107TH CONGRESS 1ST SESSION H.R.4

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.

IN THE HOUSE OF REPRESENTATIVES

JULY 27, 2001

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

A BILL

- 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,

3 SEC. 1. SHORT TITLE AND TABLE OF CONTENTS.

4 (a) SHORT TITLE.—This Act may be cited as the
5 "Securing America's Future Energy Act of 2001" or the
6 "SAFE Act of 2001".

1 (b) TABLE OF CONTENTS.—The table of contents for

2 this Act is as follows:

Sec. 1. Short title and table of contents.

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Sec. 100. Short title.

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

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- 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.
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- 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.
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- Sec. 301. Budget status of Nuclear Waste Fund.
- Sec. 302. License period.
- Sec. 303. Cost recovery from Government agencies.
- Sec. 304. Depleted uranium hexafluoride.
- Sec. 305. Nuclear Regulatory Commission meetings.
- Sec. 306. Cooperative research and development and special demonstration projects for the uranium mining industry.
- Sec. 307. Maintenance of a viable domestic uranium conversion industry.
- Sec. 308. Paducah decontamination and decommissioning plan.

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

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- Sec. 602. Gasoline blendstock requirements.
- Sec. 603. Boutique fuels.
- Sec. 604. Funding for MTBE contamination.

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- Sec. 702. Renewable energy production incentive.

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DIVISION A

11

2 SEC. 100. SHORT TITLE.

1

3 This division may be cited as the "Energy Advance-4 ment and Conservation Act of 2001".

TITLE I—ENERGY 5 **CONSERVATION** 6 Subtitle **A**—Reauthorization of 7 Conservation Federal Energy 8 **Programs** 9 10 SEC. 101. AUTHORIZATION OF APPROPRIATIONS. 11 Section 660 of the Department of Energy Organiza-12 tion Act (42 U.S.C. 7270) is amended as follows: 13 (1) By inserting "(a)" before "Appropriations". 14 (2) By inserting at the end the following new 15 subsection: 16 "(b) There are hereby authorized to be appropriated to the Department of Energy for fiscal year 2002, 17 \$950,000,000; for fiscal year 2003, \$1,000,000,000; for 18 fiscal year 2004, \$1,050,000,000; for fiscal year 2005, 19 20 \$1,100,000,000; and for fiscal 2006.year 21\$1,150,000,000, to carry out energy efficiency activities 22 under the following laws, such sums to remain available 23 until expended:

24 "(1) Energy Policy and Conservation Act, in25 cluding section 256(d)(42 U.S.C. 6276(d)) (promote

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

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).".

Subtitle B—Federal Leadership in Energy Conservation

3 SEC. 121. FEDERAL FACILITIES AND NATIONAL ENERGY SE-

CURITY.

4

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".

(b) ENERGY MANAGEMENT REQUIREMENTS.—Sec13 tion 543 of the National Energy Conservation Policy Act
14 (42 U.S.C. 8253) is amended as follows:

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

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 foot25 of its Federal buildings in use during fiscal year 1985.

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

6 (2) In subsection (d), by inserting "Such guide-7 lines shall include appropriate model technical standards for energy efficiency and unconventional and 8 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 energy resources." after "implementation of this 15 part.". 16

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 en2 ergy, there are authorized to be appropriated to the Sec3 retary \$20,000,000 for each of the fiscal years 2003
4 through 2010.".

5 (c) DEFINITION.—Section 551 of the National En6 ergy Conservation Policy Act (42 U.S.C. 8259) is amend7 ed as follows:

8 (1) By striking "and" at the end of paragraph9 (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 new13 paragraph:

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

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

- 22 (1) In section 543(a)—
- (A) by striking "(1) Subject to paragraph
 (2)" and inserting "Subject to subsection (c)";
 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 new9 paragraph:

"(5)(A)(i) Agencies shall select only Energy Star 10 products when available when acquiring energy-using 11 products. For product groups where Energy Star labels 12 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 500 horsepower, agencies shall select only premium effi-16 17 ciency motors that meet a standard designated by the Secretary, and shall replace (not rewind) failed motors with 18 motors meeting such standard. The Secretary shall des-19 ignate such standard within 90 days of enactment of para-20 21 graph, after considering recommendations by the National 22 Electrical Manufacturers Association. The Secretary of 23 Energy shall develop guidelines within 180 days after the 24 enactment of this paragraph for exemptions to this section 1 when equivalent products do not exist, are impractical, or2 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 Administrator of the Environmental Protection Agency 6 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 Services Administration and the Secretary of Defense (acting 11 12 through the Defense Logistics Agency) shall only replace 13 inventories with energy-using products that are Energy Star, products that are rated in the top 25 percent of en-14 15 ergy efficiency, or products that are exempted as designated by FEMP and defined in clause (i). 16

17 "(iii) Agencies shall incorporate energy-efficient criteria consistent with Energy Star and other FEMP des-18 ignated energy efficiency levels into all guide specifications 19 20and 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.

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

4 "(B) Not later than 6 months after the date of the 5 enactment of this paragraph, the Secretary of Energy shall establish guidelines defining the circumstances under 6 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 compatibility of a product, system, or design with existing 11 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:

"(f) METERING.—(1) By October 1, 2004, all Federal buildings including buildings owned by the legislative
branch and the Federal court system and other energyusing structures shall be metered or submetered in accordance with guidelines established by the Secretary under
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.".
15	requirements of this section.
13	SEC. 122. ENHANCEMENT AND EXTENSION OF AUTHORITY
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14	SEC. 122. ENHANCEMENT AND EXTENSION OF AUTHORITY
14 15	SEC. 122. ENHANCEMENT AND EXTENSION OF AUTHORITY RELATING TO FEDERAL ENERGY SAVINGS
14 15 16	SEC. 122. ENHANCEMENT AND EXTENSION OF AUTHORITY RELATING TO FEDERAL ENERGY SAVINGS PERFORMANCE CONTRACTS.
14 15 16 17	SEC. 122. ENHANCEMENT AND EXTENSION OF AUTHORITY RELATING TO FEDERAL ENERGY SAVINGS PERFORMANCE CONTRACTS. (a) Cost Savings From Operation and Mainte-
14 15 16 17 18	 SEC. 122. ENHANCEMENT AND EXTENSION OF AUTHORITY RELATING TO FEDERAL ENERGY SAVINGS PERFORMANCE CONTRACTS. (a) COST SAVINGS FROM OPERATION AND MAINTE- NANCE EFFICIENCIES IN REPLACEMENT FACILITIES.—
14 15 16 17 18 19	 SEC. 122. ENHANCEMENT AND EXTENSION OF AUTHORITY RELATING TO FEDERAL ENERGY SAVINGS PERFORMANCE CONTRACTS. (a) COST SAVINGS FROM OPERATION AND MAINTE- NANCE EFFICIENCIES IN REPLACEMENT FACILITIES.— Section 801(a) of the National Energy Conservation Pol-
 14 15 16 17 18 19 20 	 SEC. 122. ENHANCEMENT AND EXTENSION OF AUTHORITY RELATING TO FEDERAL ENERGY SAVINGS PERFORMANCE CONTRACTS. (a) COST SAVINGS FROM OPERATION AND MAINTE- NANCE EFFICIENCIES IN REPLACEMENT FACILITIES.— Section 801(a) of the National Energy Conservation Pol- icy Act (42 U.S.C. 8287(a)) is amended by adding at the
 14 15 16 17 18 19 20 21 	 SEC. 122. ENHANCEMENT AND EXTENSION OF AUTHORITY RELATING TO FEDERAL ENERGY SAVINGS PERFORMANCE CONTRACTS. (a) COST SAVINGS FROM OPERATION AND MAINTE- NANCE EFFICIENCIES IN REPLACEMENT FACILITIES.— Section 801(a) of the National Energy Conservation Pol- icy Act (42 U.S.C. 8287(a)) is amended by adding at the end the following new paragraph:
 14 15 16 17 18 19 20 21 22 	 SEC. 122. ENHANCEMENT AND EXTENSION OF AUTHORITY RELATING TO FEDERAL ENERGY SAVINGS PERFORMANCE CONTRACTS. (a) COST SAVINGS FROM OPERATION AND MAINTE- NANCE EFFICIENCIES IN REPLACEMENT FACILITIES.— Section 801(a) of the National Energy Conservation Pol- icy Act (42 U.S.C. 8287(a)) is amended by adding at the end the following new paragraph: "(3)(A) In the case of an energy savings contract or

buildings or facilities, benefits ancillary to the purpose of
 such contract under paragraph (1) may include savings
 resulting from reduced costs of operation and maintenance
 at such replacement buildings or facilities when compared
 with costs of operation and maintenance at the buildings
 or facilities being replaced, established through a method 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.".

(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 re21 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 facili25 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	Oľ
23	"(B) a water conservation measure that
24	improves water efficiency, is life cycle cost effec-

25 tive, and involves water conservation, water re-

cycling or reuse, improvements in operation or
 maintenance efficiencies, retrofit activities, or
 other related activities, not at a Federal hydro 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:

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

21 SEC. 123. CLARIFICATION AND ENHANCEMENT OF AUTHOR22 ITY TO ENTER UTILITY INCENTIVE PRO23 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) In paragraph (3) by adding at the end the
 following: "Such a utility incentive program may in clude a contract or contract term designed to pro vide for cost-effective electricity demand manage ment, energy efficiency, or water conservation.".

6 (2) By adding at the end of the following new7 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 in such a contract, that would otherwise be utilized in one 11 12 or more federally owned buildings or other federally owned 13 facilities by reason of the construction or operation of one or more replacement buildings or facilities, as well as ben-14 15 efits ancillary to the purpose of such contract or contract term, including savings resulting from reduced costs of op-16 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 participation, should be included in the evaluation of en 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 enactment of 10 this Act.

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

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

16 (2) For air-source heat pumps with cooling ca17 pacities less than 65,000 Btu/hour, a Seasonal En18 ergy Efficiency Ratio of 12 SEER, and a Heating
19 Seasonal Performance Factor of 7.4.

(c) MODIFIED STANDARDS.—The Secretary of Energy may establish, after appropriate notice and comment,
revised standards providing for reduced energy consumption or increased energy efficiency of central air conditioners and heat pumps acquired by the Federal Govern-

1 ment, but may not establish standards less rigorous than2 those established by subsection (b).

3 (d) DEFINITIONS.—For purposes of this section, the
4 terms "Energy Efficiency Ratio", "Seasonal Energy Effi5 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 such17 purchase would be less than 10 years;

18 (2) space constraints or other technical factors
19 would make compliance with this section cost-prohib20 itive; or

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

1 SEC. 125. ADVANCED BUILDING EFFICIENCY TESTBED.

2 (a) ESTABLISHMENT.—The Secretary of Energy 3 shall establish an Advanced Building Efficiency Testbed program for the development, testing, and demonstration 4 5 of advanced engineering systems, components, and materials to enable innovations in building technologies. The 6 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 sustainability. 12

13 (b) PARTICIPANTS.—The program established under 14 subsection (a) shall be led by a university having demonstrated experience with the application of intelligent 15 16 workplaces and advanced building systems in improving the quality of built environments. Such university shall 17 also have the ability to combine the expertise from more 18 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.—There26 are authorized to be appropriated to the Secretary of En-

ergy to carry out this section \$18,000,000 for fiscal year
 2002, to remain available until expended, of which
 \$6,000,000 shall be provided to the lead university de scribed in subsection (b), and the remainder shall be pro 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-INGS.—Not later than January 1, 2003, each agency shall 12 13 utilize, to the maximum extent practicable, for the purposes of efficient use of energy and reduction in the cost 14 15 of electricity consumed in its Federal buildings, interval consumption data that measure on a real time or daily 16 17 basis consumption of electricity in its Federal buildings. 18 To meet the requirements of this subsection each agency shall prepare and submit at the earliest opportunity pur-19 20suant 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 this subsection.". 24

1SEC. 127. REVIEW OF ENERGY SAVINGS PERFORMANCE2CONTRACT PROGRAM.

3 Within 180 days after the date of the enactment of this Act, the Secretary of Energy shall complete a review 4 5 of the Energy Savings Performance Contract program to identify statutory, regulatory, and administrative obstacles 6 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 Committee on Energy and Commerce of the House of 14 Representatives and the Committee on Energy and Nat-15 16 ural Resources of the Senate, and shall implement identified administrative and regulatory changes to increase 17 18 program flexibility and effectiveness to the extent that 19 such changes are consistent with statutory authority.

20 SEC. 128. CAPITOL COMPLEX.

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

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

4 (b) AUTHORIZATION.—There is authorized to be ap5 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.

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

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

(b) STATE ENERGY EFFICIENCY GOALS.—Section
364 of the Energy Policy and Conservation Act (42 U.S.C.
6324) is amended by inserting "Each State energy conservation plan with respect to which assistance is made

available under this part on or after the date of the enact-1 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 compared to the calendar year 1990, and may contain interim 6 7 goals." after "contain interim goals.".

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

15 SEC. 132. REAUTHORIZATION OF ENERGY CONSERVATION 16

PROGRAM FOR SCHOOLS AND HOSPITALS.

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

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 necessary" and inserting "\$273,000,000 for fiscal year 2002, 25

\$325,000,000 for fiscal year 2003, \$400,000,000 for fis cal year 2004, and \$500,000,000 for fiscal year 2005".
 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.".

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

(1) the extent to which Low-Income Home Energy Assistance (LIHEAP) and other government
energy subsidies paid to consumers discourage energy conservation and energy efficiency investments;
and

(2) the extent to which the goals of conservation and assistance for low income households could
be simultaneously achieved through cash income
supplements that do not specifically target energy,
thereby maintaining incentives for wise use of expensive forms of energy, or through other means.
1 SEC. 135. HIGH PERFORMANCE PUBLIC BUILDINGS.

2 (a) Program Establishment and Administra-3 tion.—

4 (1) ESTABLISHMENT.—There is established in
5 the Department of Energy the High Performance
6 Public Buildings Program (in this section referred to
7 as the "Program").

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

10 (A) to assist units of local government in 11 the production, through construction or renova-12 tion of buildings and facilities they own and op-13 erate, of high performance public buildings and 14 facilities that are healthful, productive, energy 15 efficient, and environmentally sound;

16 (B) to State energy offices to administer
17 the program of assistance to units of local gov18 ernment pursuant to this section; and

19 (C) to State energy offices to promote par20 ticipation by units of local government in the
21 Program.

(3) GRANTS TO ASSIST UNITS OF LOCAL GOVERNMENT.—Grants under paragraph (2)(A) for new
public buildings shall be used to achieve energy efficiency performance that reduces energy use at least
30 percent below that of a public building con-

1	structed in compnance with standards presented in
2	Chapter 8 of the 2000 International Energy Con-
3	servation Code, or a similar State code intended to
4	achieve substantially equivalent results. Grants
5	under paragraph (2)(A) for existing public buildings
6	shall be used to achieve energy efficiency perform-
7	ance that reduces energy use below the public build-
8	ing baseline consumption, assuming a 3-year, weath-
9	er-normalized average for calculating such baseline.
10	Grants under paragraph (2)(A) shall be made to
11	units of local government that have—
12	(A) demonstrated a need for such grants
13	in order to respond appropriately to increasing
14	population or to make major investments in
15	renovation of public buildings; and
16	(B) made a commitment to use the grant
17	funds to develop high performance public build-
18	ings in accordance with a plan developed and
19	approved pursuant to paragraph (5)(A).
20	(4) Other grants.—
21	(A) GRANTS FOR ADMINISTRATION.—
22	Grants under paragraph (2)(B) shall be used to
23	evaluate compliance by units of local govern-

)N. ed to evaluate compliance by units of local government with the requirements of this section, and in addition may be used for—

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structed in compliance with standards prescribed in

00
(i) distributing information and mate-
rials to clearly define and promote the de-
velopment of high performance public
buildings for both new and existing facili-
ties;
(ii) organizing and conducting pro-
grams for local government personnel, ar-
chitects, engineers, and others to advance
the concepts of high performance public
buildings;
(iii) obtaining technical services and
assistance in planning and designing high
performance public buildings; and
(iv) collecting and monitoring data
and information pertaining to the high per-
formance public building projects.
(B) GRANTS TO PROMOTE PARTICIPA-
TION.—Grants under paragraph (2)(C) may be
used for promotional and marketing activities,
including facilitating private and public financ-
ing, promoting the use of energy service compa-
nies, working with public building users, and
communities, and coordinating public benefit
programs.
(5) Implementation.—

1	(A) PLANS.—A grant under paragraph
2	(2)(A) shall be provided only to a unit of local
3	government that, in consultation with its State
4	office of energy, has developed a plan that the
5	State energy office determines to be feasible
б	and appropriate in order to achieve the pur-
7	poses for which such grants are made.
8	(B) SUPPLEMENTING GRANT FUNDS.—
9	State energy offices shall encourage qualifying
10	units of local government to supplement their
11	grant funds with funds from other sources in
12	the implementation of their plans.
13	(b) Allocation of Funds.—
14	(1) IN GENERAL.—Except as provided in para-
15	graph (3), funds appropriated to carry out this sec-
16	tion shall be provided to State energy offices.
17	(2) PURPOSES.—Except as provided in para-
18	graph (3), funds appropriated to carry out this sec-
19	tion shall be allocated as follows:
20	(A) Seventy percent shall be used to make
21	grants under subsection $(a)(2)(A)$.
22	(B) Fifteen percent shall be used to make
23	grants under subsection $(a)(2)(B)$.
24	(C) Fifteen percent shall be used to make
25	grants under subsection $(a)(2)(C)$.

