERSONAL CREDITS AL-**  
7 **LOWED AGAINST REGULAR AND MINIMUM**  
8 **TAXES.**

9 (a) IN GENERAL.—Paragraph (1) of section 26(a) is  
10 amended by striking “and 25B” and inserting “25B, 25C,  
11 25D, and 25E”.

12 (b) CONFORMING AMENDMENTS.—

13 (1) Section 24(b)(3)(B) is amended by striking  
14 “and 25B” and inserting “, 25B, 25C, 25D, and  
15 25E”.

16 (2) Section 25(e)(1)(C) is amended by inserting  
17 “25C, 25D, and 25E” after “25B,”.

18 (3) Section 25B(g)(2) is amended by striking  
19 “section 23” and inserting “sections 23, 25C, 25D,  
20 and 25E”.

21 (4) Section 904(h) is amended by striking “and  
22 25B” and inserting “25B, 25C, 25D, and 25E”.

23 (5) Section 1400C(d) is amended by striking  
24 “and 25B” and inserting “25B, 25C, 25D, and  
25 25E”.

1 (c) EFFECTIVE DATE.—The amendments made by  
 2 this section shall apply to taxable years beginning after  
 3 December 31, 2001.

4 **SEC. 3115. PHASEOUT OF 4.3-CENT MOTOR FUEL EXCISE**  
 5 **TAXES ON RAILROADS AND INLAND WATER-**  
 6 **WAY TRANSPORTATION WHICH REMAIN IN**  
 7 **GENERAL FUND.**

8 (a) TAXES ON TRAINS.—

9 (1) IN GENERAL.—Clause (ii) of section  
 10 4041(a)(1)(C) is amended by striking subclauses (I),  
 11 (II), and (III) and inserting the following new sub-  
 12 clauses:

13 “(I) 3.3 cents per gallon after  
 14 September 30, 2001, and before Jan-  
 15 uary 1, 2005,

16 “(II) 2.3 cents per gallon after  
 17 December 31, 2004, and before Janu-  
 18 ary 1, 2007,

19 “(III) 1.3 cents per gallon after  
 20 December 31, 2006, and before Janu-  
 21 ary 1, 2009,

22 “(IV) 0.3 cent per gallon after  
 23 December 31, 2008, and before Janu-  
 24 ary 1, 2010, and

1 “(V) 0 after December 31,  
2 2009.”.

3 (2) CONFORMING AMENDMENTS.—

4 (A) Subsection (d) of section 4041 is  
5 amended by redesignating paragraph (3) as  
6 paragraph (4) and by inserting after paragraph  
7 (2) the following new paragraph:

8 “(3) DIESEL FUEL USED IN TRAINS.—In the  
9 case of any sale for use (or use) after September 30,  
10 2010, there is hereby imposed a tax of 0.1 cent per  
11 gallon on any liquid other than gasoline (as defined  
12 in section 4083)—

13 “(A) sold by any person to an owner, les-  
14 see, or other operator of a diesel-powered train  
15 for use as a fuel in such train, or

16 “(B) used by any person as a fuel in a die-  
17 sel-powered train unless there was a taxable  
18 sale of such fuel under subparagraph (A).

19 No tax shall be imposed by this paragraph on the  
20 sale or use of any liquid if tax was imposed on such  
21 liquid under section 4081.”.

22 (B) Subsection (f) of section 4082 is  
23 amended by striking “section 4041(a)(1)” and  
24 inserting “subsections (a)(1) and (d)(3) of sec-  
25 tion 4041”.

1           (C) Subparagraph (B) of section  
2           6421(f)(3) is amended to read as follows:

3           “(B) so much of the rate specified in sec-  
4           tion 4081(a)(2)(A) as does not exceed the rate  
5           applicable under section 4041(a)(1)(C)(ii).”.

6           (D) Subparagraph (B) of section  
7           6427(l)(3) is amended to read as follows:

8           “(B) so much of the rate specified in sec-  
9           tion 4081(a)(2)(A) as does not exceed the rate  
10          applicable under section 4041(a)(1)(C)(ii).”.

11       (b) FUEL USED ON INLAND WATERWAYS.—Subpara-  
12       graph (C) of section 4042(b)(2) is amended to read as  
13       follows:

14               “(C) The deficit reduction rate is—

15               “(i) 3.3 cents per gallon after Sep-  
16               tember 30, 2001, and before January 1,  
17               2005,

18               “(ii) 2.3 cents per gallon after Decem-  
19               ber 31, 2004, and before January 1, 2007,

20               “(iii) 1.3 cents per gallon after De-  
21               cember 31, 2006, and before January 1,  
22               2009,

23               “(iv) 0.3 cent per gallon after Decem-  
24               ber 31, 2008, and before January 1, 2010,  
25               and



1 “(v) 0 after December 31, 2009.”.

2 (c) EFFECTIVE DATE.—The amendments made by  
3 this section shall take effect on October 1, 2001.

4 **SEC. 3116. REDUCED MOTOR FUEL EXCISE TAX ON CER-**  
5 **TAIN MIXTURES OF DIESEL FUEL.**

6 (a) IN GENERAL.—Clause (iii) of section  
7 4081(a)(2)(A) is amended by inserting before the period  
8 “(19.7 cents per gallon in the case of a diesel-water fuel  
9 emulsion at least 14 percent of which is water)”.

10 (b) REFUNDS FOR TAX-PAID PURCHASES.—

11 (1) IN GENERAL.—Section 6427 is amended by  
12 redesignating subsections (m) through (p) as sub-  
13 sections (n) through (q), respectively, and by insert-  
14 ing after subsection (l) the following new subsection:

15 “(m) DIESEL FUEL USED TO PRODUCE EMUL-  
16 SION.—

17 “(1) IN GENERAL.—Except as provided in sub-  
18 section (k), if any diesel fuel on which tax was im-  
19 posed by section 4081 at the regular tax rate is used  
20 by any person in producing an emulsion described in  
21 section 4081(a)(2)(A) which is sold or used in such  
22 person’s trade or business, the Secretary shall pay  
23 (without interest) to such person an amount equal to  
24 the excess of the regular tax rate over the incentive  
25 tax rate with respect to such fuel.

1           “(2) DEFINITIONS.—For purposes of paragraph  
2       (1)—

3           “(A) REGULAR TAX RATE.—The term ‘reg-  
4       ular tax rate’ means the aggregate rate of tax  
5       imposed by section 4081 determined without re-  
6       gard to the parenthetical in section  
7       4081(a)(2)(A).

8           “(B) INCENTIVE TAX RATE.—The term  
9       ‘incentive tax rate’ means the aggregate rate of  
10      tax imposed by section 4081 determined with  
11      regard to the parenthetical in section  
12      4081(a)(2)(A).”.

13      (c) EFFECTIVE DATE.—The amendments made by  
14      this section shall take effect on October 1, 2001.

15      **SEC. 3117. CREDIT FOR INVESTMENT IN QUALIFYING AD-**  
16                                   **VANCED CLEAN COAL TECHNOLOGY.**

17      (a) ALLOWANCE OF QUALIFYING ADVANCED CLEAN  
18      COAL TECHNOLOGY FACILITY CREDIT.—Section 46 (re-  
19      lating to amount of credit) is amended by striking “and”  
20      at the end of paragraph (2), by striking the period at the  
21      end of paragraph (3) and inserting “, and”, and by adding  
22      at the end the following:

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

1 (b) AMOUNT OF QUALIFYING ADVANCED CLEAN  
 2 COAL TECHNOLOGY FACILITY CREDIT.—Subpart E of  
 3 part IV of subchapter A of chapter 1 (relating to rules  
 4 for computing investment credit) is amended by inserting  
 5 after section 48 the following:

6 **“SEC. 48A. QUALIFYING ADVANCED CLEAN COAL TECH-**  
 7 **NOLOGY FACILITY CREDIT.**

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

13 “(b) QUALIFYING ADVANCED CLEAN COAL TECH-  
 14 NOLOGY FACILITY.—

15 “(1) IN GENERAL.—For purposes of subsection  
 16 (a), the term ‘qualifying advanced clean coal tech-  
 17 nology facility’ means a facility of the taxpayer  
 18 which—

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

21 “(II) is a retrofitted or repowered conven-  
 22 tional technology facility, the retrofitting or  
 23 repowering of which is completed by the tax-  
 24 payer (but only with respect to that portion of

1 the basis which is properly attributable to such  
2 retrofitting or repowering), or

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

5 “(B) is depreciable under section 167,

6 “(C) has a useful life of not less than 4  
7 years,

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

9 “(E) uses qualifying advanced clean coal  
10 technology.

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

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

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

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

21 such facility shall be treated as originally placed in  
22 service not earlier than the date on which such prop-  
23 erty is used under the leaseback (or lease) referred  
24 to in subparagraph (B). The preceding sentence  
25 shall not apply to any property if the lessee and les-

1       sor of such property make an election under this  
2       sentence. Such an election, once made, may be re-  
3       voked only with the consent of the Secretary.

4       “(c) QUALIFYING ADVANCED CLEAN COAL TECH-  
5       NOLOGY.—For purposes of this section—

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

9                       “(A) which has—

10                               “(i) multiple applications, with a com-  
11                               bined capacity of not more than 5,000  
12                               megawatts (4,000 megawatts before 2009),  
13                               of advanced pulverized coal or atmospheric  
14                               fluidized bed combustion technology—

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

17                                       “(II) operated between 2000 and  
18                                       2012, and

19                                       “(III) having a design net heat  
20                                       rate of not more than 9,500 Btu per  
21                                       kilowatt hour when the design coal  
22                                       has a heat content of more than 9,000  
23                                       Btu per pound, or a design net heat  
24                                       rate of not more than 9,900 Btu per  
25                                       kilowatt hour when the design coal

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

3 “(ii) multiple applications, with a  
4 combined capacity of not more than 1,000  
5 megawatts (500 megawatts before 2009  
6 and 750 megawatts before 2013), of pres-  
7 surized fluidized bed combustion  
8 technology—

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

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

13 “(III) having a design net heat  
14 rate of not more than 8,400 Btu per  
15 kilowatt hour when the design coal  
16 has a heat content of more than 9,000  
17 Btu per pound, or a design net heat  
18 rate of not more than 9,900 Btu’s per  
19 kilowatt hour when the design coal  
20 has a heat content of 9,000 Btu per  
21 pound or less, and

22 “(iii) multiple applications, with a  
23 combined capacity of not more than 2,000  
24 megawatts (1,000 megawatts before 2009  
25 and 1,500 megawatts before 2013), of in-

1 integrated gasification combined cycle tech-  
2 nology, with or without fuel or chemical co-  
3 production—

4 “(I) installed as a new, retrofit,  
5 or repowering application,

6 “(II) operated between 2000 and  
7 2016,

8 “(III) having a design net heat  
9 rate of not more than 8,550 Btu per  
10 kilowatt hour when the design coal  
11 has a heat content of more than 9,000  
12 Btu per pound, or a design net heat  
13 rate of not more than 9,900 Btu per  
14 kilowatt hour when the design coal  
15 has a heat content of 9,000 Btu per  
16 pound or less, and

17 “(IV) having a net thermal effi-  
18 ciency on any fuel or chemical co-pro-  
19 duction of not less than 39 percent  
20 (higher heating value), or

21 “(iv) multiple applications, with a  
22 combined capacity of not more than 2,000  
23 megawatts (1,000 megawatts before 2009  
24 and 1,500 megawatts before 2013) of tech-  
25 nology for the production of electricity—

1                   “(I) installed as a new, retrofit,  
2                   or repowering application,

3                   “(II) operated between 2000 and  
4                   2016, and

5                   “(III) having a carbon emission  
6                   rate which is not more than 85 per-  
7                   cent of conventional technology, and

8                   “(B) which reduces the discharge into the  
9                   atmosphere of 1 or more of the following pollut-  
10                  ants to not more than—

11                  “(i) 5 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 1.2  
15                  lb/million btu of heat input or greater,

16                  “(ii) 15 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 less  
20                  than 1.2 lb/million btu of heat input,

21                  “(iii) nitrogen oxide emissions of 0.1  
22                  lb per million btu of heat input from other  
23                  than cyclone-fired boilers,



1                   “(iv) 15 percent of the uncontrolled  
2                   nitrogen oxide emissions from cyclone-fired  
3                   boilers,

4                   “(v) particulate emissions of 0.02 lb  
5                   per million btu of heat input, and

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

14               “(2) EXCEPTIONS.—Such term shall not in-  
15               clude any projects receiving or scheduled to receive  
16               funding under the Clean Coal Technology Program,  
17               or the Power Plant Improvement administered by  
18               the Secretary of the Department of Energy.

19               “(d) CLEAN COAL TECHNOLOGY.—For purposes of  
20               this section, the term ‘clean coal technology’ means ad-  
21               vanced technology which uses coal to produce 75 percent  
22               or more of its thermal output as electricity including ad-  
23               vanced pulverized coal or atmospheric fluidized bed com-  
24               bustion, pressurized fluidized bed combustion, integrated  
25               gasification combined cycle with or without fuel or chem-

1 ical co-production, and any other technology for the pro-  
2 duction of electricity which exceeds the performance of  
3 conventional technology.

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

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

12 “(2) coal-fired combustion technology with a de-  
13 sign net heat rate of not less than 10,500 Btu per  
14 kilowatt hour (HHV) and a carbon equivalents emis-  
15 sion rate of not more than 0.60 pounds of carbon  
16 per kilowatt hour when the design coal has a heat  
17 content of 9,000 Btu per pound or less, or

18 “(3) natural gas-fired combustion technology  
19 with a design net heat rate of not less than 7,500  
20 Btu per kilowatt hour (HHV) and a carbon equiva-  
21 lents emission rate of not more than 0.24 pounds of  
22 carbon per kilowatt hour.

23 “(f) DESIGN NET HEAT RATE.—The design net heat  
24 rate shall be based on the design annual heat input to  
25 and the design annual net electrical output from the quali-

1 fying advanced clean coal technology (determined without  
2 regard to such technology’s co-generation of steam).

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

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

7 “(2) shall include primary criteria of minimum  
8 design net heat rate, maximum design thermal effi-  
9 ciency, environmental performance, and lowest cost  
10 to the government, and

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

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

18 “(i) QUALIFIED PROGRESS EXPENDITURES.—

19 “(1) INCREASE IN QUALIFIED INVESTMENT.—

20 In the case of a taxpayer who has made an election  
21 under paragraph (5), the amount of the qualified in-  
22 vestment of such taxpayer for the taxable year (de-  
23 termined under subsection (c) without regard to this  
24 section) shall be increased by an amount equal to  
25 the aggregate of each qualified progress expenditure

1       for the taxable year with respect to progress expend-  
2       iture property.

3               “(2) PROGRESS EXPENDITURE PROPERTY DE-  
4       FINED.—For purposes of this subsection, the term  
5       ‘progress expenditure property’ means any property  
6       being constructed by or for the taxpayer and which  
7       it is reasonable to believe will qualify as a qualifying  
8       advanced clean coal technology facility which is  
9       being constructed by or for the taxpayer when it is  
10      placed in service.

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

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

20                   “(B) NONSELF-CONSTRUCTED PROP-  
21              ERTY.—In the case of nonself-constructed prop-  
22              erty, the term ‘qualified progress expenditures’  
23              means the amount paid during the taxable year  
24              to another person for the construction of such  
25              property.

1           “(4) OTHER DEFINITIONS.—For purposes of  
2       this subsection—

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

8           “(B) NONSELF-CONSTRUCTED PROP-  
9       ERTY.—The term ‘nonself-constructed property’  
10      means property which is not self-constructed  
11      property.

12          “(C) CONSTRUCTION, ETC.—The term  
13      ‘construction’ includes reconstruction and erec-  
14      tion, and the term ‘constructed’ includes recon-  
15      structed and erected.

16          “(D) ONLY CONSTRUCTION OF QUALI-  
17      FYING ADVANCED CLEAN COAL TECHNOLOGY  
18      FACILITY TO BE TAKEN INTO ACCOUNT.—Con-  
19      struction shall be taken into account only if, for  
20      purposes of this subpart, expenditures therefor  
21      are properly chargeable to capital account with  
22      respect to the property.

23          “(5) ELECTION.—An election under this sub-  
24      section may be made at such time and in such man-  
25      ner as the Secretary may by regulations prescribe.

1       Such an election shall apply to the taxable year for  
2       which made and to all subsequent taxable years.

3       Such an election, once made, may not be revoked ex-  
4       cept with the consent of the Secretary.

5       “(j) COORDINATION WITH OTHER CREDITS.—This  
6       section shall not apply to any property with respect to  
7       which the rehabilitation credit under section 47 or the en-  
8       ergy credit under section 48 is allowed unless the taxpayer  
9       elects to waive the application of such credit to such prop-  
10      erty.

11      “(k) TERMINATION.—This section shall not apply  
12      with respect to any qualified investment made after De-  
13      cember 31, 2011.

14      “(l) NATIONAL LIMITATION.—

15           “(1) IN GENERAL.—Notwithstanding any other  
16      provision of this section, the term ‘qualifying ad-  
17      vanced clean coal technology facility’ shall include  
18      such a facility only to the extent that such facility  
19      is allocated a portion of the national megawatt limi-  
20      tation under this subsection.

21           “(2) NATIONAL MEGAWATT LIMITATION.—The  
22      national megawatt limitation under this subsection  
23      is 7,500 megawatts.

24           “(3) ALLOCATION OF LIMITATION.—The na-  
25      tional megawatt limitation shall be allocated by the

1 Secretary under rules prescribed by the Secretary.  
2 Not later than 6 months after the date of the enact-  
3 ment of this subsection, the Secretary shall prescribe  
4 such regulations as may be necessary or appropriate  
5 to carry out the purposes of this section, including  
6 regulations—

7 “(A) to limit which facility qualifies as  
8 ‘qualified advanced clean coal technology’ in  
9 subsection (c) to particular facilities, a portion  
10 of particular facilities, or a portion of the pro-  
11 duction from particular facilities, so that when  
12 all such facilities (or portions thereof) are  
13 placed in service over the ten year period in sec-  
14 tion (k), the combination of facilities approved  
15 for tax credits (and/or portions of facilities ap-  
16 proved for tax credits) will not exceed a com-  
17 bined capacity of 7,500 megawatts;

18 “(B) to provide a certification process in  
19 consultation with the Secretary of Energy  
20 under subsection (g) that will approve and allo-  
21 cate the 7,500 megawatts of available tax cred-  
22 its authority—

23 “(i) to encourage that facilities with  
24 the highest thermal efficiencies and envi-

ronmental performance be placed in service  
as soon as possible;

“(ii) to allocate credits to taxpayers  
that have a definite and credible plan for  
placing into commercial operation a quali-  
fying advanced clean coal technology facil-  
ity, including—

“(I) a site,

“(II) contractual commitments  
for procurement and construction,

“(III) filings for all necessary  
preconstruction approvals,

“(IV) a demonstrated record of  
having successfully completed com-  
parable projects on a timely basis, and

“(V) such other factors that the  
Secretary shall determine are appro-  
priate;

“(iii) to allocate credits to a portion of  
a facility (or a portion of the production  
from a facility) if the Secretary determines  
that such an allocation should maximize  
the amount of efficient production encour-  
aged with the available tax credits;



1           “(C) to set progress requirements and con-  
2           ditional approvals so that credits for approved  
3           projects that become unlikely to meet the nec-  
4           essary conditions that can be reallocated by the  
5           Secretary to other projects;

6           “(D) to reallocate credits that are not allo-  
7           cated to 1 technology described in clauses (i)  
8           through (iv) of subsection (c)(1)(A) because an  
9           insufficient number of qualifying facilities re-  
10          quested credits for one technology, to another  
11          technology described in another subparagraph  
12          of subsection (c) in order to maximize the  
13          amount of energy efficient production encour-  
14          aged with the available tax credits; and

15          “(E) to provide taxpayers with opportuni-  
16          ties to correct administrative errors and omis-  
17          sions with respect to allocations and record-  
18          keeping within a reasonable period after their  
19          discovery, taking into account the availability of  
20          regulations and other administrative guidance  
21          from the Secretary.”.

22          (c) RECAPTURE.—Section 50(a) (relating to other  
23          special rules) is amended by adding at the end the fol-  
24          lowing:

1           “(6) 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 48A, 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 48A(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 48A, 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) (relating to  
14 transitional rules) is amended by adding at the end the  
15 following:

16 “(14) NO CARRYBACK OF SECTION 48A CREDIT  
17 BEFORE EFFECTIVE DATE.—No portion of the un-  
18 used business credit for any taxable year which is  
19 attributable to the qualifying advanced clean coal  
20 technology facility credit determined under section  
21 48A may be carried back to a taxable year ending  
22 before January 1, 2002.”.

23 (e) TECHNICAL AMENDMENTS.—

24 (1) Section 49(a)(1)(C) is amended by striking  
25 “and” at the end of clause (ii), by striking the pe-

1        riod at the end of clause (iii) and inserting “, and”,  
 2        and by adding at the end the following:

3                    “(iv) the portion of the basis of any  
 4                    qualifying advanced clean coal technology  
 5                    facility attributable to any qualified invest-  
 6                    ment (as defined by section 48A(c)).”.

7            (2) Section 50(a)(4) is amended by striking  
 8        “and (2)” and inserting “, (2), and (6)”.

9            (3) Section 50(c) is amended by adding at the  
 10        end the following new paragraph:

11            “(6) SPECIAL RULE FOR QUALIFYING AD-  
 12        VANCED CLEAN COAL TECHNOLOGY FACILITIES.—  
 13        Paragraphs (1) and (2) shall not apply to any prop-  
 14        erty with respect to the credit determined under sec-  
 15        tion 48A.”.

16            (4) The table of sections for subpart E of part  
 17        IV of subchapter A of chapter 1 is amended by in-  
 18        serting after the item relating to section 48 the fol-  
 19        lowing:

                  “Sec. 48A. Qualifying advanced clean coal technology facility  
                   credit.”.

20        (f) EFFECTIVE DATE.—The amendments made by  
 21        this section shall apply to periods after December 31,  
 22        2001, under rules similar to the rules of section 48(m)  
 23        of the Internal Revenue Code of 1986 (as in effect on the

1 day before the date of the enactment of the Revenue Rec-  
2 onciliation Act of 1990).

3 **SEC. 3118. 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 (relating to business  
8 related credits) is amended by adding after section 45J  
9 the following:

10 **“SEC. 45K. CREDIT FOR PRODUCTION FROM QUALIFYING**  
11 **ADVANCED CLEAN COAL TECHNOLOGY.**

12 “(a) GENERAL RULE.—For purposes of section 38,  
13 the qualifying advanced clean coal technology production  
14 credit of any taxpayer for any taxable year is equal to—

15 “(1) the applicable amount of advanced clean  
16 coal technology production credit, multiplied by

17 “(2) the sum of—

18 “(A) the kilowatt hours of electricity, plus

19 “(B) each 3,413 Btu of fuels or chemicals,  
20 produced by the taxpayer during such taxable year  
21 at a qualifying advanced clean coal technology facil-  
22 ity during the 10-year period beginning on the date  
23 the facility was originally placed in service.

24 “(b) APPLICABLE AMOUNT.—For purposes of this  
25 section, the applicable amount of advanced clean coal tech-

nology production credit with respect to production from  
 a qualifying advanced clean coal technology facility shall  
 be determined as follows:

“(1) Where the design coal has a heat content  
 of more than 9,000 Btu per pound:

“(A) In the case of a facility originally  
 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.

“(B) In the case of a facility originally  
 placed in service after 2008 and before 2013,  
 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.

“(C) In the case of a facility originally  
 placed in service after 2012 and before 2017,  
 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.

“(2) Where the design coal has a heat content  
 of not more than 9,000 Btu per pound:

1 “(A) In the case of a facility originally  
 2 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.

3 “(B) In the case of a facility originally  
 4 placed in service after 2008 and before 2013,  
 5 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.

6 “(C) In the case of a facility originally  
 7 placed in service after 2012 and before 2017,  
 8 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.

9 “(3) Where the clean coal technology facility is  
 10 producing fuel or chemicals:

11 “(A) In the case of a facility originally  
 12 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.

15           “(d) DEFINITIONS AND SPECIAL RULES.—For pur-  
 16 poses of this section—

17           “(1) IN GENERAL.—Any term used in this sec-  
 18 tion which is also used in section 48A shall have the  
 19 meaning given such term in section 48A.



1           “(2) APPLICABLE RULES.—The rules of para-  
2           graphs (3), (4), and (5) of section 45 shall apply.

3           “(3) INFLATION ADJUSTMENT FACTOR.—The  
4           term ‘inflation adjustment factor’ means, with re-  
5           spect to a calendar year, a fraction the numerator  
6           of which is the GDP implicit price deflator for the  
7           preceding calendar year and the denominator of  
8           which is the GDP implicit price deflator for the cal-  
9           endar year 2001.

10          “(4) GDP IMPLICIT PRICE DEFLATOR.—The  
11          term ‘GDP implicit price deflator’ means the most  
12          recent revision of the implicit price deflator for the  
13          gross domestic product as computed by the Depart-  
14          ment of Commerce before March 15 of the calendar  
15          year.”.

16          (b) CREDIT TREATED AS BUSINESS CREDIT.—Sec-  
17          tion 38(b) is amended by striking “plus” at the end of  
18          paragraph (18), by striking the period at the end of para-  
19          graph (19) and inserting “, plus”, and by adding at the  
20          end the following:

21                 “(20) the qualifying advanced clean coal tech-  
22                 nology production credit determined under section  
23                 45K(a).”.

1 (c) TRANSITIONAL RULE.—Section 39(d) (relating to  
2 transitional rules) is amended by adding after paragraph  
3 (14) the following:

4 “(15) NO CARRYBACK OF SECTION 45K CREDIT  
5 BEFORE EFFECTIVE DATE.—No portion of the un-  
6 used business credit for any taxable year which is  
7 attributable to the qualifying advanced clean coal  
8 technology production credit determined under sec-  
9 tion 45K may be carried back to a taxable year end-  
10 ing before the date of the enactment of section  
11 45K.”.

12 (d) CLERICAL AMENDMENT.—The table of sections  
13 for subpart D of part IV of subchapter A of chapter 1  
14 is amended by adding at the end the following:

“Sec. 45K. Credit for production from qualifying advanced clean  
coal technology.”.

15 (e) EFFECTIVE DATE.—The amendments made by  
16 this section shall apply to production after the date of the  
17 enactment of this Act.

## 18 **TITLE II—RELIABILITY**

### 19 **SEC. 3201. NATURAL GAS GATHERING LINES TREATED AS 7-** 20 **YEAR PROPERTY.**

21 (a) IN GENERAL.—Subparagraph (C) of section  
22 168(e)(3) (relating to classification of certain property) is  
23 amended by striking “and” at the end of clause (i), by

1 redesignating clause (ii) as clause (iii), and by inserting  
2 after clause (i) the following new clause:

3                   “(ii) any natural gas gathering line,  
4                   and”.

5           (b) NATURAL GAS GATHERING LINE.—Subsection (i)  
6 of section 168 is amended by adding after paragraph (15)  
7 the following new paragraph:

8                   “(16) NATURAL GAS GATHERING LINE.—The  
9           term ‘natural gas gathering line’ means—

10                   “(A) the pipe, equipment, and appur-  
11           tenances determined to be a gathering line by  
12           the Federal Energy Regulatory Commission, or

13                   “(B) the pipe, equipment, and appur-  
14           tenances used to deliver natural gas from the  
15           wellhead or a commonpoint to the point at  
16           which such gas first reaches—

17                   “(i) a gas processing plant,

18                   “(ii) an interconnection with a trans-  
19           mission pipeline certificated by the Federal  
20           Energy Regulatory Commission as an  
21           interstate transmission pipeline,

22                   “(iii) an interconnection with an  
23           intrastate transmission pipeline, or

1 “(iv) a direct interconnection with a  
 2 local distribution company, a gas storage  
 3 facility, or an industrial consumer.”.