1 (3) OTHER FUNDS.—The Secretary of Energy 2 may retain not to exceed \$300,000 per year from 3 amounts appropriated under subsection (c) to assist 4 State energy offices in coordinating and imple-5 menting the Program. Such funds may be used to 6 develop reference materials to further define the 7 principles and criteria to achieve high performance 8 public buildings.

9 (c) AUTHORIZATION OF APPROPRIATIONS.—There 10 are authorized to be appropriated to the Secretary of En-11 ergy to carry out this section such sums as may be nec-12 essary for each of the fiscal years 2002 through 2010.

13 (d) REPORT TO CONGRESS.—The Secretary of Energy shall conduct a biennial review of State actions imple-14 15 menting this section, and the Secretary shall report to Congress on the results of such reviews. In conducting 16 17 such reviews, the Secretary shall assess the effectiveness 18 of the calculation procedures used by the States in estab-19 lishing eligibility of units of local government for funding 20 under this section, and may assess other aspects of the 21 State program to determine whether they have been effec-22 tively implemented.

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

24 (1) HIGH PERFORMANCE PUBLIC BUILDING.—
25 The term "high performance public building" means

1 a public building which, in its design, construction, 2 operation, and maintenance, maximizes use of un-3 conventional and renewable energy resources and en-4 ergy efficiency practices, is cost-effective on a life cycle basis, uses affordable, environmentally pref-5 6 erable, durable materials, enhances indoor environ-7 mental quality, protects and conserves water, and 8 optimizes site potential.

9 (2) RENEWABLE ENERGY.—The term "renew10 able energy" means energy produced by solar, wind,
11 geothermal, hydroelectric, or biomass power.

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

18 Subtitle D—Energy Efficiency for

19

Consumer Products

20 SEC. 141. ENERGY STAR PROGRAM.

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

1 "SEC. 324A. ENERGY STAR PROGRAM.

2 "(a) IN GENERAL.—There is established at the Department of Energy and the Environmental Protection 3 Agency a program to identify and promote energy-efficient 4 5 products and buildings in order to reduce energy consumption, improve energy security, and reduce pollution 6 7 through labeling of products and buildings that meet the 8 highest energy efficiency standards. Responsibilities under 9 the program shall be divided between the Department of 10 Energy and the Environmental Protection Agency consistent with the terms of agreements between the two 11 agencies. The Administrator and the Secretary shall— 12

13 "(1) promote Energy Star compliant tech14 nologies as the preferred technologies in the market15 place for achieving energy efficiency and to reduce
16 pollution;

17 "(2) work to enhance public awareness of the18 Energy Star label; and

19 "(3) preserve the integrity of the Energy Star20 label.

21 For the purposes of carrying out this section, there is au22 thorized to be appropriated for fiscal years 2002 through
23 2006 such sums as may be necessary, to remain available
24 until expended.

25 "(b) STUDY OF CERTAIN PRODUCTS AND BUILD26 INGS.—Within 180 days after the date of enactment of •HR 4 IH

1	this section, the Secretary and the Administrator, con-
2	sistent with the terms of agreements between the two
3	agencies (including existing agreements with respect to
4	which agency shall handle a particular product or build-
5	ing), shall determine whether the Energy Star label should
6	be extended to additional products and buildings, includ-
7	ing the following:
8	"(1) Air cleaners.
9	"(2) Ceiling fans.
10	"(3) Light commercial heating and cooling
11	products.
12	"(4) Reach-in refrigerators and freezers.
13	"(5) Telephony.
14	"(6) Vending machines.
15	"(7) Residential water heaters.
16	"(8) Refrigerated beverage merchandisers.
17	"(9) Commercial ice makers.
18	"(10) School buildings.
19	"(11) Retail buildings.
20	"(12) Health care facilities.
21	"(13) Homes.
22	"(14) Hotels and other commercial lodging fa-
23	cilities.
24	"(15) Restaurants and other food service facili-
25	ties.

	10
1	"(16) Solar water heaters.
2	"(17) Building-integrated photovoltaic systems.
3	"(18) Reflective pigment coatings.
4	"(19) Windows.
5	"(20) Boilers.
6	"(21) Devices to extend the life of motor vehicle
7	oil.
8	"(c) COOL ROOFING.—In determining whether the
9	Energy Star label should be extended to roofing products,
10	the Secretary and the Administrator shall work with the
11	roofing products industry to determine the appropriate
12	solar reflective index of roofing products.".
13	(b) TABLE OF CONTENTS AMENDMENT.—The table
14	of contents of the Energy Policy and Conservation Act is
15	amended by inserting after the item relating to section
16	324 the following new item:
	"Sec. 324A. Energy Star program.".
17	SEC. 142. LABELING OF ENERGY EFFICIENT APPLIANCES.
18	(a) STUDY.—Section 324(e) of the Energy Policy and
19	Conservation Act (42 U.S.C. 6294(e)) is amended as fol-
20	lows:
21	(1) By inserting "(1)" before "The Secretary,
22	in consultation".
23	(2) By redesignating paragraphs (1) and (2) as
24	subparagraphs (A) and (B) respectively

24 subparagraphs (A) and (B), respectively.

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

3 "(2) The Secretary shall make recommendations to 4 the Commission within 180 days of the date of enactment 5 of this paragraph regarding labeling of consumer products 6 that are not covered products in accordance with this sec-7 tion, where such labeling is likely to assist consumers in 8 making purchasing decisions and is technologically and 9 economically feasible.".

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

14 "(F) Not later than one year after the date of enact-15 ment of this subparagraph, the Commission shall initiate 16 a rulemaking to prescribe labeling rules under this section 17 applicable to consumer products that are not covered prod-18 ucts if it determines that labeling of such products is likely 19 to assist consumers in making purchasing decisions and 20 is technologically and economically feasible.

21 "(G) Not later than three months after the date of 22 enactment of this subparagraph, the Commission shall ini-23 tiate a rulemaking to consider the effectiveness of the cur-24 rent consumer products labeling program in assisting con-25 sumers in making purchasing decisions and improving energy efficiency and to consider changes to the label that
 would improve the effectiveness of the label. Such rule making shall be completed within 15 months of the date
 of enactment of this subparagraph.".

5 SEC. 143. APPLIANCE STANDARDS.

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

10 "(u) STANDBY MODE ELECTRIC ENERGY CONSUMP11 TION BY HOUSEHOLD APPLIANCES.—(1) In this sub12 section:

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

"(B) The term 'standby mode' means a mode 3 4 in which a household appliance consumes the least 5 amount of electric energy that the household appli-6 ance is capable of consuming without being com-7 pletely switched off (provided that, the amount of 8 electric energy consumed in such mode is substan-9 tially less than the amount the household appliance 10 would consume in its normal operational mode).

11 "(C) The term 'major consumer of electricity in 12 standby mode' means a product for which a stand-13 ard prescribed under this section would result in 14 substantial energy savings as compared to energy 15 savings achieved or expected to be achieved by 16 standards established by the Secretary under sub-17 sections (o) and (p) of this section for products that 18 were, at the time of enactment of this subsection, 19 covered products under this section.

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

"(B) In the case of analog televisions, the Secretary
shall prescribe, on or after the date that is 2 years after
the date of enactment of this subsection, in accordance
with subsections (o) and (p) of section 325, an energy conservation standard that is technologically feasible and economically justified under section 325(o)(2)(A) (in lieu of
the 1 watt standard under subparagraph (A)).

8 "(3)(A) A manufacturer or importer of a household 9 appliance may submit to the Secretary an application for 10 an exemption of the household appliance from the stand-11 ard under paragraph (2).

12 "(B) The Secretary shall grant an exemption for a 13 household appliance for which an application is made 14 under subparagraph (A) if the applicant provides evidence 15 showing that, and the Secretary determines that—

16 "(i) it is not technically feasible to modify the
17 household appliance to enable the household appli18 ance to meet the standard;

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

22 "(iii) the cost of electricity that a typical con23 sumer would save in operating the household appli24 ance meeting the standard would not equal the in25 crease in the price of the household appliance that

1	would be attributable to the modifications that
2	would be necessary to enable the household appli-
3	ance to meet the standard by the earlier of—
4	"(I) the date that is 7 years after the date
5	of purchase of the household appliance; or
6	"(II) the end of the useful life of the
7	household appliance.
8	"(C) If the Secretary determines that it is not tech-
9	nically feasible to modify a household appliance to meet
10	the standard under paragraph (2), the Secretary shall es-
11	tablish a different standard for the household appliance
12	in accordance with the criteria under subsection (l).
13	((4)(A) Not later than 1 year after the date of enact-
14	ment of this subsection, the Secretary shall establish a test
15	procedure for determining the amount of consumption of
16	power by a household appliance operating in standby
17	mode.
18	"(B) In establishing the test procedure, the Secretary
19	shall consider—
20	"(i) international test procedures under devel-
21	opment;
22	"(ii) test procedures used in connection with
23	the Energy Star program; and
24	"(iii) test procedures used for measuring power
25	consumption in standby mode in other countries.

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

6 "(v) STANDBY MODE ELECTRIC ENERGY CONSUMP-TION BY DIGITAL TELEVISIONS, DIGITAL SET 7 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 energy conservation standard of standby mode electric en-11 12 ergy consumption by digital television sets, digital set top 13 boxes, and digital video recorders. The Secretary shall issue a final rule prescribing such standards not later than 14 15 18 months thereafter. In determining whether a standard under this section is technologically feasible and economi-16 17 cally justified under section 325(0)(2)(A), the Secretary shall consider the potential effects on market penetration 18 19 by digital products covered under this section, and shall 20 consider any recommendations by the FCC regarding such 21 effects.".

(2) Section 325(o)(3) of the Energy Policy and
Conservation Act (42 U.S.C. 6295(n)(1)) is amended by inserting at the end of the paragraph the following: "Notwithstanding any provision of this part,

the Secretary shall not amend a standard estab lished under subsection (u) or (v) of this section.".
 (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 one year after the date of enact-9 ment of the Energy Advancement and Conservation Act 10 of 2001, the Secretary shall conduct a rulemaking to determine whether consumer products not classified as a 11 12 covered product under section 322(a)(1) through (18) 13 meet the criteria of section 322(b)(1) and is a major consumer of electricity. If the Secretary finds that a consumer 14 15 product not classified as a covered product meets the criteria of section 322(b)(1), he shall prescribe, in accordance 16 17 with subsections (o) and (p), an energy conservation standard for such consumer product, if such standard is 18 19 reasonably probable to be technologically feasible and eco-20nomically 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 established by the Secretary under paragraphs (o) and (p) of
 this section for products that were, at the time of enact ment of this paragraph, covered products under this sec tion.".

5 (c) CONSUMER EDUCATION ON ENERGY EFFICIENCY
6 BENEFITS OF AIR CONDITIONING, HEATING AND VEN7 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 Secretary shall, within 180 days of the date of enactment of 14 15 this subsection, develop and implement a public education campaign to educate homeowners and small business own-16 17 ers concerning the energy savings resulting from regularly scheduled maintenance of air conditioning, heating, and 18 19 ventilating systems. In developing and implementing this campaign, the Secretary shall consider support by the De-20 21 partment of public education programs sponsored by trade 22 and professional and energy efficiency organizations. The 23 public service information shall provide sufficient informa-24 tion to allow consumers to make informed choices from 25 among professional, licensed (where State or local licensing is required) contractors. There are authorized to be
 appropriated to carry out this subsection \$5,000,000 for
 fiscal years 2002 and 2003 in addition to amounts other wise appropriated in this part.".

5 (d) EFFICIENCY STANDARDS FOR FURNACE FANS,
6 CEILING FANS, AND COLD DRINK VENDING MA7 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 beverage vending machine' means a machine that 8 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 Secretary shall within 18 months after the date of enactment 16 17 of this subsection prescribe testing requirements for residential furnace fans, residential central air conditioner 18

16 retary shall within 18 months after the date of enactment 17 of this subsection prescribe testing requirements for resi-18 dential 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 shall include efficiency at both maximum output and at
 an output no more than 50 percent of the maximum out 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 shall, within 18 months after the date of enactment of this 11 12 subsection, assess the current and projected future market 13 for residential furnace fans, residential central air conditioner and heat pump circulation fans, suspended ceiling 14 15 fans, and refrigerated bottled or canned beverage vending machines. This assessment shall include an examination 16 17 of the types of products sold, the number of products in use, annual sales of these products, energy used by these 18 products sold, the number of products in use, annual sales 19 20 of these products, energy used by these products, esti-21 mates of the potential energy savings from specific tech-22 nical improvements to these products, and an examination 23 of the cost-effectiveness of these improvements. Prior to 24 the end of this time period, the Secretary shall hold an 25 initial scoping workshop to discuss and receive input to

plans for developing minimum efficiency standards 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, energy conservation standards for residential furnace fans, 6 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 procedures contained in subsections (l) and (m). Any 11 12 standard prescribed under this section shall apply to prod-13 ucts manufactured 36 months after the date such rule is published.". 14

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 date on which energy conservation standards are pre-19 20scribed 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 section 325(w).". 24

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;

(2) which, in the case of a passenger automobile
 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.

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

23 SEC. 152. RAILROAD EFFICIENCY.

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

research partnership with railroad carriers, locomotive
 manufacturers, and a world-class research and test center
 dedicated to the advancement of railroad technology, effi ciency, and safety that is owned by the Federal Railroad
 Administration and operated in the private sector, for the
 development and demonstration of locomotive technologies
 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.

Section 312(c) of the Energy Policy Act of 1992 (42
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.

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

6 Subtitle F—Other Provisions 7 SEC. 161. REVIEW OF REGULATIONS TO ELIMINATE BAR8 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).

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

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

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

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 pe19 riod greater than 60 minutes.

(b) RECOGNITION OF BENEFITS OF ADVANCED IDLE
ELIMINATION SYSTEMS.—Within 90 days after the date
of enactment of this subsection, the Administrator of the
Environmental Protection Agency is directed to commence
a review of the Agency's mobile source air emissions models used under the Clean Air Act to determine whether

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

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

15 (a) STUDY.—The Secretary of Energy and the Administrator of the Environmental Protection Agency shall 16 17 jointly conduct a study of oil bypass filtration technology in motor vehicle engines. The study shall analyze and 18 quantify the potential benefits of such technology in terms 19 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 Energy and Commerce of the United States House of Rep-6 7 resentatives and to the Committee on Energy and Natural 8 Resources of the United States Senate.

9 SEC. 164. GAS FLARE STUDY.

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

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

21 SEC. 165. TELECOMMUTING STUDY.

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

(b) REQUIRED SUBJECTS OF STUDY.—The study re quired by subsection (a) shall analyze the following sub jects in relation to the energy saving potential of telecom muting:
 (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 by9 telecommuting.

10 (3) Existing regulatory barriers that hamper
11 telecommuting, including barriers to broadband tele12 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 enactment of this Act. Such report shall include 19 a description of the results of the analysis of each of the 20 subject described in subsection (b).

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

(1) SECRETARY.—The term "Secretary" meansthe Secretary of Energy.

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

(3) NTIA.—The term "NTIA" means the Na-1 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. TITLE II—AUTOMOBILE FUEL 9 ECONOMY 10 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-(1) by inserting "(1)" after "NONPASSENGER 15 AUTOMOBILES.—"; and 16 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 such automobiles if they achieved only the fuel economy
 required under the average fuel economy standard that ap plies under this subsection to automobiles (except pas senger automobiles) manufactured in model year 2002.".
 SEC. 202. CONSIDERATION OF PRESCRIBING DIFFERENT
 AVERAGE FUEL ECONOMY STANDARDS FOR
 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—

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

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

20 (b) SPECIFIC CONSIDERATIONS.—In implementing21 this section the Secretary—

(1) shall consider any recommendations made
in the National Academy of Sciences study completed pursuant to the Department of Transportation and Related Agencies Appropriations Act,

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

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.

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

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 sec20 tion 32906 of title 49, United States Code.

21 (b) Amendments.—

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

3 Section 32917 of title 49, United States Code, is4 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 average fuel economy for such automobiles. For the pur-10 11 poses of this section, the average fuel economy so determined shall be the baseline average fuel economy for the 12 13 agency's fleet of automobiles.