4 (c) ALTERNATIVE SYSTEM.—The table contained in  
 5 section 168(g)(3)(B) is amended by inserting after the  
 6 item relating to subparagraph (C)(i) the following:

“(C)(ii) ..... 10”.

7 (d) ALTERNATIVE MINIMUM TAX EXCEPTION.—Sub-  
 8 paragraph (B) of section 56(a)(1) is amended by inserting  
 9 before the period the following: “or in clause (ii) of section  
 10 168(e)(3)(C)”.

11 (e) EFFECTIVE DATE.—The amendments made by  
 12 this section shall apply to property placed in service after  
 13 the date of the enactment of this Act.

14 **SEC. 3202. NATURAL GAS DISTRIBUTION LINES TREATED**  
 15 **AS 10-YEAR PROPERTY.**

16 (a) IN GENERAL.—Subparagraph (D) of section  
 17 168(e)(3) (relating to classification of certain property) is  
 18 amended by striking “and” at the end of clause (i), by  
 19 striking the period at the end of clause (ii) and by insert-  
 20 ing “, and”, and by adding at the end the following new  
 21 clause:

22 “(iii) any natural gas distribution  
 23 line.”.

1 (b) ALTERNATIVE SYSTEM.—The table contained in  
 2 section 168(g)(3)(B) is amended by inserting after the  
 3 item relating to subparagraph (D)(ii) the following:

“(D)(iii) ..... 20”.

4 (c) ALTERNATIVE MINIMUM TAX EXCEPTION.—Sub-  
 5 paragraph (B) of section 56(a)(1) is amended by inserting  
 6 before the period the following: “or in clause (iii) of section  
 7 168(e)(3)(D)”.

8 (d) EFFECTIVE DATE.—The amendments made by  
 9 this section shall apply to property placed in service after  
 10 the date of the enactment of this Act.

11 **SEC. 3203. PETROLEUM REFINING PROPERTY TREATED AS**  
 12 **7-YEAR PROPERTY.**

13 (a) IN GENERAL.—Subparagraph (C) of section  
 14 168(e)(3) (relating to classification of certain property),  
 15 as amended by section 3201, is amended by striking  
 16 “and” at the end of clause (ii), by redesignating clause  
 17 (iii) as clause (iv), and by inserting after clause (ii) the  
 18 following new clause:

19 “(iii) any property used for the dis-  
 20 tillation, fractionation, and catalytic crack-  
 21 ing of crude petroleum into gasoline and  
 22 its other components, and”.

23 (b) ALTERNATIVE SYSTEM.—The table contained in  
 24 section 168(g)(3)(B), as amended by section 3201, is

1 amended by inserting after the item relating to subpara-  
 2 graph (C)(ii) the following:

“(C)(iii) ..... 10”.

3 (c) ALTERNATIVE MINIMUM TAX EXCEPTION.—Sub-  
 4 paragraph (B) of section 56(a)(1), as amended by section  
 5 3201, is amended by inserting “or (iii)” after “clause  
 6 (ii)”.

7 (d) EFFECTIVE DATE.—The amendment made by  
 8 this section shall apply to property placed in service after  
 9 the date of the enactment of this Act.

10 **SEC. 3204. EXPENSING OF CAPITAL COSTS INCURRED IN**  
 11 **COMPLYING WITH ENVIRONMENTAL PROTEC-**  
 12 **TION AGENCY SULFUR REGULATIONS.**

13 (a) IN GENERAL.—Section 179(b) (relating to elec-  
 14 tion to expense certain depreciable business assets) is  
 15 amended by adding at the end the following new para-  
 16 graph:

17 “(5) LIMITATION FOR SMALL BUSINESS REFIN-  
 18 ERS.—

19 “(A) IN GENERAL.—In the case of a small  
 20 business refiner electing to expense qualified  
 21 costs, in lieu of the dollar limitations in para-  
 22 graph (1), the limitation on the aggregate costs  
 23 which may be taken into account under sub-  
 24 section (a) for any taxable year shall not exceed  
 25 75 percent of the qualified costs.

1           “(B) QUALIFIED COSTS.—For purposes of  
2           this paragraph, the term ‘qualified costs’ means  
3           costs paid or incurred by a small business re-  
4           finer for the purpose of complying with the  
5           Highway Diesel Fuel Sulfur Control Require-  
6           ments of the Environmental Protection Agency.

7           “(C) SMALL BUSINESS REFINER.—For  
8           purposes of this paragraph, the term ‘small  
9           business refiner’ means, with respect to any  
10          taxable year, a refiner which, within the refin-  
11          ing operations of the business, employs not  
12          more than 1,500 employees on business days  
13          during such taxable year performing services in  
14          the refining operations of such businesses and  
15          has an average total capacity of 155,000 bar-  
16          rels per day or less.”.

17          (b) EFFECTIVE DATE.—The amendment made by  
18          this section shall apply to expenses paid or incurred after  
19          the date of the enactment of this Act.

20      **SEC. 3205. ENVIRONMENTAL TAX CREDIT.**

21          (a) IN GENERAL.—Subpart D of part IV of sub-  
22          chapter A of chapter 1 (relating to business-related cred-  
23          its) is amended by adding at the end the following new  
24          section:

1 **“SEC. 45I. ENVIRONMENTAL TAX CREDIT.**

2       “(a) IN GENERAL.—For purposes of section 38, the  
3 amount of the environmental tax credit determined under  
4 this section with respect to any small business refiner for  
5 any taxable year is an amount equal to 5 cents for every  
6 gallon of 15 parts per million or less sulfur diesel produced  
7 at a facility by such small business refiner.

8       “(b) MAXIMUM CREDIT.—For any small business re-  
9 finer, the aggregate amount allowable as a credit under  
10 subsection (a) for any taxable year with respect to any  
11 facility shall not exceed 25 percent of the qualified capital  
12 costs incurred by such small business refiner with respect  
13 to such facility not taken into account in determining the  
14 credit under subsection (a) for any preceding taxable year.

15       “(c) DEFINITIONS.—For purposes of this section—

16               “(1) SMALL BUSINESS REFINER.—The term  
17 ‘small business refiner’ means, with respect to any  
18 taxable year, a refiner which, within the refining op-  
19 erations of the business, employs not more than  
20 1,500 employees on business days during such tax-  
21 able year performing services in the refining oper-  
22 ations of such businesses and has an average total  
23 capacity of 155,000 barrels per day or less.

24               “(2) QUALIFIED CAPITAL COSTS.—The term  
25 ‘qualified capital costs’ means, with respect to any  
26 facility, those costs paid or incurred during the ap-



1 applicable period for compliance with the applicable  
2 EPA regulations with respect to such facility, includ-  
3 ing expenditures for the construction of new process  
4 operation units or the dismantling and reconstruc-  
5 tion of existing process units to be used in the pro-  
6 duction of 15 parts per million or less sulfur diesel  
7 fuel, associated adjacent or offsite equipment (in-  
8 cluding tankage, catalyst, and power supply), engi-  
9 neering, construction period interest, and sitework.

10 “(3) APPLICABLE EPA REGULATIONS.—The  
11 term ‘applicable EPA regulations’ means the High-  
12 way Diesel Fuel Sulfur Control Requirements of the  
13 Environmental Protection Agency.

14 “(4) APPLICABLE PERIOD.—The term ‘applica-  
15 ble period’ means, with respect to any facility, the  
16 period beginning on the day after the date of the en-  
17 actment of this section and ending with the date  
18 which is 1 year after the date on which the taxpayer  
19 must comply with the applicable EPA regulations  
20 with respect to such facility.

21 “(d) REDUCTION IN BASIS.—For purposes of this  
22 subtitle, if a credit is determined under this section with  
23 respect to any property by reason of qualified capital  
24 costs, the basis of such property shall be reduced by the  
25 amount of the credit so determined.

1 “(e) CERTIFICATION.—

2 “(1) REQUIRED.—Not later than the date  
3 which is 30 months after the first day of the first  
4 taxable year in which the environmental tax credit is  
5 allowed with respect to a facility, the small business  
6 refiner must obtain certification from the Secretary,  
7 in consultation with the Administrator of the Envi-  
8 ronmental Protection Agency, that the taxpayer’s  
9 qualified capital costs with respect to such facility  
10 will result in compliance with the applicable EPA  
11 regulations.

12 “(2) CONTENTS OF APPLICATION.—An applica-  
13 tion for certification shall include relevant informa-  
14 tion regarding unit capacities and operating charac-  
15 teristics sufficient for the Secretary, in consultation  
16 with the Administrator of the Environmental Protec-  
17 tion Agency, to determine that such qualified capital  
18 costs are necessary for compliance with the applica-  
19 ble EPA regulations.

20 “(3) REVIEW PERIOD.—Any application shall  
21 be reviewed and notice of certification, if applicable,  
22 shall be made within 60 days of receipt of such ap-  
23 plication.

24 “(4) RECAPTURE.—Notwithstanding subsection  
25 (f), failure to obtain certification under paragraph

1 (1) constitutes a recapture event under subsection  
 2 (f) with an applicable percentage of 100 percent.

3 “(f) RECAPTURE OF ENVIRONMENTAL TAX CRED-  
 4 IT.—

5 “(1) IN GENERAL.—Except as provided in sub-  
 6 section (e), if, as of the close of any taxable year,  
 7 there is a recapture event with respect to any facility  
 8 of the small business refiner, then the tax of such  
 9 refiner under this chapter for such taxable year shall  
 10 be increased by an amount equal to the product of—

11 “(A) the applicable recapture percentage,  
 12 and

13 “(B) the aggregate decrease in the credits  
 14 allowed under section 38 for all prior taxable  
 15 years which would have resulted if the qualified  
 16 capital costs of the taxpayer described in sub-  
 17 section (c)(2) with respect to such facility had  
 18 been zero.

19 “(2) APPLICABLE RECAPTURE PERCENTAGE.—

20 “(A) IN GENERAL.—For purposes of this  
 21 subsection, the applicable recapture percentage  
 22 shall be determined from the following table:

“If the recapture event occurs in:	The applicable recapture percentage is:
Year 1 .....	100
Year 2 .....	80
Year 3 .....	60
Year 4 .....	40

Year 5 .....	20
Years 6 and thereafter .....	0.

1           “(B) YEARS.—For purposes of subpara-  
2           graph (A), year 1 shall begin on the first day  
3           of the taxable year in which the qualified cap-  
4           ital costs with respect to a facility described in  
5           subsection (c)(2) are paid or incurred by the  
6           taxpayer.

7           “(3) RECAPTURE EVENT DEFINED.—For pur-  
8           poses of this subsection, the term ‘recapture event’  
9           means—

10           “(A) FAILURE TO COMPLY.—The failure  
11           by the small business refiner to meet the appli-  
12           cable EPA regulations within the applicable pe-  
13           riod with respect to the facility.

14           “(B) CESSATION OF OPERATION.—The  
15           cessation of the operation of the facility as a fa-  
16           cility which produces 15 parts per million or  
17           less sulfur diesel after the applicable period.

18           “(C) CHANGE IN OWNERSHIP.—

19           “(i) IN GENERAL.—Except as pro-  
20           vided in clause (ii), the disposition of a  
21           small business refiner’s interest in the fa-  
22           cility with respect to which the credit de-  
23           scribed in subsection (a) was allowable.

1                   “(ii) AGREEMENT TO ASSUME RECAP-  
2                   TURE LIABILITY.—Clause (i) shall not  
3                   apply if the person acquiring such interest  
4                   in the facility agrees in writing to assume  
5                   the recapture liability of the person dis-  
6                   posing of such interest in effect imme-  
7                   diately before such disposition. In the  
8                   event of such an assumption, the person  
9                   acquiring the interest in the facility shall  
10                  be treated as the taxpayer for purposes of  
11                  assessing any recapture liability (computed  
12                  as if there had been no change in owner-  
13                  ship).

14               “(4) SPECIAL RULES.—

15                   “(A) TAX BENEFIT RULE.—The tax for  
16                   the taxable year shall be increased under para-  
17                   graph (1) only with respect to credits allowed  
18                   by reason of this section which were used to re-  
19                   duce tax liability. In the case of credits not so  
20                   used to reduce tax liability, the carryforwards  
21                   and carrybacks under section 39 shall be appro-  
22                   priately adjusted.

23                   “(B) NO CREDITS AGAINST TAX.—Any in-  
24                   crease in tax under this subsection shall not be  
25                   treated as a tax imposed by this chapter for

1 purposes of determining the amount of any  
2 credit under this chapter or for purposes of sec-  
3 tion 55.

4 “(C) NO RECAPTURE BY REASON OF CAS-  
5 UALTY LOSS.—The increase in tax under this  
6 subsection shall not apply to a cessation of op-  
7 eration of the facility by reason of a casualty  
8 loss to the extent such loss is restored by recon-  
9 struction or replacement within a reasonable pe-  
10 riod established by the Secretary.

11 “(g) CONTROLLED GROUPS.—For purposes of this  
12 section, all persons treated as a single employer under sub-  
13 section (b), (c), (m), or (o) of section 414 shall be treated  
14 as a single employer.”.

15 (b) CREDIT MADE PART OF GENERAL BUSINESS  
16 CREDIT.—Subsection (b) of section 38 (relating to general  
17 business credit) is amended by striking “plus” at the end  
18 of paragraph (16), by striking the period at the end of  
19 paragraph (17) and inserting “, plus”, and by adding at  
20 the end the following new paragraph:

21 “(18) in the case of a small business refiner,  
22 the environmental tax credit determined under sec-  
23 tion 45I(a).”.

24 (c) DENIAL OF DOUBLE BENEFIT.—Section 280C  
25 (relating to certain expenses for which credits are allow-

1 able) is amended by adding after subsection (d) the fol-  
2 lowing new subsection:

3       “(e) ENVIRONMENTAL TAX CREDIT.—No deduction  
4 shall be allowed for that portion of the expenses otherwise  
5 allowable as a deduction for the taxable year which is  
6 equal to the amount of the credit determined for the tax-  
7 able year under section 45I(a).”.

8       (d) BASIS ADJUSTMENT.—Section 1016(a) (relating  
9 to adjustments to basis) is amended by striking “and” at  
10 the end of paragraph (33), by striking the period at the  
11 end of paragraph (34) and inserting “, and”, and by add-  
12 ing at the end the following new paragraph:

13               “(35) in the case of a facility with respect to  
14 which a credit was allowed under section 45I, to the  
15 extent provided in section 45I(d).”.

16       (e) CLERICAL AMENDMENT.—The table of sections  
17 for subpart D of part IV of subchapter A of chapter 1  
18 is amended by adding at the end the following new item:

“Sec. 45I. Environmental tax credit.”.

19       (f) EFFECTIVE DATE.—The amendments made by  
20 this section shall apply to expenses paid or incurred after  
21 the date of the enactment of this Act.

1 **SEC. 3206. DETERMINATION OF SMALL REFINER EXCEP-**  
2 **TION TO OIL DEPLETION DEDUCTION.**

3 (a) IN GENERAL.—Paragraph (4) of section 613A(d)  
4 (relating to certain refiners excluded) is amended to read  
5 as follows:

6 “(4) CERTAIN REFINERS EXCLUDED.—If the  
7 taxpayer or a related person engages in the refining  
8 of crude oil, subsection (c) shall not apply to the  
9 taxpayer for a taxable year if the average daily refin-  
10 ery runs of the taxpayer and the related person for  
11 the taxable year exceed 75,000 barrels. For purposes  
12 of this paragraph, the average daily refinery runs for  
13 any taxable year shall be determined by dividing the  
14 aggregate refinery runs for the taxable year by the  
15 number of days in the taxable year.”.

16 (b) EFFECTIVE DATE.—The amendment made by  
17 this section shall apply to taxable years beginning after  
18 December 31, 2001.

19 **SEC. 3207. TAX-EXEMPT BOND FINANCING OF CERTAIN**  
20 **ELECTRIC FACILITIES.**

21 (a) IN GENERAL.—Subpart A of part IV of sub-  
22 chapter B of chapter 1 (relating to tax exemption require-  
23 ments for State and local bonds) is amended by inserting  
24 after section 141 the following new section:



1 **“SEC. 141A. TREATMENT OF GOVERNMENT-OWNED ELEC-**  
2 **TRIC OUTPUT FACILITIES.**

3 “(a) EXCEPTIONS FROM PRIVATE BUSINESS USE  
4 LIMITATIONS WHERE OPEN ACCESS REQUIREMENTS  
5 MET.—

6 “(1) GENERAL RULE.—For purposes of this  
7 part, the term ‘private business use’ shall not  
8 include—

9 “(A) any permitted open access activity by  
10 a governmental unit with respect to an electric  
11 output facility owned by such unit, or

12 “(B) any permitted sale of electricity by a  
13 governmental unit which is generated at an ex-  
14 isting generation facility owned by such unit.

15 “(2) PERMITTED OPEN ACCESS ACTIVITY.—For  
16 purposes of this section—

17 “(A) IN GENERAL.—The term ‘permitted  
18 open access activity’ means any activity meeting  
19 the open access requirements of any of the fol-  
20 lowing clauses with respect to such electric out-  
21 put facility:

22 “(i) TRANSMISSION AND ANCILLARY  
23 FACILITY.—In the case of a transmission  
24 facility or a facility providing ancillary  
25 services, the provision of transmission serv-  
26 ice and ancillary services meets the open

1 access requirements of this clause only if  
2 such services are provided on a non-  
3 discriminatory open access basis—

4 “(I) pursuant to an open access  
5 transmission tariff filed with and ap-  
6 proved by FERC, including an accept-  
7 able reciprocity tariff, or

8 “(II) under a regional trans-  
9 mission organization agreement ap-  
10 proved by FERC.

11 “(ii) DISTRIBUTION FACILITIES.—In  
12 the case of a distribution facility, the deliv-  
13 ery of electric energy meets the open ac-  
14 cess requirements of this clause only if  
15 such delivery is made on a nondiscrim-  
16 inatory open access basis.

17 “(iii) GENERATION FACILITIES.—In  
18 the case of a generation facility, the deliv-  
19 ery of electric energy generated by such fa-  
20 cility meets the open access requirements  
21 of this clause only if—

22 “(I) such facility is directly con-  
23 nected to distribution facilities owned  
24 by the governmental unit which owns  
25 the generation facility, and

1                   “(II) such distribution facilities  
2                   meet the open access requirements of  
3                   clause (ii).

4                   “(B) SPECIAL RULES.—

5                   “(i) VOLUNTARILY FILED TARIFFS.—  
6                   Subparagraph (A)(i)(I) shall apply in the  
7                   case of a voluntarily filed tariff only if the  
8                   governmental unit files a report with  
9                   FERC within 90 days after the date of the  
10                  enactment of this section relating to  
11                  whether or not such governmental unit will  
12                  join a regional transmission organization.

13                  “(ii) CONTROL OF TRANSMISSION FA-  
14                  CILITIES BY REGIONAL TRANSMISSION OR-  
15                  GANIZATION.—A governmental unit shall  
16                  be treated as meeting the open access re-  
17                  quirements of subparagraph (A)(i) if a re-  
18                  gional transmission organization controls  
19                  the transmission facilities.

20                  “(iii) ERCOT UTILITY.—References  
21                  to FERC in subparagraph (A) shall be  
22                  treated as references to the Public Utility  
23                  Commission of Texas with respect to any  
24                  ERCOT utility (as defined in section

1                   212(k)(2)(B) of the Federal Power Act (16  
2                   U.S.C. 824k(k)(2)(B))).

3                   “(3) PERMITTED SALE.—For purposes of this  
4 subsection—

5                   “(A) IN GENERAL.—The term ‘permitted  
6 sale’ means—

7                   “(i) any sale of electricity to an on-  
8 system purchaser if the seller meets the  
9 open access requirements of paragraph (2)  
10 with respect to all distribution and trans-  
11 mission facilities (if any) owned by such  
12 seller, and

13                   “(ii) subject to subparagraphs (B)  
14 and (C), any sale of electricity to a whole-  
15 sale native load purchaser, and any load  
16 loss sale, if—

17                   “(I) the seller meets the open ac-  
18 cess requirements of paragraph (2)  
19 with respect to all transmission facili-  
20 ties (if any) owned by such seller, or

21                   “(II) in any case in which the  
22 seller does not own any transmission  
23 facilities, all persons providing trans-  
24 mission services to the seller’s whole-  
25 sale native load purchasers meet the

1 open access requirements of para-  
2 graph (2) with respect to all trans-  
3 mission facilities owned by such per-  
4 sons.

5 “(B) LIMITATION ON SALES TO WHOLE-  
6 SALE NATIVE LOAD PURCHASERS.—A sale to a  
7 wholesale native load purchaser shall be treated  
8 as a permitted sale only to the extent that—

9 “(i) such purchaser resells the elec-  
10 tricity directly at retail to persons within  
11 the purchaser’s distribution area, or

12 “(ii) such electricity is resold by such  
13 purchaser through one or more wholesale  
14 purchasers (each of whom as of June 30,  
15 2000, was a party to a requirements con-  
16 tract or a firm power contract described in  
17 paragraph (5)(B)(ii)) to retail purchasers  
18 in the ultimate wholesale purchaser’s dis-  
19 tribution area.

20 “(C) LOAD LOSS SALES.—

21 “(i) IN GENERAL.—The term ‘load  
22 loss sale’ means any sale at wholesale to  
23 the extent that—

24 “(I) the aggregate sales at whole-  
25 sale during the recovery period does

1 not exceed the load loss mitigation  
2 sales limit for such period, and

3 “(II) the aggregate sales at  
4 wholesale during the first calendar  
5 year after the recovery period does not  
6 exceed the excess carried under clause  
7 (iv) to such year.

8 “(ii) LOAD LOSS MITIGATION SALES  
9 LIMIT.—For purposes of clause (i), the  
10 load loss mitigation sales limit for the re-  
11 covery period is the sum of the annual load  
12 losses for each year of such period.

13 “(iii) ANNUAL LOAD LOSS.—A govern-  
14 mental unit’s annual load loss for each  
15 year of the recovery period is the amount  
16 (if any) by which—

17 “(I) the megawatt hours of elec-  
18 tric energy sold during such year to  
19 wholesale native load purchasers  
20 which do not constitute private busi-  
21 ness use are less than

22 “(III) the megawatt hours of  
23 electric energy sold during the base  
24 year to wholesale native load pur-

1           chasers which do not constitute pri-  
2           vate business use.

3           The annual load loss for any year shall not  
4           exceed the portion of the amount deter-  
5           mined under the preceding sentence which  
6           is attributable to open access requirements.

7           “(iv) CARRYOVERS.—If the limitation  
8           under clause (i) for the recovery period ex-  
9           ceeds the aggregate sales during such pe-  
10          riod which are taken into account under  
11          clause (i), such excess (but not more than  
12          10 percent of such limitation) may be car-  
13          ried over to the first calendar year fol-  
14          lowing the recovery period.

15          “(v) RECOVERY PERIOD.—The recov-  
16          ery period is the 7-year period beginning  
17          with the start-up year.

18          “(vi) START-UP YEAR.—The start-up  
19          year is the calendar year which includes  
20          the date of the enactment of this section  
21          or, if later, at the election of the govern-  
22          mental unit—

23                 “(I) the first year that the gov-  
24                 ernmental unit offers nondiscrim-  
25                 inatory open transmission access, or

1                   “(II) the first year in which at  
2                   least 10 percent of the governmental  
3                   unit’s wholesale customers’ aggregate  
4                   retail native load is open to retail  
5                   competition.

6                   “(4) ON-SYSTEM PURCHASER.—For purposes of  
7                   this section, the term ‘on-system purchaser’ means  
8                   any person whose electric equipment is directly con-  
9                   nected with any transmission or distribution facility  
10                  owned by the governmental unit owning the existing  
11                  generation facility if—

12                   “(A) such person—

13                   “(i) purchases electric energy from  
14                   such governmental unit at retail, and

15                   “(ii)(I) was within such unit’s dis-  
16                   tribution area at the close of the base year  
17                   or

18                   “(II) is a person as to whom the gov-  
19                   ernmental unit has a statutory service obli-  
20                   gation, or

21                   “(B) is a wholesale native load purchaser  
22                   from such governmental unit.

23                   “(5) WHOLESALE NATIVE LOAD PURCHASER.—  
24                   For purposes of this section—



1           “(A) IN GENERAL.—The term ‘wholesale  
2           native load purchaser’ means a wholesale pur-  
3           chaser as to whom the governmental unit had—

4                   “(i) a statutory service obligation at  
5                   wholesale at the close of the base year, or

6                   “(ii) an obligation at the close of the  
7                   base year under a requirements or firm  
8                   sales contract if, as of June 30, 2000, such  
9                   contract had been in effect for (or had an  
10                  initial term of) at least 10 years.

11           “(B) PERMITTED SALES UNDER EXISTING  
12           CONTRACTS.—A private business use sale dur-  
13           ing any year to a wholesale native load pur-  
14           chaser (other than a person to whom the gov-  
15           ernmental unit had a statutory service obliga-  
16           tion) under a contract shall be treated as a per-  
17           mitted sale by reason of being a load loss sale  
18           only to the extent that the private business use  
19           sales under the contract during such year ex-  
20           ceed the lesser of—

21                   “(i) the private business use sales  
22                   under the contract during the base year, or

23                   “(ii) the maximum private business  
24                   use sales which would (but for this section)

1           be permitted without causing the bonds to  
2           be private activity bonds.

3           This subparagraph shall only apply to the ex-  
4           tent that the sale is allocable to bonds issued  
5           before the date of the enactment of this section  
6           (or bonds issued to refund such bonds).

7           “(6) SPECIAL RULES.—

8                 “(A) TIME OF SALE RULE.—For purposes  
9                 of paragraphs (3)(C)(iii) and (5)(B), the deter-  
10                mination of whether a sale after the date of the  
11                enactment of this section is a private business  
12                use shall be made with regard to this section.

13               “(B) JOINT ACTION AGENCIES.—To the  
14                extent provided in regulations, a joint action  
15                agency, or a member of (or a wholesale native  
16                load purchaser from) a joint action agency,  
17                which is entitled to make a sale described in  
18                subparagraph (A) or (B) in a year, may trans-  
19                fer the entitlement to make that sale to the  
20                member (or purchaser), or the joint action  
21                agency, respectively.

22           “(b) CERTAIN BONDS FOR TRANSMISSION AND DIS-  
23    TRIBUTION FACILITIES NOT TAX EXEMPT.—

24                “(1) IN GENERAL.—Section 103 shall not apply  
25                to any bond issued on or after the date of the enact-

1       ment of this section if any portion of the proceeds  
2       of the issue of which such bond is a part is used (di-  
3       rectly or indirectly) to finance—

4               “(A) any electric transmission facility, or

5               “(B) any start-up electric utility distribu-  
6       tion facility.

7               “(2) EXCEPTIONS RELATING TO TRANSMISSION  
8       FACILITIES.—Paragraph (1)(A) shall not apply to  
9       any bond issued to finance—

10              “(A) any repair of a transmission facility  
11       in service on the date of the enactment of this  
12       section, so long as the repair does not—

13              “(i) increase the voltage level of such  
14       facility over its level at the close of the  
15       base year, or

16              “(ii) increase the thermal load limit of  
17       such facility by more than 3 percent over  
18       such limit at the close of the base year,

19              “(B) any qualifying upgrade of an electric  
20       transmission facility in service on the date of  
21       the enactment of this section, or

22              “(C) any transmission facility necessary to  
23       comply with an obligation under a shared or re-  
24       ciprocal transmission agreement in effect on  
25       such date.