14 "(b) INCREASE OF AVERAGE FUEL ECONOMY.—The head of an executive agency shall manage the procurement 15 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 av24 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
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economy determined under subsection (a) for that
 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 Sec6 retary of Transportation shall prescribe for the implemen7 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.

"(3) The term 'new automobile', with respect to
the fleet of automobiles of an executive agency,
means an automobile that is leased for at least 60
consecutive days or bought, by or for the agency,
after September 30, 1999.".

19 SEC. 205. HYBRID VEHICLES AND ALTERNATIVE VEHICLES.

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

or hybrid vehicles and in fiscal year 2006 and thereafter
 at least 10 percent of the vehicles in addition to those cov ered by the preceding sentence shall be alternative fueled
 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 engine13 using combustible fuel; and

14 "(B) a rechargeable energy storage system.".

15 SEC. 206. FEDERAL FLEET PETROLEUM-BASED NONALTER16 NATIVE FUELS.

(a) IN GENERAL.—Title III of the Energy Policy Act
of 1992 (42 U.S.C. 13212 et seq.) is amended as follows:
(1) By adding at the end thereof the following: **"SEC. 313. CONSERVATION OF PETROLEUM-BASED FUELS**BY THE FEDERAL GOVERNMENT FOR LIGHTDUTY 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
in section 303(b)(3), acquire in the aggregate a minimum 1 percentage of alternative fuel vehicles, to encourage the 2 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 alternative fuels defined in this title) used by new light-duty 6 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 the purchase of petroleum-based nonalternative fuels for 11 12 such fleets beginning October 1, 2003, through September 13 30, 2009, from the amount purchased for such fleets over a comparable period since enactment of this Act, as deter-14 15 mined by the Secretary, through the annual purchase, in accordance with section 304, and the use of alternative 16 fuels for the light-duty motor vehicles of such Federal 17 fleets, so as to achieve levels which reflect total reliance 18 19 by such fleets on the consumptive use of alternative fuels consistent with the provisions of section 303(b) of this 20 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 such other heads of entities referenced in section 303 with-25

in the executive branch as such Director may designate, 1 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 reports by the heads of such fleets, on the extent to which 6 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 fuels and in requiring their use.". 11

12 (2) By amending section 304(b) of such Act to13 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.".

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

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

1 SEC. 207. STUDY OF FEASIBILITY AND EFFECTS OF REDUC-

ING USE OF FUEL FOR AUTOMOBILES.

2

3 (a) IN GENERAL.—Not later than 30 days after the
4 date of the enactment of this Act, the Secretary of Trans5 portation shall enter into an arrangement with the Na6 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—

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

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

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

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. BUDGET STATUS OF NUCLEAR WASTE FUND.
16	(a) IN GENERAL.—Notwithstanding any other provi-
17	sion of law, the receipts and disbursements of the Nuclear
18	Waste Fund established under section 302 of the Nuclear
19	Waste Policy Act of 1982 (42 U.S.C. 10222) shall not
20	be counted as new budget authority, outlays, receipts, or
21	deficit or surplus for purposes of—
22	(1) the budget of the United States Govern-
23	ment as submitted by the President;
24	(2) the congressional budget; or

(2) the congressional budget; or

3 (b) EFFECT ON PAYGO SCORECARD.—Upon the en4 actment of this Act, the Director of the Office of Manage5 ment and Budget shall not make any estimates of changes
6 in direct spending outlays and receipts under section
7 252(d) of the Balanced Budget and Emergency Deficit
8 Control Act of 1985 resulting from the enactment of sub9 section (a) of this section.

10 SEC. 302. LICENSE PERIOD.

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

13 (1) by striking "c. Each such" and inserting14 the following:

15 "c. LICENSE PERIOD.—

- 16 "(1) IN GENERAL.—Each such"; and
- 17 (2) by adding at the end the following:

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

1 SEC. 303. COST RECOVERY FROM GOVERNMENT AGENCIES. 2 Section 161 w. of the Atomic Energy Act of 1954 3 (42 U.S.C. 2201(w)) is amended— 4 (1) by striking "for or is issued" and all that 5 follows through "1702" and inserting "to the Com-6 mission for, or is issued by the Commission, a li-7 cense or certificate"; (2) by striking "483a" and inserting "9701"; 8 9 and 10 (3) by striking ", of applicants for, or holders 11 of, such licenses or certificates". 12 SEC. 304. DEPLETED URANIUM HEXAFLUORIDE. 13 Section 1(b) of Public Law 105–204 is amended by

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

16 SEC. 305. NUCLEAR REGULATORY COMMISSION MEETINGS.

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

1	SEC. 306. COOPERATIVE RESEARCH AND DEVELOPMENT
2	AND SPECIAL DEMONSTRATION PROJECTS
3	FOR THE URANIUM MINING INDUSTRY.
4	(a) Authorization of Appropriations.—There
5	are authorized to be appropriated to the Secretary
6	\$10,000,000 for each of fiscal years 2002, 2003, and 2004
7	for—
8	(1) cooperative, cost-shared, agreements be-
9	tween the Department of Energy and domestic ura-
10	nium producers to identify, test, and develop im-
11	proved in situ leaching mining technologies, includ-
12	ing low-cost environmental restoration technologies
13	that may be applied to sites after completion of in
14	situ leaching operations; and
15	(2) funding for competitively selected dem-
16	onstration projects with domestic uranium producers
17	relating to—
18	(A) enhanced production with minimal en-
19	vironmental impacts;
20	(B) restoration of well fields; and
21	(C) decommissioning and decontamination
22	activities.

23 (b) DOMESTIC URANIUM PRODUCER.—For purposes
24 of this section, the term "domestic uranium producer" has
25 the meaning given that term in section 1018(4) of the En26 ergy Policy Act of 1992 (42 U.S.C. 2296b–7(4)), except
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that the term shall not include any producer that has not
 produced uranium from domestic reserves on or after July
 30, 1998.

4 SEC. 307. MAINTENANCE OF A VIABLE DOMESTIC URANIUM 5 CONVERSION INDUSTRY.

6 There are authorized to be appropriated to the Sec-7 retary \$800,000 for contracting with the Nation's sole re-8 maining uranium converter for the purpose of performing 9 research and development to improve the environmental 10 and economic performance of United States uranium con-11 version operations.

12 SEC. 308. PADUCAH DECONTAMINATION AND DECOMMIS-13 SIONING PLAN.

14 The Secretary of Energy shall prepare and submit 15 a plan to Congress within 180 days after the date of the enactment of this Act that establishes scope, cost, sched-16 ule, sequence of activities, and contracting strategy for— 17 18 (1) the decontamination and decommissioning 19 of the Department of Energy's surplus buildings and 20 facilities at the Paducah Gaseous Diffusion Plant 21 that have no future anticipated reuse; and

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

Such plan shall inventory all surplus facilities and build-1 2 ings, and identify and rank health and safety risks associ-3 ated with such facilities and buildings. Such plan shall in-4 ventory all Department of Energy Material Storage Areas, 5 and identify and rank health and safety risks associated with such Department of Energy Material Storage Areas. 6 7 The Department of Energy shall incorporate these risk 8 factors in designing the sequence and schedule for the 9 plan. Such plan shall identify funding requirements that 10 are in addition to the expected outlays included in the Department of Energy's Environmental Management Plan 11 for the Paducah Gaseous Diffusion Plan. 12

13 TITLE IV—HYDROELECTRIC 14 ENERGY

15 SEC. 401. ALTERNATIVE CONDITIONS AND FISHWAYS.

(a) ALTERNATIVE MANDATORY CONDITIONS.—Sec17 tion 4 of the Federal Power Act (16 U.S.C. 797) is
18 amended by adding at the end the following:

19 "(h)(1) Whenever any person applies for a license for 20 any project works within any reservation of the United 21 States, and the Secretary of the department under whose 22 supervision such reservation falls deems a condition to 23 such license to be necessary under the first proviso of sub-24 section (e), the license applicant or any other party to the 25 licensing proceeding may propose an alternative condition.

1 "(2) Notwithstanding the first proviso of subsection 2 (e), the Secretary of the department under whose super-3 vision the reservation falls shall accept the proposed alter-4 native condition referred to in paragraph (1), and the 5 Commission shall include in the license such alternative condition, if the Secretary of the appropriate department 6 7 determines, based on substantial evidence provided by the 8 party proposing such alternative condition, that the alter-9 native condition— 10 "(A) provides no less protection for the reserva-11 tion than provided by the condition deemed nec-12 essary by the Secretary; and 13 "(B) will either— 14 "(i) cost less to implement, or "(ii) result in improved operation of the 15 16 project works for electricity production 17 as compared to the condition deemed necessary by 18 the Secretary. 19 "(3) Within one year after the enactment of this subsection, each Secretary concerned shall, by rule, establish 20 21 a process to expeditiously resolve conflicts arising under 22 this subsection.". 23 (b) ALTERNATIVE FISHWAYS.—Section 18 of the Federal Power Act (16 U.S.C. 811) is amended by— 24

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

3 (2) adding at the end the following: (b)(1) Whenever the Commission shall require a li-4 5 censee to construct, maintain, or operate a fishway prescribed by the Secretary of the Interior or the Secretary 6 7 of Commerce under this section, the licensee or any other 8 party to the proceeding may propose an alternative to such 9 prescription to construct, maintain, or operate a fishway. 10 "(2) Notwithstanding subsection (a), the Secretary of the Interior or the Secretary of Commerce, as appropriate, 11 12 shall accept and prescribe, and the Commission shall re-13 quire, the proposed alternative referred to in paragraph 14 (1), if the Secretary of the appropriate department deter-15 mines, based on substantial evidence provided by the party proposing such alternative, that the alternative— 16 17 "(A) will be no less effective than the fishway 18 initially prescribed by the Secretary, and 19 "(B) will either— 20 "(i) cost less to implement, or

21 "(ii) result in improved operation of the
22 project works for electricity production
23 as compared to the fishway initially prescribed by
24 the Secretary.

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

6 SEC. 402. FERC DATA ON HYDROELECTRIC LICENSING.

7 (a) DATA COLLECTION PROCEDURES.—The Federal 8 Energy Regulatory Commission shall revise its procedures 9 regarding the collection of data in connection with the 10 Commission's consideration of hydroelectric licenses under the Federal Power Act. Such revised data collection proce-11 dures shall be designed to provide the Commission with 12 13 complete and accurate information concerning the time and costs to parties involved in the licensing process. Such 14 15 data shall be available for each significant stage in the licensing process and shall be designed to identify projects 16 17 with similar characteristics so that analyses can be made of the time and costs involved in licensing proceedings 18 based upon the different characteristics of those pro-19 20 ceedings.

(b) REPORTS.—Within 6 months after the date of enactment of this Act, the Commission shall notify the Committee on Energy and Commerce of the United States
House of Representatives and the Committee on Energy
and Natural Resources of the United States Senate of the

progress made by the Commission under subsection (a),
 and within one year after such date of enactment, the
 Commission shall submit a report to such Committees
 specifying the measures taken by the Commission pursu ant to subsection (a).

6 TITLE V—FUELS 7 SEC. 601. TANK DRAINING DURING TRANSITION TO SUM8 MERTIME RFG.

9 Not later than 60 days after the enactment of the 10 Act, the Administrator of the Environmental Protection Agency shall commence a rulemaking to determine wheth-11 12 er modifications to the regulations set forth in 40 C.F.R. 13 Section 80.78 and any associated regulations regarding the transition to high ozone season reformulated gasoline 14 15 are necessary to ensure that the transition to high ozone season reformulated gasoline is conducted in a manner 16 17 that minimizes disruptions to the general availability and 18 affordability of gasoline, and maximizes flexibility with re-19 gard to the draining and inventory management of gaso-20 line storage tanks located at refineries, terminals, whole-21 sale and retail outlets, consistent with the goals of the 22 Clean Air Act. The Administrator shall propose and take 23 final action in such rulemaking to ensure that any modi-24 fications are effective and implemented at least 60 days prior to the beginning of the high ozone season for the
 year 2002.

3 SEC. 602. GASOLINE BLENDSTOCK REQUIREMENTS.

4 Not later than 60 days after the enactment of this 5 Act, the Administrator of the Environmental Protection Agency shall commence a rulemaking to determine wheth-6 7 er modifications to product transfer documentation, ac-8 counting, compliance calculation, and other requirements 9 contained in the regulations of the Administrator set forth 10 in section 80.102 of title 40 of the Code of Federal Regu-11 lations relating to gasoline blendstocks are necessary to facilitate the movement of gasoline and gasoline feedstocks 12 13 among different regions throughout the country and to improve the ability of petroleum refiners and importers to 14 15 respond to regional gasoline shortages and prevent unreasonable short-term price increases. The Administrator 16 17 shall take into consideration the extent to which such requirements have been, or will be, rendered unnecessary or 18 19 inefficient by reason of subsequent environmental safe-20 guards that were not in effect at the time the regulations 21 in section 80.102 of title 40 of the Code of Federal Regu-22 lations were promulgated. The Administrator shall propose and take final action in such rulemaking to ensure 23 24 that any modifications are effective and implemented at least 60 days prior to the beginning of the high ozone sea son for the year 2002.

3 SEC. 603. BOUTIQUE FUELS.

4 (a) JOINT STUDY.—The Administrator of the Envi-5 ronmental Protection Agency and the Secretary of Energy shall jointly conduct a study of all Federal, State, and 6 7 local requirements regarding motor vehicle fuels, including 8 requirements relating to reformulated gasoline, volatility 9 (Reid Vapor Pressure), oxygenated fuel, diesel fuel and 10 other requirements that vary from State to State, region to region, or locality to locality. The study shall analyze— 11

12 (1) the effect of the variety of such require13 ments on the price of motor vehicle fuels to the con14 sumer;

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

17 (3) the effect of Federal, State, and local regu18 lations, including multiple fuel requirements, on do19 mestic refineries and the fuel distribution system;

20 (4) the effect of such requirements on local, re21 gional, and national air quality requirements and
22 goals;

(5) the effect of such requirements on vehicleemissions;

1	(6) the feasibility of developing national or re-
2	gional fuel specifications for the contiguous United
3	States that would—
4	(A) enhance flexibility in the fuel distribu-
5	tion infrastructure and improve fuel fungibility;
6	(B) reduce price volatility and costs to con-
7	sumers and producers;
8	(C) meet local, regional, and national air
9	quality requirements and goals; and
10	(D) provide increased gasoline market li-
11	quidity; and
12	(7) the extent to which the Environmental Pro-
13	tection Agency's Tier II requirements for conven-
14	tional gasoline may achieve in future years the same
15	or similar air quality results as State reformulated
16	gasoline programs and State programs regarding
17	gasoline volatility (RVP).
18	(b) REPORT.—By December 31, 2001, the Adminis-
19	trator of the Environmental Protection Agency and the
20	Secretary of Energy shall submit a report to the Congress
21	containing the results of the study conducted under sub-
22	section (a). Such report shall contain recommendations for
23	legislative and administrative actions that may be taken
24	to simplify the national distribution system for motor vehi-
25	cle fuel, make such system more cost-effective, and reduce

the costs and increase the availability of motor vehicle fuel
 to the end user while meeting the requirements of the
 Clean Air Act. Such recommendations shall take into ac count the need to provide lead time for refinery and fuel
 distribution system modifications necessary to assure ade quate fuel supply for all States.

7 SEC. 604. FUNDING FOR MTBE CONTAMINATION.

8 Notwithstanding any other provision of law, there is 9 authorized to be appropriated to the Administrator of the 10 Environmental Protection Agency from the Leaking Un-Trust Fund 11 derground Storage not more than 12 \$200,000,000 to be used for taking such action, limited to assessment, corrective action, inspection of under-13 ground storage tank systems, and groundwater monitoring 14 15 in connection with MTBE contamination, as the Administrator deems necessary to protect human health and the 16 environment from releases of methyl tertiary butyl ether 17 18 (MTBE) from underground storage tanks.

19 TITLE VI—RENEWABLE ENERGY

20 SEC. 701. ASSESSMENT OF RENEWABLE ENERGY RE-21 SOURCES.

(a) RESOURCE ASSESSMENT.—Not later than one
year after the date of enactment of this Act, and each
year thereafter, the Secretary of Energy shall publish an

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assessment by the National Laboratories of all renewable
 energy resources available within the United States.

3 (b) CONTENTS OF REPORT.—The report published4 under subsection (a) shall contain each of the following:

5 (1) A detailed inventory describing the available
6 amount and characteristics of solar, wind, biomass,
7 geothermal, hydroelectric and other renewable en8 ergy sources.

9 (2) Such other information as the Secretary of 10 Energy believes would be useful in developing such 11 renewable energy resources, including descriptions of 12 surrounding terrain, population and load centers, 13 nearby energy infrastructure, location of energy and 14 water resources, and available estimates of the costs 15 needed to develop each resource.

16 SEC. 702. RENEWABLE ENERGY PRODUCTION INCENTIVE.

17 Section 1212 of the Energy Policy Act of 1992 (4218 U.S.C. 13317) is amended as follows:

(1) In subsection (a) by striking "and which
satisfies" and all that follows through "Secretary
shall establish." and inserting ". The Secretary shall
establish other procedures necessary for efficient administration of the program. The Secretary shall not
establish any criteria or procedures that have the effect of assigning to proposals a higher or lower pri-

ority for eligibility or allocation of appropriated funds on the basis of the energy source proposed.".

(2) In subsection (b)—

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(A) by striking "a State or any political" 4 and all that follows through "nonprofit elec-5 trical cooperative" and inserting "an electricity-6 7 generating cooperative exempt from taxation 8 under section 501(c)(12)or section 9 1381(a)(2)(C) of the Internal Revenue Code of 10 1986, a public utility described in section 115 11 of such Code, a State, Commonwealth, terri-12 tory, or possession of the United States or the 13 District of Columbia, or a political subdivision 14 thereof, or an Indian tribal government or sub-15 division thereof,"; and

16 (B) By inserting "landfill gas," after17 "wind, biomass,".

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

(4) In subsection (d) by inserting "or in which
the Secretary finds that all necessary Federal and
State authorizations have been obtained to begin

1	construction of the facility" after "eligible for such
2	payments".
3	(5) In subsection $(e)(1)$ by inserting "landfill
4	gas," after "wind, biomass,".
5	(6) In subsection (f) by striking "the expiration
6	of" and all that follows through "of this section"
7	and inserting "September 30, 2023".
8	(7) In subsection (g)—
9	(A) by striking "1993, 1994, and 1995"
10	and inserting "2003 through 2023"; and
11	(B) by inserting "Funds may be appro-
12	priated pursuant to this subsection to remain
13	available until expended." after "purposes of
14	this section.".
15	TITLE VII—PIPELINES

16 SEC. 801. PROHIBITION ON CERTAIN PIPELINE ROUTE.

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

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

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

3 SEC. 802. HISTORIC PIPELINES.

4 Section 7 of the Natural Gas Act (15 U.S.C. 717f)
5 is amended by adding at the end the following new sub6 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 until 10 the Commission has permitted the abandonment of the 11 transportation facility pursuant to subsection (b) of this 12 section.".

13 TITLE VII—MISCELLANEOUS 14 PROVISIONS

15 SEC. 901. WASTE REDUCTION AND USE OF ALTERNATIVES.

16 (a) GRANT AUTHORITY.—The Secretary of Energy is authorized to make a single grant to a qualified institution 17 to examine and develop the feasibility of burning post-con-18 19 sumer carpet in cement kilns as an alternative energy 20 The purposes of the source. grant shall include 21 determining-

(1) how post-consumer carpet can be burnedwithout disrupting kiln operations;

24 (2) the extent to which overall kiln emissions25 may be reduced; and

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

3 (b) QUALIFIED INSTITUTION.—For the purposes of 4 subsection (a), a qualified institution is a research-inten-5 sive institution of higher learning with demonstrated ex-6 pertise in the fields of fiber recycling and logistical mod-7 eling of carpet waste collection and preparation.

8 (c) AUTHORIZATION OF APPROPRIATIONS.—There 9 are authorized to be appropriated to the Secretary of En-10 ergy for carrying out this section \$275,000 for fiscal year 11 2002, to remain available until expended.

12 SEC. 902. ANNUAL REPORT ON UNITED STATES ENERGY 13 INDEPENDENCE.

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

(b) ALTERNATIVES.—The information required
under this section to be included in the reports under section 801(c) of the Department of Energy Organization Act
shall include a specification of what legislative or administrative actions must be implemented to meet this goal and

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set forth a range of options and alternatives with a cost/ 1 2 benefit analysis for each option or alternative together 3 with an estimate of the contribution each option or alter-4 native could make to reduce foreign oil imports. The Sec-5 retary shall solicit information from the public and request information from the Energy Information Agency and 6 7 other agencies to develop the information required under 8 this section. The information shall indicate, in detail, op-9 tions and alternatives to—

10 (1) increase the use of renewable domestic en11 ergy sources, including conventional and nonconven12 tional sources;

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

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

19 SEC. 903. STUDY OF AIRCRAFT EMISSIONS.

The Secretary of Transportation and the Administrator of the Environmental Protection Agency shall jointly commence a study within 60 days after the enactment of this Act to investigate the impact of aircraft emissions on air quality in areas that are considered to be in nonattainment for the national ambient air quality standard

for ozone. As part of this study, the Secretary and the 1 2 Administrator shall focus on the impact of emissions by 3 aircraft idling at airports and on the contribution of such 4 emissions as a percentage of total emissions in the non-5 attainment area. Within 180 days of the commencement 6 of the study, the Secretary and the Administrator shall 7 submit a report to the Committees on Energy and Com-8 merce and Transportation and Infrastructure of the 9 United States House of Representatives and to the Com-10 mittees on Environment and Public Works and Commerce, 11 Science, and Transportation of the United States Senate 12 containing the results of the study and recommendations 13 with respect to a plan to maintain comprehensive data on 14 aircraft emissions and methods by which such emissions 15 may be reduced, without increasing individual aircraft noise, in order to assist in the attainment of the national 16 ambient air quality standards. 17

DIVISION B

97

2 SEC. 2001. SHORT TITLE.

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3 This division may be cited as the "Comprehensive4 Energy Research and Technology Act of 2001".

5 SEC. 2002. FINDINGS.

6 The Congress finds that—

7 (1) the Nation's prosperity and way of life are8 sustained by energy use;

9 (2) the growing imbalance between domestic en-10 ergy production and consumption means that the 11 Nation is becoming increasingly reliant on imported 12 energy, which has the potential to undermine the 13 Nation's economy, standard of living, and national 14 security;

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

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

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

7 (6) development of reliable, affordable, and en-8 vironmentally sound energy efficiency technologies, 9 renewable and alternative energy technologies, and 10 advanced energy systems technologies will require 11 maintenance of a vibrant fundamental scientific 12 knowledge base and continued scientific and techno-13 logical innovations that can be accelerated by Fed-14 eral funding, whereas commercial deployment of 15 such systems and technologies are the responsibility 16 of the private sector;

17 (7) Federal funding should focus on those pro18 grams, projects, and activities that are long-term,
19 high-risk, noncommercial, and well-managed, and
20 that provide the potential for scientific and techno21 logical advances; and

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

24 SEC. 2003. PURPOSES.

25 The purposes of this division are to—

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

4 (2) meet future needs for energy services at the
5 lowest total cost to the Nation, including environ6 mental costs, giving balanced and comprehensive
7 consideration to technologies that improve the effi8 ciency of energy end uses and that enhance energy
9 supply;

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

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

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

(6) foster international cooperation by developing international markets for domestically produced sustainable energy technologies, and by transferring environmentally sound, advanced energy sys-

tems and technologies to developing countries to pro mote sustainable development;

3 (7) provide sufficient funding of programs,
4 projects, and activities that are performance-based
5 and modeled as public-private partnerships, as ap6 propriate; and

7 (8) enhance the contribution of a given pro8 gram, project, or activity to fundamental scientific
9 knowledge.

10 SEC. 2004. GOALS.

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

18 (1) ENERGY CONSERVATION AND ENERGY EFFI19 CIENCY.—

20 (A) For the Building Technology, State
21 and Community Sector, the program should de22 velop technologies, housing components, de23 signs, and production methods that will, by
24 2010—

1 (i) reduce the monthly energy cost of 2 new housing by 20 percent, compared to the cost as of the date of the enactment of 3 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 cooperation affected should, in with the 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 five
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

20 ment, the program should focus on advanced
21 concepts for the long term. The first priority
22 should be high-grade enhanced geothermal sys23 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

demonstrations of enhanced geothermal systems technology, including sites in lower grade areas to demonstrate the benefits of reservoir concepts to different conditions. (D) For Hydropower, the program should

provide a new generation of turbine technologies that will increase generating capacity and will be less damaging to fish and aquatic ecosystems.

10 (E) For Concentrating Solar Power, the 11 program should strengthen ongoing research, 12 development, and demonstration combining high-efficiency and high-temperature receivers 13 14 with advanced thermal storage and power cy-15 cles, with the goal of making solar-only power (including baseload solar power) widely com-16 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.

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(F) For Photovoltaic Energy Systems, the 1 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 Re20 search, the program should complete research
21 and development on new polymers and manu22 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 enactment of this
25 Act.

(H) For Wind Energy Systems, the pro-1 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 2004, and 4 cents per kilowatt-hour in Class 4 5 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 flow studies, durable materials to extend tur-12 13 bine life, blade efficiency, and higher efficiency 14 operation in low quality wind regimes.

15 (I) For Electric Energy Systems and Stor-16 including High Temperature Superage, 17 conducting Research and Development, Energy 18 Storage Systems, and Transmission Reliability, 19 program should develop high capacity the 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
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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—

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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-

propriate, and in accordance with the provisions of this division, the scientific user facilities maintained by the Office of Science, and ensure that they are an integral part of the Department's mission for exploring the frontiers of fundamental energy sciences; and

16 (C) ensure that its fundamental energy
17 sciences programs, where appropriate, help in18 form the applied research and development pro19 grams of the Department.

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

1 the purposes of this division under section 2003. Such as2 sessment shall be based on the latest scientific and tech3 nical knowledge, and shall also take into consideration, as
4 appropriate, the comparative environmental impacts (in5 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—

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

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

(B) in the case of a program not estab-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

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

3 SEC. 2006. AUTHORIZATIONS.

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

9 SEC. 2007. BALANCE OF FUNDING PRIORITIES.

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

16 (b) REPORT TO CONGRESS.—If for fiscal year 2002, 17 2003, or 2004 the amounts appropriated in general appropriations Acts for the programs authorized in titles I 18 through IV of this division are not in the same proportion 19 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 amounts for such programs, transmit to the appropriate 24 25 congressional committees a report describing the pro-

grams, projects, and activities that would have been fund-1 2 ed if the proportions provided for in this division had been maintained in the appropriations. The amount appro-3 4 priated for the program receiving the highest percentage of its authorized funding for a fiscal year shall be used 5 6 as the baseline for calculating the proportional deficiencies 7 of appropriations for other programs in that fiscal year. **I**—ENERGY **CONSERVA**-TITLE 8 TION AND **ENERGY** EFFI-9 **CIENCY** 10 Subtitle A—Alternative Fuel 11 Vehicles 12

13 SEC. 2101. SHORT TITLE.

14 This subtitle may be cited as the "Alternative Fuel15 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;

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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;
2	and
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.

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

5 (4) Operation and maintenance of vehicles, in6 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 pas17 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 transpor20 tation system;

(B) a description of the projects proposed
in the application, including how they meet the
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. (2) PARTNERS.—An applicant under paragraph 4 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.

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

5 (3) MAXIMUM PERIOD OF GRANTS.—The Sec6 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 KNOWL15 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.—

(1) PUBLICATION.—Not later than 3 months
after the date of enactment of this Act, the Secretary shall publish in the Federal Register, Commerce Business Daily, and elsewhere as appropriate,

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

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.

(a) INITIAL REPORT.—Not later than 2 months after
the date grants are awarded under this subtitle, the Secretary shall transmit to the appropriate congressional
committees a report containing—

18 (1) an identification of the grant recipients and19 a description of the projects to be funded;

20 (2) an identification of other applicants that21 submitted applications for the pilot program; and

(3) a description of the mechanisms used by the
Secretary to ensure that the information and knowledge gained by participants in the pilot program are
transferred among the pilot program participants

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

3 (b) EVALUATION.—Not later than 3 years after the 4 date of enactment of this Act, and annually thereafter 5 until the pilot program ends, the Secretary shall transmit to the appropriate congressional committees a report con-6 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 to the environment to be derived from widespread applica-11 12 tion of alternative fuel vehicles and ultra-low sulfur diesel vehicles. 13

14 SEC. 2105. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary \$200,000,000 to carry out this subtitle, to remain
available until expended.

18 Subtitle B—Distributed Power

19 Hybrid Energy Systems

20 SEC. 2121. FINDINGS.

21 The Congress makes the following findings:

(1) Our ability to take advantage of our renewable, indigenous resources in a cost-effective manner
can be greatly advanced through systems that 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

these components into workable distributed power
 hybrid systems that maximize benefits to consumers
 in a safe manner often are not coherently being ad 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 sup10 porting equipment, including storage equipment, and
11 software necessary to provide electric power onsite
12 and to an electric distribution system; and

(2) the term "distributed power source" means
an independent electric energy source of usually 10
megawatts or less located close to a residential, commercial, or industrial load center, including—

- 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 de4 velop and transmit to the Congress a distributed power
5 hybrid systems strategy showing—

6 (1) needs best met with distributed power hy7 brid systems configurations, especially systems in8 cluding one or more solar or renewable power
9 sources; and

10 (2) technology gaps and barriers (including bar11 riers to efficient connection with the power grid)
12 that hamper the use of distributed power hybrid sys13 tems.

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

16 (1) system integration tools (including data17 bases, computer models, software, sensors, and con18 trols) needed to plan, design, build, and operate dis19 tributed power hybrid systems for maximum bene20 fits;

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

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

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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-

grated with other activities of the Department's Office of
 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.

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

(1) significant improvement in efficiency of high
power density facilities, and in data and telecommunications centers, using advanced thermal
control technologies;

17 (2) significant improvements in air-conditioning
18 efficiency in facilities such as data centers and tele19 communications facilities;

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

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

24 (c) IMPLEMENTATION AND INTEGRATION.—Activities25 pursuant to this program shall be integrated with other

activities of the Department's Office of Power Tech 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 development of micro-cogeneration energy technology. The con-6 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 available until expended. 11

12 SEC. 2126. PROGRAM PLAN.

13 Within 4 months after the date of enactment of this Act, the Secretary, in consultation with other appropriate 14 15 Federal agencies, shall prepare and transmit to the Congress a 5-year program plan to guide activities under this 16 17 subtitle. In preparing the program plan, the Secretary shall consult with appropriate representatives of the dis-18 tributed energy resources, power transmission, and high 19 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 technical societies, and any other persons the Secretary con siders appropriate.

3 SEC. 2127. REPORT.

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

9 SEC. 2128. VOLUNTARY CONSENSUS STANDARDS.

10 Not later than 2 years after the date of enactment of this Act, the Secretary, in consultation with the Na-11 12 tional Institute of Standards and Technology, shall work 13 with the Institute of Electrical and Electronic Engineers and other standards development organizations toward the 14 15 development of voluntary consensus standards for distributed energy systems for use in manufacturing and using 16 equipment and systems for connection with electric dis-17 tribution systems, for obtaining electricity from, or pro-18 viding electricity to, such systems. 19

- 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 device25 that previously has been used to provide motive

1 power in a vehicle powered in whole or in part by 2 electricity; and (2) "associated equipment" means equipment 3 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 program for the secondary use of batteries where the original 11 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 United States. The Secretary may make additional solici-6 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—

(i) a description of the project, including the batteries to be used in the project, the proposed locations and applications for the batteries, the number of batteries to be demonstrated, and the type, characteristics, and estimated life-cycle costs of the batteries compared to other energy storage devices currently used;

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

(iii) the type of associated equipment to be
demonstrated and the type of supporting infrastructure to be demonstrated; and

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

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

4 (c) SELECTION OF PROPOSALS.—(1)(A) The Sec5 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 finan8 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, the14 Secretary shall consider—

(A) the ability of the proposer to acquire the
batteries and associated equipment and to successfully manage and conduct the demonstration project,
including the reporting requirements set forth in
paragraph (3)(B);

20 (B) the geographic and climatic diversity of the21 projects selected;

(C) the long-term technical and competitive viability of the batteries to be used in the project and
of the original manufacturer of such batteries;

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

application of alternative fuel school buses and ultra-low
 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.

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

(d) ELIGIBLE RECIPIENTS.—A grant shall be awarded under this section only—

(1) to a local governmental entity responsible
for providing school bus service for one or more public school systems; or

(2) jointly to an entity described in paragraph
(1) and a contracting entity that provides school bus
service to the public school system or systems.

21 (e) Types of Grants.—

(1) IN GENERAL.—Grants under this section
shall be for the demonstration and commercial application of technologies to facilitate the use of alternative fuel school buses and ultra-low sulfur diesel

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

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

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-

20 (1) for subes manufactured in inster years
21 2001 through 2003, 3.0 grams per brake horse22 power-hour of nonmethane hydrocarbons and
23 oxides of nitrogen and .01 grams per brake
24 horsepower-hour of particulate matter; and

(B) for buses manufactured in model years
 2004 through 2006, 2.5 grams per brake horse power-hour of nonmethane hydrocarbons and
 oxides of nitrogen and .01 grams per brake
 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 mat9 ter at a rate greater than the best performing tech10 nology of ultra-low sulfur diesel school buses com11 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 ensure a broad geographic distribution of grant awards, 16 17 with a goal of no State receiving more than 10 percent of the grant funding made available under this section for 18 19 a fiscal year.