1           “(3) EXCEPTION FOR LOCAL ELECTRIC TRANS-  
2       MISSION FACILITY.—For purposes of this  
3       subsection—

4           “(A) IN GENERAL.—In the case of a gov-  
5       ernmental unit which owns distribution facili-  
6       ties, paragraph (1)(A) shall not apply to any  
7       bond issued to finance an electric transmission  
8       facility owned by such governmental unit and  
9       located within such governmental unit’s dis-  
10      tribution area, but only to the extent such facil-  
11      ity is, or will be, necessary to supply electricity  
12      to serve the retail native load, or wholesale na-  
13      tive load, of such governmental unit or of 1 or  
14      more other governmental units owning distribu-  
15      tion facilities which are directly connected to  
16      such electric transmission facility.

17          “(B) RETAIL LOAD.—The term ‘retail  
18      load’ means, with respect to a governmental  
19      unit, the electric load of end-users in the dis-  
20      tribution area of the governmental unit.

21          “(C) WHOLESALE NATIVE LOAD.—The  
22      term ‘wholesale native load’ means—

23              “(i) the retail load of such unit’s  
24      wholesale native load purchasers (or of an

1 ultimate wholesale purchaser described in  
2 subsection (a)(3)(B)(ii)), and

3 “(ii) the electric load of purchasers  
4 (not described in clause (i)) under whole-  
5 sale requirements contracts which—

6 “(I) do not constitute private  
7 business use (determined without re-  
8 gard to this section), and

9 “(II) were in effect in the base  
10 year.

11 “(D) NECESSARY TO SERVE LOAD.—For  
12 purposes of determining whether a transmission  
13 facility is, or will be, necessary to supply elec-  
14 tricity to retail native load or wholesale native  
15 load—

16 “(i) the governmental unit’s available  
17 transmission rights shall be taken into ac-  
18 count,

19 “(ii) electric reliability standards or  
20 requirements of national or regional reli-  
21 ability organizations, regional transmission  
22 organizations and the Electric Reliability  
23 Council of Texas shall be taken into ac-  
24 count, and

1 “(iii) transmission, siting and con-  
2 struction decisions of regional transmission  
3 organizations and State and Federal regu-  
4 latory and siting agencies, after a pro-  
5 ceeding that provides for public input,  
6 shall be presumptive evidence regarding  
7 whether transmission facilities are nec-  
8 essary to serve native load.

9 “(E) QUALIFYING UPGRADE.—The term  
10 ‘qualifying upgrade’ means an improvement or  
11 addition to transmission facilities of the govern-  
12 mental unit in service on the date of the enact-  
13 ment of this section which—

14 “(i) is ordered or approved by a re-  
15 gional transmission organization or by a  
16 State regulatory or siting agency, after a  
17 proceeding that provides for public input,  
18 and

19 “(ii) is, or will be, necessary to supply  
20 electricity to serve the retail native load, or  
21 wholesale native load, of such govern-  
22 mental unit or of one or more govern-  
23 mental units owning distribution facilities  
24 which are directly connected to such trans-  
25 mission facility.

1           “(4) START-UP ELECTRIC UTILITY DISTRIBUTION FACILITY DEFINED.—For purposes of this sub-  
2           TION FACILITY DEFINED.—For purposes of this sub-  
3           section, the term ‘start-up electric utility distribution  
4           facility’ means any distribution facility to provide  
5           electric service for sale to the public if such facility  
6           is placed in service—

7                   “(A) by a governmental unit that did not  
8                   operate an electric utility on the date of the en-  
9                   actment of this section, and

10                   “(B) during the first 10 years after the  
11                   date such governmental unit begins operating  
12                   an electric utility.

13           A governmental unit is treated as having operated  
14           an electric utility on the date of the enactment of  
15           this section if it operates electric output facilities  
16           which were (on such date) operated by another gov-  
17           ernmental unit to provide electric service for sale to  
18           the public.

19           “(5) EXCEPTION FOR REFUNDING BONDS.—

20                   “(A) IN GENERAL.—Paragraph (1) shall  
21                   not apply to any eligible refunding bond.

22                   “(B) ELIGIBLE REFUNDING BOND.—For  
23                   purposes of subparagraph (A), the term ‘eligible  
24                   refunding bond’ means any bond (or series of  
25                   bonds) issued to refund any bond issued before

1           the date of the enactment of this section if the  
2           average maturity date of the issue of which the  
3           refunding bond is a part is not later than the  
4           average maturity date of the bonds to be re-  
5           funded by such issue.

6           “(c) DEFINITIONS; SPECIAL RULES.—For purposes  
7 of this section—

8           “(1) BASE YEAR.—The term ‘base year’  
9           means—

10           “(A) the calendar year preceding the start-  
11           up year, or

12           “(B) at the election of the governmental  
13           unit, the second or third calendar years pre-  
14           ceding the start-up year.

15           “(2) DISTRIBUTION AREA.—The term ‘distribu-  
16           tion area’ means the area in which a governmental  
17           unit owns distribution facilities.

18           “(3) ELECTRIC OUTPUT FACILITY.—The term  
19           ‘electric output facility’ means an output facility  
20           that is an electric generation, transmission, or dis-  
21           tribution facility.

22           “(4) DISTRIBUTION FACILITY.—The term ‘dis-  
23           tribution facility’ means an electric output facility  
24           that is not a generation or transmission facility.



1           “(5) TRANSMISSION FACILITY.—The term  
2           ‘transmission facility’ means an electric output facil-  
3           ity (other than a generation facility) that operates at  
4           an electric voltage of 69 kV or greater. To the ex-  
5           tent provided in regulations, such term includes any  
6           output facility that FERC determines is a trans-  
7           mission facility under standards applied by FERC  
8           under the Federal Power Act (as in effect on the  
9           date of the enactment of this section).

10          “(6) EXISTING GENERATION FACILITY.—

11               “(A) IN GENERAL.—The term ‘existing  
12               generation facility’ means any electric genera-  
13               tion facility if—

14                       “(i) such facility is originally placed in  
15                       service on or before the date of the enact-  
16                       ment of this Act and is owned by any gov-  
17                       ernmental unit on such date, or

18                       “(ii) such facility is originally placed  
19                       in service after such date if the construc-  
20                       tion of the facility commenced before June  
21                       1, 2000, and such facility is owned by any  
22                       governmental unit when it is placed in  
23                       service.

24               “(B) DENIAL OF TREATMENT TO EXPAN-  
25               SIONS.—Such term shall not include any facility

1 to the extent the generating capacity of such fa-  
2 cility as of any date is 3 percent above the  
3 greater of its nameplate or rated capacity as of  
4 the date of the enactment of this section (or, in  
5 the case of a facility described in subparagraph  
6 (A)(ii), the date that the facility is placed in  
7 service).

8 “(7) REGIONAL TRANSMISSION ORGANIZA-  
9 TION.—The term ‘regional transmission organiza-  
10 tion’ includes an independent system operator.

11 “(8) FERC.—The term ‘FERC’ means the  
12 Federal Energy Regulatory Commission.

13 “(9) GOVERNMENT-OWNED FACILITY.—An elec-  
14 tric transmission facility shall be treated as owned  
15 by a governmental unit as of any date to the extent  
16 that—

17 “(A) such unit acquired (before the base  
18 year) long-term firm transmission capacity (as  
19 determined under regulations) of such facility  
20 for the purposes of serving customers to which  
21 such unit had at the close of the base year—

22 “(i) a statutory service obligation, or

23 “(ii) an obligation under a require-  
24 ments contract, and

1           “(B) such unit holds such capacity as of  
2           such date.

3           “(10) STATUTORY SERVICE OBLIGATION.—The  
4           term ‘statutory service obligation’ means an obliga-  
5           tion under State or Federal law (exclusive of an obli-  
6           gation arising solely under a contract entered into  
7           with a person) to provide electric distribution serv-  
8           ices or electric sales services, as provided in such  
9           law.

10          “(11) CONTRACT MODIFICATIONS.—A material  
11          modification of a contract shall be treated as a new  
12          contract.

13          “(d) ELECTION TO TERMINATE TAX-EXEMPT BOND  
14          FINANCING FOR CERTAIN ELECTRIC OUTPUT FACILI-  
15          TIES.—

16          “(1) IN GENERAL.—At the election of a govern-  
17          mental unit, section 103(a) shall not apply to any  
18          bond issued by or on behalf of such unit after the  
19          date of such election if any portion of the proceeds  
20          of the issue of which such bond is a part are used  
21          to provide any electric output facilities. Such an  
22          election, once made, shall be irrevocable.

23          “(2) OTHER EFFECTS OF ELECTION.—During  
24          the period that the election under paragraph (1) is

1 in effect with respect to a governmental unit, the  
2 term ‘private activity bond’ shall not include—

3 “(A) any bond issued by such unit before  
4 the date of the enactment of this section to pro-  
5 vide an electric output facility if, as of the date  
6 of the election, such bond was not a private ac-  
7 tivity bond, and

8 “(B) any bond to which paragraph (1)  
9 does not apply by reason of paragraph (3).

10 “(3) EXCEPTIONS FOR CERTAIN PROPERTY.—

11 “(A) IN GENERAL.—Paragraph (1) shall  
12 not apply to any bond issued to provide prop-  
13 erty owned by a governmental unit if such prop-  
14 erty is—

15 “(i) any qualifying transmission facil-  
16 ity,

17 “(ii) any qualifying distribution facil-  
18 ity,

19 “(iii) any facility necessary to meet  
20 Federal or State environmental require-  
21 ments applicable to an existing generation  
22 facility owned by the governmental unit as  
23 of the date of the election,

24 “(iv) any property to repair any exist-  
25 ing generation facility owned by the gov-

1           ernmental unit as of the date of the elec-  
2           tion,

3           “(v) any qualified facility (as defined  
4           in section 45(c)(3)) producing electricity  
5           from any qualified energy resource (as de-  
6           fined in section 45(c)(1)), and

7           “(vi) any energy property (as defined  
8           in section 48(a)(3)) placed in service dur-  
9           ing a period that the energy percentage  
10          under section 48(a) is greater than zero.

11          “(B) LIMITATION ON USE BY NONGOVERN-  
12          MENTAL PERSONS.—Subparagraph (A) shall  
13          not apply to any property constructed, acquired  
14          or financed for a principal purpose of providing  
15          the facility (or the output thereof) to non-  
16          governmental persons.

17          “(4) DEFINITIONS.—For purposes of this  
18          subsection—

19               “(A) QUALIFYING DISTRIBUTION FACIL-  
20               ITY.—The term ‘qualifying distribution facility’  
21               means a distribution facility meeting the open  
22               access requirements of subsection (a)(2)(A)(ii).

23               “(B) QUALIFYING TRANSMISSION FACIL-  
24               ITY.—The term ‘qualifying transmission facil-  
25               ity’ means a local transmission facility (as de-

1           fined in subsection (b)(3)) meeting the open ac-  
2           cess requirements of subsection (a)(2)(A)(i).

3           “(5) EFFECT OF ELECTION.—

4                   “(A) IN GENERAL.—An election under  
5           paragraph (1) shall be binding on any successor  
6           in interest to, or any related party with respect  
7           to, the electing governmental unit. For purposes  
8           of this paragraph, a governmental unit shall be  
9           treated as related to another governmental unit  
10          if it is a member of the same controlled group  
11          (as determined under regulations).

12                   “(B) TREATMENT OF ELECTING GOVERN-  
13          MENTAL UNIT.—A governmental unit which  
14          makes an election under paragraph (1) shall be  
15          treated for purposes of section 141 as a  
16          person—

17                           “(i) which is not a governmental unit,  
18                           and

19                           “(ii) which is engaged in a trade or  
20                           business,

21          with respect to its purchase of electricity gen-  
22          erated by an electric output facility placed in  
23          service after the date of such election if such  
24          purchase is under a contract executed after  
25          such date.”.

1 (b) WAIVER OF CERTAIN LIMITATIONS NOT TO  
 2 APPLY TO DISTRIBUTION FACILITIES.—Section 141(d)(5)  
 3 is amended by inserting “(except in the case of an electric  
 4 output facility that is a distribution facility)” after “this  
 5 subsection”.

6 (c) CLERICAL AMENDMENT.—The table of sections  
 7 for subpart A of part IV of subchapter B of chapter 1  
 8 is amended by inserting after the item relating to section  
 9 141 the following new item:

“Sec. 141A. Treatment of government-owned electric output fa-  
 cilities.”.

10 (d) EFFECTIVE DATE.—

11 (1) IN GENERAL.—The amendments made by  
 12 this section shall take effect on the date of the en-  
 13 actment of this Act, except that a governmental unit  
 14 may elect to have section 141A(a)(1) of the Internal  
 15 Revenue Code of 1986, as added by subsection (a),  
 16 take effect on April 14, 1996.

17 (2) BINDING CONTRACTS.—The amendment  
 18 made by subsection (b) (relating to waiver of certain  
 19 limitations not to apply to distribution facilities)  
 20 shall not apply to facilities acquired pursuant to a  
 21 contract which was entered into before the date of  
 22 the enactment of this Act and which was binding on  
 23 such date and at all times thereafter before such ac-  
 24 quisition.

1           (3) COMPARABLE TREATMENT TO BONDS  
2       UNDER 1954 CODE RULES.—References in the  
3       amendments made by this Act to sections of the In-  
4       ternal Revenue Code of 1986 shall be deemed to in-  
5       clude references to comparable sections of the Inter-  
6       nal Revenue Code of 1954.

7   **SEC. 3208. SALES OR DISPOSITIONS TO IMPLEMENT FED-**  
8                   **ERAL ENERGY REGULATORY COMMISSION**  
9                   **OR STATE ELECTRIC RESTRUCTURING POL-**  
10                  **ICY.**

11       (a) IN GENERAL.—Section 1033 (relating to involun-  
12       tary conversions) is amended by redesignating subsection  
13       (k) as subsection (l) and by inserting after subsection (j)  
14       the following new subsection:

15       “(k) SALES OR DISPOSITIONS TO IMPLEMENT FED-  
16       ERAL ENERGY REGULATORY COMMISSION OR STATE  
17       ELECTRIC RESTRUCTURING POLICY.—

18           “(1) IN GENERAL.—For purposes of this sub-  
19       title, if a taxpayer elects the application of this sub-  
20       section to a qualifying electric transmission  
21       transaction—

22           “(A) such transaction shall be treated as  
23       an involuntary conversion to which this section  
24       applies, and



1           “(B) exempt utility property shall be treat-  
2           ed as property which is similar or related in  
3           service or use to the property disposed of in  
4           such transaction.

5           “(2) EXTENSION OF REPLACEMENT PERIOD.—  
6           In the case of any involuntary conversion described  
7           in paragraph (1), subsection (a)(2)(B) shall be ap-  
8           plied by substituting ‘4 years’ for ‘2 years’ in clause  
9           (i) thereof.

10          “(3) QUALIFYING ELECTRIC TRANSMISSION  
11          TRANSACTION.—For purposes of this subsection, the  
12          term ‘qualifying electric transmission transaction’  
13          means any sale or other disposition before January  
14          1, 2009, of—

15               “(A) property used in the trade or business  
16               of providing electric transmission services, or

17               “(B) any stock or partnership interest in a  
18               corporation or partnership, as the case may be,  
19               whose principal trade or business consists of  
20               providing electric transmission services,  
21          but only if such sale or disposition is to an inde-  
22          pendent transmission company.

23          “(4) INDEPENDENT TRANSMISSION COM-  
24          PANY.—For purposes of this subsection, the term  
25          ‘independent transmission company’ means—

1           “(A) a regional transmission organization  
2 approved by the Federal Energy Regulatory  
3 Commission,

4           “(B) a person—

5               “(i) who the Federal Energy Regu-  
6 latory Commission determines in its au-  
7 thorization of the transaction under section  
8 203 of the Federal Power Act (16 U.S.C.  
9 823b) is not a market participant within  
10 the meaning of such Commission’s rules  
11 applicable to regional transmission organi-  
12 zations, and

13               “(ii) whose transmission facilities to  
14 which the election under this subsection  
15 applies are under the operational control of  
16 a Federal Energy Regulatory Commission-  
17 approved regional transmission organiza-  
18 tion before the close of the period specified  
19 in such authorization, but not later than  
20 the close of the period applicable under  
21 subsection (a)(2)(B) as extended under  
22 paragraph (2), or

23           “(C) in the case of facilities subject to the  
24 exclusive jurisdiction of the Public Utility Com-  
25 mission of Texas, a person which is approved by

1           that Commission as consistent with Texas State  
2           law regarding an independent transmission or-  
3           ganization.

4           “(5) EXEMPT UTILITY PROPERTY.—For pur-  
5           poses of this subsection—

6                   “(A) IN GENERAL.—The term ‘exempt  
7           utility property’ means property used in the  
8           trade or business of—

9                           “(i) generating, transmitting, distrib-  
10                          uting, or selling electricity, or

11                           “(ii) producing, transmitting, distrib-  
12                          uting, or selling natural gas.

13                   “(B) NONRECOGNITION OF GAIN BY REA-  
14           SON OF ACQUISITION OF STOCK.—Acquisition of  
15           control of a corporation shall be taken into ac-  
16           count under this section with respect to a quali-  
17           fying electric transmission transaction only if  
18           the principal trade or business of such corpora-  
19           tion is a trade or business referred to in sub-  
20           paragraph (A).

21           “(6) SPECIAL RULE FOR CONSOLIDATED  
22           GROUPS.—In the case of a corporation which is a  
23           member of an affiliated group filing a consolidated  
24           return, such corporation shall be treated as satis-  
25           fying the purchase requirement of subsection (a)(2)

1 with respect to any qualifying electric transmission  
2 transaction engaged in by such corporation to the  
3 extent such requirement is satisfied by another  
4 member of such group.

5 “(7) ELECTION.—An election under paragraph  
6 (1), once made, shall be irrevocable.”.

7 (b) EXCEPTION FROM GAIN RECOGNITION UNDER  
8 SECTION 1245.—Subsection (b) of section 1245 is amend-  
9 ed by adding at the end the following new paragraph:

10 “(9) DISPOSITIONS TO IMPLEMENT FEDERAL  
11 ENERGY REGULATORY COMMISSION OR STATE ELEC-  
12 TRIC RESTRUCTURING POLICY.—At the election of  
13 the taxpayer, the amount of gain which would (but  
14 for this paragraph) be recognized under this section  
15 on any qualified electric transmission transaction (as  
16 defined in section 1033(k)) for which an election  
17 under section 1033 is made shall be reduced by the  
18 aggregate reduction in the basis of section 1245  
19 property held by the taxpayer or, if insufficient, by  
20 a member of an affiliated group which includes the  
21 taxpayer at any time during the taxable year in  
22 which such transaction occurred. The manner and  
23 amount of such reduction shall be determined under  
24 regulations prescribed by the Secretary.”.

1       (c) EFFECTIVE DATE.—The amendments made by  
 2 this section shall apply to transactions occurring after the  
 3 date of the enactment of this Act.

4   **SEC. 3209. DISTRIBUTIONS OF STOCK TO IMPLEMENT FED-**  
 5                   **ERAL ENERGY REGULATORY COMMISSION**  
 6                   **OR STATE ELECTRIC RESTRUCTURING POL-**  
 7                   **ICY.**

8       (a) IN GENERAL.—Subparagraph (A) of section  
 9 355(e)(3) (relating to special rules relating to acquisi-  
 10 tions) is amended by inserting after clause (iv) the fol-  
 11 lowing new clause:

12                   “(v) The acquisition of stock in any  
 13                   controlled corporation in a qualifying elec-  
 14                   tric transmission transaction (as defined in  
 15                   section 1033(k)).”.

16       (b) EFFECTIVE DATE.—The amendment made by  
 17 subsection (a) shall apply to distributions after the date  
 18 of the enactment of this Act.

19   **SEC. 3210. MODIFICATIONS TO SPECIAL RULES FOR NU-**  
 20                   **CLEAR DECOMMISSIONING COSTS.**

21       (a) REPEAL OF LIMITATION ON DEPOSITS INTO  
 22 FUND BASED ON COST OF SERVICE; CONTRIBUTIONS  
 23 AFTER FUNDING PERIOD.—Subsection (b) of section  
 24 468A is amended to read as follows:

25       “(b) LIMITATION ON AMOUNTS PAID INTO FUND.—

1           “(1) IN GENERAL.—The amount which a tax-  
2       payer may pay into the Fund for any taxable year  
3       shall not exceed the ruling amount applicable to  
4       such taxable year.

5           “(2) CONTRIBUTIONS AFTER FUNDING PE-  
6       RIOD.—Notwithstanding any other provision of this  
7       section, a taxpayer may pay into the Fund in any  
8       taxable year after the last taxable year to which the  
9       ruling amount applies. Payments may not be made  
10      under the preceding sentence to the extent such pay-  
11      ments would cause the assets of the Fund to exceed  
12      the nuclear decommissioning costs allocable to the  
13      taxpayer’s current or former interest in the nuclear  
14      powerplant to which the Fund relates. The limita-  
15      tion under the preceding sentence shall be deter-  
16      mined by taking into account a reasonable rate of  
17      inflation for the nuclear decommissioning costs and  
18      a reasonable after-tax rate of return on the assets  
19      of the Fund until such assets are anticipated to be  
20      expended.”.

21       (b) CLARIFICATION OF TREATMENT OF FUND  
22 TRANSFERS.—Subsection (e) of section 468A is amended  
23 by adding at the end the following new paragraph:

24           “(8) TREATMENT OF FUND TRANSFERS.—If, in  
25       connection with the transfer of the taxpayer’s inter-

1       est in a nuclear powerplant, the taxpayer transfers  
 2       the Fund with respect to such powerplant to the  
 3       transferee of such interest and the transferee elects  
 4       to continue the application of this section to such  
 5       Fund—

6               “(A) the transfer of such Fund shall not  
 7               cause such Fund to be disqualified from the ap-  
 8               plication of this section, and

9               “(B) no amount shall be treated as distrib-  
 10              uted from such Fund, or be includible in gross  
 11              income, by reason of such transfer.”.

12       (c) TREATMENT OF CERTAIN DECOMMISSIONING  
 13       COSTS.—

14              (1) IN GENERAL.—Section 468A is amended by  
 15       redesignating subsections (f) and (g) as subsections  
 16       (g) and (h), respectively, and by inserting after sub-  
 17       section (e) the following new subsection:

18       “(f) TRANSFERS INTO QUALIFIED FUNDS.—

19              “(1) IN GENERAL.—Notwithstanding subsection  
 20       (b), any taxpayer maintaining a Fund to which this  
 21       section applies with respect to a nuclear powerplant  
 22       may transfer into such Fund up to an amount equal  
 23       to the excess of the total nuclear decommissioning  
 24       costs with respect to such nuclear powerplant over  
 25       the portion of such costs taken into account in de-

1       termining the ruling amount in effect immediately  
2       before the transfer.

3               “(2) DEDUCTION FOR AMOUNTS TRANS-  
4       FERRED.—

5               “(A) IN GENERAL.—The deduction allowed  
6       by subsection (a) for any transfer permitted by  
7       this subsection shall be allowed ratably over the  
8       remaining estimated useful life (within the  
9       meaning of subsection (d)(2)(A)) of the nuclear  
10      powerplant beginning with the taxable year dur-  
11      ing which the transfer is made.

12              “(B) DENIAL OF DEDUCTION FOR PRE-  
13      VIOUSLY DEDUCTED AMOUNTS.—No deduction  
14      shall be allowed for any transfer under this sub-  
15      section of an amount for which a deduction was  
16      previously allowed or a corresponding amount  
17      was not included in gross income. For purposes  
18      of the preceding sentence, a ratable portion of  
19      each transfer shall be treated as being from  
20      previously deducted or excluded amounts to the  
21      extent thereof.

22              “(C) TRANSFERS OF QUALIFIED FUNDS.—  
23      If—



1                   “(i) any transfer permitted by this  
 2                   subsection is made to any Fund to which  
 3                   this section applies, and

4                   “(ii) such Fund is transferred there-  
 5                   after,

6                   any deduction under this subsection for taxable  
 7                   years ending after the date that such Fund is  
 8                   transferred shall be allowed to the transferee  
 9                   and not to the transferor. The preceding sen-  
 10                  tence shall not apply if the transferor is an or-  
 11                  ganization exempt from tax imposed by this  
 12                  chapter.

13                  “(D) SPECIAL RULES.—

14                  “(i) GAIN OR LOSS NOT RECOG-  
 15                  NIZED.—No gain or loss shall be recog-  
 16                  nized on any transfer permitted by this  
 17                  subsection.

18                  “(ii) TRANSFERS OF APPRECIATED  
 19                  PROPERTY.—If appreciated property is  
 20                  transferred in a transfer permitted by this  
 21                  subsection, the amount of the deduction  
 22                  shall be the adjusted basis of such prop-  
 23                  erty.

24                  “(3) NEW RULING AMOUNT REQUIRED.—Para-  
 25                  graph (1) shall not apply to any transfer unless the

1 taxpayer requests from the Secretary a new schedule  
2 of ruling amounts in connection with such transfer.

3 “(4) NO BASIS IN QUALIFIED FUNDS.—Not-  
4 withstanding any other provision of law, the tax-  
5 payer’s basis in any Fund to which this section ap-  
6 plies shall not be increased by reason of any transfer  
7 permitted by this subsection.”.

8 (2) NEW RULING AMOUNT TO TAKE INTO AC-  
9 COUNT TOTAL COSTS.—Subparagraph (A) of section  
10 468A(d)(2) is amended to read as follows:

11 “(A) fund the total nuclear decommis-  
12 sioning costs with respect to such powerplant  
13 over the estimated useful life of such power-  
14 plant, and”.

15 (d) DEDUCTION FOR NUCLEAR DECOMMISSIONING  
16 COSTS WHEN PAID.—Paragraph (2) of section 468A(c)  
17 is amended to read as follows:

18 “(2) DEDUCTION OF NUCLEAR DECOMMISS-  
19 SIONING COSTS.—In addition to any deduction under  
20 subsection (a), nuclear decommissioning costs paid  
21 or incurred by the taxpayer during any taxable year  
22 shall constitute ordinary and necessary expenses in  
23 carrying on a trade or business under section 162.”.

1 (e) EFFECTIVE DATE.—The amendments made by  
2 this section shall apply to taxable years beginning after  
3 December 31, 2001.

4 **SEC. 3211. TREATMENT OF CERTAIN INCOME OF COOPERA-**  
5 **TIVES.**

6 (a) INCOME FROM OPEN ACCESS AND NUCLEAR DE-  
7 COMMISSIONING TRANSACTIONS.—

8 (1) IN GENERAL.—Subparagraph (C) of section  
9 501(c)(12) is amended by striking “or” at the end  
10 of clause (i), by striking the period at the end of  
11 clause (ii) and inserting a comma, and by adding at  
12 the end the following new clauses:

13 “(iii) from any open access trans-  
14 action (other than income received or ac-  
15 crued directly or indirectly from a mem-  
16 ber), or

17 “(iv) from any nuclear decommis-  
18 sioning transaction.”.

19 (2) DEFINITIONS.—Paragraph (12) of section  
20 501(c) is amended by adding at the end the fol-  
21 lowing new subparagraph:

22 “(E) For purposes of subparagraph (C)—

23 “(i) The term ‘open access trans-  
24 action’ means any activity which would be  
25 a permitted open access activity (as de-

1           fined in section 141A(a)(2)) if the coopera-  
2           tive were a governmental unit.

3           “(ii) The term ‘nuclear decommis-  
4           sioning transaction’ means—

5                   “(I) any transfer into a trust,  
6                   fund, or instrument established to pay  
7                   any nuclear decommissioning costs if  
8                   the transfer is in connection with the  
9                   transfer of the cooperative’s interest  
10                  in a nuclear powerplant or nuclear  
11                  powerplant unit,

12                   “(II) any distribution from such  
13                  a trust, fund, or instrument, or

14                   “(III) any earnings from such a  
15                  trust, fund, or instrument.”.