(i) LIMIT ON FUNDING.—The Secretary shall provide
not less than 20 percent and not more than 25 percent
of the grant funding made available under this section for
any fiscal year for the acquisition of ultra-low sulfur diesel
school buses.

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.
10	million.
10 11	million. SEC. 2143. FUEL CELL BUS DEVELOPMENT AND DEM-
10 11 12	million. SEC. 2143. FUEL CELL BUS DEVELOPMENT AND DEM- ONSTRATION PROGRAM.
10 11 12 13	million. SEC. 2143. FUEL CELL BUS DEVELOPMENT AND DEM- ONSTRATION PROGRAM. (a) ESTABLISHMENT OF PROGRAM.—The Secretary
10 11 12 13 14	million. SEC. 2143. FUEL CELL BUS DEVELOPMENT AND DEM- ONSTRATION PROGRAM. (a) ESTABLISHMENT OF PROGRAM.—The Secretary shall establish a program for entering into cooperative
 10 11 12 13 14 15 	million. SEC. 2143. FUEL CELL BUS DEVELOPMENT AND DEM- ONSTRATION PROGRAM. (a) ESTABLISHMENT OF PROGRAM.—The Secretary shall establish a program for entering into cooperative agreements with private sector fuel cell bus developers for

18 ment using natural gas-powered school buses and such19 private sector fuel cell bus developers to demonstrate the20 use of fuel cell-powered school buses.

(b) COST SHARING.—The non-Federal contribution
for activities funded under this section shall be not less
than—

24 (1) 20 percent for fuel infrastructure develop-25 ment activities; and

(2) 50 percent for demonstration activities and
 for development activities not described in paragraph
 (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—

(1) evaluates the process of converting natural
gas infrastructure to accommodate fuel cell-powered
school buses; and

(2) assesses the results of the development anddemonstration program under this section.

17 SEC. 2144. AUTHORIZATION OF APPROPRIATIONS.

18 There are authorized to be appropriated to the Sec19 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
- (5) \$80,000,000 for fiscal year 2006.

Subtitle E—Next Generation Lighting Initiative

144

3 SEC. 2151. SHORT TITLE.

4 This subtitle may be cited as "Next Generation5 Lighting Initiative Act".

6 SEC. 2152. DEFINITION.

7 In this subtitle, the term "Lighting Initiative" means
8 the "Next Generation Lighting Initiative" established
9 under section 2153(a).

10 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—

- 21 (1) longer lasting;
- 22 (2) more energy-efficient; and
- 23 (3) cost-competitive.
1 SEC. 2154. STUDY.

2 (a) IN GENERAL.—Not later than 6 months after the 3 date of enactment of this Act, the Secretary, in consultation with other Federal agencies, as appropriate, shall 4 5 complete a study on strategies for the development and commercial application of advanced lighting technologies. 6 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

(2) identify the research and development, manufacturing, deployment, and marketing barriers that
must be overcome to achieve a goal of a 25 percent
market penetration by advanced lighting technologies into the incandescent and fluorescent lighting market by the year 2012.

(c) IMPLEMENTATION.—As soon as practicable after
the review of the study under subsection (a) is transmitted
to the Secretary by the National Academies of Sciences
and Engineering, the Secretary shall adapt the implementation of the Lighting Initiative taking into consideration
the recommendations of the National Academies of
Sciences and Engineering.

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.

(c) TECHNICAL AND FINANCIAL ASSISTANCE.—The
national laboratories and other Federal agencies, as appropriate, shall cooperate with and provide technical and
financial assistance to firms and research organizations

conducting research, development, and demonstration
 projects carried out under this subtitle.

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 operation and maintenance (including Building Technology, 11 State and Community Sector (Nongrants), Industry Sec-12 13 tor, Transportation Sector, Power Technologies, and Policy and Management) \$625,000,000 for fiscal year 2002, 14 15 \$700,000,000 for fiscal year 2003, and \$800,000,000 for fiscal year 2004, to remain available until expended. 16

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;

(D) Weatherization Assistance Program; 1 2 or 3 (E) State Energy Program; or 4 (2) Federal Energy Management Program. Subtitle G—Environmental Protec-5 tion Agency Office of Air and 6 **Radiation Authorization of Ap-**7 propriations 8

9 SEC. 2171. SHORT TITLE.

This subtitle may be cited as the "Environmental
Protection Agency Office of Air and Radiation Authorization 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 Change Protection Programs \$121,942,000 for fiscal year 16 17 fiscal 2002,\$126,800,000 for vear 2003,and \$131,800,000 for fiscal year 2004 to remain available 18 until expended, of which— 19

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-

tiate Requests for Proposals for a program if the program
 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 development programs carried out under this subtitle, the Admin-6 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 Administrator determines that the research and development is of 11 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 directly and specifically related to any demonstration or 16 17 commercial application project under this subtitle to be provided from non-Federal sources. The Administrator 18 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 the25 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 COMMER4 CIAL APPLICATIONS OF ENERGY TECH5 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.

(a) AUTHORITY.—The Administrator may use
amounts appropriated under this subtitle for a program,
project, or activity other than the program, project, or activity for which such amounts were appropriated only if—

(1) the Administrator has transmitted to the
appropriate congressional committees a report described in subsection (b) and a period of 30 days has
elapsed after such committees receive the report;

(2) amounts used for the program, project, oractivity do not exceed—

24 (A) 105 percent of the amount authorized
25 for the program, project, or activity; or

(B) \$250,000 more than the amount au thorized for the program, project, or activity,
 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.

(2) In the computation of the 30-day period under
subsection (a), there shall be excluded any day on which
either House of Congress is not in session because of an
adjournment of more than 3 days to a day certain.

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.

The Administrator shall provide to the appropriate congressional committees, to be transmitted at the same time as the Environmental Protection Agency's annual
 budget request submission, a detailed justification for
 budget authorization for the programs, projects, and ac tivities for which funds are authorized by this subtitle.
 Each such document shall include, for the fiscal year for
 which funding is being requested and for the 2 previous
 fiscal years—

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 para14 graph (2).

15 SEC. 2178. OTHER PROVISIONS.

16 (a) ANNUAL OPERATING PLAN AND REPORTS.—The
17 Administrator shall provide simultaneously to the Com18 mittee on Science of the House of Representatives—

(1) any annual operating plan or other operational funding document, including any additions or
amendments thereto; and

(2) any report relating to the environmental research or development, scientific or energy research,
development, or demonstration, or commercial appli-

cation of energy technology programs, projects, or
 activities of the Environmental Protection Agency,
 provided to any committee of Congress.

4 (b) NOTICE OF REORGANIZATION.—The Adminis5 trator shall provide notice to the appropriate congressional
6 committees not later than 15 days before any reorganiza7 tion of any environmental research or development, sci8 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.

Subtitle H—National Building Performance Initiative

13 SEC. 2181. NATIONAL BUILDING PERFORMANCE INITIA14 TIVE.

15 (a) INTERAGENCY GROUP.—Not later than 3 months after the date of the enactment of this Act, the Director 16 of the Office of Science and Technology Policy shall estab-17 lish an Interagency Group responsible for the development 18 and implementation of a National Building Performance 19 Initiative to address energy conservation and research and 2021 development and related issues. The National Institute of 22 Standards and Technology shall provide necessary admin-23 istrative support for the Interagency Group.

(b) PLAN.—Not later than 9 months after the dateof the enactment of this Act, the Interagency Group shall

transmit to the Congress a multiyear implementation plan
 describing the Federal role in reducing the costs, including
 energy costs, of using, owning, and operating commercial,
 institutional, residential, and industrial buildings by 30
 percent by 2020. The plan shall include—

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 infor12 mation to the design and construction industry, gov13 ernment officials, and the general public.

14 (c) NATIONAL BUILDING PERFORMANCE ADVISORY 15 COMMITTEE.—A National Building Performance Advisory Committee shall be established to advise on creation of 16 the plan, review progress made under the plan, advise on 17 any improvements that should be made to the plan, and 18 report to the Congress on actions that have been taken 19 to advance the Nation's capability in furtherance of the 20 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, multifamily, and commercial sectors of the construction indus 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 devel8 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. Walker14 and George E. Brown, Jr. Hydrogen Energy Act of15 2001".

16 SEC. 2202. PURPOSES.

Section 102(b) of the Spark M. Matsunaga Hydrogen
Research, Development, and Demonstration Act of 1990
is amended to read as follows:

20 "(b) PURPOSES.—The purposes of this Act are—

"(1) to direct the Secretary to conduct research, development, and demonstration activities
leading to the production, storage, transportation,
and use of hydrogen for industrial, commercial, residential, transportation, and utility applications;

"(2) to direct the Secretary to develop a pro gram of technology assessment, information dissemi nation, and education in which Federal, State, and
 local agencies, members of the energy, transpor tation, and other industries, and other entities may
 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.

Section 102(c) of the Spark M. Matsunaga Hydrogen
Research, Development, and Demonstration Act of 1990
is amended—

(1) by redesignating paragraphs (1) through
(3) as paragraphs (2) through (4), respectively; and
(2) by inserting before paragraph (2), as so redesignated by paragraph (1) of this section, the following new paragraph:

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:

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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 bienni5 ally thereafter, the Secretary shall transmit to Congress
6 a detailed report on the status and progress of the pro7 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—

"(1) an assessment of the extent to which the
program is meeting the purposes specified in section
102(b);

"(2) a determination of the effectiveness of the
technology assessment, information dissemination,
and education program established under section
106;

"(3) an analysis of Federal, State, local, and
private sector hydrogen-related research, development, and demonstration activities to identify productive areas for increased intergovernmental and
private-public sector collaboration; and

23 "(4) recommendations of the advisory com24 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—

"(1) give particular attention to developing an
understanding and resolution of critical technical
issues preventing the introduction of hydrogen as an
energy carrier into the marketplace;

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

under this section and other efforts authorized under this
 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 Secretary may reduce or eliminate the non-Federal require-11 ment under this subsection if the Secretary determines 12 13 that the research and development is of a basic or fundamental nature.". 14

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 ", preferably20 in self-contained locations,";

(2) in subsection (b), by striking "at self-contained sites" and inserting ", which shall include a
fuel cell bus demonstration program to address hydrogen production, storage, and use in transit bus
applications"; and

(3) in subsection (c), by inserting "NON-FED 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 DIS8 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 out17 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 industrial, commercial, residential, transportation,
 and utility sector; and

"(2) develop, with other Federal agencies as appropriate and industry, an information exchange
program to improve technology transfer for hydrogen production, storage, transportation, and use,
which may consist of workshops, publications, conferences, and a database for the use by the public
and private sectors.".

10 SEC. 2208. COORDINATION AND CONSULTATION.

Section 107 of the Spark M. Matsunaga Hydrogen
Research, Development, and Demonstration Act of 1990
is amended—

14 (1) by amending paragraph (1) of subsection15 (a) to read as follows:

"(1) shall establish a central point for the coordination of all hydrogen research, development,
and demonstration activities of the Department;
and"; and

20 (2) by amending subsection (c) to read as fol-21 lows:

"(c) CONSULTATION.—The Secretary shall consult
with other Federal agencies as appropriate, and the advisory committee, in carrying out the Secretary's authorities
pursuant to this Act.".

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 Sec21 retary on—

"(1) the implementation and conduct of programs and activities authorized under this Act; and
"(2) the economic, technological, and environmental consequences of the deployment of hydrogen
production, storage, transportation, and use systems.

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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;

	100
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.

(a) BIOPOWER ENERGY SYSTEMS.—There are authorized to be appropriated to the Secretary for Biopower
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.
21	(d) INTEGRATED APPLICATIONS.—Amounts author-

(d) INTEGRATED APPLICATIONS.—Amounts authorized to be appropriated under this subtitle may be used
to assist in the planning, design, and implementation of
projects to convert rice straw and barley grain into
biopower or biofuels.

Subtitle C—Transmission Infrastructure Systems

1

2

3 SEC. 2241. TRANSMISSION INFRASTRUCTURE SYSTEMS RE 4 SEARCH, DEVELOPMENT, DEMONSTRATION,
 5 AND COMMERCIAL APPLICATION.

6 (a) IN GENERAL.—The Secretary shall develop and 7 implement a comprehensive research, development, dem-8 onstration, and commercial application program to ensure 9 the reliability, efficiency, and environmental integrity of 10 electrical transmission systems. Such program shall in-11 clude advanced energy technologies and systems, high ca-12 pacity superconducting transmission lines and generators, 13 advanced grid reliability and efficiency technologies devel-14 opment, technologies contributing to significant load re-15 ductions, advanced metering, load management and control technologies, and technology transfer and education. 16

(b) TECHNOLOGY.—In carrying out this subtitle, the
Secretary may include research, development, and demonstration on and commercial application of improved
transmission technologies including the integration of the
following technologies into improved transmission systems:

- 22 (1) High temperature superconductivity.
- 23 (2) Advanced transmission materials.

(3) Self-adjusting equipment, processes, or soft ware for survivability, security, and failure contain ment.

4 (4) Enhancements of energy transfer over exist-5 ing lines.

6 (5) Any other infrastructure technologies, as7 appropriate.

8 SEC. 2242. PROGRAM PLAN.

9 Within 4 months after the date of the enactment of 10 this Act, the Secretary, in consultation with other appropriate Federal agencies, shall prepare and transmit to 11 12 Congress a 5-year program plan to guide activities under 13 this subtitle. In preparing the program plan, the Secretary shall consult with appropriate representatives of the trans-14 15 mission infrastructure systems industry to select and prioritize appropriate program areas. The Secretary shall 16 17 also seek the advice of utilities, energy services providers, manufacturers, institutions of higher learning, other ap-18 propriate State and local agencies, environmental organi-19 20 zations, professional and technical societies, and any other 21 persons as the Secretary considers appropriate.

22 SEC. 2243. REPORT.

Two years after the date of the enactment of this Act,
and at two year intervals thereafter, the Secretary, in consultation with other appropriate Federal agencies, shall

transmit a report to Congress describing the progress
 made to achieve the purposes of this subtitle and identi fying any additional resources needed to continue the de velopment and commercial application of transmission in frastructure technologies.

6 Subtitle D—Department of Energy 7 Authorization of Appropriations

8 SEC. 2261. AUTHORIZATION OF APPROPRIATIONS.

9 (a) Operation and Maintenance.—There are au-10 thorized to be appropriated to the Secretary for Renewable Energy operation and maintenance, including activities 11 under subtitle C, Geothermal Technology Development, 12 13 Hydropower, Concentrating Solar Power, Photovoltaic Energy Systems, Solar Building Technology Research, 14 15 Wind Energy Systems, High Temperature Superconducting Research and Development, Energy Storage 16 17 Systems, Transmission Reliability, International Renewable Energy Program, Renewable Energy Production In-18 19 centive Program, Renewable Program Support, National Renewable Energy Laboratory, and Program Direction, 20 21 and including amounts authorized under the amendment 22 made by section 2210 and amounts authorized under sec-23 tion 2225,\$535,000,000 for fiscal vear 2002,\$639,000,000 for fiscal year 2003, and \$683,000,000 for 24 25 fiscal year 2004, to remain available until expended.

(b) WAVE POWERED ELECTRIC GENERATION.—
 Within the amounts authorized to be appropriated to the
 Secretary under subsection (a), the Secretary shall carry
 out a research program, in conjunction with other appro priate Federal agencies, on wave powered electric genera tion.

7 (c) Assessment of Renewable Energy Re-8 sources.—

9 (1) IN GENERAL.—Using funds authorized in 10 subsection (a), of this section, the Secretary shall 11 transmit to the Congress, within one year after the 12 date of the enactment of this Act, an assessment of 13 all renewable energy resources available within the 14 United States.

15 (2)RESOURCE ASSESSMENT.—Such report 16 shall include a detailed inventory describing the 17 available amount and characteristics of solar, wind, 18 biomass, geothermal, hydroelectric, and other renew-19 able energy sources, and an estimate of the costs 20 needed to develop each resource. The report shall 21 also include such other information as the Secretary 22 believes would be useful in siting renewable energy 23 generation, such as appropriate terrain, population 24 and load centers, nearby energy infrastructure, and 25 location of energy resources.