16       (b) INCOME FROM LOAD LOSS TRANSACTIONS  
17       TREATED AS MEMBER INCOME.—Paragraph (12) of sec-  
18       tion 501(c) is amended by adding after subparagraph (E)  
19       the following new subparagraph:

20                   “(F)(i) In the case of a mutual or coopera-  
21                  tive electric company, income received or ac-  
22                  crued from a load loss transaction shall be  
23                  treated as an amount collected from members  
24                  for the sole purpose of meeting losses and ex-  
25                  penses.

1           “(ii) For purposes of clause (i), the term  
 2           ‘load loss transaction’ means any sale (whether  
 3           at wholesale or at retail) which would be a load  
 4           loss sale under rules similar to the rules of sec-  
 5           tion 141A(a)(3)(C).

6           “(iii) A company shall not fail to be treat-  
 7           ed as a mutual cooperative company for pur-  
 8           poses of this paragraph by reason of the treat-  
 9           ment under clause (i).

10           “(iv) A rule similar to the rule of this sub-  
 11           paragraph shall apply to an organization to  
 12           which section 1381 does not apply by reason of  
 13           section 1381(a)(2)(C).”.

14           (c) EXCEPTION FROM UNRELATED BUSINESS TAX-  
 15           ABLE INCOME.—Subsection (b) of section 512 (relating to  
 16           modifications) is amended by adding at the end the fol-  
 17           lowing new paragraph:

18           “(18) TREATMENT OF LOAD LOSS SALES OF  
 19           MUTUAL OR COOPERATIVE ELECTRIC COMPANIES.—  
 20           In the case of a mutual or cooperative electric com-  
 21           pany described in section 501(c)(12), there shall be  
 22           excluded income which is treated as member income  
 23           under subparagraph (F) thereof.”.

1 (d) EFFECTIVE DATE.—The amendments made by  
2 this section shall apply to taxable years beginning after  
3 the date of the enactment of this Act.

4 **SEC. 3212. REPEAL OF REQUIREMENT OF CERTAIN AP-**  
5 **PROVED TERMINALS TO OFFER DYED DIESEL**  
6 **FUEL AND KEROSENE FOR NONTAXABLE**  
7 **PURPOSES.**

8 Section 4101 (relating to certain approved terminals  
9 of registered persons required to offer dyed diesel fuel and  
10 kerosene for nontaxable purposes) is amended by striking  
11 subsection (e).

12 **SEC. 3213. ARBITRAGE RULES NOT TO APPLY TO PREPAY-**  
13 **MENTS FOR NATURAL GAS.**

14 (a) IN GENERAL.—Subsection (b) of section 148 (de-  
15 fining higher yielding investments) is amended by adding  
16 at the end the following new paragraph:

17 “(4) EXCEPTION FOR CERTAIN PREPAYMENTS  
18 TO ENSURE NATURAL GAS SUPPLY.—The term ‘in-  
19 vestment property’ shall not include any prepayment  
20 for the purpose of obtaining a supply of a natural  
21 gas—

22 “(A) at least 85 percent of which is to be  
23 used in the State in which the issuer is located,  
24 and

1           “(B) which is to be used in a business of  
2           one or more utilities each of which is owned and  
3           operated by a State or local government, any  
4           political subdivision or instrumentality thereof,  
5           or any governmental unit acting for or on be-  
6           half of such a utility.”.

7           (b) PRIVATE LOAN FINANCING TEST NOT TO APPLY  
8 TO PREPAYMENTS FOR NATURAL GAS.—Paragraph (2) of  
9 section 141(c) (providing exceptions to the private loan fi-  
10 nancing test) is amended by striking “or” at the end of  
11 subparagraph (A), by striking the period at the end of  
12 subparagraph (B) and inserting “, or”, and by adding at  
13 the end the following new subparagraph:

14           “(C) arises from a transaction described in  
15           section 148(b)(4).”.

16           (c) EFFECTIVE DATE.—The amendments made by  
17 this section shall apply to obligations issued after October  
18 22, 1986; except that section 148(b)(4)(A) of the Internal  
19 Revenue Code of 1986, as added by this section, shall  
20 apply only to obligations issued after the date of the enact-  
21 ment of this Act.

1           **TITLE III—PRODUCTION**

2   **SEC. 3301. OIL AND GAS FROM MARGINAL WELLS.**

3           (a) IN GENERAL.—Subpart D of part IV of sub-  
4 chapter A of chapter 1 (relating to business credits) is  
5 amended by adding at the end the following:

6   **“SEC. 45J. CREDIT FOR PRODUCING OIL AND GAS FROM**  
7                   **MARGINAL WELLS.**

8           “(a) GENERAL RULE.—For purposes of section 38,  
9 the marginal well production credit for any taxable year  
10 is an amount equal to the product of—

11                   “(1) the credit amount, and

12                   “(2) the qualified credit oil production and the  
13 qualified natural gas production which is attrib-  
14 utable to the taxpayer.

15           “(b) CREDIT AMOUNT.—For purposes of this  
16 section—

17                   “(1) IN GENERAL.—The credit amount is—

18                           “(A) \$3 per barrel of qualified crude oil  
19 production, and

20                           “(B) 50 cents per 1,000 cubic feet of  
21 qualified natural gas production.

22                   “(2) REDUCTION AS OIL AND GAS PRICES IN-  
23 CREASE.—

24                           “(A) IN GENERAL.—The \$3 and 50 cents  
25 amounts under paragraph (1) shall each be re-



1           duced (but not below zero) by an amount which  
2           bears the same ratio to such amount (deter-  
3           mined without regard to this paragraph) as—

4                   “(i) the excess (if any) of the applica-  
5                   ble reference price over \$15 (\$1.67 for  
6                   qualified natural gas production), bears to

7                   “(ii) \$3 (\$0.33 for qualified natural  
8                   gas production).

9           The applicable reference price for a taxable  
10          year is the reference price of the calendar year  
11          preceding the calendar year in which the tax-  
12          able year begins.

13               “(B) INFLATION ADJUSTMENT.—In the  
14               case of any taxable year beginning in a calendar  
15               year after 2001, each of the dollar amounts  
16               contained in subparagraph (A) shall be in-  
17               creased to an amount equal to such dollar  
18               amount multiplied by the inflation adjustment  
19               factor for such calendar year (determined under  
20               section 43(b)(3)(B) by substituting ‘2000’ for  
21               ‘1990’).

22               “(C) REFERENCE PRICE.—For purposes of  
23               this paragraph, the term ‘reference price’  
24               means, with respect to any calendar year—

1 “(i) in the case of qualified crude oil  
2 production, the reference price determined  
3 under section 29(d)(2)(C), and

4 “(ii) in the case of qualified natural  
5 gas production, the Secretary’s estimate of  
6 the annual average wellhead price per  
7 1,000 cubic feet for all domestic natural  
8 gas.

9 “(c) QUALIFIED CRUDE OIL AND NATURAL GAS  
10 PRODUCTION.—For purposes of this section—

11 “(1) IN GENERAL.—The terms ‘qualified crude  
12 oil production’ and ‘qualified natural gas production’  
13 mean domestic crude oil or natural gas which is pro-  
14 duced from a qualified marginal well.

15 “(2) LIMITATION ON AMOUNT OF PRODUCTION  
16 WHICH MAY QUALIFY.—

17 “(A) IN GENERAL.—Crude oil or natural  
18 gas produced during any taxable year from any  
19 well shall not be treated or qualified crude oil  
20 production or qualified natural gas production  
21 to the extent production from the well during  
22 the taxable year exceeds 1,095 barrels or barrel  
23 equivalents.

24 “(B) PROPORTIONATE REDUCTIONS.—

1                   “(i) SHORT TAXABLE YEARS.—In the  
2                   case of a short taxable year, the limitations  
3                   under this paragraph shall be proportion-  
4                   ately reduced to reflect the ratio which the  
5                   number of days in such taxable year bears  
6                   to 365.

7                   “(ii) WELLS NOT IN PRODUCTION EN-  
8                   TIRE YEAR.—In the case of a well which is  
9                   not capable of production during each day  
10                  of a taxable year, the limitations under  
11                  this paragraph applicable to the well shall  
12                  be proportionately reduced to reflect the  
13                  ratio which the number of days of produc-  
14                  tion bears to the total number of days in  
15                  the taxable year.

16               “(3) DEFINITIONS.—

17                   “(A) QUALIFIED MARGINAL WELL.—The  
18                  term ‘qualified marginal well’ means a domestic  
19                  well—

20                   “(i) the production from which during  
21                  the taxable year is treated as marginal  
22                  production under section 613A(c)(6), or

23                   “(ii) which, during the taxable year—

1                   “(I) has average daily production  
2                   of not more than 25 barrel equiva-  
3                   lents, and

4                   “(II) produces water at a rate  
5                   not less than 95 percent of total well  
6                   effluent.

7                   “(B) CRUDE OIL, ETC.—The terms ‘crude  
8                   oil’, ‘natural gas’, ‘domestic’, and ‘barrel’ have  
9                   the meanings given such terms by section  
10                  613A(e).

11                  “(C) BARREL EQUIVALENT.—The term  
12                  ‘barrel equivalent’ means, with respect to nat-  
13                  ural gas, a conversion ratio of 6,000 cubic  
14                  feet of natural gas to 1 barrel of crude oil.

15                  “(d) OTHER RULES.—

16                  “(1) PRODUCTION ATTRIBUTABLE TO THE TAX-  
17                  PAYER.—In the case of a qualified marginal well in  
18                  which there is more than one owner of operating in-  
19                  terests in the well and the crude oil or natural gas  
20                  production exceeds the limitation under subsection  
21                  (c)(2), qualifying crude oil production or qualifying  
22                  natural gas production attributable to the taxpayer  
23                  shall be determined on the basis of the ratio which  
24                  taxpayer’s revenue interest in the production bears

1 to the aggregate of the revenue interests of all oper-  
2 ating interest owners in the production.

3 “(2) OPERATING INTEREST REQUIRED.—Any  
4 credit under this section may be claimed only on  
5 production which is attributable to the holder of an  
6 operating interest.

7 “(3) PRODUCTION FROM NONCONVENTIONAL  
8 SOURCES EXCLUDED.—In the case of production  
9 from a qualified marginal well which is eligible for  
10 the credit allowed under section 29 for the taxable  
11 year, no credit shall be allowable under this section  
12 unless the taxpayer elects not to claim the credit  
13 under section 29 with respect to the well.

14 “(4) NONCOMPLIANCE WITH POLLUTION  
15 LAWS.—For purposes of subsection (c)(3)(A), a  
16 marginal well which is not in compliance with the  
17 applicable State and Federal pollution prevention,  
18 control, and permit requirements for any period of  
19 time shall not be considered to be a qualified mar-  
20 ginal well during such period.”.

21 (b) CREDIT TREATED AS BUSINESS CREDIT.—Sec-  
22 tion 38(b) is amended by striking “plus” at the end of  
23 paragraph (17), by striking the period at the end of para-  
24 graph (18) and inserting “, plus”, and by adding at the  
25 end the following:

1           “(19) the marginal oil and gas well production  
2           credit determined under section 45J(a).”.

3           (c) CARRYBACK.—Subsection (a) of section 39 (relat-  
4           ing to carryback and carryforward of unused credits gen-  
5           erally) is amended by adding at the end the following:

6           “(3) 10-YEAR CARRYBACK FOR MARGINAL OIL  
7           AND GAS WELL PRODUCTION CREDIT.—In the case  
8           of the marginal oil and gas well production credit—

9                   “(A) this section shall be applied sepa-  
10                  rately from the business credit (other than the  
11                  marginal oil and gas well production credit),

12                  “(B) paragraph (1) shall be applied by  
13                  substituting ‘10 taxable years’ for ‘1 taxable  
14                  years’ in subparagraph (A) thereof, and

15                  “(C) paragraph (2) shall be applied—

16                          “(i) by substituting ‘31 taxable years’  
17                          for ‘21 taxable years’ in subparagraph (A)  
18                          thereof, and

19                          “(ii) by substituting ‘30 taxable years’  
20                          for ‘20 taxable years’ in subparagraph (A)  
21                          thereof.”.

22           (d) COORDINATION WITH SECTION 29.—Section  
23           29(a) is amended by striking “There” and inserting “At  
24           the election of the taxpayer, there”.

1 (e) CLERICAL AMENDMENT.—The table of sections  
 2 for subpart D of part IV of subchapter A of chapter I  
 3 is amended by adding at the end the following:

“Sec. 45J. Credit for producing oil and gas from marginal wells.”.

4 (f) EFFECTIVE DATE.—The amendments made by  
 5 this section shall apply to production in taxable years be-  
 6 ginning after December 31, 2001.

7 **SEC. 3302. TEMPORARY SUSPENSION OF LIMITATION**  
 8 **BASED ON 65 PERCENT OF TAXABLE INCOME**  
 9 **AND EXTENSION OF SUSPENSION OF TAX-**  
 10 **ABLE INCOME LIMIT WITH RESPECT TO MAR-**  
 11 **GINAL PRODUCTION.**

12 (a) LIMITATION BASED ON 65 PERCENT OF TAX-  
 13 ABLE INCOME.—Subsection (d) of section 613A (relating  
 14 to limitation on percentage depletion in case of oil and  
 15 gas wells) is amended by adding at the end the following  
 16 new paragraph:

17 “(6) TEMPORARY SUSPENSION OF TAXABLE IN-  
 18 COME LIMIT.—Paragraph (1) shall not apply to tax-  
 19 able years beginning after December 31, 2001, and  
 20 before January 1, 2007, including with respect to  
 21 amounts carried under the second sentence of para-  
 22 graph (1) to such taxable years.”.

23 (b) EXTENSION OF SUSPENSION OF TAXABLE IN-  
 24 COME LIMIT WITH RESPECT TO MARGINAL PRODUC-  
 25 TION.—Subparagraph (H) of section 613A(c)(6) (relating

1 to temporary suspension of taxable income limit with re-  
2 spect to marginal production) is amended by striking  
3 “2002” and inserting “2007”.

4 (c) EFFECTIVE DATE.—The amendment made by  
5 subsection (a) shall apply to taxable years beginning after  
6 December 31, 2001.

7 **SEC. 3303. DEDUCTION FOR DELAY RENTAL PAYMENTS.**

8 (a) IN GENERAL.—Section 263 (relating to capital  
9 expenditures) is amended by adding after subsection (i)  
10 the following:

11 “(j) DELAY RENTAL PAYMENTS FOR DOMESTIC OIL  
12 AND GAS WELLS.—

13 “(1) IN GENERAL.—Notwithstanding subsection  
14 (a), a taxpayer may elect to treat delay rental pay-  
15 ments incurred in connection with the development  
16 of oil or gas within the United States (as defined in  
17 section 638) as payments which are not chargeable  
18 to capital account. Any payments so treated shall be  
19 allowed as a deduction in the taxable year in which  
20 paid or incurred.

21 “(2) DELAY RENTAL PAYMENTS.—For purposes  
22 of paragraph (1), the term ‘delay rental payment’  
23 means an amount paid for the privilege of deferring  
24 development of an oil or gas well under an oil or gas  
25 lease.”.



1 (b) CONFORMING AMENDMENT.—Section 263A(c)(3)  
 2 is amended by inserting “263(j),” after “263(i),”.

3 (c) EFFECTIVE DATE.—The amendments made by  
 4 this section shall apply to amounts paid or incurred in tax-  
 5 able years beginning after December 31, 2001.

6 **SEC. 3304. ELECTION TO EXPENSE GEOLOGICAL AND GEO-**  
 7 **PHYSICAL EXPENDITURES.**

8 (a) IN GENERAL.—Section 263 (relating to capital  
 9 expenditures) is amended by adding after subsection (j)  
 10 the following:

11 “(k) GEOLOGICAL AND GEOPHYSICAL EXPENDI-  
 12 TURES FOR DOMESTIC OIL AND GAS WELLS.—Notwith-  
 13 standing subsection (a), a taxpayer may elect to treat geo-  
 14 logical and geophysical expenses incurred in connection  
 15 with the exploration for, or development of, oil or gas with-  
 16 in the United States (as defined in section 638) as ex-  
 17 penses which are not chargeable to capital account. Any  
 18 expenses so treated shall be allowed as a deduction in the  
 19 taxable year in which paid or incurred.”.

20 (b) CONFORMING AMENDMENT.—Section  
 21 263A(c)(3), as amended by section 3303(b), is amended  
 22 by inserting “263(k),” after “263(j),”.

23 (c) EFFECTIVE DATE.—The amendments made by  
 24 this section shall apply to costs paid or incurred in taxable  
 25 years beginning after December 31, 2001.

1 **SEC. 3305. FIVE-YEAR NET OPERATING LOSS CARRYBACK**  
 2 **FOR LOSSES ATTRIBUTABLE TO OPERATING**  
 3 **MINERAL INTERESTS OF OIL AND GAS PRO-**  
 4 **DUCERS.**

5 (a) IN GENERAL.—Paragraph (1) of section 172(b)  
 6 (relating to years to which loss may be carried) is amended  
 7 by adding at the end the following new subparagraph:

8 “(H) LOSSES ON OPERATING MINERAL IN-  
 9 TERESTS OF OIL AND GAS PRODUCERS.—In the  
 10 case of a taxpayer which has an eligible oil and  
 11 gas loss (as defined in subsection (j)) for a tax-  
 12 able year, such eligible oil and gas loss shall be  
 13 a net operating loss carryback to each of the 5  
 14 taxable years preceding the taxable year of such  
 15 loss.”.

16 (b) ELIGIBLE OIL AND GAS LOSS.—Section 172 is  
 17 amended by redesignating subsection (j) as subsection (k)  
 18 and by inserting after subsection (i) the following new sub-  
 19 section:

20 “(j) ELIGIBLE OIL AND GAS LOSS.—For purposes of  
 21 this section—

22 “(1) IN GENERAL.—The term ‘eligible oil and  
 23 gas loss’ means the lesser of—

24 “(A) the amount which would be the net  
 25 operating loss for the taxable year if only in-  
 26 come and deductions attributable to operating

1 mineral interests (as defined in section 614(d))  
 2 in oil and gas wells are taken into account, or  
 3 “(B) the amount of the net operating loss  
 4 for such taxable year.

5 “(2) COORDINATION WITH SUBSECTION  
 6 (b)(2).—For purposes of applying subsection (b)(2),  
 7 an eligible oil and gas loss for any taxable year shall  
 8 be treated in a manner similar to the manner in  
 9 which a specified liability loss is treated.

10 “(3) ELECTION.—Any taxpayer entitled to a 5-  
 11 year carryback under subsection (b)(1)(H) from any  
 12 loss year may elect to have the carryback period  
 13 with respect to such loss year determined without re-  
 14 gard to subsection (b)(1)(H).”.

15 (c) EFFECTIVE DATE.—The amendments made by  
 16 this section shall apply to net operating losses for taxable  
 17 years beginning after December 31, 2001.

18 **SEC. 3306. EXTENSION AND MODIFICATION OF CREDIT FOR**  
 19 **PRODUCING FUEL FROM A NONCONVEN-**  
 20 **TIONAL SOURCE.**

21 (a) IN GENERAL.—Section 29 is amended by adding  
 22 at the end the following new subsection:

23 “(h) EXTENSION FOR OTHER FACILITIES.—

24 “(1) EXTENSION FOR OIL AND CERTAIN GAS.—

25 In the case of a well for producing qualified fuels de-

scribed in subparagraph (A) or (B)(i) of subsection  
(c)(1)—

“(A) APPLICATION OF CREDIT FOR NEW  
WELLS.—Notwithstanding subsection (f), this  
section shall apply with respect to such fuels—

“(i) which are produced from a well  
drilled after the date of the enactment of  
this subsection and before January 1,  
2007, and

“(ii) which are sold not later than the  
close of the 4-year period beginning on the  
date that such well is drilled, or, if earlier,  
January 1, 2010.

“(B) EXTENSION OF CREDIT FOR OLD  
WELLS.—Subsection (f)(2) shall be applied by  
substituting ‘2007’ for ‘2003’ with respect to  
wells described in subsection (f)(1)(A) with re-  
spect to such fuels.

“(2) EXTENSION FOR FACILITIES PRODUCING  
QUALIFIED FUEL FROM LANDFILL GAS.—

“(A) IN GENERAL.—In the case of a facil-  
ity for producing qualified fuel from landfill gas  
which was placed in service after June 30,  
1998, and before January 1, 2007, this section  
shall apply to fuel produced at such facility dur-

1 ing the 5-year period beginning on the later  
2 of—

3 “(i) the date such facility was placed  
4 in service, or

5 “(ii) the date of the enactment of this  
6 subsection.

7 “(B) REDUCTION OF CREDIT FOR CERTAIN  
8 LANDFILL FACILITIES.—In the case of a facility  
9 to which paragraph (1) applies and which is  
10 subject to the 1996 New Source Performance  
11 Standards/Emmissions Guidelines of the Envi-  
12 ronmental Protection Agency, subsection (a)(1)  
13 shall be applied by substituting ‘\$2’ for ‘\$3’.

14 “(3) SPECIAL RULES.—In determining the  
15 amount of credit allowable under this section solely  
16 by reason of this subsection—

17 “(A) DAILY LIMIT.—The amount of quali-  
18 fied fuels sold during any taxable year which  
19 may be taken into account by reason of this  
20 subsection with respect to any project shall not  
21 exceed an average barrel-of-oil equivalent of  
22 200,000 cubic feet of natural gas per day. Days  
23 before the date the project is placed in service  
24 shall not be taken into account in determining  
25 such average.

1                   “(B) EXTENSION PERIOD TO COMMENCE  
 2                   WITH UNADJUSTED CREDIT AMOUNT.—In the  
 3                   case of fuels sold during 2001 and 2002, the  
 4                   dollar amount applicable under subsection  
 5                   (a)(1) shall be \$3 (without regard to subsection  
 6                   (b)(2)). In the case of fuels sold after 2002,  
 7                   subparagraph (B) of subsection (d)(2) shall be  
 8                   applied by substituting ‘2002’ for ‘1979’.”.

9                   (b) EFFECTIVE DATE.—The amendment made by  
 10                  this section shall apply to fuel sold after the date of the  
 11                  enactment of this Act.

12   **SEC. 3307. BUSINESS RELATED ENERGY CREDITS ALLOWED**  
 13                   **AGAINST REGULAR AND MINIMUM TAX.**

14                  (a) IN GENERAL.—Subsection (c) of section 38 (re-  
 15                  lating to limitation based on amount of tax) is amended  
 16                  by redesignating paragraph (3) as paragraph (4) and by  
 17                  inserting after paragraph (2) the following new paragraph:

18                   “(3) SPECIAL RULES FOR SPECIFIED ENERGY  
 19                   CREDITS.—

20                   “(A) IN GENERAL.—In the case of speci-  
 21                   fied energy credits—

22                   “(i) this section and section 39 shall  
 23                   be applied separately with respect to such  
 24                   credits, and

1 “(ii) in applying paragraph (1) to  
2 such credits—

3 “(I) the tentative minimum tax  
4 shall be treated as being zero, and

5 “(II) the limitation under para-  
6 graph (1) (as modified by subclause  
7 (I)) shall be reduced by the credit al-  
8 lowed under subsection (a) for the  
9 taxable year (other than the specified  
10 energy credits).

11 “(B) SPECIFIED ENERGY CREDITS.—For  
12 purposes of this subsection, the term ‘specified  
13 energy credits’ means the credits determined  
14 under sections 45G, 45H, 45I, 45J, and 45K.”.

15 (b) CONFORMING AMENDMENT.—Subclause (II) of  
16 section 38(c)(2)(A)(ii) is amended by inserting “or the  
17 specified energy credits” after “employment credit”.

18 (c) EFFECTIVE DATE.—The amendments made by  
19 this section shall apply to taxable years ending after the  
20 date of the enactment of this Act.

21 **SEC. 3308. TEMPORARY REPEAL OF ALTERNATIVE MIN-**  
22 **IMUM TAX PREFERENCE FOR INTANGIBLE**  
23 **DRILLING COSTS.**

24 (a) IN GENERAL.—Clause (ii) of section 57(a)(2)(E)  
25 is amended by adding at the end the following new sen-

1 tence: “The preceding sentence shall not apply to taxable  
 2 years beginning after December 31, 2001, and before Jan-  
 3 uary 1, 2005.”.

4 (b) EFFECTIVE DATES.—The amendment made by  
 5 this section shall apply to taxable years beginning after  
 6 December 31, 2001.

7 **SEC. 3309. ALLOWANCE OF ENHANCED RECOVERY CREDIT**  
 8 **AGAINST THE ALTERNATIVE MINIMUM TAX.**

9 (a) IN GENERAL.—Subparagraph (B) of section  
 10 38(c)(3), as amended by section 3307, is amended by add-  
 11 ing at the end the following new sentence: “For taxable  
 12 years beginning before January 1, 2005, such term in-  
 13 cludes the credit determined under section 43.”.

14 (b) EFFECTIVE DATE.—The amendment made by  
 15 this section shall apply to taxable years beginning after  
 16 December 31, 2001.

17 **SEC. 3310. EXTENSION OF CERTAIN BENEFITS FOR EN-**  
 18 **ERGY-RELATED BUSINESSES ON INDIAN RES-**  
 19 **ERVATIONS.**

20 (a) DEPRECIATION FOR PROPERTY ON INDIAN RES-  
 21 ERVATIONS.—Paragraph (8) of section 168(j) (relating to  
 22 termination) is amended by adding at the end the fol-  
 23 lowing new sentence: “The preceding sentence shall be ap-  
 24 plied by substituting ‘December 31, 2006’ for ‘December



1 31, 2003’ in the case of property placed in service as part  
 2 of a facility for—

3 “(A) the generation or transmission of  
 4 electricity (including from any qualified energy  
 5 resource, as defined in section 45(c)),

6 “(B) an oil or gas well,

7 “(C) the transmission or refining of oil or  
 8 gas, or

9 “(D) the production of any qualified fuel  
 10 (as defined in section 29(c)).”.

11 (b) EMPLOYMENT OF INDIANS.—Subsection (f) of  
 12 section 45A (relating to termination) is amended by add-  
 13 ing at the end the following new sentence: “The preceding  
 14 sentence shall be applied by substituting ‘December 31,  
 15 2006’ for ‘December 31, 2003’ in the case of wages paid  
 16 for services performed at a facility described in section  
 17 168(j)(8).”.

## 18 **DIVISION D**

### 19 **SEC. 4101. CAPACITY BUILDING FOR ENERGY-EFFICIENT,** 20 **AFFORDABLE HOUSING.**

21 Section 4(b) of the HUD Demonstration Act of 1993  
 22 (42 U.S.C. 9816 note) is amended—

23 (1) in paragraph (1), by inserting before the  
 24 semicolon at the end the following: “, including ca-  
 25 pabilities regarding the provision of energy efficient,

1 affordable housing and residential energy conserva-  
2 tion measures”; and

3 (2) in paragraph (2), by inserting before the  
4 semicolon the following: “, including such activities  
5 relating to the provision of energy efficient, afford-  
6 able housing and residential energy conservation  
7 measures that benefit low-income families”.

8 **SEC. 4102. INCREASE OF CDBG PUBLIC SERVICES CAP FOR**  
9 **ENERGY CONSERVATION AND EFFICIENCY**  
10 **ACTIVITIES.**

11 Section 105(a)(8) of the Housing and Community  
12 Development Act of 1974 (42 U.S.C. 5305(a)(8)) is  
13 amended—

14 (1) by inserting “or efficiency” after “energy  
15 conservation”;

16 (2) by striking “, and except that” and insert-  
17 ing “; except that”; and

18 (3) by inserting before the period at the end the  
19 following: “; and except that each percentage limita-  
20 tion under this paragraph on the amount of assist-  
21 ance provided under this title that may be used for  
22 the provision of public services is hereby increased  
23 by 10 percent, but such percentage increase may be  
24 used only for the provision of public services con-  
25 cerning energy conservation or efficiency”.