1	(3) AVAILABILITY.—The information and cost
2	estimates in this report shall be updated annually
3	and made available to the public, along with the
4	data used to create the report.
5	(4) SUNSET.—This subsection shall expire at
6	the end of fiscal year 2004.
7	(d) LIMITS ON USE OF FUNDS.—None of the funds
8	authorized to be appropriated in subsection (a) may be
9	used for—
10	(1) Departmental Energy Management Pro-
11	gram; or
12	(2) Renewable Indian Energy Resources.
13	TITLE III—NUCLEAR ENERGY
14	Subtitle A—University Nuclear
15	Science and Engineering
15 16	Science and Engineering SEC. 2301. SHORT TITLE.
16 17	SEC. 2301. SHORT TITLE.
16 17	SEC. 2301. SHORT TITLE. This subtitle may be cited as "Department of Energy
16 17 18	SEC. 2301. SHORT TITLE. This subtitle may be cited as "Department of Energy University Nuclear Science and Engineering Act".
16 17 18 19	 SEC. 2301. SHORT TITLE. This subtitle may be cited as "Department of Energy University Nuclear Science and Engineering Act". SEC. 2302. FINDINGS.
16 17 18 19 20	 SEC. 2301. SHORT TITLE. This subtitle may be cited as "Department of Energy University Nuclear Science and Engineering Act". SEC. 2302. FINDINGS. The Congress finds the following:
16 17 18 19 20 21	 SEC. 2301. SHORT TITLE. This subtitle may be cited as "Department of Energy University Nuclear Science and Engineering Act". SEC. 2302. FINDINGS. The Congress finds the following: (1) United States university nuclear science and
 16 17 18 19 20 21 22 	 SEC. 2301. SHORT TITLE. This subtitle may be cited as "Department of Energy University Nuclear Science and Engineering Act". SEC. 2302. FINDINGS. The Congress finds the following: (1) United States university nuclear science and engineering programs are in a state of serious de-

1 percent, and over two-thirds of the faculty in these 2 programs are 45 years of age or older. Also, since 1980, the number of university research and train-3 4 ing reactors in the United States has declined by 5 over 50 percent. Most of these reactors were built in 6 the late 1950s and 1960s with 30-year to 40-year 7 operating licenses, and many will require relicensing 8 in the next several years.

9 (2) A decline in a competent nuclear workforce, 10 and the lack of adequately trained nuclear scientists 11 and engineers, will affect the ability of the United 12 States to solve future nuclear waste storage issues, 13 operate existing and design future fission reactors in 14 the United States, respond to future nuclear events 15 worldwide, help stem the proliferation of nuclear 16 weapons, and design and operate naval nuclear reac-17 tors.

(3) The Department of Energy's Office of Nuclear Energy, Science and Technology, a principal
Federal agency for civilian research in nuclear
science and engineering, is well suited to help maintain tomorrow's human resource and training investment in the nuclear sciences and engineering.

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1 SEC. 2303. DEPARTMENT OF ENERGY PROGRAM.

2 (a) ESTABLISHMENT.—The Secretary, through the 3 Office of Nuclear Energy, Science and Technology, shall support a program to maintain the Nation's human re-4 5 source investment and infrastructure in the nuclear sciences and engineering consistent with the Department's 6 7 statutory authorities related to civilian nuclear research, 8 development, and demonstration and commercial application of energy technology. 9

(b) DUTIES OF THE OFFICE OF NUCLEAR ENERGY,
SCIENCE AND TECHNOLOGY.—In carrying out the program under this subtitle, the Director of the Office of Nuclear Energy, Science and Technology shall—

14 (1) develop a robust graduate and under15 graduate fellowship program to attract new and tal16 ented students;

(2) assist universities in recruiting and retaining new faculty in the nuclear sciences and engineering through a Junior Faculty Research Initiation
Grant Program;

(3) maintain a robust investment in the fundamental nuclear sciences and engineering through the
Nuclear Engineering Education Research Program;
(4) encourage collaborative nuclear research
among industry, national laboratories, and univer-

sities through the Nuclear Energy Research Initia tive;

3 (5) assist universities in maintaining reactor in4 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 Energy, Science and Technology, shall provide for the fol-10 lowing university research and training reactor infrastruc-11 12 ture maintenance and research activities:

(1) Refueling of university research reactors
with low enriched fuels, upgrade of operational instrumentation, and sharing of reactors among universities.

17 (2) In collaboration with the United States nu18 clear industry, assistance, where necessary, in reli19 censing and upgrading university training reactors
20 as part of a student training program.

(3) A university reactor research and training
award program that provides for reactor improvements as part of a focused effort that emphasizes research, training, and education.

(d) UNIVERSITY-DOE LABORATORY INTER ACTIONS.—The Secretary, through the Office of Nuclear
 Energy, Science and Technology, shall develop—

4 (1) a sabbatical fellowship program for univer5 sity faculty to spend extended periods of time at De6 partment of Energy laboratories in the areas of nu7 clear science and technology; and

8 (2) a visiting scientist program in which labora9 tory staff can spend time in academic nuclear
10 science and engineering departments.

11 The Secretary may under subsection (b)(1) provide for fel12 lowships for students to spend time at Department of En13 ergy laboratories in the areas of nuclear science and tech14 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.

(f) MERIT REVIEW REQUIRED.—All grants, contracts, cooperative agreements, or other financial assistance awards under this subtitle shall be made only after
independent merit review.

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 of the projected personnel needs in the fields of nuclear 6 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.

(a) TOTAL AUTHORIZATION.—The following sums
are authorized to be appropriated to the Secretary, to remain available until expended, for the purposes of carrying
out this subtitle:

- 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.

(b) GRADUATE AND UNDERGRADUATE FELLOWSHIPS.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry
out section 2303(b)(1):

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
23 24	NUCLEAR SCIENCE AND ENGINEERING.—Of the funds authorized by subsection (a), the following sums are au-

thorized to be appropriated to carry out section
 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-

nology, shall conduct an advanced fuel recycling tech-

nology research and development program to further the 1 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 concepts, subject to annual review by the Secretary's Nu-6 7 clear Energy Research Advisory Committee or other inde-8 pendent entity, as appropriate.

9 (b) REPORTS.—The Secretary shall report on the ac10 tivities of the advanced fuel recycling technology research
11 and development program, as part of the Department's
12 annual budget submission.

(c) AUTHORIZATION OF APPROPRIATIONS.—There
are authorized to be appropriated to the Secretary to carry
out this section—

16 (1) \$10,000,000 for fiscal year 2002; and

17 (2) such sums as are necessary for fiscal year18 2003 and fiscal year 2004.

19 Subtitle C—Department of Energy

20 Authorization of Appropriations

21 SEC. 2341. NUCLEAR ENERGY RESEARCH INITIATIVE.

(a) PROGRAM.—The Secretary, through the Office of
Nuclear Energy, Science and Technology, shall conduct a
Nuclear Energy Research Initiative for grants to be com-

petitively awarded and subject to peer review for research
 relating to nuclear energy.

3 (b) OBJECTIVES.—The program shall be directed to4 ward accomplishing the objectives of—

5 (1) developing advanced concepts and scientific
6 breakthroughs in nuclear fission and reactor tech7 nology to address and overcome the principal tech8 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 en22 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.

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1 SEC. 2343. NUCLEAR ENERGY TECHNOLOGIES.

(a) IN GENERAL.—The Secretary, through the Office
of Nuclear Energy, Science and Technology, shall conduct
a study of Generation IV nuclear energy systems, including development of a technology roadmap and performance of research and development necessary to make an
informed technical decision regarding the most promising
candidates for commercial application.

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 passive17 safety features;

(3) substantially reduced production of highlevel waste, as compared with the quantity of waste
produced by reactors in operation on the date of enactment of this Act;

(4) highly proliferation-resistant fuel and waste;
(5) sustainable energy generation including optimized fuel utilization; and

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1	(6) substantially improved thermal efficiency, as
2	compared with the thermal efficiency of reactors in
3	operation on the date of 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

(2) such sums as are necessary for fiscal year
 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, \$191,200,000 for fiscal year 2002, \$199,000,000 for fis-11 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—

(1) \$950,000 for fiscal year 2002, \$2,200,000
for fiscal year 2003, \$1,246,000 for fiscal year
2004, and \$1,699,000 for fiscal year 2005 for completion of construction of Project 99-E-200, Test
Reactor Area Electric Utility Upgrade, Idaho National Engineering and Environmental Laboratory;
and

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	struction 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
14 15	Subtitle A—Coal sec. 2401. coal and related technologies pro-
15	SEC. 2401. COAL AND RELATED TECHNOLOGIES PRO-
15 16	SEC. 2401. COAL AND RELATED TECHNOLOGIES PRO- GRAMS.
15 16 17	SEC. 2401. COAL AND RELATED TECHNOLOGIES PRO- GRAMS. (a) AUTHORIZATION OF APPROPRIATIONS.—There
15 16 17 18	SEC. 2401. COAL AND RELATED TECHNOLOGIES PRO- GRAMS. (a) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary
15 16 17 18 19	 SEC. 2401. COAL AND RELATED TECHNOLOGIES PRO- GRAMS. (a) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary \$172,000,000 for fiscal year 2002, \$179,000,000 for fis-
 15 16 17 18 19 20 	 SEC. 2401. COAL AND RELATED TECHNOLOGIES PRO- GRAMS. (a) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary \$172,000,000 for fiscal year 2002, \$179,000,000 for fis- cal year 2003, and \$186,000,000 for fiscal year 2004, to
 15 16 17 18 19 20 21 	SEC. 2401. COAL AND RELATED TECHNOLOGIES PRO- GRAMS. (a) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary \$172,000,000 for fiscal year 2002, \$179,000,000 for fis- cal year 2003, and \$186,000,000 for fiscal year 2004, to remain available until expended, for other coal and related
 15 16 17 18 19 20 21 22 	SEC. 2401. COAL AND RELATED TECHNOLOGIES PRO- GRAMS. (a) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary \$172,000,000 for fiscal year 2002, \$179,000,000 for fis- cal year 2003, and \$186,000,000 for fiscal year 2004, to remain available until expended, for other coal and related technologies research and development programs, which

25 (2) Integrated Gasification Combined Cycle;

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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;

(3) a description of how the programs authorized in this subsection will be carried out so as to
complement and not duplicate activities authorized
under division E.

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Subtitle B—Oil and Gas

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2 SEC. 2421. PETROLEUM-OIL TECHNOLOGY.

3 The Secretary shall conduct a program of research, development, demonstration, and commercial application 4 on petroleum-oil technology. The program shall address— 5 6 (1) Exploration and Production Supporting Re-7 search; 8 (2) Oil Technology Reservoir Management/Ex-9 tension; and 10 (3) Effective Environmental Protection. 11 SEC. 2422. GAS. 12 The Secretary shall conduct a program of research, 13 development, demonstration, and commercial application 14 on natural gas technologies. The program shall address— 15 (1) Exploration and Production; 16 (2) Infrastructure; and 17 (3) Effective Environmental Protection. Subtitle C—Ultra-Deepwater and 18 **Unconventional Drilling** 19 20SEC. 2441. SHORT TITLE. 21 This subtitle may be cited as the "Natural Gas and 22 Other Petroleum Research, Development, and Demonstra-23 tion Act of 2001". 24 SEC. 2442. DEFINITIONS.

25 For purposes of this subtitle—

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(1) the term "deepwater" means water depths
greater than 200 meters but less than 1,500 meters;
(2) the term "Fund" means the Ultra-Deep-
water and Unconventional Gas Research Fund es-
tablished under section 2450;
(3) the term "institution of higher education"
has the meaning given that term in section 101 of
the Higher Education Act of 1965 (20 U.S.C.
1001);
(4) the term "Research Organization" means
the Research Organization created pursuant to sec-
tion 2446(a);
(5) the term "ultra-deepwater" means water
depths greater than 1,500 meters; and
(6) the term "unconventional" means located in
heretofore inaccessible or uneconomic formations on
land.
SEC. 2443. ULTRA-DEEPWATER PROGRAM.
The Secretary shall establish a program of research,
development, and demonstration of ultra-deepwater nat-
ural gas and other petroleum exploration and production
technologies, in areas currently available for Outer Conti-
nental Shelf leasing. The program shall be carried out by

1 SEC. 2444. NATIONAL ENERGY TECHNOLOGY LABORATORY.

2 The National Energy Technology Laboratory and the 3 United States Geological Survey, when appropriate, shall carry out programs of long-term research into new natural 4 5 gas and other petroleum exploration and production technologies and environmental mitigation technologies for 6 7 production from unconventional and ultra-deepwater re-8 sources, including methane hydrates. Such Laboratory 9 shall also conduct a program of research, development, and demonstration of new technologies for the reduction 10 11 of greenhouse gas emissions from unconventional and ultra-deepwater natural gas or other petroleum explo-12 13 ration and production activities, including sub-sea floor carbon sequestration technologies. 14

15 SEC. 2445. ADVISORY COMMITTEE.

16 (a) ESTABLISHMENT.—The Secretary shall, within 3 months after the date of the enactment of this Act, estab-17 18 lish an Advisory Committee consisting of 7 members, each having extensive operational knowledge of and experience 19 in the natural gas and other petroleum exploration and 20 production industry who are not Federal Government em-21 22 ployees or contractors. A minimum of 4 members shall 23 have extensive knowledge of ultra-deepwater natural gas 24 or other petroleum exploration and production technologies, a minimum of 2 members shall have extensive 25 26 knowledge of unconventional natural gas or other petroleum exploration and production technologies, and at least
 member shall have extensive knowledge of greenhouse
 gas emission reduction technologies, including carbon se questration.

5 (b) FUNCTION.—The Advisory Committee shall ad-6 vise the Secretary on the selection of an organization to 7 create the Research Organization and on the implementa-8 tion of this subtitle.

9 (c) COMPENSATION.—Members of the Advisory Com-10 mittee shall serve without compensation but shall receive 11 travel expenses, including per diem in lieu of subsistence, 12 in accordance with applicable provisions under subchapter 13 I of chapter 57 of title 5, United States Code.

(d) ADMINISTRATIVE COSTS.—The costs of activities
carried out by the Secretary and the Advisory Committee
under this subtitle shall be paid or reimbursed from the
Fund.

(e) DURATION OF ADVISORY COMMITTEE.—Section
14 of the Federal Advisory Committee Act shall not apply
20 to the Advisory Committee.

21 SEC. 2446. RESEARCH ORGANIZATION.

(a) SELECTION OF RESEARCH ORGANIZATION.—The
Secretary, within 6 months after the date of the enactment
of this Act, shall solicit proposals from eligible entities for
the creation of the Research Organization, and within 3

months after such solicitation, shall select an entity to cre-1 2 ate the Research Organization. 3 (b) ELIGIBLE ENTITIES.—Entities eligible to create 4 the Research Organization shall— 5 (1) have been in existence as of the date of the 6 enactment of this Act; 7 (2) be entities exempt from tax under section 8 501(c)(3) of the Internal Revenue Code of 1986; 9 and 10 (3) be experienced in planning and managing 11 programs in natural gas or other petroleum explo-12 ration and production research, development, and 13 demonstration. 14 (c) PROPOSALS.—A proposal from an entity seeking 15 to create the Research Organization shall include a detailed description of the proposed membership and struc-16 ture of the Research Organization. 17 18 (d) FUNCTIONS.—The Research Organization shall— 19 (1) award grants on a competitive basis to 20 qualified— 21 (A) research institutions; 22 (B) institutions of higher education; 23 (C) companies; and 24 (D) consortia formed among institutions 25 and companies described in subparagraphs (A)

1	through (C) for the purpose of conducting re-
2	search, development, and demonstration of un-
3	conventional and ultra-deepwater natural gas or
4	other petroleum exploration and production
5	technologies; and
6	(2) review activities under those grants to en-
7	sure that they comply with the requirements of this
8	subtitle and serve the purposes for which the grant
9	was made.
10	SEC. 2447. GRANTS.
11	(a) Types of Grants.—
12	(1) Unconventional.—The Research Organi-
13	zation shall award grants for research, development,
14	and demonstration of technologies to maximize the
15	value of the Government's natural gas and other pe-
16	troleum resources in unconventional reservoirs, and
17	to develop technologies to increase the supply of nat-
18	ural gas and other petroleum resources by lowering
19	the cost and improving the efficiency of exploration
20	and production of unconventional reservoirs, while
21	improving safety and minimizing environmental im-
22	pacts.
23	(2) Ultra-deepwater.—The Research Orga-
24	nization shall award grants for research, develop-

25 ment, and demonstration of natural gas or other pe-

1	troleum exploration and production technologies
2	to—
3	(A) maximize the value of the Federal
4	Government's natural gas and other petroleum
5	resources in the ultra-deepwater areas;
6	(B) increase the supply of natural gas and
7	other petroleum resources by lowering the cost
8	and improving the efficiency of exploration and

10 (C) improve safety and minimize the envi11 ronmental impacts of ultra-deepwater develop12 ments.

production of ultra-deepwater reservoirs; and

13 (3) ULTRA-DEEPWATER ARCHITECTURE.—The 14 Research Organization shall award a grant to one or 15 more consortia described in section 2446(d)(1)(D)16 for the purpose of developing and demonstrating the 17 next generation architecture for ultra-deepwater pro-18 duction of natural gas and other petroleum in fur-19 therance of the purposes stated in paragraph (2)(A)20 through (C).

(b) CONDITIONS FOR GRANTS.—Grants provided
under this section shall contain the following conditions:
(1) If the grant recipient consists of more than
one entity, the recipient shall provide a signed contract agreed to by all participating members clearly

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defining all rights to intellectual property for existing technology and for future inventions conceived and developed using funds provided under the grant, in a manner that is consistent with applicable laws.

5 (2) There shall be a repayment schedule for 6 Federal dollars provided for demonstration projects 7 under the grant in the event of a successful commer-8 cialization of the demonstrated technology. Such re-9 payment schedule shall provide that the payments 10 are made to the Secretary with the express intent that these payments not impede the adoption of the 11 12 demonstrated technology in the marketplace. In the 13 event that such impedance occurs due to market 14 forces or other factors, the Research Organization 15 shall renegotiate the grant agreement so that the ac-16 ceptance of the technology in the marketplace is en-17 abled.

18 (3) Applications for grants for demonstration
19 projects shall clearly state the intended commercial
20 applications of the technology demonstrated.

(4) The total amount of funds made available
under a grant provided under subsection (a)(3) shall
not exceed 50 percent of the total cost of the activities for which the grant is provided.

(5) The total amount of funds made available
under a grant provided under subsection (a)(1) or
(2) shall not exceed 50 percent of the total cost of
the activities covered by the grant, except that the
Research Organization may elect to provide grants
covering a higher percentage, not to exceed 90 per-

7 cent, of total project costs in the case of grants8 made solely to independent producers.

9 (6) An appropriate amount of funds provided 10 under a grant shall be used for the broad dissemina-11 tion of technologies developed under the grant to in-12 terested institutions of higher education, industry, 13 and appropriate Federal and State technology enti-14 ties to ensure the greatest possible benefits for the 15 public and use of government resources.

16 (7) Demonstrations of ultra-deepwater tech17 nologies for which funds are provided under a grant
18 may be conducted in ultra-deepwater or deepwater
19 locations.

20 (c) ALLOCATION OF FUNDS.—Funds available for21 grants under this subtitle shall be allocated as follows:

(1) 15 percent shall be for grants under sub-section (a)(1).

24 (2) 15 percent shall be for grants under sub-25 section (a)(2).

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(3) 60 percent shall be for grants under sub section (a)(3).

3 (4) 10 percent shall be for carrying out section
4 2444.

5 SEC. 2448. PLAN AND FUNDING.

6 (a) TRANSMITTAL TO SECRETARY.—The Research
7 Organization shall transmit to the Secretary an annual
8 plan proposing projects and funding of activities under
9 each paragraph of section 2447(a).

10 (b) REVIEW.—The Secretary shall have 1 month to 11 review the annual plan, and shall approve the plan, if it 12 is consistent with this subtitle. If the Secretary approves 13 the plan, the Secretary shall provide funding as proposed 14 in the plan.

15 (c) DISAPPROVAL.—If the Secretary does not approve 16 the plan, the Secretary shall notify the Research Organiza-17 tion of the reasons for disapproval and shall withhold 18 funding until a new plan is submitted which the Secretary 19 approves. Within 1 month after notifying the Research Or-20 ganization of a disapproval, the Secretary shall notify the 21 appropriate congressional committees of the disapproval.

22 SEC. 2449. AUDIT.

The Secretary shall retain an independent, commercial auditor to determine the extent to which the funds authorized by this subtitle have been expended in a manner consistent with the purposes of this subtitle. The audi tor shall transmit a report annually to the Secretary, who
 shall transmit the report to the appropriate congressional
 committees, along with a plan to remedy any deficiencies
 cited in the report.

6 SEC. 2450. FUND.

7 (a) ESTABLISHMENT.—There is established in the
8 Treasury of the United States a fund to be known as the
9 "Ultra-Deepwater and Unconventional Gas Research
10 Fund" which shall be available for obligation to the extent
11 provided in advance in appropriations Acts for allocation
12 under section 2447(c).

13 (b) FUNDING SOURCES.—

14 (1) LOANS FROM TREASURY.—There are authorized to be appropriated to the 15 Secretary 16 \$900,000,000 for the period encompassing fiscal 17 years 2002 through 2009. Such amounts shall be 18 deposited by the Secretary in the Fund, and shall be 19 considered loans from the Treasury. Income received 20 by the United States in connection with any ultra-21 deepwater oil and gas leases shall be deposited in 22 the Treasury and considered as repayment for the 23 loans under this paragraph.

24 (2) ADDITIONAL APPROPRIATIONS.—There are
25 authorized to be appropriated to the Secretary such

1	sums as may be necessary for the fiscal years 2002
2	through 2009, to be deposited in the Fund.
3	(3) OIL AND GAS LEASE INCOME.—To the ex-
4	tent provided in advance in appropriations Acts, not
5	more than 7.5 percent of the income of the United
6	States from Federal oil and gas leases may be de-
7	posited in the Fund for fiscal years 2002 through
8	2009.
9	SEC. 2451. SUNSET.
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10	No funds are authorized to be appropriated for car-
10	No funds are authorized to be appropriated for car-
10 11	No funds are authorized to be appropriated for car- rying out this subtitle after fiscal year 2009. The Research
10 11 12	No funds are authorized to be appropriated for car- rying out this subtitle after fiscal year 2009. The Research Organization shall be terminated when it has expended all
10 11 12 13	No funds are authorized to be appropriated for car- rying out this subtitle after fiscal year 2009. The Research Organization shall be terminated when it has expended all funds made available pursuant to this subtitle.

ct a 17 program of research, development, demonstration, and 18 commercial application on fuel cells. The program shall 19 address-

- 20 (1) Advanced Research;
- 21 (2) Systems Development;
- 22 (3) Vision 21-Hybrids; and
- 23 (4) Innovative Concepts.

24 MANUFACTURING PRODUCTION AND (b) Proc-25 ESSES.—In addition to the program under subsection (a),

the Secretary, in consultation other Federal agencies, as 1 2 appropriate, shall establish a program for the demonstra-3 tion of fuel cell technologies, including fuel cell proton ex-4 change membrane technology, for commercial, residential, and transportation applications. The program shall spe-5 cifically focus on promoting the application of and im-6 7 proved manufacturing production and processes for fuel 8 cell technologies.

9 (c) AUTHORIZATION OF APPROPRIATIONS.—Within 10 the amounts authorized to be appropriated under section 11 2481(a), there are authorized to be appropriated to the 12 Secretary for the purpose of carrying out subsection (b), 13 \$28,000,000 for each of fiscal years 2002 through 2004.

14 Subtitle E—Department of Energy

15 Authorization of Appropriations

16 SEC. 2481. AUTHORIZATION OF APPROPRIATIONS.

17 (a) OPERATION AND MAINTENANCE.—There are au-18 thorized to be appropriated to the Secretary for operation 19 and maintenance for subtitle B and subtitle D, and for Fossil Energy Research and Development Headquarters 2021 Program Direction, Field Program Direction, Plant and 22 Capital Equipment, Cooperative Research and Develop-23 ment, Import/Export Authorization, and Advanced Met-24 allurgical Processes \$282,000,000 for fiscal year 2002,

1	\$293,000,000 for fiscal year 2003, and \$305,000,000 for
2	fiscal year 2004, to remain available until expended.
3	(b) LIMITS ON USE OF FUNDS.—None of the funds
4	authorized to be appropriated in subsection (a) may be
5	used for—
6	(1) Gas Hydrates.
7	(2) Fossil Energy Environmental Restoration;
8	or
9	(3) research, development, demonstration, and
10	commercial application on coal and related tech-
11	nologies, including activities under subtitle A.
12	TITLE V—SCIENCE
13	Subtitle A—Fusion Energy
14	Sciences
14 15	Sciences SEC. 2501. SHORT TITLE.
15	SEC. 2501. SHORT TITLE. This subtitle may be cited as the "Fusion Energy
15 16	SEC. 2501. SHORT TITLE. This subtitle may be cited as the "Fusion Energy
15 16 17	SEC. 2501. SHORT TITLE. This subtitle may be cited as the "Fusion Energy Sciences Act of 2001".
15 16 17 18	SEC. 2501. SHORT TITLE.This subtitle may be cited as the "Fusion Energy Sciences Act of 2001".SEC. 2502. FINDINGS.
15 16 17 18 19	 SEC. 2501. SHORT TITLE. This subtitle may be cited as the "Fusion Energy Sciences Act of 2001". SEC. 2502. FINDINGS. The Congress finds that—
15 16 17 18 19 20	 SEC. 2501. SHORT TITLE. This subtitle may be cited as the "Fusion Energy Sciences Act of 2001". SEC. 2502. FINDINGS. The Congress finds that— (1) economic prosperity is closely linked to an
15 16 17 18 19 20 21	 SEC. 2501. SHORT TITLE. This subtitle may be cited as the "Fusion Energy Sciences Act of 2001". SEC. 2502. FINDINGS. The Congress finds that— (1) economic prosperity is closely linked to an affordable and ample energy supply;
 15 16 17 18 19 20 21 22 	 SEC. 2501. SHORT TITLE. This subtitle may be cited as the "Fusion Energy Sciences Act of 2001". SEC. 2502. FINDINGS. The Congress finds that— (1) economic prosperity is closely linked to an affordable and ample energy supply; (2) environmental quality is closely linked to en-
 15 16 17 18 19 20 21 22 23 	 SEC. 2501. SHORT TITLE. This subtitle may be cited as the "Fusion Energy Sciences Act of 2001". SEC. 2502. FINDINGS. The Congress finds that— (1) economic prosperity is closely linked to an affordable and ample energy supply; (2) environmental quality is closely linked to energy production and use;

1	ronment are all expected to increase substantially in
2	the coming decades;
3	(4) the few energy options with the potential to
4	meet economic and environmental needs for the
5	long-term future should be pursued as part of a bal-
6	anced national energy plan;
7	(5) fusion energy is an attractive long-term en-

8 ergy source because of the virtually inexhaustible
9 supply of fuel, and the promise of minimal adverse
10 environmental impact and inherent safety;

11 (6) the National Research Council, the Presi-12 dent's Committee of Advisers on Science and Tech-13 nology, and the Secretary of Energy Advisory Board 14 have each recently reviewed the Fusion Energy 15 Sciences Program and each strongly supports the fundamental science and creative innovation of the 16 17 program, and has confirmed that progress toward 18 the goal of producing practical fusion energy has 19 been excellent, although much scientific and engi-20 neering work remains to be done;

(7) each of these reviews stressed the need for
a magnetic fusion burning plasma experiment to address key scientific issues and as a necessary step in
the development of fusion energy;

(8) the National Research Council has also
 called for a broadening of the Fusion Energy
 Sciences Program research base as a means to more
 fully integrate the fusion science community into the
 broader scientific community; and

6 (9) the Fusion Energy Sciences Program budg-7 et is inadequate to support the necessary science and 8 innovation for the present generation of experiments, 9 and cannot accommodate the cost of a burning plas-10 ma experiment constructed by the United States, or 11 even the cost of key participation by the United 12 States in an international effort.

13 SEC. 2503. PLAN FOR FUSION EXPERIMENT.

14 (a) PLAN FOR UNITED STATES FUSION EXPERI-15 MENT.—The Secretary, on the basis of full consultation with the Fusion Energy Sciences Advisory Committee and 16 the Secretary of Energy Advisory Board, as appropriate, 17 18 shall develop a plan for United States construction of a magnetic fusion burning plasma experiment for the pur-19 20 pose of accelerating scientific understanding of fusion 21 plasmas. The Secretary shall request a review of the plan by the National Academy of Sciences, and shall transmit 22 23 the plan and the review to the Congress by July 1, 2004. 24 (b) REQUIREMENTS OF PLAN.—The plan described 25 in subsection (a) shall(1) address key burning plasma physics issues;
 and

3 (2) include specific information on the scientific
4 capabilities of the proposed experiment, the rel5 evance of these capabilities to the goal of practical
6 fusion energy, and the overall design of the experi7 ment including its estimated cost and potential con8 struction sites.

9 (c) UNITED STATES PARTICIPATION IN AN INTER-10 NATIONAL EXPERIMENT.—In addition to the plan described in subsection (a), the Secretary, on the basis of 11 12 full consultation with the Fusion Energy Sciences Advi-13 sory Committee and the Secretary of Energy Advisory Board, as appropriate, may also develop a plan for United 14 15 States participation in an international burning plasma experiment for the same purpose, whose construction is 16 17 found by the Secretary to be highly likely and where 18 United States participation is cost effective relative to the 19 cost and scientific benefits of a domestic experiment de-20 scribed in subsection (a). If the Secretary elects to develop 21 a plan under this subsection, he shall include the informa-22 tion described in subsection (b), and an estimate of the 23 cost of United States participation in such an inter-24 national experiment. The Secretary shall request a review 25 by the National Academies of Sciences and Engineering of a plan developed under this subsection, and shall trans mit the plan and the review to the Congress not later than
 July 1, 2004.

4 (d) AUTHORIZATION OF RESEARCH AND DEVELOP5 MENT.—The Secretary, through the Fusion Energy
6 Sciences Program, may conduct any research and develop7 ment necessary to fully develop the plans described in this
8 section.

9 SEC. 2504. PLAN FOR FUSION ENERGY SCIENCES PRO-10 GRAM.

11 Not later than 6 months after the date of the enact-12 ment of this Act, the Secretary, in full consultation with 13 FESAC, shall develop and transmit to the Congress a plan 14 for the purpose of ensuring a strong scientific base for 15 the Fusion Energy Sciences Program and to enable the 16 experiments described in section 2503. Such plan shall in-17 clude as its objectives—

(1) to ensure that existing fusion research facilities and equipment are more fully utilized with
appropriate measurements and control tools;

21 (2) to ensure a strengthened fusion science the22 ory and computational base;

(3) to ensure that the selection of and fundingfor new magnetic and inertial fusion research facili-

1	ties is based on scientific innovation and cost effec-
2	tiveness;
3	(4) to improve the communication of scientific
4	results and methods between the fusion science com-
5	munity and the wider scientific community;
6	(5) to ensure that adequate support is provided
7	to optimize the design of the magnetic fusion burn-
8	ing plasma experiments referred to in section 2503;
9	(6) to ensure that inertial confinement fusion
10	facilities are utilized to the extent practicable for the
11	purpose of inertial fusion energy research and devel-
12	opment;
13	(7) to develop a roadmap for a fusion-based en-
14	ergy source that shows the important scientific ques-
15	tions, the evolution of confinement configurations,
16	the relation between these two features, and their re-
17	lation to the fusion energy goal;
18	(8) to establish several new centers of excel-
19	lence, selected through a competitive peer-review
20	process and devoted to exploring the frontiers of fu-
21	sion science;
22	(9) to ensure that the National Science Foun-
23	dation, and other agencies, as appropriate, play a
24	role in extending the reach of fusion science and in
25	sponsoring general plasma science; and

(10) to ensure that there be continuing broad
 assessments of the outlook for fusion energy and
 periodic external reviews of fusion energy sciences.

4 SEC. 2505. AUTHORIZATION OF APPROPRIATIONS.

5 There are authorized to be appropriated to the Sec-6 retary for the development and review, but not for imple-7 mentation, of the plans described in this subtitle and for 8 activities of the Fusion Energy Sciences Program 9 \$320,000,000 for fiscal year 2002 and \$335,000,000 for 10 fiscal year 2003, of which up to \$15,000,000 for each of fiscal year 2002 and fiscal year 2003 may be used to es-11 12 tablish several new centers of excellence, selected through 13 a competitive peer-review process and devoted to exploring 14 the frontiers of fusion science.

Subtitle B—Spallation Neutron Source

17 SEC. 2521. DEFINITION.

For the purposes of this subtitle, the term "Spallation Neutron Source" means Department Project 99–E–
334, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

22 SEC. 2522. AUTHORIZATION OF APPROPRIATIONS.

(a) AUTHORIZATION OF CONSTRUCTION FUNDING.—
There are authorized to be appropriated to the Secretary
for construction of the Spallation Neutron Source—

1	(1) \$276,300,000 for fiscal year 2002;
2	(2) \$210,571,000 for fiscal year 2003;
3	(3) \$124,600,000 for fiscal year 2004;
4	(4) \$79,800,000 for fiscal year 2005; and
5	(5) \$41,100,000 for fiscal year 2006 for com-
6	pletion of construction.

(b) AUTHORIZATION OF OTHER PROJECT FUND-7 8 ING.—There are authorized to be appropriated to the Sec-9 retary for other project costs (including research and de-10 velopment necessary to complete the project, preoperations 11 costs, and capital equipment not related to construction) 12 of the Spallation Neutron Source \$15,353,000 for fiscal 13 year 2002 and \$103,279,000 for the period encompassing fiscal years 2003 through 2006, to remain available until 14 15 expended through September 30, 2006.

16 SEC. 2523. REPORT.

17 The Secretary shall report on the Spallation Neutron 18 Source as part of the Department's annual budget submis-19 sion, including a description of the achievement of mile-20 stones, a comparison of actual costs to estimated costs, 21 and any changes in estimated project costs or schedule.