1 **SEC. 4103. FHA MORTGAGE INSURANCE INCENTIVES FOR**  
2 **ENERGY EFFICIENT HOUSING.**

3 (a) SINGLE FAMILY HOUSING MORTGAGE INSUR-  
4 ANCE.—Section 203(b)(2) of the National Housing Act  
5 (12 U.S.C. 1709(b)(2)) is amended, in the first undesig-  
6 nated paragraph beginning after subparagraph (B)(iii)  
7 (relating to solar energy systems)—

8 (1) by inserting “or paragraph (10)”; and

9 (2) by striking “20 percent” and inserting “30  
10 percent”.

11 (b) MULTIFAMILY HOUSING MORTGAGE INSUR-  
12 ANCE.—Section 207(c) of the National Housing Act (12  
13 U.S.C. 1713(c)) is amended, in the second undesignated  
14 paragraph beginning after paragraph (3) (relating to solar  
15 energy systems and residential energy conservation meas-  
16 ures), by striking “20 percent” and inserting “30 per-  
17 cent”.

18 (c) COOPERATIVE HOUSING MORTGAGE INSUR-  
19 ANCE.—Section 213(p) of the National Housing Act (12  
20 U.S.C. 1715e(p)) is amended by striking “20 per centum”  
21 and inserting “30 percent”.

22 (d) REHABILITATION AND NEIGHBORHOOD CON-  
23 SERVATION HOUSING MORTGAGE INSURANCE.—Section  
24 220(d)(3)(B)(iii) of the National Housing Act (12 U.S.C.  
25 1715k(d)(3)(B)(iii)) is amended by striking “20 per cen-  
26 tum” and inserting “30 percent”.

1       (e) LOW-INCOME MULTIFAMILY HOUSING MORT-  
 2 GAGE INSURANCE.—Section 221(k) of the National Hous-  
 3 ing Act (12 U.S.C. 1715l(k)) is amended by striking “20  
 4 per centum” and inserting “30 percent”.

5       (f) ELDERLY HOUSING MORTGAGE INSURANCE.—  
 6 The proviso at the end of section 213(c)(2) of the National  
 7 Housing Act (12 U.S.C. 1715v(c)(2)) is amended by strik-  
 8 ing “20 per centum” and inserting “30 percent”.

9       (g) CONDOMINIUM HOUSING MORTGAGE INSUR-  
 10 ANCE.—Section 234(j) of the National Housing Act (12  
 11 U.S.C. 1715y(j)) is amended by striking “20 per centum”  
 12 and inserting “30 percent”.

13 **SEC. 4104. PUBLIC HOUSING CAPITAL FUND.**

14       Section 9(d)(1) of the United States Housing Act of  
 15 1937 (42 U.S.C. 1437g(d)(1)) is amended—

16           (1) in subparagraph (I), by striking “and” at  
 17 the end;

18           (2) in subparagraph (K), by striking the period  
 19 at the end and inserting “; and”; and

20           (3) by adding at the end the following new sub-  
 21 paragraph:

22                   “(L) improvement of energy and water-use  
 23 efficiency by installing fixtures and fittings that  
 24 conform to the American Society of Mechanical  
 25 Engineers/American National Standards Insti-

1           tute standards A112.19.2-1998 and A112.18.1-  
2           2000, or any revision thereto, applicable at the  
3           time of installation, and by increasing energy  
4           efficiency and water conservation by such other  
5           means as the Secretary determines are appro-  
6           priate.”.

7   **SEC. 4105. GRANTS FOR ENERGY-CONSERVING IMPROVE-**  
8                   **MENTS FOR ASSISTED HOUSING.**

9           Section 251(b)(1) of the National Energy Conserva-  
10          tion Policy Act (42 U.S.C. 8231(1)) is amended—

11               (1) by striking “financed with loans” and in-  
12               serting “assisted”;

13               (2) by inserting after “1959,” the following:  
14               “which are eligible multifamily housing projects (as  
15               such term is defined in section 512 of the Multi-  
16               family Assisted Housing Reform and Affordability  
17               Act of 1997 (42 U.S.C. 1437f note)) and are subject  
18               to a mortgage restructuring and rental assistance  
19               sufficiency plans under such Act,”; and

20               (3) by inserting after the period at the end of  
21               the first sentence the following new sentence: “Such  
22               improvements may also include the installation of  
23               energy and water conserving fixtures and fittings  
24               that conform to the American Society of Mechanical  
25               Engineers/American National Standards Institute

1 standards A112.19.2-1998 and A112.18.1-2000, or  
 2 any revision thereto, applicable at the time of instal-  
 3 lation.”.

4 **SEC. 4106. NORTH AMERICAN DEVELOPMENT BANK.**

5 Part 2 of subtitle D of title V of the North American  
 6 Free Trade Agreement Implementation Act (22 U.S.C.  
 7 290m–290m-3) is amended by adding at the end the fol-  
 8 lowing:

9 **“SEC. 545. SUPPORT FOR CERTAIN ENERGY POLICIES.**

10 “Consistent with the focus of the Bank’s Charter on  
 11 environmental infrastructure projects, the Board members  
 12 representing the United States should use their voice and  
 13 vote to encourage the Bank to finance projects related to  
 14 clean and efficient energy, including energy conservation,  
 15 that prevent, control, or reduce environmental pollutants  
 16 or contaminants.”.

17 **DIVISION E**

18 **SEC. 5000. SHORT TITLE.**

19 This division may be cited as the “Clean Coal Power  
 20 Initiative Act of 2001”.

21 **SEC. 5001. 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 the enactment  
8           of this Act, accounts for more than 1/2 of all elec-  
9           tricity generated in the United States, is the most  
10          abundant fossil energy resource of the United  
11          States;

12          (4) coal comprises more than 85 percent of all  
13          fossil resources in the United States and exists in  
14          quantities sufficient to supply the United States for  
15          250 years at current usage rates;

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

22          (6) continuous improvement in efficiency and  
23          environmental performance from electricity gener-  
24          ating facilities would allow continued use of coal and

1 preserve less abundant energy resources for other  
2 energy uses;

3 (7) new ways to convert coal into electricity can  
4 effectively eliminate health-threatening emissions  
5 and improve efficiency by as much as 50 percent,  
6 but initial deployment of new coal generation meth-  
7 ods and equipment entails significant risk that gen-  
8 erators may be unable to accept in a newly competi-  
9 tive electricity market; and

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

15 **SEC. 5002. DEFINITIONS.**

16 In this division:

17 (1) **COST AND PERFORMANCE GOALS.**—The  
18 term “cost and performance goals” means the cost  
19 and performance goals established under section  
20 5004.

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

23 **SEC. 5003. CLEAN COAL POWER INITIATIVE.**

24 (a) **IN GENERAL.**—The Secretary shall carry out a  
25 program under—



1 (1) this division;

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

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

7 (4) title XIII of the Energy Policy Act of 1992  
8 (42 U.S.C. 13331 et seq.),

9 to achieve cost and performance goals established by the  
10 Secretary under section 5004.

11 **SEC. 5004. COST AND PERFORMANCE GOALS.**

12 (a) REVIEW AND ASSESSMENT.—The Secretary shall  
13 perform an assessment that establishes measurable cost  
14 and performance goals for 2005, 2010, 2015, and 2020  
15 for the programs authorized by this division. Such assess-  
16 ment shall be based on the latest scientific, economic, and  
17 technical knowledge.

18 (b) CONSULTATION.—In establishing the cost and  
19 performance goals, the Secretary shall consult with rep-  
20 resentatives of—

21 (1) the United States coal industry;

22 (2) State coal development agencies;

23 (3) the electric utility industry;

24 (4) railroads and other transportation indus-  
25 tries;

1           (5) manufacturers of advanced coal-based  
2 equipment;

3           (6) institutions of higher learning, national lab-  
4 oratories, and professional and technical societies;

5           (7) organizations representing workers;

6           (8) organizations formed to—

7                 (A) promote the use of coal;

8                 (B) further the goals of environmental pro-  
9 tection; and

10                (C) promote the production and generation  
11 of coal-based power from advanced facilities;  
12 and

13           (9) other appropriate Federal and State agen-  
14 cies.

15       (c) TIMING.—The Secretary shall—

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

19           (2) not later than 180 days after the date of  
20 the enactment of this Act, after taking into consider-  
21 ation any public comments received, submit to the  
22 Committee on Energy and Commerce and the Com-  
23 mittee on Science of the House of Representatives,  
24 and to the Senate, the final cost and performance  
25 goals.

1 **SEC. 5005. AUTHORIZATION OF APPROPRIATIONS.**

2 (a) CLEAN COAL POWER INITIATIVE.—Except as  
3 provided in subsection (b), there are authorized to be ap-  
4 propriated to the Secretary to carry out the Clean Coal  
5 Power Initiative under section 5003 \$200,000,000 for  
6 each of the fiscal years 2002 through 2011, to remain  
7 available until expended.

8 (b) LIMIT ON USE OF FUNDS.—Notwithstanding sub-  
9 section (a), no funds may be used to carry out the activi-  
10 ties authorized by this Act after September 30, 2002, un-  
11 less the Secretary has transmitted to the Committee on  
12 Energy and Commerce and the Committee on Science of  
13 the House of Representatives, and to the Senate, the re-  
14 port required by this subsection and 1 month has elapsed  
15 since that transmission. The report shall include, with re-  
16 spect to subsection (a), a 10-year plan containing—

17 (1) a detailed assessment of whether the aggre-  
18 gate funding levels provided under subsection (a) are  
19 the appropriate funding levels for that program;

20 (2) a detailed description of how proposals will  
21 be solicited and evaluated, including a list of all ac-  
22 tivities expected to be undertaken;

23 (3) a detailed list of technical milestones for  
24 each coal and related technology that will be pur-  
25 sued;

1           (4) recommendations for a mechanism for  
2       recoupment of Federal funding for successful com-  
3       mercial projects; and

4           (5) a detailed description of how the program  
5       will avoid problems enumerated in General Account-  
6       ing Office reports on the Clean Coal Technology  
7       Program, including problems that have resulted in  
8       unspent funds and projects that failed either finan-  
9       cially or scientifically.

10       (c) **APPLICABILITY.**—Subsection (b) shall not apply  
11   to any project begun before September 30, 2002.

12   **SEC. 5006. PROJECT CRITERIA.**

13       (a) **IN GENERAL.**—The Secretary shall not provide  
14   funding under this division for any project that does not  
15   advance efficiency, environmental performance, and cost  
16   competitiveness well beyond the level of technologies that  
17   are in operation or have been demonstrated as of the date  
18   of the enactment of this Act.

19       (b) **TECHNICAL CRITERIA FOR CLEAN COAL POWER**  
20   **INITIATIVE.**—

21           (1) **GASIFICATION.**—(A) In allocating the funds  
22       authorized under section 5005(a), the Secretary  
23       shall ensure that at least 80 percent of the funds are  
24       used only for projects on coal-based gasification  
25       technologies, including gasification combined cycle,

1 gasification fuel cells, gasification coproduction and  
2 hybrid gasification/combustion.

3 (B) The Secretary shall set technical milestones  
4 specifying emissions levels that coal gasification  
5 projects must be designed to and reasonably ex-  
6 pected to achieve. The milestones shall get more re-  
7 strictive through the life of the program. The mile-  
8 stones shall be designed to achieve by 2020 coal gas-  
9 ification projects able—

10 (i) to remove 99 percent of sulfur dioxide;

11 (ii) to emit no more than .05 lbs of NO<sub>x</sub>  
12 per million BTU;

13 (iii) to achieve substantial reductions in  
14 mercury emissions; and

15 (iv) to achieve a thermal efficiency of 60  
16 percent (higher heating value).

17 (2) OTHER PROJECTS.—For projects not de-  
18 scribed in paragraph (1), the Secretary shall set  
19 technical milestones specifying emissions levels that  
20 the projects must be designed to and reasonably ex-  
21 pected to achieve. The milestones shall get more re-  
22 strictive through the life of the program. The mile-  
23 stones shall be designed to achieve by 2010 projects  
24 able—

25 (A) to remove 97 percent of sulfur dioxide;

1 (B) to emit no more than .08 lbs of NOx  
2 per million BTU;

3 (C) to achieve substantial reductions in  
4 mercury emissions; and

5 (D) to achieve a thermal efficiency of 45  
6 percent (higher heating value).

7 (c) FINANCIAL CRITERIA.—The Secretary shall not  
8 provide a funding award under this division unless the re-  
9 cipient has documented to the satisfaction of the Secretary  
10 that—

11 (1) the award recipient is financially viable  
12 without the receipt of additional Federal funding;

13 (2) the recipient will provide sufficient informa-  
14 tion to the Secretary for the Secretary to ensure  
15 that the award funds are spent efficiently and effec-  
16 tively; and

17 (3) a market exists for the technology being  
18 demonstrated or applied, as evidenced by statements  
19 of interest in writing from potential purchasers of  
20 the technology.

21 (d) FINANCIAL ASSISTANCE.—The Secretary shall  
22 provide financial assistance to projects that meet the re-  
23 quirements of subsections (a), (b), and (c) and are likely  
24 to—

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

3           (2) improve the competitiveness of coal among  
4           various forms of energy in order to maintain a diver-  
5           sity of fuel choices in the United States to meet elec-  
6           tricity generation requirements; and

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

11          (e) FEDERAL SHARE.—The Federal share of the cost  
12          of a coal or related technology project funded by the Sec-  
13          retary shall not exceed 50 percent.

14          (f) APPLICABILITY.—Neither the use of any par-  
15          ticular technology, nor the achievement of any emission  
16          reduction, by any facility receiving assistance under this  
17          title shall be taken into account for purposes of making  
18          any determination under the Clean Air Act in applying  
19          the provisions of that Act to a facility not receiving assist-  
20          ance under this title, including any determination con-  
21          cerning new source performance standards, lowest achiev-  
22          able emission rate, best available control technology, or  
23          any other standard, requirement, or limitation.

1 **SEC. 5007. STUDY.**

2 (a) IN GENERAL.—Not later than 1 year after the  
3 date of the enactment of this Act, and once every 2 years  
4 thereafter through 2016, the Secretary, in cooperation  
5 with other appropriate Federal agencies, shall transmit to  
6 the Committee on Energy and Commerce and the Com-  
7 mittee on Science of the House of Representatives, and  
8 to the Senate, a report containing the results of a study  
9 to—

10 (1) identify efforts (and the costs and periods  
11 of time associated with those efforts) that, by them-  
12 selves or in combination with other efforts, may be  
13 capable of achieving the cost and performance goals;

14 (2) develop recommendations for the Depart-  
15 ment of Energy to promote the efforts identified  
16 under paragraph (1); and

17 (3) develop recommendations for additional au-  
18 thorities required to achieve the cost and perform-  
19 ance goals.

20 (b) EXPERT ADVICE.—In carrying out this section,  
21 the Secretary shall give due weight to the expert advice  
22 of representatives of the entities described in section  
23 5004(b).

24 **SEC. 5008. CLEAN COAL CENTERS OF EXCELLENCE.**

25 As part of the program authorized in section 5003,  
26 the Secretary shall award competitive, merit-based grants



1 to universities for the establishment of Centers of Excel-  
2 lence for Energy Systems of the Future. The Secretary  
3 shall provide grants to universities that can show the  
4 greatest potential for advancing new clean coal tech-  
5 nologies.

## 6 **DIVISION F**

### 7 **SEC. 6001. SHORT TITLE.**

8 This division may be cited as the “Energy Security  
9 Act”.

## 10 **TITLE I—GENERAL PROTEC-** 11 **TIONS FOR ENERGY SUPPLY** 12 **AND SECURITY**

### 13 **SEC. 6101. STUDY OF EXISTING RIGHTS-OF-WAY ON FED-** 14 **ERAL LANDS TO DETERMINE CAPABILITY TO** 15 **SUPPORT NEW PIPELINES OR OTHER TRANS-** 16 **MISSION FACILITIES.**

17 (a) IN GENERAL.—Within 1 year after the date of  
18 the enactment of this Act, the head of each Federal agency  
19 that has authorized a right-of-way across Federal lands  
20 for transportation of energy supplies or transmission of  
21 electricity shall review each such right-of-way and submit  
22 a report to the Secretary of Energy and the Chairman  
23 of the Federal Energy Regulatory Commission  
24 regarding—

1           (1) whether the right-of-way can be used to  
2           support new or additional capacity; and

3           (2) what modifications or other changes, if any,  
4           would be necessary to accommodate such additional  
5           capacity.

6           (b) CONSULTATIONS AND CONSIDERATIONS.—In per-  
7           forming the review, the head of each agency shall—

8           (1) consult with agencies of State, tribal, or  
9           local units of government as appropriate; and

10          (2) consider whether safety or other concerns  
11          related to current uses might preclude the avail-  
12          ability of a right-of-way for additional or new trans-  
13          portation or transmission facilities, and set forth  
14          those considerations in the report.

15 **SEC. 6102. INVENTORY OF ENERGY PRODUCTION POTEN-**  
16 **TIAL OF ALL FEDERAL PUBLIC LANDS.**

17          (a) INVENTORY REQUIREMENT.—The Secretary of  
18          the Interior, in consultation with the Secretary of Agri-  
19          culture and the Secretary of Energy, shall conduct an in-  
20          ventory of the energy production potential of all Federal  
21          public lands other than national park lands and lands in  
22          any wilderness area, with respect to wind, solar, coal, and  
23          geothermal power production.

24          (b) LIMITATIONS.—

1           (1) IN GENERAL.—The Secretary shall not in-  
2           clude in the inventory under this section the matters  
3           to be identified in the inventory under section 604  
4           of the Energy Act of 2000 (43 U.S.C. 6217).

5           (2) WIND AND SOLAR POWER.—The inventory  
6           under this section—

7                   (A) with respect to wind power production  
8                   shall be limited to sites having a mean average  
9                   wind speed—

10                          (i) exceeding 12.5 miles per hour at a  
11                          height of 33 feet; and

12                          (ii) exceeding 15.7 miles per hour at  
13                          a height of 164 feet; and

14                   (B) with respect to solar power production  
15                   shall be limited to areas rated as receiving 450  
16                   watts per square meter or greater.

17           (c) EXAMINATION OF RESTRICTIONS AND IMPEDI-  
18           MENTS.—The inventory shall identify the extent and na-  
19           ture of any restrictions or impediments to the development  
20           of such energy production potential.

21           (d) GEOTHERMAL POWER.—The inventory shall in-  
22           clude an update of the 1978 Assessment of Geothermal  
23           Resources by the United States Geological Survey.

24           (e) COMPLETION AND UPDATING.—The Secretary—

1           (1) shall complete the inventory by not later  
2           than 2 years after the date of the enactment of this  
3           Act; and

4           (2) shall update the inventory regularly there-  
5           after.

6           (f) REPORTS.—The Secretary shall submit to the  
7           Committee on Resources of the House of Representatives  
8           and to the Committee on Energy and Natural Resources  
9           of the Senate and make publicly available—

10           (1) a report containing the inventory under this  
11           section, by not later than 2 years after the effective  
12           date of this section; and

13           (2) each update of such inventory.

14   **SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BAR-**  
15                   **RIERS TO EMERGING ENERGY TECHNOLOGY.**

16           (a) IN GENERAL.—Each Federal agency shall carry  
17           out a review of its regulations and standards to determine  
18           those that act as a barrier to market entry for emerging  
19           energy-efficient technologies, including fuel cells, combined  
20           heat and power, and distributed generation (including  
21           small-scale renewable energy).

22           (b) REPORT TO CONGRESS.—No later than 18  
23           months after date of the enactment of this Act, each agen-  
24           cy shall provide a report to the Congress and the President  
25           detailing all regulatory barriers to emerging energy-effi-

1 cient technologies, along with actions the agency intends  
2 to take, or has taken, to remove such barriers.

3 (c) PERIODIC REVIEW.—Each agency shall subse-  
4 quently review its regulations and standards in this man-  
5 ner no less frequently than every 5 years, and report their  
6 findings to the Congress and the President. Such reviews  
7 shall include a detailed analysis of all agency actions taken  
8 to remove existing barriers to emerging energy tech-  
9 nologies.

10 **SEC. 6104. INTERAGENCY AGREEMENT ON ENVIRON-**  
11 **MENTAL REVIEW OF INTERSTATE NATURAL**  
12 **GAS PIPELINE PROJECTS.**

13 (a) IN GENERAL.—The Secretary of Energy, in co-  
14 ordination with the Federal Energy Regulatory Commis-  
15 sion, shall establish an administrative interagency task  
16 force to develop an interagency agreement to expedite and  
17 facilitate the environmental review and permitting of  
18 interstate natural gas pipeline projects.

19 (b) TASK FORCE MEMBERS.—The task force shall in-  
20 clude a representative of each of the Bureau of Land Man-  
21 agement, the United States Fish and Wildlife Service, the  
22 Army Corps of Engineers, the Forest Service, the Envi-  
23 ronmental Protection Agency, the Advisory Council on  
24 Historic Preservation, and such other agencies as the Sec-

1 retary of Energy and the Federal Energy Regulatory  
2 Commission consider appropriate.

3 (c) TERMS OF AGREEMENT.—The interagency agree-  
4 ment shall require that agencies complete their review of  
5 interstate pipeline projects within a specific period of time  
6 after referral of the matter by the Federal Energy Regu-  
7 latory Commission.

8 (d) SUBMITTAL OF AGREEMENT.—The Secretary of  
9 Energy shall submit a final interagency agreement under  
10 this section to the Congress by not later than 6 months  
11 after the effective date of this section.

12 **SEC. 6105. ENHANCING ENERGY EFFICIENCY IN MANAGE-**  
13 **MENT OF FEDERAL LANDS.**

14 (a) SENSE OF THE CONGRESS.—It is the sense of  
15 Congress that Federal land managing agencies should en-  
16 hance the use of energy efficient technologies in the man-  
17 agement of natural resources.

18 (b) ENERGY EFFICIENT BUILDINGS.—To the extent  
19 economically practicable, the Secretary of the Interior and  
20 the Secretary of Agriculture shall seek to incorporate en-  
21 ergy efficient technologies in public and administrative  
22 buildings associated with management of the National  
23 Park System, National Wildlife Refuge System, National  
24 Forest System, and other public lands and resources man-  
25 aged by such Secretaries.

1       (c) ENERGY EFFICIENT VEHICLES.—To the extent  
2 economically practicable, the Secretary of the Interior and  
3 the Secretary of Agriculture shall seek to use energy effi-  
4 cient motor vehicles, including vehicles equipped with bio-  
5 diesel or hybrid engine technologies, in the management  
6 of the National Park System, National Wildlife Refuge  
7 System, and other public lands and managed by the Secre-  
8 taries.

9       **SEC. 6106. EFFICIENT INFRASTRUCTURE DEVELOPMENT.**

10       (a) IN GENERAL.—The Secretary of Energy and the  
11 Chairman of the Federal Energy Regulatory Commission  
12 shall jointly undertake a study of the location and extent  
13 of anticipated demand growth for natural gas consumption  
14 in the Western States, herein defined as the area covered  
15 by the Western System Coordinating Council.

16       (b) CONTENTS.—The study under subsection (a)  
17 shall include the following:

18               (1) A review of natural gas demand forecasts  
19 by Western State officials, such as the California  
20 Energy Commission and the California Public Utili-  
21 ties Commission, which indicate the forecasted levels  
22 of demand for natural gas and the geographic dis-  
23 tribution of that forecasted demand.

24               (2) A review of the locations of proposed new  
25 natural gas-fired electric generation facilities cur-

1       rently in the approval process in the Western States,  
2       and their forecasted impact on natural gas demand.

3           (3) A review of the locations of existing inter-  
4       state natural gas transmission pipelines, and inter-  
5       state natural gas pipelines currently in the planning  
6       stage or approval process, throughout the Western  
7       States.

8           (4) A review of the locations and capacity of  
9       intrastate natural gas pipelines in the Western  
10      States.

11          (5) Recommendations for the coordination of  
12      the development of the natural gas infrastructure in-  
13      dicated in paragraphs (1) through (4).

14      (c) REPORT.—The Secretary shall report the findings  
15      and recommendations resulting from the study required  
16      by this section to the Committee on Energy and Com-  
17      merce of the House of Representatives and to the Com-  
18      mittee on Energy and Natural Resources of the Senate  
19      no later than 6 months after the date of the enactment  
20      of this Act. The Chairman of the Federal Energy Regu-  
21      latory Commission shall report on how the Commission  
22      will factor these results into its review of applications of  
23      interstate pipelines within the Western States to the Com-  
24      mittee on Energy and Commerce of the House of Rep-  
25      resentatives and to the Committee on Energy and Natural



1 Resources of the Senate no later than 6 months after the  
2 date of the enactment of this Act.

3 **TITLE II—OIL AND GAS**  
4 **DEVELOPMENT**

5 **Subtitle A—Offshore Oil and Gas**

6 **SEC. 6201. SHORT TITLE.**

7 This subtitle may be referred to as the “Royalty Re-  
8 lief Extension Act of 2001”.

9 **SEC. 6202. LEASE SALES IN WESTERN AND CENTRAL PLAN-**  
10 **NING AREA OF THE GULF OF MEXICO.**

11 (a) IN GENERAL.—For all tracts located in water  
12 depths of greater than 200 meters in the Western and  
13 Central Planning Area of the Gulf of Mexico, including  
14 that portion of the Eastern Planning Area of the Gulf of  
15 Mexico encompassing whole lease blocks lying west of 87  
16 degrees, 30 minutes West longitude, any oil or gas lease  
17 sale under the Outer Continental Shelf Lands Act occur-  
18 ring within 2 years after the date of the enactment of this  
19 Act shall use the bidding system authorized in section  
20 8(a)(1)(H) of the Outer Continental Shelf Lands Act (30  
21 U.S.C. 1337(a)(1)(H)), except that the suspension of roy-  
22 alties shall be set at a volume of not less than the fol-  
23 lowing:

24 (1) 5 million barrels of oil equivalent for each  
25 lease in water depths of 400 to 800 meters.

1           (2) 9 million barrels of oil equivalent for each  
2           lease in water depths of 800 to 1,600 meters.

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

5           (b) RELATIONSHIP TO EXISTING AUTHORITY.—Ex-  
6           cept as expressly provided in this section, nothing in this  
7           section is intended to limit the authority of the Secretary  
8           of the Interior under the Outer Continental Shelf Lands  
9           Act (43 U.S.C. 1301 et seq.) to provide royalty suspen-  
10          sion.

11       **SEC. 6203. SAVINGS CLAUSE.**

12          Nothing in this subtitle shall be construed to affect  
13          any offshore pre-leasing, leasing, or development morato-  
14          rium, including any moratorium applicable to the Eastern  
15          Planning Area of the Gulf of Mexico located off the Gulf  
16          Coast of Florida.

17       **SEC. 6204. ANALYSIS OF GULF OF MEXICO FIELD SIZE DIS-**

18                       **TRIBUTION, INTERNATIONAL COMPETITIVE-**

19                       **NESS, AND INCENTIVES FOR DEVELOPMENT.**

20          (a) IN GENERAL.—The Secretary of the Interior and  
21          the Secretary of Energy shall enter into appropriate ar-  
22          rangements with the National Academy of Sciences to  
23          commission the Academy to perform the following:

1           (1) Conduct an analysis and review of existing  
2       Gulf of Mexico oil and natural gas resource assess-  
3       ments, including—

4           (A) analysis and review of assessments re-  
5       cently performed by the Minerals Management  
6       Service, the 1999 National Petroleum Council  
7       Gas Study, the Department of Energy's Off-  
8       shore Marginal Property Study, and the Ad-  
9       vanced Resources International, Inc. Deepwater  
10      Gulf of Mexico model; and

11          (B) evaluation and comparison of the accu-  
12      racy of assumptions of the existing assessments  
13      with respect to resource field size distribution,  
14      hydrocarbon potential, and scenarios for leas-  
15      ing, exploration, and development.

16          (2) Evaluate the lease terms and conditions of-  
17      fered by the Minerals Management Service for Lease  
18      Sale 178, and compare the financial incentives of-  
19      fered by such terms and conditions to financial in-  
20      centives offered by the terms and conditions that  
21      apply under leases for other offshore areas that are  
22      competing for the same limited offshore oil and gas  
23      exploration and development capital, including off-  
24      shore areas of West Africa and Brazil.

1           (3) Recommend what level of incentives for all  
2       water depths are appropriate in order to ensure that  
3       the United States optimizes the domestic supply of  
4       oil and natural gas from the offshore areas of the  
5       Gulf of Mexico that are not subject to current leas-  
6       ing moratoria. Recommendations under this para-  
7       graph should be made in the context of the impor-  
8       tance of the oil and natural gas resources of the  
9       Gulf of Mexico to the future energy and economic  
10      needs of the United States.

11      (b) REPORT.—Not later than 180 days after the date  
12   of the enactment of this Act, the Secretary of the Interior  
13   shall submit a report to the Committee on Resources in  
14   the House of Representatives and the Committee on En-  
15   ergy and Natural Resources in the Senate, summarizing  
16   the findings of the National Academy of Sciences pursuant  
17   to subsection (a) and providing recommendations of the  
18   Secretary for new policies or other actions that could help  
19   to further increase oil and natural gas production from  
20   the Gulf of Mexico.

1       **Subtitle B—Improvements to**  
2       **Federal Oil and Gas Management**

3       **SEC. 6221. SHORT TITLE.**

4           This subtitle may be cited as the “Federal Oil and  
5       Gas Lease Management Improvement Demonstration Pro-  
6       gram Act of 2001”.

7       **SEC. 6222. STUDY OF IMPEDIMENTS TO EFFICIENT LEASE**  
8               **OPERATIONS.**

9           (a) IN GENERAL.—The Secretary of the Interior and  
10       the Secretary of Agriculture shall jointly undertake a  
11       study of the impediments to efficient oil and gas leasing  
12       and operations on Federal onshore lands in order to iden-  
13       tify means by which unnecessary impediments to the expe-  
14       ditious exploration and production of oil and natural gas  
15       on such lands can be removed.

16       (b) CONTENTS.—The study under subsection (a)  
17       shall include the following:

18               (1) A review of the process by which Federal  
19       land managers accept or reject an offer to lease, in-  
20       cluding the timeframes in which such offers are  
21       acted upon, the reasons for any delays in acting  
22       upon such offers, and any recommendations for ex-  
23       pediting the response to such offers.

24               (2) A review of the approval process for appli-  
25       cations for permits to drill, including the timeframes

1 in which such applications are approved, the impact  
2 of compliance with other Federal laws on such time-  
3 frames, any other reasons for delays in making such  
4 approvals, and any recommendations for expediting  
5 such approvals.

6 (3) A review of the approval process for surface  
7 use plans of operation, including the timeframes in  
8 which such applications are approved, the impact of  
9 compliance with other Federal laws on such time-  
10 frames, any other reasons for delays in making such  
11 approvals, and any recommendations for expediting  
12 such approvals.

13 (4) A review of the process for administrative  
14 appeal of decisions or orders of officers or employees  
15 of the Bureau of Land Management with respect to  
16 a Federal oil or gas lease, including the timeframes  
17 in which such appeals are heard and decided, any  
18 reasons for delays in hearing or deciding such ap-  
19 peals, and any recommendations for expediting the  
20 appeals process.

21 (c) REPORT.—The Secretaries shall report the find-  
22 ings and recommendations resulting from the study re-  
23 quired by this section to the Committee on Resources of  
24 the House of Representatives and to the Committee on

1 Energy and Natural Resources of the Senate no later than  
2 6 months after the date of the enactment of this Act.

3 **SEC. 6223. ELIMINATION OF UNWARRANTED DENIALS AND**  
4 **STAYS.**

5 (a) IN GENERAL.—The Secretary shall ensure that  
6 unwarranted denials and stays of lease issuance and un-  
7 warranted restrictions on lease operations are eliminated  
8 from the administration of oil and natural gas leasing on  
9 Federal land.

10 (b) PREPARATION OF LEASING PLAN OR ANAL-  
11 YSIS.—In preparing a management plan or leasing anal-  
12 ysis for oil or natural gas leasing on Federal lands admin-  
13 istered by the Bureau of Land Management or the Forest  
14 Service, the Secretary concerned shall—

15 (1) identify and review the restrictions on sur-  
16 face use and operations imposed under the laws (in-  
17 cluding regulations) of the State in which the lands  
18 are located;

19 (2) consult with the appropriate State agency  
20 regarding the reasons for the State restrictions iden-  
21 tified under paragraph (1);

22 (3) identify any differences between the State  
23 restrictions identified under paragraph (1) and any  
24 restrictions on surface use and operations that would  
25 apply under the lease; and

1           (4) prepare and provide upon request a written  
2 explanation of such differences.

3           (c) REJECTION OF OFFER TO LEASE.—

4           (1) IN GENERAL.—If the Secretary rejects an  
5 offer to lease Federal lands for oil or natural gas de-  
6 velopment on the ground that the land is unavailable  
7 for oil and natural gas leasing, the Secretary shall  
8 provide a written, detailed explanation of the reasons  
9 the land is unavailable for leasing.

10          (2) PREVIOUS RESOURCE MANAGEMENT DECISION.—If the determination of unavailability is  
11 based on a previous resource management decision,  
12 the explanation shall include a careful assessment of  
13 whether the reasons underlying the previous decision  
14 are still persuasive.

15          (3) SEGREGATION OF AVAILABLE LAND FROM  
16 UNAVAILABLE LAND.—The Secretary may not reject  
17 an offer to lease Federal land for oil and natural gas  
18 development that is available for such leasing on the  
19 ground that the offer includes land unavailable for  
20 leasing. The Secretary shall segregate available land  
21 from unavailable land, on the offeror's request fol-  
22 lowing notice by the Secretary, before acting on the  
23 offer to lease.  
24



1 (d) DISAPPROVAL OR REQUIRED MODIFICATION OF  
2 SURFACE USE PLANS OF OPERATIONS AND APPLICATION  
3 FOR PERMIT TO DRILL.—The Secretary shall provide a  
4 written, detailed explanation of the reasons for dis-  
5 approving or requiring modifications of any surface use  
6 plan of operations or application for permit to drill with  
7 respect to oil or natural gas development on Federal lands.

8 (e) PRESERVATION OF FEDERAL AUTHORITY.—  
9 Nothing in this section or in any identification, review, or  
10 explanation prepared under this section shall be  
11 construed—

12 (1) to limit the authority of the Federal Gov-  
13 ernment to impose lease stipulations, restrictions, re-  
14 quirements, or other terms that are different than  
15 those that apply under State law; or

16 (2) to affect the procedures that apply to judi-  
17 cial review of actions taken under this subsection.

18 **SEC. 6224. LIMITATION ON COST RECOVERY FOR APPLICA-**  
19 **TIONS.**

20 Notwithstanding sections 304 and 504 of the Federal  
21 Land Policy and Management Act of 1976 (43 U.S.C.  
22 1734, 1764) and section 9701 of title 31, United States  
23 Code, the Secretary shall not recover the Secretary's costs  
24 with respect to applications and other documents relating  
25 to oil and gas leases.

1 **SEC. 6225. CONSULTATION WITH SECRETARY OF AGRICULTURE.**  
2

3 Section 17(h) of the Mineral Leasing Act (30 U.S.C.  
4 226(h)) is amended to read as follows:

5 “(h)(1) In issuing any lease on National Forest Sys-  
6 tem lands reserved from the public domain, the Secretary  
7 of the Interior shall consult with the Secretary of Agri-  
8 culture in determining stipulations on surface use under  
9 the lease.

10 “(2)(A) A lease on lands referred to in paragraph (1)  
11 may not be issued if the Secretary of Agriculture deter-  
12 mines, after consultation under paragraph (1) and con-  
13 sultation with the Regional Forester having administrative  
14 jurisdiction over the National Forest System Lands con-  
15 cerned, that the terms and conditions of the lease, includ-  
16 ing any prohibition on surface occupancy for lease oper-  
17 ations, will not be sufficient to adequately protect such  
18 lands under the National Forest Management Act of 1976  
19 (16 U.S.C. 1600 et seq.).

20 “(B) The authority of the Secretary of Agriculture  
21 under this paragraph may be delegated only to the Under-  
22 secretary of Agriculture for Natural Resources and Envi-  
23 ronment.

24 “(3) The Secretary of Agriculture shall include in the  
25 record of decision for a determination under paragraph  
26 (2)(A)—

1           “(A) any written statement regarding the deter-  
2           mination that is prepared by a Regional Forester  
3           consulted by the Secretary under paragraph (2)(A)  
4           regarding the determination; or

5           “(B) an explanation why such a statement by  
6           the Regional Forester is not included.

## 7           **Subtitle C—Miscellaneous**

### 8   **SEC. 6231. OFFSHORE SUBSALT DEVELOPMENT.**

9           Section 5 of the Outer Continental Shelf Lands Act  
10          of 1953 (43 U.S.C. 1334) is amended by adding at the  
11          end the following:

12          “(k) SUSPENSION OF OPERATIONS FOR SUBSALT  
13          EXPLORATION.—Notwithstanding any other provision of  
14          law or regulation, to prevent waste caused by the drilling  
15          of unnecessary wells and to facilitate the discovery of addi-  
16          tional hydrocarbon reserves, the Secretary may grant a re-  
17          quest for a suspension of operations under any lease to  
18          allow the reprocessing and reinterpretation of geophysical  
19          data to identify and define drilling objectives beneath  
20          allocthonous salt sheets.”.

### 21   **SEC. 6232. PROGRAM ON OIL AND GAS ROYALTIES IN KIND.**

22          (a) APPLICABILITY OF SECTION.—Notwithstanding  
23          any other provision of law, the provisions of this section  
24          shall apply to all royalty in kind accepted by the Secretary  
25          of the Interior under any Federal oil or gas lease or permit

1 under section 36 of the Mineral Leasing Act (30 U.S.C.  
2 192), section 27 of the Outer Continental Shelf Lands Act  
3 (43 U.S.C. 1353), or any other mineral leasing law, in  
4 the period beginning on the date of the enactment of this  
5 Act through September 30, 2006.

6 (b) TERMS AND CONDITIONS.—All royalty accruing  
7 to the United States under any Federal oil or gas lease  
8 or permit under the Mineral Leasing Act (30 U.S.C. 181  
9 et seq.) or the Outer Continental Shelf Lands Act (43  
10 U.S.C. 1331 et seq.) shall, on the demand of the Secretary  
11 of the Interior, be paid in oil or gas. If the Secretary of  
12 the Interior makes such a demand, the following provi-  
13 sions apply to such payment:

14 (1) Delivery by, or on behalf of, the lessee of  
15 the royalty amount and quality due under the lease  
16 satisfies the lessee's royalty obligation for the  
17 amount delivered, except that transportation and  
18 processing reimbursements paid to, or deductions  
19 claimed by, the lessee shall be subject to review and  
20 audit.

21 (2) Royalty production shall be placed in mar-  
22 ketable condition by the lessee at no cost to the  
23 United States.

24 (3) The Secretary of the Interior may—

1 (A) sell or otherwise dispose of any royalty  
2 oil or gas taken in kind (other than oil or gas  
3 taken under section 27(a)(3) of the Outer Con-  
4 tinental Shelf Lands Act (43 U.S.C.  
5 1353(a)(3)) for not less than the market price;  
6 and

7 (B) transport or process any oil or gas roy-  
8 alty taken in kind.

9 (4) The Secretary of the Interior may, notwith-  
10 standing section 3302 of title 31, United States  
11 Code, retain and use a portion of the revenues from  
12 the sale of oil and gas royalties taken in kind that  
13 otherwise would be deposited to miscellaneous re-  
14 ceipts, without regard to fiscal year limitation, or  
15 may use royalty production, to pay the cost of—

16 (A) transporting the oil or gas,

17 (B) processing the gas, or

18 (C) disposing of the oil or gas.

19 (5) The Secretary may not use revenues from  
20 the sale of oil and gas royalties taken in kind to pay  
21 for personnel, travel, or other administrative costs of  
22 the Federal Government.

23 (c) REIMBURSEMENT OF COST.—If the lessee, pursu-  
24 ant to an agreement with the United States or as provided  
25 in the lease, processes the royalty gas or delivers the roy-

1 alty oil or gas at a point not on or adjacent to the lease  
2 area, the Secretary of the Interior shall—

3 (1) reimburse the lessee for the reasonable costs  
4 of transportation (not including gathering) from the  
5 lease to the point of delivery or for processing costs;  
6 or

7 (2) at the discretion of the Secretary of the In-  
8 terior, allow the lessee to deduct such transportation  
9 or processing costs in reporting and paying royalties  
10 in value for other Federal oil and gas leases.

11 (d) BENEFIT TO THE UNITED STATES REQUIRED.—  
12 The Secretary may receive oil or gas royalties in kind only  
13 if the Secretary determines that receiving such royalties  
14 provides benefits to the United States greater than or  
15 equal to those that would be realized under a comparable  
16 royalty in value program.

17 (e) REPORT TO CONGRESS.—For each of the fiscal  
18 years 2002 through 2006 in which the United States takes  
19 oil or gas royalties in kind from production in any State  
20 or from the Outer Continental Shelf, excluding royalties  
21 taken in kind and sold to refineries under subsection (h),  
22 the Secretary of the Interior shall provide a report to the  
23 Congress describing—

24 (1) the methodology or methodologies used by  
25 the Secretary to determine compliance with sub-

1 section (d), including performance standards for  
2 comparing amounts received by the United States  
3 derived from such royalties in kind to amounts likely  
4 to have been received had royalties been taken in  
5 value;

6 (2) an explanation of the evaluation that led the  
7 Secretary to take royalties in kind from a lease or  
8 group of leases, including the expected revenue effect  
9 of taking royalties in kind;

10 (3) actual amounts received by the United  
11 States derived from taking royalties in kind, and  
12 costs and savings incurred by the United States as-  
13 sociated with taking royalties in kind; and

14 (4) an evaluation of other relevant public bene-  
15 fits or detriments associated with taking royalties in  
16 kind.

17 (f) DEDUCTION OF EXPENSES.—

18 (1) IN GENERAL.—Before making payments  
19 under section 35 of the Mineral Leasing Act (30  
20 U.S.C. 191) or section 8(g) of the Outer Continental  
21 Shelf Lands Act (30 U.S.C. 1337(g)) of revenues  
22 derived from the sale of royalty production taken in  
23 kind from a lease, the Secretary of the Interior shall  
24 deduct amounts paid or deducted under subsections

1 (b)(4) and (c), and shall deposit such amounts to  
2 miscellaneous receipts.

3 (2) ACCOUNTING FOR DEDUCTIONS.—If the  
4 Secretary of the Interior allows the lessee to deduct  
5 transportation or processing costs under subsection  
6 (c), the Secretary may not reduce any payments to  
7 recipients of revenues derived from any other Fed-  
8 eral oil and gas lease as a consequence of that de-  
9 duction.

10 (g) CONSULTATION WITH STATES.—The Secretary  
11 of the Interior—

12 (1) shall consult with a State before conducting  
13 a royalty in kind program under this title within the  
14 State, and may delegate management of any portion  
15 of the Federal royalty in kind program to such State  
16 except as otherwise prohibited by Federal law; and

17 (2) shall consult annually with any State from  
18 which Federal oil or gas royalty is being taken in  
19 kind to ensure to the maximum extent practicable  
20 that the royalty in kind program provides revenues  
21 to the State greater than or equal to those which  
22 would be realized under a comparable royalty in  
23 value program.

24 (h) PROVISIONS FOR SMALL REFINERIES.—



1           (1) PREFERENCE.—If the Secretary of the In-  
2           terior determines that sufficient supplies of crude oil  
3           are not available in the open market to refineries not  
4           having their own source of supply for crude oil, the  
5           Secretary may grant preference to such refineries in  
6           the sale of any royalty oil accruing or reserved to the  
7           United States under Federal oil and gas leases  
8           issued under any mineral leasing law, for processing  
9           or use in such refineries at private sale at not less  
10          than the market price.

11          (2) PRORATION AMONG REFINERIES IN PRO-  
12          DUCTION AREA.—In disposing of oil under this sub-  
13          section, the Secretary of the Interior may, at the  
14          discretion of the Secretary, prorate such oil among  
15          such refineries in the area in which the oil is pro-  
16          duced.

17          (i) DISPOSITION TO FEDERAL AGENCIES.—

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

23               (2) OFFSHORE ROYALTY.—Any royalty oil or  
24               gas taken in kind from Federal oil and gas leases on  
25               the Outer Continental Shelf may be disposed of only

1 under section 27 of the Outer Continental Shelf  
2 Lands Act (43 U.S.C. 1353).

3 (j) PREFERENCE FOR FEDERAL LOW-INCOME EN-  
4 ERGY ASSISTANCE PROGRAMS.—In disposing of royalty oil  
5 or gas taken in kind under this section, the Secretary may  
6 grant a preference to any person, including any State or  
7 Federal agency, for the purpose of providing additional re-  
8 sources to any Federal low-income energy assistance pro-  
9 gram.

10 **SEC. 6233. MARGINAL WELL PRODUCTION INCENTIVES.**

11 To enhance the economics of marginal oil and gas  
12 production by increasing the ultimate recovery from mar-  
13 ginal wells when the cash price of West Texas Inter-  
14 mediate crude oil, as posted on the Dow Jones Commod-  
15 ities Index chart, is less than \$15 per barrel for 180 con-  
16 secutive pricing days or when the price of natural gas de-  
17 livered at Henry Hub, Louisiana, is less than \$2.00 per  
18 million British thermal units for 180 consecutive days, the  
19 Secretary shall reduce the royalty rate as production de-  
20 clines for—

21 (1) onshore oil wells producing less than 30  
22 barrels per day;

23 (2) onshore gas wells producing less than 120  
24 million British thermal units per day;

1           (3) offshore oil wells producing less than 300  
2       barrels of oil per day; and

3           (4) offshore gas wells producing less than 1,200  
4       million British thermal units per day.

5   **SEC. 6234. REIMBURSEMENT FOR COSTS OF NEPA ANAL-**  
6                   **YSES, DOCUMENTATION, AND STUDIES.**

7       (a) IN GENERAL.—The Mineral Leasing Act (30  
8   U.S.C. 181 et seq.) is amended by inserting after section  
9   37 the following:

10   “REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES,  
11                   DOCUMENTATION, AND STUDIES

12       “SEC. 38. (a) IN GENERAL.—The Secretary of the  
13   Interior may, through royalty credits, reimburse a person  
14   who is a lessee, operator, operating rights owner, or appli-  
15   cant for an oil or gas lease under this Act for amounts  
16   paid by the person for preparation by the Secretary (or  
17   a contractor or other person selected by the Secretary) of  
18   any project-level analysis, documentation, or related study  
19   required under the National Environmental Policy Act of  
20   1969 (42 U.S.C. 4321 et seq.) with respect to the lease.

21       “(b) CONDITIONS.—The Secretary may provide reim-  
22   bursement under subsection (b) only if—

23           “(1) adequate funding to enable the Secretary  
24       to timely prepare the analysis, documentation, or re-  
25       lated study is not appropriated;

26           “(2) the person paid the costs voluntarily; and

1           “(3) the person maintains records of its costs  
2           in accordance with regulations prescribed by the  
3           Secretary.”.

4           (b) APPLICATION.—The amendments made by this  
5           section shall apply with respect to any lease entered into  
6           before, on, or after the date of the enactment of this Act.

7           (c) DEADLINE FOR REGULATIONS.—The Secretary  
8           shall issue regulations implementing the amendments  
9           made by this section by not later than 90 days after the  
10          date of the enactment of this Act.

11   **SEC. 6235. ENCOURAGEMENT OF STATE AND PROVINCIAL**  
12                           **PROHIBITIONS ON OFF-SHORE DRILLING IN**  
13                           **THE GREAT LAKES.**

14          (a) FINDINGS.—The Congress finds the following:

15               (1) The water resources of the Great Lakes  
16               Basin are precious public natural resources, shared  
17               and held in trust by the States of Illinois, Indiana,  
18               Michigan, Minnesota, New York, Ohio, Pennsyl-  
19               vania, and Wisconsin, and the Canadian Province of  
20               Ontario.

21               (2) The environmental dangers associated with  
22               off-shore drilling in the Great Lakes for oil and gas  
23               outweigh the potential benefits of such drilling.

24               (3) In accordance with the Submerged Lands  
25               Act (43 U.S.C. 1301 et seq.), each State that bor-

1       ders any of the Great Lakes has authority over the  
2       area between that State's coastline and the bound-  
3       ary of Canada or another State.

4           (4) The States of Illinois, Michigan, New York,  
5       Pennsylvania, and Wisconsin each have a statutory  
6       prohibition of off-shore drilling in the Great Lakes  
7       for oil and gas.

8           (5) The States of Indiana, Minnesota, and Ohio  
9       do not have such a prohibition.

10          (6) The Canadian Province of Ontario does not  
11       have such a prohibition, and drilling for and produc-  
12       tion of gas occurs in the Canadian portion of Lake  
13       Erie.

14       (b) ENCOURAGEMENT OF STATE AND PROVINCIAL  
15       PROHIBITIONS.—The Congress encourages—

16           (1) the States of Illinois, Michigan, New York,  
17       Pennsylvania, and Wisconsin to continue to prohibit  
18       off-shore drilling in the Great Lakes for oil and gas;

19           (2) the States of Indiana, Minnesota, and Ohio  
20       and the Canadian Province of Ontario to enact a  
21       prohibition of such drilling; and

22           (3) the Canadian Province of Ontario to require  
23       the cessation of any such drilling and any production  
24       resulting from such drilling.

## **TITLE III—GEOTHERMAL ENERGY DEVELOPMENT**

### **SEC. 6301. ROYALTY REDUCTION AND RELIEF.**

(a) ROYALTY REDUCTION.—Section 5(a) of the Geothermal Steam Act of 1970 (30 U.S.C. 1004(a)) is amended by striking “not less than 10 per centum or more than 15 per centum” and inserting “not more than 8 per centum”.

(b) ROYALTY RELIEF.—

(1) IN GENERAL.—Notwithstanding section 5 of the Geothermal Steam Act of 1970 (30 U.S.C. 1004(a)) and any provision of any lease under that Act, no royalty is required to be paid—

(A) under any qualified geothermal energy lease with respect to commercial production of heat or energy from a facility that begins such production in the 5-year period beginning on the date of the enactment of this Act; or

(B) on qualified expansion geothermal energy.

(2) 3-YEAR APPLICATION.—Paragraph (1) applies only to commercial production of heat or energy from a facility in the first 3 years of such production.

(c) DEFINITIONS.—In this section:

1           (1) QUALIFIED EXPANSION GEOTHERMAL EN-  
2           ERGY.—The term “qualified expansion geothermal  
3           energy”—

4                   (A) subject to subparagraph (B), means  
5           geothermal energy produced from a generation  
6           facility for which the rated capacity is increased  
7           by more than 10 percent as a result of expan-  
8           sion of the facility carried out in the 5-year pe-  
9           riod beginning on the date of the enactment of  
10          this Act; and

11                   (B) does not include the rated capacity of  
12          the generation facility on the date of the enact-  
13          ment of this Act.

14          (2) QUALIFIED GEOTHERMAL ENERGY  
15          LEASE.—The term “qualified geothermal energy  
16          lease” means a lease under the Geothermal Steam  
17          Act of 1970 (30 U.S.C. 1001 et seq.)—

18                   (A) that was executed before the end of  
19          the 5-year period beginning on the date of the  
20          enactment of this Act; and

21                   (B) under which no commercial production  
22          of any form of heat or energy occurred before  
23          the date of the enactment of this Act.

1 **SEC. 6302. EXEMPTION FROM ROYALTIES FOR DIRECT USE**  
2 **OF LOW TEMPERATURE GEOTHERMAL EN-**  
3 **ERGY RESOURCES.**

4 Section 5 of the Geothermal Steam Act of 1970 (30  
5 U.S.C. 1004) is amended—

6 (1) in paragraph (c) by redesignating subpara-  
7 graphs (1) and (2) as subparagraphs (A) and (B);

8 (2) by redesignating paragraphs (a) through (d)  
9 in order as paragraphs (1) through (4);

10 (3) by inserting “(a) IN GENERAL.—” after  
11 “SEC. 5.”; and

12 (4) by adding at the end the following new sub-  
13 section:

14 “(b) EXEMPTION FOR USE OF LOW TEMPERATURE  
15 RESOURCES.—

16 “(1) IN GENERAL.—In lieu of any royalty or  
17 rental under subsection (a), a lease for qualified de-  
18 velopment and direct utilization of low temperature  
19 geothermal resources shall provide for payment by  
20 the lessee of an annual fee of not less than \$100,  
21 and not more than \$1,000, in accordance with the  
22 schedule issued under paragraph (2).

23 “(2) SCHEDULE.—The Secretary shall issue a  
24 schedule of fees under this section under which a fee  
25 is based on the scale of development and utilization  
26 to which the fee applies.



1 “(3) DEFINITIONS.—In this subsection:

2 “(A) LOW TEMPERATURE GEOTHERMAL  
3 RESOURCES.—The term ‘low temperature geo-  
4 thermal resources’ means geothermal steam and  
5 associated geothermal resources having a tem-  
6 perature of less than 195 degrees Fahrenheit.

7 “(B) QUALIFIED DEVELOPMENT AND DI-  
8 RECT UTILIZATION.—The term ‘qualified devel-  
9 opment and direct utilization’ means develop-  
10 ment and utilization in which all products of  
11 geothermal resources, other than any heat uti-  
12 lized, are returned to the geothermal formation  
13 from which they are produced.”.

14 **SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOR-**  
15 **EST SERVICE LANDS.**

16 The Geothermal Steam Act of 1970 is amended—

17 (1) in section 15(b) (30 U.S.C. 1014(b))—

18 (A) by inserting “(1)” after “(b)”; and

19 (B) in paragraph (1) (as designated by  
20 subparagraph (A) of this paragraph) in the  
21 first sentence—

22 (i) by striking “with the consent of,  
23 and” and inserting “after consultation  
24 with the Secretary of Agriculture and”;  
25 and

1 (ii) by striking “the head of that De-  
2 partment” and inserting “the Secretary of  
3 Agriculture”; and

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

5 “(2)(A) A geothermal lease for lands withdrawn or  
6 acquired in aid of functions of the Department of Agri-  
7 culture may not be issued if the Secretary of Agriculture,  
8 after the consultation required by paragraph (1) and con-  
9 sultation with any Regional Forester having administra-  
10 tive jurisdiction over the lands concerned, determines that  
11 no terms or conditions, including a prohibition on surface  
12 occupancy for lease operations, would be sufficient to ade-  
13 quately protect such lands under the National Forest  
14 Management Act of 1976 (16 U.S.C. 1600 et seq.).

15 “(B) The authority of the Secretary of Agriculture  
16 under this paragraph may be delegated only to the Under-  
17 secretary of Agriculture for Natural Resources and Envi-  
18 ronment.

19 “(3) The Secretary of Agriculture shall include in the  
20 record of decision for a determination under paragraph  
21 (2)(A)—

22 “(A) any written statement regarding the deter-  
23 mination that is prepared by a Regional Forester  
24 consulted by the Secretary under paragraph (2)(A)  
25 regarding the determination; or

1           “(B) an explanation why such a statement by  
2           the Regional Forester is not included.

3   **SEC. 6304. DEADLINE FOR DETERMINATION ON PENDING**  
4                   **NONCOMPETITIVE LEASE APPLICATIONS.**

5           Not later than 90 days after the date of the enact-  
6   ment of this Act, the Secretary of the Interior shall, with  
7   respect to each application pending on the date of the en-  
8   actment of this Act for a lease under the Geothermal  
9   Steam Act of 1970 (30 U.S.C. 1001 et seq.), issue a final  
10   determination of—

11           (1) whether or not to conduct a lease sale by  
12           competitive bidding; and

13           (2) whether or not to award a lease without  
14           competitive bidding.

15   **SEC. 6305. OPENING OF PUBLIC LANDS UNDER MILITARY**  
16                   **JURISDICTION.**

17           (a) IN GENERAL.—Except as otherwise provided in  
18   the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et  
19   seq.) and other provisions of Federal law applicable to de-  
20   velopment of geothermal energy resources within public  
21   lands, all public lands under the jurisdiction of a Secretary  
22   of a military department shall be open to the operation  
23   of such laws and development and utilization of geo-  
24   thermal steam and associated geothermal resources, as  
25   that term is defined in section 2 of the Geothermal Steam

1 Act of 1970 (30 U.S.C. 1001), without the necessity for  
2 further action by the Secretary or the Congress.

3 (b) CONFORMING AMENDMENT.—Section 2689 of  
4 title 10, United States Code, is amended by striking “in-  
5 cluding public lands,” and inserting “other than public  
6 lands,”.

7 (c) TREATMENT OF EXISTING LEASES.—Upon the  
8 expiration of any lease in effect on the date of the enact-  
9 ment of this Act of public lands under the jurisdiction of  
10 a military department for the development of any geo-  
11 thermal resource, such lease may, at the option of the  
12 lessee—

13 (1) be treated as a lease under the Geothermal  
14 Steam Act of 1970 (30 U.S.C. 1001 et seq.), and be  
15 renewed in accordance with such Act; or

16 (2) be renewed in accordance with the terms of  
17 the lease, if such renewal is authorized by such  
18 terms.

19 (d) REGULATIONS.—The Secretary of the Interior,  
20 with the advice and concurrence of the Secretary of the  
21 military department concerned, shall prescribe such regu-  
22 lations to carry out this section as may be necessary. Such  
23 regulations shall contain guidelines to assist in deter-  
24 mining how much, if any, of the surface of any lands  
25 opened pursuant to this section may be used for purposes

1 incident to geothermal energy resources development and  
2 utilization.

3 (e) CLOSURE FOR PURPOSES OF NATIONAL DE-  
4 FENSE OR SECURITY.—In the event of a national emer-  
5 gency or for purposes of national defense or security, the  
6 Secretary of the Interior, at the request of the Secretary  
7 of the military department concerned, shall close any lands  
8 that have been opened to geothermal energy resources  
9 leasing pursuant to this section.

10 **SEC. 6306. APPLICATION OF AMENDMENTS.**

11 The amendments made by this title apply with re-  
12 spect to any lease executed before, on, or after the date  
13 of the enactment of this Act.

14 **SEC. 6307. REVIEW AND REPORT TO CONGRESS.**

15 The Secretary of the Interior shall promptly review  
16 and report to the Congress regarding the status of all mor-  
17 atoria on and withdrawals from leasing under the Geo-  
18 thermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) of  
19 known geothermal resources areas (as that term is defined  
20 in section 2 of that Act (30 U.S.C. 1001), specifying for  
21 each such area whether the basis for such moratoria or  
22 withdrawal still applies.

1 **SEC. 6308. REIMBURSEMENT FOR COSTS OF NEPA ANAL-**  
2 **YSES, DOCUMENTATION, AND STUDIES.**

3 (a) IN GENERAL.—The Geothermal Steam Act of  
4 1970 (30 U.S.C. 1001 et seq.) is amended by adding at  
5 the end the following:

6 “REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES,  
7 DOCUMENTATION, AND STUDIES

8 “SEC. 38. (a) IN GENERAL.—The Secretary of the  
9 Interior may, through royalty credits, reimburse a person  
10 who is a lessee, operator, operating rights owner, or appli-  
11 cant for a lease under this Act for amounts paid by the  
12 person for preparation by the Secretary (or a contractor  
13 or other person selected by the Secretary) of any project-  
14 level analysis, documentation, or related study required  
15 under the National Environmental Policy Act of 1969 (42  
16 U.S.C. 4321 et seq.) with respect to the lease.

17 “(b) CONDITIONS.—The Secretary shall may provide  
18 reimbursement under subsection (a) only if—

19 “(1) adequate funding to enable the Secretary  
20 to timely prepare the analysis, documentation, or re-  
21 lated study is not appropriated;

22 “(2) the person paid the costs voluntarily; and

23 “(3) the person maintains records of its costs  
24 in accordance with regulations prescribed by the  
25 Secretary.”.

1 (b) APPLICATION.—The amendments made by this  
2 section shall apply with respect to any lease entered into  
3 before, on, or after the date of the enactment of this Act.

4 (c) DEADLINE FOR REGULATIONS.—The Secretary  
5 shall issue regulations implementing the amendments  
6 made by this section by not later than 90 days after the  
7 date of the enactment of this Act.

## 8 **TITLE IV—HYDROPOWER**

### 9 **SEC. 6401. STUDY AND REPORT ON INCREASING ELECTRIC** 10 **POWER PRODUCTION CAPABILITY OF EXIST-** 11 **ING FACILITIES.**

12 (a) IN GENERAL.—The Secretary of the Interior shall  
13 conduct a study of the potential for increasing electric  
14 power production capability at existing facilities under the  
15 administrative jurisdiction of the Secretary.

16 (b) CONTENT.—The study under this section shall in-  
17 clude identification and description in detail of each facil-  
18 ity that is capable, with or without modification, of pro-  
19 ducing additional hydroelectric power, including esti-  
20 mation of the existing potential for the facility to generate  
21 hydroelectric power.

22 (c) REPORT.—The Secretary shall submit to the Con-  
23 gress a report on the findings, conclusions, and rec-  
24 ommendations of the study under this section by not later  
25 than 12 months after the date of the enactment of this

1 Act. The Secretary shall include in the report the fol-  
2 lowing:

3 (1) The identifications, descriptions, and esti-  
4 mations referred to in subsection (b).

5 (2) A description of activities the Secretary is  
6 currently conducting or considering, or that could be  
7 considered, to produce additional hydroelectric power  
8 from each identified facility.

9 (3) A summary of action that has already been  
10 taken by the Secretary to produce additional hydro-  
11 electric power from each identified facility.

12 (4) The costs to install, upgrade, or modify  
13 equipment or take other actions to produce addi-  
14 tional hydroelectric power from each identified facil-  
15 ity.

16 (5) The benefits that would be achieved by such  
17 installation, upgrade, modification, or other action,  
18 including quantified estimates of any additional en-  
19 ergy or capacity from each facility identified under  
20 subsection (b).

21 (6) A description of actions that are planned,  
22 underway, or might reasonably be considered to in-  
23 crease hydroelectric power production by replacing  
24 turbine runners.



1           (7) A description of actions that are planned,  
2           underway, or might reasonably be considered to in-  
3           crease hydroelectric power production by performing  
4           generator uprates and rewinds.

5           (8) The impact of increased hydroelectric power  
6           production on irrigation, fish, wildlife, Indian tribes,  
7           river health, water quality, navigation, recreation,  
8           fishing, and flood control.

9           (9) Any additional recommendations the Sec-  
10          retary considers advisable to increase hydroelectric  
11          power production from, and reduce costs and im-  
12          prove efficiency at, facilities under the jurisdiction of  
13          the Secretary.

14   **SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM**  
15                   **POWER PLANT, CALIFORNIA.**

16          (a) IN GENERAL.—The Secretary of the Interior may  
17          install a powerformer at the Bureau of Reclamation Fol-  
18          som power plant in Folsom, California, to replace a gener-  
19          ator and transformer that are due for replacement due  
20          to age.

21          (b) REIMBURSABLE COSTS.—Costs incurred by the  
22          United States for installation of a powerformer under this  
23          section shall be treated as reimbursable costs and shall  
24          bear interest at current long-term borrowing rates of the  
25          United States Treasury at the time of acquisition.

1       (c) LOCAL COST SHARING.—In addition to reimburs-  
2     able costs under subsection (b), the Secretary shall seek  
3     contributions from power users toward the costs of the  
4     powerformer and its installation.

5     **SEC. 6403. STUDY AND IMPLEMENTATION OF INCREASED**  
6                   **OPERATIONAL EFFICIENCIES IN HYDRO-**  
7                   **ELECTRIC POWER PROJECTS.**

8       (a) IN GENERAL.—The Secretary of Interior shall  
9     conduct a study of operational methods and water sched-  
10    uling techniques at all hydroelectric power plants under  
11    the administrative jurisdiction of the Secretary that have  
12    an electric power production capacity greater than 50  
13    megawatts, to—

14           (1) determine whether such power plants and  
15       associated river systems are operated so as to maxi-  
16       mize energy and capacity capabilities; and

17           (2) identify measures that can be taken to im-  
18       prove operational flexibility at such plants to achieve  
19       such maximization.

20       (b) REPORT.—The Secretary shall submit a report on  
21    the findings, conclusions, and recommendations of the  
22    study under this section by not later than 18 months after  
23    the date of the enactment of this Act, including a sum-  
24    mary of the determinations and identifications under  
25    paragraphs (1) and (2) of subsection (a).

1 (c) COOPERATION BY FEDERAL POWER MARKETING  
2 ADMINISTRATIONS.—The Secretary shall coordinate with  
3 the Administrator of each Federal power marketing ad-  
4 ministration in—

5 (1) determining how the value of electric power  
6 produced by each hydroelectric power facility that  
7 produces power marketed by the administration can  
8 be maximized; and

9 (2) implementing measures identified under  
10 subsection (a)(2).

11 (d) LIMITATION ON IMPLEMENTATION OF MEAS-  
12 URES.—Implementation under subsections (a)(2) and  
13 (b)(2) shall be limited to those measures that can be im-  
14 plemented within the constraints imposed on Department  
15 of the Interior facilities by other uses required by law.

16 **SEC. 6404. SHIFT OF PROJECT LOADS TO OFF-PEAK PERI-**  
17 **ODS.**

18 (a) IN GENERAL.—The Secretary of the Interior  
19 shall—

20 (1) review electric power consumption by Bu-  
21 reau of Reclamation facilities for water pumping  
22 purposes; and

23 (2) make such adjustments in such pumping as  
24 possible to minimize the amount of electric power  
25 consumed for such pumping during periods of peak

1 electric power consumption, including by performing  
 2 as much of such pumping as possible during off-  
 3 peak hours at night.

4 (b) CONSENT OF AFFECTED IRRIGATION CUSTOMERS  
 5 REQUIRED.—The Secretary may not under this section  
 6 make any adjustment in pumping at a facility without the  
 7 consent of each person that has contracted with the  
 8 United States for delivery of water from the facility for  
 9 use for irrigation and that would be affected by such ad-  
 10 justment.

11 (c) EXISTING OBLIGATIONS NOT AFFECTED.—This  
 12 section shall not be construed to affect any existing obliga-  
 13 tion of the Secretary to provide electric power, water, or  
 14 other benefits from Bureau of Reclamation facilities.

## 15 **TITLE V—ARCTIC COASTAL** 16 **PLAIN DOMESTIC ENERGY**

### 17 **SEC. 6501. SHORT TITLE.**

18 This title may be cited as the “Arctic Coastal Plain  
 19 Domestic Energy Security Act of 2001”.

### 20 **SEC. 6502. DEFINITIONS.**

21 In this title:

22 (1) COASTAL PLAIN.—The term “Coastal  
 23 Plain” means that area identified as such in the  
 24 map entitled “Arctic National Wildlife Refuge”,  
 25 dated August 1980, as referenced in section 1002(b)

1 of the Alaska National Interest Lands Conservation  
2 Act of 1980 (16 U.S.C. 3142(b)(1)), comprising ap-  
3 proximately 1,549,000 acres.

4 (2) SECRETARY.—The term “Secretary”, except  
5 as otherwise provided, means the Secretary of the  
6 Interior or the Secretary’s designee.

7 **SEC. 6503. LEASING PROGRAM FOR LANDS WITHIN THE**  
8 **COASTAL PLAIN.**

9 (a) IN GENERAL.—The Secretary shall take such ac-  
10 tions as are necessary—

11 (1) to establish and implement in accordance  
12 with this title a competitive oil and gas leasing pro-  
13 gram under the Mineral Leasing Act (30 U.S.C. 181  
14 et seq.) that will result in an environmentally sound  
15 program for the exploration, development, and pro-  
16 duction of the oil and gas resources of the Coastal  
17 Plain; and

18 (2) to administer the provisions of this title  
19 through regulations, lease terms, conditions, restric-  
20 tions, prohibitions, stipulations, and other provisions  
21 that ensure the oil and gas exploration, development,  
22 and production activities on the Coastal Plain will  
23 result in no significant adverse effect on fish and  
24 wildlife, their habitat, subsistence resources, and the  
25 environment, and including, in furtherance of this

1 goal, by requiring the application of the best com-  
2 mercially available technology for oil and gas explo-  
3 ration, development, and production to all explo-  
4 ration, development, and production operations  
5 under this title in a manner that ensures the receipt  
6 of fair market value by the public for the mineral re-  
7 sources to be leased.

8 (b) REPEAL.—Section 1003 of the Alaska National  
9 Interest Lands Conservation Act of 1980 (16 U.S.C.  
10 3143) is repealed.

11 (c) COMPLIANCE WITH REQUIREMENTS UNDER CER-  
12 TAIN OTHER LAWS.—

13 (1) COMPATIBILITY.—For purposes of the Na-  
14 tional Wildlife Refuge System Administration Act of  
15 1966, the oil and gas leasing program and activities  
16 authorized by this section in the Coastal Plain are  
17 deemed to be compatible with the purposes for which  
18 the Arctic National Wildlife Refuge was established,  
19 and that no further findings or decisions are re-  
20 quired to implement this determination.

21 (2) ADEQUACY OF THE DEPARTMENT OF THE  
22 INTERIOR’S LEGISLATIVE ENVIRONMENTAL IMPACT  
23 STATEMENT.—The “Final Legislative Environ-  
24 mental Impact Statement” (April 1987) on the  
25 Coastal Plain prepared pursuant to section 1002 of

1 the Alaska National Interest Lands Conservation  
2 Act of 1980 (16 U.S.C. 3142) and section 102(2)(C)  
3 of the National Environmental Policy Act of 1969  
4 (42 U.S.C. 4332(2)(C)) is deemed to satisfy the re-  
5 quirements under the National Environmental Policy  
6 Act of 1969 that apply with respect to actions au-  
7 thorized to be taken by the Secretary to develop and  
8 promulgate the regulations for the establishment of  
9 a leasing program authorized by this title before the  
10 conduct of the first lease sale.

11 (3) COMPLIANCE WITH NEPA FOR OTHER AC-  
12 TIONS.—Before conducting the first lease sale under  
13 this title, the Secretary shall prepare an environ-  
14 mental impact statement under the National Envi-  
15 ronmental Policy Act of 1969 with respect to the ac-  
16 tions authorized by this title that are not referred to  
17 in paragraph (2). Notwithstanding any other law,  
18 the Secretary is not required to identify nonleasing  
19 alternative courses of action or to analyze the envi-  
20 ronmental effects of such courses of action. The Sec-  
21 retary shall only identify a preferred action for such  
22 leasing and a single leasing alternative, and analyze  
23 the environmental effects and potential mitigation  
24 measures for those two alternatives. The identifica-  
25 tion of the preferred action and related analysis for

1 the first lease sale under this title shall be completed  
2 within 18 months after the date of the enactment of  
3 this Act. The Secretary shall only consider public  
4 comments that specifically address the Secretary's  
5 preferred action and that are filed within 20 days  
6 after publication of an environmental analysis. Not-  
7 withstanding any other law, compliance with this  
8 paragraph is deemed to satisfy all requirements for  
9 the analysis and consideration of the environmental  
10 effects of proposed leasing under this title.

11 (d) RELATIONSHIP TO STATE AND LOCAL AUTHOR-  
12 ITY.—Nothing in this title shall be considered to expand  
13 or limit State and local regulatory authority.

14 (e) SPECIAL AREAS.—

15 (1) IN GENERAL.—The Secretary, after con-  
16 sultation with the State of Alaska, the city of  
17 Kaktovik, and the North Slope Borough, may des-  
18 ignate up to a total of 45,000 acres of the Coastal  
19 Plain as a Special Area if the Secretary determines  
20 that the Special Area is of such unique character  
21 and interest so as to require special management  
22 and regulatory protection. The Secretary shall des-  
23 ignate as such a Special Area the Sadlerochit Spring  
24 area, comprising approximately 4,000 acres as de-  
25 picted on the map referred to in section 6502(1).



1           (2) MANAGEMENT.—Each such Special Area  
2       shall be managed so as to protect and preserve the  
3       area's unique and diverse character including its  
4       fish, wildlife, and subsistence resource values.

5           (3) EXCLUSION FROM LEASING OR SURFACE  
6       OCCUPANCY.—The Secretary may exclude any Spe-  
7       cial Area from leasing. If the Secretary leases a Spe-  
8       cial Area, or any part thereof, for purposes of oil  
9       and gas exploration, development, production, and  
10      related activities, there shall be no surface occu-  
11      pancy of the lands comprising the Special Area.

12          (4) DIRECTIONAL DRILLING.—Notwithstanding  
13      the other provisions of this subsection, the Secretary  
14      may lease all or a portion of a Special Area under  
15      terms that permit the use of horizontal drilling tech-  
16      nology from sites on leases located outside the area.

17          (f) LIMITATION ON CLOSED AREAS.—The Sec-  
18      retary's sole authority to close lands within the Coastal  
19      Plain to oil and gas leasing and to exploration, develop-  
20      ment, and production is that set forth in this title.

21          (g) REGULATIONS.—

22              (1) IN GENERAL.—The Secretary shall pre-  
23      scribe such regulations as may be necessary to carry  
24      out this title, including rules and regulations relating  
25      to protection of the fish and wildlife, their habitat,

1 subsistence resources, and environment of the Coast-  
2 al Plain, by no later than 15 months after the date  
3 of the enactment of this Act.

4 (2) REVISION OF REGULATIONS.—The Sec-  
5 retary shall periodically review and, if appropriate,  
6 revise the rules and regulations issued under sub-  
7 section (a) to reflect any significant biological, envi-  
8 ronmental, or engineering data that come to the Sec-  
9 retary's attention.

10 **SEC. 6504. LEASE SALES.**

11 (a) IN GENERAL.—Lands may be leased pursuant to  
12 this title to any person qualified to obtain a lease for de-  
13 posits of oil and gas under the Mineral Leasing Act (30  
14 U.S.C. 181 et seq.).

15 (b) PROCEDURES.—The Secretary shall, by regula-  
16 tion, establish procedures for—

17 (1) receipt and consideration of sealed nomina-  
18 tions for any area in the Coastal Plain for inclusion  
19 in, or exclusion (as provided in subsection (c)) from,  
20 a lease sale;

21 (2) the holding of lease sales after such nomina-  
22 tion process; and

23 (3) public notice of and comment on designa-  
24 tion of areas to be included in, or excluded from, a  
25 lease sale.

1 (c) LEASE SALE BIDS.—Bidding for leases under  
2 this title shall be by sealed competitive cash bonus bids.

3 (d) ACREAGE MINIMUM IN FIRST SALE.—In the first  
4 lease sale under this title, the Secretary shall offer for  
5 lease those tracts the Secretary considers to have the  
6 greatest potential for the discovery of hydrocarbons, tak-  
7 ing into consideration nominations received pursuant to  
8 subsection (b)(1), but in no case less than 200,000 acres.

9 (e) TIMING OF LEASE SALES.—The Secretary  
10 shall—

11 (1) conduct the first lease sale under this title  
12 within 22 months after the date of the enactment of  
13 this title; and

14 (2) conduct additional sales so long as sufficient  
15 interest in development exists to warrant, in the Sec-  
16 retary's judgment, the conduct of such sales.

17 **SEC. 6505. GRANT OF LEASES BY THE SECRETARY.**

18 (a) IN GENERAL.—The Secretary may grant to the  
19 highest responsible qualified bidder in a lease sale con-  
20 ducted pursuant to section 6504 any lands to be leased  
21 on the Coastal Plain upon payment by the lessee of such  
22 bonus as may be accepted by the Secretary.

23 (b) SUBSEQUENT TRANSFERS.—No lease issued  
24 under this title may be sold, exchanged, assigned, sublet,  
25 or otherwise transferred except with the approval of the

1 Secretary. Prior to any such approval the Secretary shall  
2 consult with, and give due consideration to the views of,  
3 the Attorney General.

4 **SEC. 6506. LEASE TERMS AND CONDITIONS.**

5 (a) IN GENERAL.—An oil or gas lease issued pursu-  
6 ant to this title shall—

7 (1) provide for the payment of a royalty of not  
8 less than 12½ percent in amount or value of the  
9 production removed or sold from the lease, as deter-  
10 mined by the Secretary under the regulations appli-  
11 cable to other Federal oil and gas leases;

12 (2) provide that the Secretary may close, on a  
13 seasonal basis, portions of the Coastal Plain to ex-  
14 ploratory drilling activities as necessary to protect  
15 caribou calving areas and other species of fish and  
16 wildlife;

17 (3) require that the lessee of lands within the  
18 Coastal Plain shall be fully responsible and liable for  
19 the reclamation of lands within the Coastal Plain  
20 and any other Federal lands that are adversely af-  
21 fected in connection with exploration, development,  
22 production, or transportation activities conducted  
23 under the lease and within the Coastal Plain by the  
24 lessee or by any of the subcontractors or agents of  
25 the lessee;

1           (4) provide that the lessee may not delegate or  
2           convey, by contract or otherwise, the reclamation re-  
3           sponsibility and liability to another person without  
4           the express written approval of the Secretary;

5           (5) provide that the standard of reclamation for  
6           lands required to be reclaimed under this title shall  
7           be, as nearly as practicable, a condition capable of  
8           supporting the uses which the lands were capable of  
9           supporting prior to any exploration, development, or  
10          production activities, or upon application by the les-  
11          see, to a higher or better use as approved by the  
12          Secretary;

13          (6) contain terms and conditions relating to  
14          protection of fish and wildlife, their habitat, and the  
15          environment as required pursuant to section  
16          6503(a)(2);

17          (7) provide that the lessee, its agents, and its  
18          contractors use best efforts to provide a fair share,  
19          as determined by the level of obligation previously  
20          agreed to in the 1974 agreement implementing sec-  
21          tion 29 of the Federal Agreement and Grant of  
22          Right of Way for the Operation of the Trans-Alaska  
23          Pipeline, of employment and contracting for Alaska  
24          Natives and Alaska Native Corporations from  
25          throughout the State;

1           (8) prohibit the export of oil produced under  
2       the lease; and

3           (9) contain such other provisions as the Sec-  
4       retary determines necessary to ensure compliance  
5       with the provisions of this title and the regulations  
6       issued under this title.

7       (b) PROJECT LABOR AGREEMENTS.—The Secretary,  
8       as a term and condition of each lease under this title and  
9       in recognizing the Government’s proprietary interest in  
10      labor stability and in the ability of construction labor and  
11      management to meet the particular needs and conditions  
12      of projects to be developed under the leases issued pursu-  
13      ant to this title and the special concerns of the parties  
14      to such leases, shall require that the lessee and its agents  
15      and contractors negotiate to obtain a project labor agree-  
16      ment for the employment of laborers and mechanics on  
17      production, maintenance, and construction under the  
18      lease.

19   **SEC. 6507. COASTAL PLAIN ENVIRONMENTAL PROTECTION.**

20       (a) NO SIGNIFICANT ADVERSE EFFECT STANDARD  
21      TO GOVERN AUTHORIZED COASTAL PLAIN ACTIVITIES.—  
22      The Secretary shall, consistent with the requirements of  
23      section 6503, administer the provisions of this title  
24      through regulations, lease terms, conditions, restrictions,  
25      prohibitions, stipulations, and other provisions that—

1           (1) ensure the oil and gas exploration, develop-  
2           ment, and production activities on the Coastal Plain  
3           will result in no significant adverse effect on fish  
4           and wildlife, their habitat, and the environment;

5           (2) require the application of the best commer-  
6           cially available technology for oil and gas explo-  
7           ration, development, and production on all new ex-  
8           ploration, development, and production operations;  
9           and

10          (3) ensure that the maximum amount of sur-  
11          face acreage covered by production and support fa-  
12          cilities, including airstrips and any areas covered by  
13          gravel berms or piers for support of pipelines, does  
14          not exceed 2,000 acres on the Coastal Plain.

15          (b) SITE-SPECIFIC ASSESSMENT AND MITIGATION.—  
16          The Secretary shall also require, with respect to any pro-  
17          posed drilling and related activities, that—

18               (1) a site-specific analysis be made of the prob-  
19               able effects, if any, that the drilling or related activi-  
20               ties will have on fish and wildlife, their habitat, and  
21               the environment;

22               (2) a plan be implemented to avoid, minimize,  
23               and mitigate (in that order and to the extent prac-  
24               ticable) any significant adverse effect identified  
25               under paragraph (1); and

1           (3) the development of the plan shall occur  
2           after consultation with the agency or agencies hav-  
3           ing jurisdiction over matters mitigated by the plan.

4           (c) REGULATIONS TO PROTECT COASTAL PLAIN  
5 FISH AND WILDLIFE RESOURCES, SUBSISTENCE USERS,  
6 AND THE ENVIRONMENT.—Before implementing the leas-  
7 ing program authorized by this title, the Secretary shall  
8 prepare and promulgate regulations, lease terms, condi-  
9 tions, restrictions, prohibitions, stipulations, and other  
10 measures designed to ensure that the activities undertaken  
11 on the Coastal Plain under this title are conducted in a  
12 manner consistent with the purposes and environmental  
13 requirements of this title.

14          (d) COMPLIANCE WITH FEDERAL AND STATE ENVI-  
15 RONMENTAL LAWS AND OTHER REQUIREMENTS.—The  
16 proposed regulations, lease terms, conditions, restrictions,  
17 prohibitions, and stipulations for the leasing program  
18 under this title shall require compliance with all applicable  
19 provisions of Federal and State environmental law and  
20 shall also require the following:

21           (1) Standards at least as effective as the safety  
22           and environmental mitigation measures set forth in  
23           items 1 through 29 at pages 167 through 169 of the  
24           “Final Legislative Environmental Impact State-  
25           ment” (April 1987) on the Coastal Plain.



1           (2) Seasonal limitations on exploration, develop-  
2           ment, and related activities, where necessary, to  
3           avoid significant adverse effects during periods of  
4           concentrated fish and wildlife breeding, denning,  
5           nesting, spawning, and migration.

6           (3) That exploration activities, except for sur-  
7           face geological studies, be limited to the period be-  
8           tween approximately November 1 and May 1 each  
9           year and that exploration activities shall be sup-  
10          ported by ice roads, winter trails with adequate snow  
11          cover, ice pads, ice airstrips, and air transport meth-  
12          ods, except that such exploration activities may  
13          occur at other times, if—

14                (A) the Secretary determines, after afford-  
15                ing an opportunity for public comment and re-  
16                view, that special circumstances exist necessi-  
17                tating that exploration activities be conducted  
18                at other times of the year; and

19                (B) the Secretary finds that such explo-  
20                ration will have no significant adverse effect on  
21                the fish and wildlife, their habitat, and the envi-  
22                ronment of the Coastal Plain.

23           (4) Design safety and construction standards  
24           for all pipelines and any access and service roads,  
25           that—

1 (A) minimize, to the maximum extent pos-  
2 sible, adverse effects upon the passage of mi-  
3 gratory species such as caribou; and

4 (B) minimize adverse effects upon the flow  
5 of surface water by requiring the use of cul-  
6 verts, bridges, and other structural devices.

7 (5) Prohibitions on public access and use on all  
8 pipeline access and service roads.

9 (6) Stringent reclamation and rehabilitation re-  
10 quirements, consistent with the standards set forth  
11 in this title, requiring the removal from the Coastal  
12 Plain of all oil and gas development and production  
13 facilities, structures, and equipment upon completion  
14 of oil and gas production operations, except that the  
15 Secretary may exempt from the requirements of this  
16 paragraph those facilities, structures, or equipment  
17 that the Secretary determines would assist in the  
18 management of the Arctic National Wildlife Refuge  
19 and that are donated to the United States for that  
20 purpose.

21 (7) Appropriate prohibitions or restrictions on  
22 access by all modes of transportation.

23 (8) Appropriate prohibitions or restrictions on  
24 sand and gravel extraction.

25 (9) Consolidation of facility siting.

1           (10) Appropriate prohibitions or restrictions on  
2       use of explosives.

3           (11) Avoidance, to the extent practicable, of  
4       springs, streams, and river system; the protection of  
5       natural surface drainage patterns, wetlands, and ri-  
6       parian habitats; and the regulation of methods or  
7       techniques for developing or transporting adequate  
8       supplies of water for exploratory drilling.

9           (12) Avoidance or reduction of air traffic-re-  
10      lated disturbance to fish and wildlife.

11          (13) Treatment and disposal of hazardous and  
12      toxic wastes, solid wastes, reserve pit fluids, drilling  
13      muds and cuttings, and domestic wastewater, includ-  
14      ing an annual waste management report, a haz-  
15      ardous materials tracking system, and a prohibition  
16      on chlorinated solvents, in accordance with applica-  
17      ble Federal and State environmental law.

18          (14) Fuel storage and oil spill contingency plan-  
19      ning.

20          (15) Research, monitoring, and reporting re-  
21      quirements.

22          (16) Field crew environmental briefings.

23          (17) Avoidance of significant adverse effects  
24      upon subsistence hunting, fishing, and trapping by  
25      subsistence users.

1           (18) Compliance with applicable air and water  
2           quality standards.

3           (19) Appropriate seasonal and safety zone des-  
4           ignations around well sites, within which subsistence  
5           hunting and trapping shall be limited.

6           (20) Reasonable stipulations for protection of  
7           cultural and archeological resources.

8           (21) All other protective environmental stipula-  
9           tions, restrictions, terms, and conditions deemed  
10          necessary by the Secretary.

11       (e) CONSIDERATIONS.—In preparing and promul-  
12       gating regulations, lease terms, conditions, restrictions,  
13       prohibitions, and stipulations under this section, the Sec-  
14       retary shall consider the following:

15           (1) The stipulations and conditions that govern  
16           the National Petroleum Reserve-Alaska leasing pro-  
17           gram, as set forth in the 1999 Northeast National  
18           Petroleum Reserve-Alaska Final Integrated Activity  
19           Plan/Environmental Impact Statement.

20           (2) The environmental protection standards  
21           that governed the initial Coastal Plain seismic explo-  
22           ration program under parts 37.31 to 37.33 of title  
23           50, Code of Federal Regulations.

24           (3) The land use stipulations for exploratory  
25           drilling on the KIC–ASRC private lands that are set

1       forth in Appendix 2 of the August 9, 1983, agree-  
2       ment between Arctic Slope Regional Corporation and  
3       the United States.

4       (f) FACILITY CONSOLIDATION PLANNING.—

5           (1) IN GENERAL.—The Secretary shall, after  
6       providing for public notice and comment, prepare  
7       and update periodically a plan to govern, guide, and  
8       direct the siting and construction of facilities for the  
9       exploration, development, production, and transpor-  
10      tation of Coastal Plain oil and gas resources.

11          (2) OBJECTIVES.—The plan shall have the fol-  
12      lowing objectives:

13           (A) Avoiding unnecessary duplication of fa-  
14      cilities and activities.

15           (B) Encouraging consolidation of common  
16      facilities and activities.

17           (C) Locating or confining facilities and ac-  
18      tivities to areas that will minimize impact on  
19      fish and wildlife, their habitat, and the environ-  
20      ment.

21           (D) Utilizing existing facilities wherever  
22      practicable.

23           (E) Enhancing compatibility between wild-  
24      life values and development activities.

1 **SEC. 6508. EXPEDITED JUDICIAL REVIEW.**

2 (a) FILING OF COMPLAINT.—

3 (1) DEADLINE.—Subject to paragraph (2), any  
4 complaint seeking judicial review of any provision of  
5 this title or any action of the Secretary under this  
6 title shall be filed in any appropriate district court  
7 of the United States—

8 (A) except as provided in subparagraph  
9 (B), within the 90-day period beginning on the  
10 date of the action being challenged; or

11 (B) in the case of a complaint based solely  
12 on grounds arising after such period, within 90  
13 days after the complainant knew or reasonably  
14 should have known of the grounds for the com-  
15 plaint.

16 (2) VENUE.—Any complaint seeking judicial re-  
17 view of an action of the Secretary under this title  
18 may be filed only in the United States Court of Ap-  
19 peals for the District of Columbia.

20 (3) LIMITATION ON SCOPE OF CERTAIN RE-  
21 VIEW.—Judicial review of a Secretarial decision to  
22 conduct a lease sale under this title, including the  
23 environmental analysis thereof, shall be limited to  
24 whether the Secretary has complied with the terms  
25 of this division and shall be based upon the adminis-  
26 trative record of that decision. The Secretary's iden-

1       tification of a preferred course of action to enable  
2       leasing to proceed and the Secretary's analysis of  
3       environmental effects under this division shall be  
4       presumed to be correct unless shown otherwise by  
5       clear and convincing evidence to the contrary.

6       (b) LIMITATION ON OTHER REVIEW.—Actions of the  
7       Secretary with respect to which review could have been  
8       obtained under this section shall not be subject to judicial  
9       review in any civil or criminal proceeding for enforcement.

10   **SEC. 6509. RIGHTS-OF-WAY ACROSS THE COASTAL PLAIN.**

11       (a) EXEMPTION.—Title XI of the Alaska National In-  
12       terest Lands Conservation Act of 1980 (16 U.S.C. 3161  
13       et seq.) shall not apply to the issuance by the Secretary  
14       under section 28 of the Mineral Leasing Act (30 U.S.C.  
15       185) of rights-of-way and easements across the Coastal  
16       Plain for the transportation of oil and gas.

17       (b) TERMS AND CONDITIONS.—The Secretary shall  
18       include in any right-of-way or easement referred to in sub-  
19       section (a) such terms and conditions as may be necessary  
20       to ensure that transportation of oil and gas does not result  
21       in a significant adverse effect on the fish and wildlife, sub-  
22       sistence resources, their habitat, and the environment of  
23       the Coastal Plain, including requirements that facilities be  
24       sited or designed so as to avoid unnecessary duplication  
25       of roads and pipelines.

1 (c) REGULATIONS.—The Secretary shall include in  
2 regulations under section 6503(g) provisions granting  
3 rights-of-way and easements described in subsection (a)  
4 of this section.

5 **SEC. 6510. CONVEYANCE.**

6 In order to maximize Federal revenues by removing  
7 clouds on title to lands and clarifying land ownership pat-  
8 terns within the Coastal Plain, the Secretary, notwith-  
9 standing the provisions of section 1302(h)(2) of the Alas-  
10 ka National Interest Lands Conservation Act (16 U.S.C.  
11 3192(h)(2)), shall convey—

12 (1) to the Kaktovik Inupiat Corporation the  
13 surface estate of the lands described in paragraph 2  
14 of Public Land Order 6959, to the extent necessary  
15 to fulfill the Corporation's entitlement under section  
16 12 of the Alaska Native Claims Settlement Act (43  
17 U.S.C. 1611); and

18 (2) to the Arctic Slope Regional Corporation  
19 the subsurface estate beneath such surface estate  
20 pursuant to the August 9, 1983, agreement between  
21 the Arctic Slope Regional Corporation and the  
22 United States of America.

23 **SEC. 6511. LOCAL GOVERNMENT IMPACT AID AND COMMU-**  
24 **NITY SERVICE ASSISTANCE.**

25 (a) FINANCIAL ASSISTANCE AUTHORIZED.—



1           (1) IN GENERAL.—The Secretary may use  
2           amounts available from the Coastal Plain Local Gov-  
3           ernment Impact Aid Assistance Fund established by  
4           subsection (d) to provide timely financial assistance  
5           to entities that are eligible under paragraph (2) and  
6           that are directly impacted by the exploration for or  
7           production of oil and gas on the Coastal Plain under  
8           this title.

9           (2) ELIGIBLE ENTITIES.—The North Slope  
10          Borough, Kaktovik, and other boroughs, municipal  
11          subdivisions, villages, and any other community or-  
12          ganized under Alaska State law shall be eligible for  
13          financial assistance under this section.

14          (b) USE OF ASSISTANCE.—Financial assistance  
15          under this section may be used only for—

16                (1) planning for mitigation of the potential ef-  
17                fects of oil and gas exploration and development on  
18                environmental, social, cultural, recreational and sub-  
19                sistence values;

20                (2) implementing mitigation plans and main-  
21                taining mitigation projects; and

22                (3) developing, carrying out, and maintaining  
23                projects and programs that provide new or expanded  
24                public facilities and services to address needs and  
25                problems associated with such effects, including fire-

1 fighting, police, water, waste treatment, medivac,  
2 and medical services.

3 (c) APPLICATION.—

4 (1) IN GENERAL.—Any community that is eligi-  
5 ble for assistance under this section may submit an  
6 application for such assistance to the Secretary, in  
7 such form and under such procedures as the Sec-  
8 retary may prescribe by regulation.

9 (2) NORTH SLOPE BOROUGH COMMUNITIES.—A  
10 community located in the North Slope Borough may  
11 apply for assistance under this section either directly  
12 to the Secretary or through the North Slope Bor-  
13 ough.

14 (3) APPLICATION ASSISTANCE.—The Secretary  
15 shall work closely with and assist the North Slope  
16 Borough and other communities eligible for assist-  
17 ance under this section in developing and submitting  
18 applications for assistance under this section.

19 (d) ESTABLISHMENT OF FUND.—

20 (1) IN GENERAL.—There is established in the  
21 Treasury the Coastal Plain Local Government Im-  
22 pact Aid Assistance Fund.

23 (2) USE.—Amounts in the fund may be used  
24 only for providing financial assistance under this  
25 section.

1           (3) DEPOSITS.—Subject to paragraph (4), there  
2       shall be deposited into the fund amounts received by  
3       the United States as revenues derived from rents,  
4       bonuses, and royalties under on leases and lease  
5       sales authorized under this title.

6           (4) LIMITATION ON DEPOSITS.—The total  
7       amount in the fund may not exceed \$10,000,000.

8           (5) INVESTMENT OF BALANCES.—The Sec-  
9       retary of the Treasury shall invest amounts in the  
10      fund in interest bearing government securities.

11      (e) AUTHORIZATION OF APPROPRIATIONS.—To pro-  
12      vide financial assistance under this section there is author-  
13      ized to be appropriated to the Secretary from the Coastal  
14      Plain Local Government Impact Aid Assistance Fund  
15      \$5,000,000 for each fiscal year.

16      **SEC. 6512. REVENUE ALLOCATION.**

17      (a) FEDERAL AND STATE DISTRIBUTION.—

18           (1) IN GENERAL.—Notwithstanding section  
19      6504 of this Act, the Mineral Leasing Act (30  
20      U.S.C. 181 et. seq.), or any other law, of the  
21      amount of adjusted bonus, rental, and royalty reve-  
22      nues from oil and gas leasing and operations author-  
23      ized under this title—

24                   (A) 50 percent shall be paid to the State  
25                   of Alaska; and

1 (B) the balance shall be deposited into the  
2 Renewable Energy Technology Investment  
3 Fund and the Royalties Conservation Fund as  
4 provided in this section.

5 (2) ADJUSTMENTS.—Adjustments to bonus,  
6 rental, and royalty amounts from oil and gas leasing  
7 and operations authorized under this title shall be  
8 made as necessary for overpayments and refunds  
9 from lease revenues received in current or subse-  
10 quent periods before distribution of such revenues  
11 pursuant to this section.

12 (3) TIMING OF PAYMENTS TO STATE.—Pay-  
13 ments to the State of Alaska under this section shall  
14 be made semiannually.

15 (b) RENEWABLE ENERGY TECHNOLOGY INVEST-  
16 MENT FUND.—

17 (1) ESTABLISHMENT AND AVAILABILITY.—  
18 There is hereby established in the Treasury of the  
19 United States a separate account which shall be  
20 known as the “Renewable Energy Technology In-  
21 vestment Fund”.

22 (2) DEPOSITS.—Fifty percent of adjusted reve-  
23 nues from bonus payments for leases issued under  
24 this title shall be deposited into the Renewable En-  
25 ergy Technology Investment Fund.

1           (3) USE, GENERALLY.—Subject to paragraph  
2           (4), funds deposited into the Renewable Energy  
3           Technology Investment Fund shall be used by the  
4           Secretary of Energy to finance research grants, con-  
5           tracts, and cooperative agreements and expenses of  
6           direct research by Federal agencies, including the  
7           costs of administering and reporting on such a pro-  
8           gram of research, to improve and demonstrate tech-  
9           nology and develop basic science information for de-  
10          velopment and use of renewable and alternative fuels  
11          including wind energy, solar energy, geothermal en-  
12          ergy, and energy from biomass. Such research may  
13          include studies on deployment of such technology in-  
14          cluding research on how to lower the costs of intro-  
15          duction of such technology and of barriers to entry  
16          into the market of such technology.

17          (4) USE FOR ADJUSTMENTS AND REFUNDS.—If  
18          for any circumstances, adjustments or refunds of  
19          bonus amounts deposited pursuant to this title be-  
20          come warranted, 50 percent of the amount necessary  
21          for the sum of such adjustments and refunds may  
22          be paid by the Secretary from the Renewable Energy  
23          Technology Investment Fund.

24          (5) CONSULTATION AND COORDINATION.—Any  
25          specific use of the Renewable Energy Technology In-

1 vestment Fund shall be determined only after the  
2 Secretary of Energy consults and coordinates with  
3 the heads of other appropriate Federal agencies.

4 (6) REPORTS.—Not later than 1 year after the  
5 date of the enactment of this Act and on an annual  
6 basis thereafter, the Secretary of Energy shall trans-  
7 mit to the Committee on Science of the House of  
8 Representatives and the Committee on Energy and  
9 Natural Resources of the Senate a report on the use  
10 of funds under this subsection and the impact of and  
11 efforts to integrate such uses with other energy re-  
12 search efforts.

13 (c) ROYALTIES CONSERVATION FUND.—

14 (1) ESTABLISHMENT AND AVAILABILITY.—  
15 There is hereby established in the Treasury of the  
16 United States a separate account which shall be  
17 known as the “Royalties Conservation Fund”.

18 (2) DEPOSITS.—Fifty percent of revenues from  
19 rents and royalty payments for leases issued under  
20 this title shall be deposited into the Royalties Con-  
21 servation Fund.

22 (3) USE, GENERALLY.—Subject to paragraph  
23 (4), funds deposited into the Royalties Conservation  
24 Fund—

1           (A) may be used by the Secretary of the  
2           Interior and the Secretary of Agriculture to fi-  
3           nance grants, contracts, cooperative agree-  
4           ments, and expenses for direct activities of the  
5           Department of the Interior and the Forest  
6           Service to restore and otherwise conserve lands  
7           and habitat and to eliminate maintenance and  
8           improvements backlogs on Federal lands, in-  
9           cluding the costs of administering and reporting  
10          on such a program; and

11          (B) may be used by the Secretary of the  
12          Interior to finance grants, contracts, coopera-  
13          tive agreements, and expenses—

14               (i) to preserve historic Federal prop-  
15               erties;

16               (ii) to assist States and Indian Tribes  
17               in preserving their historic properties;

18               (iii) to foster the development of  
19               urban parks; and

20               (iv) to conduct research to improve  
21               the effectiveness and lower the costs of  
22               habitat restoration.

23          (4) USE FOR ADJUSTMENTS AND REFUNDS.—If  
24          for any circumstances, refunds or adjustments of  
25          royalty and rental amounts deposited pursuant to

1       this title become warranted, 50 percent of the  
2       amount necessary for the sum of such adjustments  
3       and refunds may be paid from the Royalties Con-  
4       servation Fund.

5       (d) AVAILABILITY.—Moneys covered into the ac-  
6       counts established by this section—

7               (1) shall be available for expenditure only to the  
8       extent appropriated therefor;

9               (2) may be appropriated without fiscal-year lim-  
10      itation; and

11              (3) may be obligated or expended only as pro-  
12      vided in this section.

13   **TITLE VI—CONSERVATION OF**  
14   **ENERGY BY THE DEPART-**  
15   **MENT OF THE INTERIOR**

16   **SEC. 6601. ENERGY CONSERVATION BY THE DEPARTMENT**  
17                           **OF THE INTERIOR.**

18       (a) IN GENERAL.—The Secretary of the Interior  
19      shall—

20              (1) conduct a study to identify, evaluate, and  
21      recommend opportunities for conserving energy by  
22      reducing the amount of energy used by facilities of  
23      the Department of the Interior; and

24              (2) wherever feasible and appropriate, reduce  
25      the use of energy from traditional sources by encour-



1       aging use of alternative energy sources, including  
2       solar power and power from fuel cells, throughout  
3       such facilities and the public lands of the United  
4       States.

5       (b) REPORTS.—The Secretary shall submit to the  
6 Congress—

7           (1) by not later than 90 days after the date of  
8       the enactment of this Act, a report containing the  
9       findings, conclusions, and recommendations of the  
10      study under subsection (a)(1); and

11           (2) by not later than December 31 each year,  
12      an annual report describing progress made in—

13           (A) conserving energy through opportuni-  
14      ties recommended in the report under para-  
15      graph (1); and

16           (B) encouraging use of alternative energy  
17      sources under subsection (a)(2).

18 **SEC. 6602. AMENDMENT TO BUY INDIAN ACT.**

19       Section 23 of the Act of June 25, 1910 (25 U.S.C.  
20 47; commonly known as the “Buy Indian Act”) is amend-  
21 ed by inserting “energy products, and energy by-prod-  
22 ucts,” after “printing.”

## **TITLE VII—COAL**

### **SEC. 6701. LIMITATION ON FEES WITH RESPECT TO COAL LEASE APPLICATIONS AND DOCUMENTS.**

Notwithstanding sections 304 and 504 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1734, 1764) and section 9701 of title 31, United States Code, the Secretary shall not recover the Secretary's costs with respect to applications and other documents relating to coal leases.

### **SEC. 6702. MINING PLANS.**

Section 2(d)(2) of the Mineral Leasing Act (30 U.S.C. 202a(2)) is amended—

(1) by inserting “(A)” after “(2)”; and

(2) by adding at the end the following:

“(B) The Secretary may establish a period of more than 40 years if the Secretary determines that the longer period—

“(i) will ensure the maximum economic recovery of a coal deposit; or

“(ii) the longer period is in the interest of the orderly, efficient, or economic development of a coal resources.”.

1 **SEC. 6703. PAYMENT OF ADVANCE ROYALTIES UNDER COAL**  
2 **LEASES.**

3 (a) IN GENERAL.—Section 7(b) of the Mineral Leas-  
4 ing Act of 1920 (30 U.S.C. 207(b)) is amended to read  
5 as follows:

6 “(b)(1) Each lease shall be subjected to the condition  
7 of diligent development and continued operation of the  
8 mine or mines, except where operations under the lease  
9 are interrupted by strikes, the elements, or casualties not  
10 attributable to the lessee.

11 “(2)(A) The Secretary of the Interior, upon deter-  
12 mining that the public interest will be served thereby, may  
13 suspend the condition of continued operation upon the  
14 payment of advance royalties.

15 “(B) Such advance royalties shall be computed based  
16 on the average price for coal sold in the spot market from  
17 the same region during the last month of each applicable  
18 continued operation year.

19 “(C) The aggregate number of years during the ini-  
20 tial and any extended term of any lease for which advance  
21 royalties may be accepted in lieu of the condition of contin-  
22 ued operation shall not exceed 20.

23 “(3) The amount of any production royalty paid for  
24 any year shall be reduced (but not below zero) by the  
25 amount of any advance royalties paid under such lease to

1 the extent that such advance royalties have not been used  
 2 to reduce production royalties for a prior year.

3 “(4) This subsection shall be applicable to any lease  
 4 or logical mining unit in existence on the date of the enact-  
 5 ment of this paragraph or issued or approved after such  
 6 date.

7 “(5) Nothing in this subsection shall be construed to  
 8 affect the requirement contained in the second sentence  
 9 of subsection (a) relating to commencement of production  
 10 at the end of 10 years.”.

11 (b) **AUTHORITY TO WAIVE, SUSPEND, OR REDUCE**  
 12 **ADVANCE ROYALTIES.**—Section 39 of the Mineral Leas-  
 13 ing Act (30 U.S.C. 209) is amended by striking the last  
 14 sentence.

15 **SEC. 6704. ELIMINATION OF DEADLINE FOR SUBMISSION**  
 16 **OF COAL LEASE OPERATION AND RECLAMA-**  
 17 **TION PLAN.**

18 Section 7(c) of the Mineral Leasing Act (30 U.S.C.  
 19 207(c)) is amended by striking “and not later than three  
 20 years after a lease is issued,”.

21 **TITLE VIII—INSULAR AREAS**  
 22 **ENERGY SECURITY**

23 **SEC. 6801. INSULAR AREAS ENERGY SECURITY.**

24 Section 604 of the Act entitled “An Act to authorize  
 25 appropriations for certain insular areas of the United

1 States, and for other purposes”, approved December 24,  
2 1980 (Public Law 96–597; 94 Stat. 3480–3481), is  
3 amended—

4 (1) in subsection (a)(4) by striking the period  
5 and inserting a semicolon;

6 (2) by adding at the end of subsection (a) the  
7 following new paragraphs:

8 “(5) electric power transmission and distribu-  
9 tion lines in insular areas are inadequate to with-  
10 stand damage caused by the hurricanes and ty-  
11 phoons which frequently occur in insular areas and  
12 such damage often costs millions of dollars to repair;  
13 and

14 “(6) the refinement of renewable energy tech-  
15 nologies since the publication of the 1982 Territorial  
16 Energy Assessment prepared pursuant to subsection  
17 (c) reveals the need to reassess the state of energy  
18 production, consumption, infrastructure, reliance on  
19 imported energy, and indigenous sources in regard  
20 to the insular areas.”;

21 (3) by amending subsection (e) to read as fol-  
22 lows:

23 “(e)(1) The Secretary of the Interior, in consultation  
24 with the Secretary of Energy and the chief executive offi-

1 cer of each insular area, shall update the plans required  
2 under subsection (c) by—

3 “(A) updating the contents required by sub-  
4 section (c);

5 “(B) drafting long-term energy plans for such  
6 insular areas with the objective of reducing, to the  
7 extent feasible, their reliance on energy imports by  
8 the year 2010 and maximizing, to the extent fea-  
9 sible, use of indigenous energy sources; and

10 “(C) drafting long-term energy transmission  
11 line plans for such insular areas with the objective  
12 that the maximum percentage feasible of electric  
13 power transmission and distribution lines in each in-  
14 sular area be protected from damage caused by hur-  
15 ricanes and typhoons.

16 “(2) Not later than May 31, 2003, the Secretary of  
17 the Interior shall submit to Congress the updated plans  
18 for each insular area required by this subsection.”; and

19 (4) by amending subsection (g)(4) to read as  
20 follows:

21 “(4) POWER LINE GRANTS FOR TERRI-  
22 TORIES.—

23 “(A) IN GENERAL.—The Secretary of the  
24 Interior is authorized to make grants to govern-  
25 ments of territories of the United States to

1 carry out eligible projects to protect electric  
2 power transmission and distribution lines in  
3 such territories from damage caused by hurri-  
4 canes and typhoons.

5 “(B) ELIGIBLE PROJECTS.—The Secretary  
6 may award grants under subparagraph (A) only  
7 to governments of territories of the United  
8 States that submit written project plans to the  
9 Secretary for projects that meet the following  
10 criteria:

11 “(i) The project is designed to protect  
12 electric power transmission and distribu-  
13 tion lines located in one or more of the ter-  
14 ritories of the United States from damage  
15 caused by hurricanes and typhoons.

16 “(ii) The project is likely to substan-  
17 tially reduce the risk of future damage,  
18 hardship, loss, or suffering.

19 “(iii) The project addresses one or  
20 more problems that have been repetitive or  
21 that pose a significant risk to public health  
22 and safety.

23 “(iv) The project is not likely to cost  
24 more than the value of the reduction in di-  
25 rect damage and other negative impacts

1           that the project is designed to prevent or  
2           mitigate. The cost benefit analysis required  
3           by this criterion shall be computed on a  
4           net present value basis.

5           “(v) The project design has taken into  
6           consideration long-term changes to the  
7           areas and persons it is designed to protect  
8           and has manageable future maintenance  
9           and modification requirements.

10          “(vi) The project plan includes an  
11          analysis of a range of options to address  
12          the problem it is designed to prevent or  
13          mitigate and a justification for the selec-  
14          tion of the project in light of that analysis.

15          “(vii) The applicant has demonstrated  
16          to the Secretary that the matching funds  
17          required by subparagraph (D) are avail-  
18          able.

19          “(C) PRIORITY.—When making grants  
20          under this paragraph, the Secretary shall give  
21          priority to grants for projects which are likely  
22          to—

23                 “(i) have the greatest impact on re-  
24                 ducing future disaster losses; and



1           “(ii) best conform with plans that  
2           have been approved by the Federal Govern-  
3           ment or the government of the territory  
4           where the project is to be carried out for  
5           development or hazard mitigation for that  
6           territory.

7           “(D) MATCHING REQUIREMENT.—The  
8           Federal share of the cost for a project for which  
9           a grant is provided under this paragraph shall  
10          not exceed 75 percent of the total cost of that  
11          project. The non-Federal share of the cost may  
12          be provided in the form of cash or services.

13          “(E) TREATMENT OF FUNDS FOR CERTAIN  
14          PURPOSES.—Grants provided under this para-  
15          graph shall not be considered as income, a re-  
16          source, or a duplicative program when deter-  
17          mining eligibility or benefit levels for Federal  
18          major disaster and emergency assistance.

19          “(F) AUTHORIZATION OF APPROPRIA-  
20          TIONS.—There is authorized to be appropriated  
21          to carry out this paragraph \$5,000,000 for each  
22          fiscal year beginning after the date of the en-  
23          actment of this paragraph.”.

1 **DIVISION G**

2 **SEC. 7101. BUY AMERICAN.**

3 No funds authorized under this Act shall be available  
4 to any person or entity that has been convicted of violating  
5 the Buy American Act (41 U.S.C. 10a–10c).

Passed the House of Representatives August 2 (legislative day, August 1), 2001.

Attest:

*Clerk.*

107TH CONGRESS  
1ST SESSION

# H. R. 4

---

---

## AN ACT

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