22 SEC. 2524. LIMITATIONS.

The total amount obligated by the Department, including prior year appropriations, for the Spallation Neutron Source may not exceed—

1	(1) \$1,192,700,000 for costs of construction;
2	(2) \$219,000,000 for other project costs; and
3	(3) \$1,411,700,000 for total project cost.
4	Subtitle C—Facilities,
5	Infrastructure, and User Facilities
6	SEC. 2541. DEFINITION.
7	For purposes of this subtitle—
8	(1) the term "nonmilitary energy laboratory"
9	means—
10	(A) Ames Laboratory;
11	(B) Argonne National Laboratory;
12	(C) Brookhaven National Laboratory;
13	(D) Fermi National Accelerator Labora-
14	tory;
15	(E) Lawrence Berkeley National Labora-
16	tory;
17	(F) Oak Ridge National Laboratory;
18	(G) Pacific Northwest National Labora-
19	tory;
20	(H) Princeton Plasma Physics Laboratory;
21	(I) Stanford Linear Accelerator Center;
22	(J) Thomas Jefferson National Accelerator
23	Facility; or
24	(K) any other facility of the Department
25	that the Secretary, in consultation with the Di-

1	rector, Office of Science and the appropriate
2	congressional committees, determines to be con-
3	sistent with the mission of the Office of
4	Science; and

(2) the term "user facility" means—

5

(A) an Office of Science facility at a non-6 7 military energy laboratory that provides special scientific and research capabilities, including 8 9 technical expertise and support as appropriate, 10 to serve the research needs of the Nation's uni-11 versities, industry, private laboratories, Federal 12 laboratories, and others, including research in-13 stitutions or individuals from other nations 14 where reciprocal accommodations are provided 15 to United States research institutions and indi-16 viduals or where the Secretary considers such 17 accommodation to be in the national interest; 18 and

(B) any other Office of Science funded facility designated by the Secretary as a user facility.

1	SEC. 2542. FACILITY AND INFRASTRUCTURE SUPPORT FOR
2	NONMILITARY ENERGY LABORATORIES.
3	(a) FACILITY POLICY.—The Secretary shall develop
4	and implement a least-cost nonmilitary energy laboratory
5	facility and infrastructure strategy for—
6	(1) maintaining existing facilities and infra-
7	structure, as needed;
8	(2) closing unneeded facilities;
9	(3) making facility modifications; and
10	(4) building new facilities.
11	(b) PLAN.—The Secretary shall prepare a com-
12	prehensive 10-year plan for conducting future facility
13	maintenance, making repairs, modifications, and new ad-
14	ditions, and constructing new facilities at each nonmilitary
15	energy laboratory. Such plan shall provide for facilities
16	work in accordance with the following priorities:
17	(1) Providing for the safety and health of em-
18	ployees, visitors, and the general public with regard
19	to correcting existing structural, mechanical, elec-
20	trical, and environmental deficiencies.
21	(2) Providing for the repair and rehabilitation
22	of existing facilities to keep them in use and prevent
23	deterioration, if feasible.
24	(3) Providing engineering design and construc-
25	tion services for those facilities that require modi-

1	fication or additions in order to meet the needs of
2	new or expanded programs.
3	(c) Report.—
4	(1) TRANSMITTAL.—Within 1 year after the
5	date of the enactment of this Act, the Secretary
6	shall prepare and transmit to the appropriate con-
7	gressional committees a report containing the plan
8	prepared under subsection (b).
9	(2) CONTENTS.—For each nonmilitary energy
10	laboratory, such report shall contain—
11	(A) the current priority list of proposed fa-
12	cilities and infrastructure projects, including
13	cost and schedule requirements;
14	(B) a current ten-year plan that dem-
15	onstrates the reconfiguration of its facilities and
16	infrastructure to meet its missions and to ad-
17	dress its long-term operational costs and return
18	on investment;
19	(C) the total current budget for all facili-
20	ties and infrastructure funding; and
21	(D) the current status of each facilities
22	and infrastructure project compared to the
23	original baseline cost, schedule, and scope.
24	(3) Additional elements.—The report shall
25	also—

1 (A) include a plan for new facilities and fa-2 cility modifications at each nonmilitary energy 3 laboratory that will be required to meet the De-4 partment's changing missions of the twenty-5 first century, including schedules and estimates 6 for implementation, and including a section out-7 lining long-term funding requirements con-8 sistent with anticipated budgets and annual au-9 thorization of appropriations;

10 (B) address the coordination of moderniza11 tion and consolidation of facilities among the
12 nonmilitary energy laboratories in order to meet
13 changing mission requirements; and

14 (C) provide for annual reports to the ap15 propriate congressional committees on accom16 plishments, conformance to schedules, commit17 ments, and expenditures.

18 SEC. 2543. USER FACILITIES.

(a) NOTICE REQUIREMENT.—When the Department
makes a user facility available to universities and other
potential users, or seeks input from universities and other
potential users regarding significant characteristics or
equipment in a user facility or a proposed user facility,
the Department shall ensure broad public notice of such
availability or such need for input to universities and other
 potential users.

3 (b) COMPETITION REQUIREMENT.—When the De-4 partment considers the participation of a university or 5 other potential user in the establishment or operation of 6 a user facility, the Department shall employ full and open 7 competition in selecting such a participant.

8 (c) PROHIBITION.—The Department may not redes-9 ignate a user facility, as defined by section 2541(b) as 10 something other than a user facility for avoid the require-11 ments of subsections (a) and (b).

Subtitle D—Advisory Panel on Office of Science

14 SEC. 2561. ESTABLISHMENT.

The Director of the Office of Science and Technology
Policy, in consultation with the Secretary, shall establish
an Advisory Panel on the Office of Science comprised of
knowledgeable individuals to—

19 (1) address concerns about the current status
20 and the future of scientific research supported by
21 the Office;

(2) examine alternatives to the current organizational structure of the Office within the Department, taking into consideration existing structures

for the support of scientific research in other Fed eral agencies and the private sector; and

3 (3) suggest actions to strengthen the scientific
4 research supported by the Office that might be
5 taken jointly by the Department and Congress.

6 SEC. 2562. REPORT.

7 Within 6 months after the date of the enactment of
8 this Act, the Advisory Panel shall transmit its findings
9 and recommendations in a report to the Director of the
10 Office of Science and Technology Policy and the Sec11 retary. The Director and the Secretary shall jointly—

(1) consider each of the Panel's findings and
recommendations, and comment on each as they
consider appropriate; and

(2) transmit the Panel's report and the comments of the Director and the Secretary on the report to the appropriate congressional committees
within 9 months after the date of the enactment of
this Act.

20 Subtitle E—Department of Energy

21 Authorization of Appropriations

22 SEC. 2581. AUTHORIZATION OF APPROPRIATIONS.

(a) OPERATION AND MAINTENANCE.—Including the
amounts authorized to be appropriated for fiscal year
2002 under section 2505 for Fusion Energy Sciences and

under section 2522(b) for the Spallation Neutron Source, 1 2 there are authorized to be appropriated to the Secretary 3 for the Office of Science (also including subtitle C, High 4 Energy Physics, Nuclear Physics, Biological and Environ-5 mental Research, Basic Energy Sciences (except for the Spallation Neutron Source), Advanced Scientific Com-6 7 puting Research, Energy Research Analysis, Multipro-8 gram Energy Laboratories-Facilities Support, Facilities 9 and Infrastructure, Safeguards and Security, and Prooperation 10 gram Direction) and maintenance \$3,299,558,000 for fiscal year 2002, to remain available 11 12 until expended.

13 (b) RESEARCH REGARDING PRECIOUS METAL CA-14 TALYSIS.—Within the amounts authorized to be appro-15 priated to the Secretary under subsection (a), \$5,000,000 for fiscal year 2002 may be used to carry out research 16 17 in the use of precious metals (excluding platinum, palla-18 dium, and rhodium) in catalysis, either directly though na-19 tional laboratories, or through the award of grants, coop-20 erative agreements, or contracts with public or nonprofit 21 entities.

(c) CONSTRUCTION.—In addition to the amounts authorized to be appropriated under section 2522(a) for construction of the Spallation Neutron Source, there are authorized to be appropriated to the Secretary for Science—

1	(1) \$11,400,000 for fiscal year 2002 for com-
2	pletion of construction of Project 98-G-304,
3	Neutrinos at the Main Injector, Fermi National Ac-
4	celerator Laboratory;
5	(2) \$11,405,000 for fiscal year 2002 for com-
6	pletion of construction of Project 01-E-300, Labora-
7	tory for Comparative and Functional Genomics, Oak
8	Ridge National Laboratory;
9	(3) \$4,000,000 for fiscal year 2002, \$8,000,000
10	for fiscal year 2003, and \$2,000,000 for fiscal year
11	2004 for completion of construction of Project 02-
12	SC-002, Project Engineering Design (PED), Var-
13	ious Locations;
14	(4) $$3,183,000$ for fiscal year 2002 for comple-
15	tion of construction of Project 02-SC-002, Multipro-
16	gram Energy Laboratories Infrastructure Project
17	Engineering Design (PED), Various Locations; and
18	(5) \$18,633,000 for fiscal year 2002 and
19	\$13,029,000 for fiscal year 2003 for completion of
20	construction of Project MEL-001, Multiprogram En-
21	ergy Laboratories, Infrastructure, Various Loca-
22	tions.
23	(d) LIMITS ON USE OF FUNDS.—None of the funds

23 (d) IMMITS ON USE OF FUNDS.—None of the funds24 authorized to be appropriated in subsection (c) may be25 used for construction at any national security laboratory

as defined in section 3281(1) of the National Defense Au thorization Act for Fiscal Year 2000 (50 U.S.C. 2471(1))
 or at any nuclear weapons production facility as defined
 in section 3281(2) of the National Defense Authorization
 Act for Fiscal Year 2000 (50 U.S.C. 2471(2)).

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TITLE VI—MISCELLANEOUS Subtitle A—General Provisions for the Department of Energy

9 SEC. 2601. RESEARCH, DEVELOPMENT, DEMONSTRATION,
10 AND COMMERCIAL APPLICATION OF ENERGY
11 TECHNOLOGY PROGRAMS, PROJECTS, AND
12 ACTIVITIES.

13 (a) AUTHORIZED ACTIVITIES.—Except as otherwise provided in this division, research, development, dem-14 15 onstration, and commercial application programs, projects, and activities for which appropriations are au-16 17 thorized under this division may be carried out under the procedures of the Federal Nonnuclear Energy Research 18 and Development Act of 1974 (42 U.S.C. 5901 et seq.), 19 the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.), 20 21 or any other Act under which the Secretary is authorized 22 to carry out such programs, projects, and activities, but 23 only to the extent the Secretary is authorized to carry out such activities under each such Act. 24

1 (b) AUTHORIZED AGREEMENTS.—Except as otherwise provided in this division, in carrying out research, 2 3 development, demonstration, and commercial application 4 programs, projects, and activities for which appropriations 5 are authorized under this division, the Secretary may use, to the extent authorized under applicable provisions of 6 7 law, contracts, cooperative agreements, cooperative re-8 search and development agreements under the Stevenson-9 Wydler Technology Innovation Act of 1980 (15 U.S.C. 10 3701 et seq.), grants, joint ventures, and any other form of agreement available to the Secretary. 11

12 (c) DEFINITION.—For purposes of this section, the 13 term "joint venture" has the meaning given that term 14 under section 2 of the National Cooperative Research and 15 Production Act of 1993 (15 U.S.C. 4301), except that 16 such term may apply under this section to research, devel-17 opment, demonstration, and commercial application of en-18 ergy technology joint ventures.

19 (d) PROTECTION OF INFORMATION.—Section 2012(c)(7) of the Stevenson-Wydler Technology Innovation 21 Act of 1980 (15 U.S.C. 3710a(c)(7)), relating to the pro-22 tection of information, shall apply to research, develop-23 ment, demonstration, and commercial application of en-24 ergy technology programs, projects, and activities for 25 which appropriations are authorized under this division.

(e) INVENTIONS.—An invention conceived and devel oped by any person using funds provided through a grant
 under this division shall be considered a subject invention
 for the purposes of chapter 18 of title 35, United States
 Code (commonly referred to as the Bayh-Dole Act).

6 (f) OUTREACH.—The Secretary shall ensure that 7 each program authorized by this division includes an out-8 reach component to provide information, as appropriate, 9 to manufacturers, consumers, engineers, architects, build-10 ers, energy service companies, universities, facility plan-11 ners and managers, State and local governments, and 12 other entities.

(g) GUIDELINES AND PROCEDURES.—The Secretary
shall provide guidelines and procedures for the transition,
where appropriate, of energy technologies from research
through development and demonstration to commercial
application of energy technology. Nothing in this section
shall preclude the Secretary from—

(1) entering into a contract, cooperative agreement, cooperative research and development agreement under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grant,
joint venture, or any other form of agreement available to the Secretary under this section that relates

1	to research, development, demonstration, and com-
2	mercial application of energy technology; or

(2) extending a contract, cooperative agree-3 4 ment, cooperative research and development agree-5 ment under the Stevenson-Wydler Technology Inno-6 vation Act of 1980, grant, joint venture, or any 7 other form of agreement available to the Secretary 8 that relates to research, development, and dem-9 onstration to cover commercial application of energy 10 technology.

(h) APPLICATION OF SECTION.—This section shall
not apply to any contract, cooperative agreement, cooperative research and development agreement under the Stevenson-Wydler Technology Innovation Act of 1980 (15)
U.S.C. 3701 et seq.), grant, joint venture, or any other
form of agreement available to the Secretary that is in
effect as of the date of enactment of this Act.

18 SEC. 2602. LIMITS ON USE OF FUNDS.

19 (a) MANAGEMENT AND OPERATING CONTRACTS.—

(1) COMPETITIVE PROCEDURE REQUIREMENT.—None of the funds authorized to be appropriated to the Secretary by this division may be used
to award a management and operating contract for
a federally owned or operated nonmilitary energy
laboratory of the Department unless such contract is

awarded using competitive procedures or the Sec retary grants, on a case-by-case basis, a waiver to
 allow for such a deviation. The Secretary may not
 delegate the authority to grant such a waiver.

25 (2)CONGRESSIONAL NOTICE.—At least 6 months before a contract award, amendment, or 7 modification for which the Secretary intends to 8 grant such a waiver, the Secretary shall submit to 9 the appropriate congressional committees a report 10 notifying the committees of the waiver and setting 11 forth the reasons for the waiver.

12 (b) PRODUCTION OR PROVISION OF ARTICLES OR 13 SERVICES.—None of the funds authorized to be appropriated to the Secretary by this division may be used to 14 15 produce or provide articles or services for the purpose of selling the articles or services to a person outside the Fed-16 17 eral Government, unless the Secretary determines that 18 comparable articles or services are not available from a 19 commercial source in the United States.

(c) REQUESTS FOR PROPOSALS.—None of the funds
authorized to be appropriated to the Secretary by this division may be used by the Department to prepare or initiate
Requests for Proposals for a program if the program has
not been authorized by Congress.

1 SEC. 2603. COST SHARING.

2 (a) RESEARCH AND DEVELOPMENT.—Except as oth-3 erwise provided in this division, for research and development programs carried out under this division, the Sec-4 5 retary shall require a commitment from non-Federal sources of at least 20 percent of the cost of the project. 6 7 The Secretary may reduce or eliminate the non-Federal 8 requirement under this subsection if the Secretary determines that the research and development is of a basic or 9 10 fundamental nature.

11 (b) DEMONSTRATION AND COMMERCIAL APPLICA-12 TION.—Except as otherwise provided in this division, the 13 Secretary shall require at least 50 percent of the costs directly and specifically related to any demonstration or 14 commercial application project under this division to be 15 provided from non-Federal sources. The Secretary may re-16 duce the non-Federal requirement under this subsection 17 18 if the Secretary determines that the reduction is necessary and appropriate considering the technological risks in-19 20 volved in the project and is necessary to meet the objec-21 tives of this division.

(c) CALCULATION OF AMOUNT.—In calculating the
amount of the non-Federal commitment under subsection
(a) or (b), the Secretary may include personnel, services,
equipment, and other resources.

1 SEC. 2604. LIMITATION ON DEMONSTRATION AND COMMER-

2 CIAL APPLICATION OF ENERGY TECH-3 NOLOGY.

4 Except as otherwise provided in this division, the Sec-5 retary shall provide funding for scientific or energy dem-6 onstration and commercial application of energy tech-7 nology programs, projects, or activities only for tech-8 nologies or processes that can be reasonably expected to 9 yield new, measurable benefits to the cost, efficiency, or 10 performance of the technology or process.

11 SEC. 2605. REPROGRAMMING.

(a) AUTHORITY.—The Secretary may use amounts
appropriated under this division for a program, project,
or activity other than the program, project, or activity for
which such amounts were appropriated only if—

- 16 (1) the Secretary has transmitted to the appro17 priate congressional committees a report described
 18 in subsection (b) and a period of 30 days has
 19 elapsed after such committees receive the report;
- 20 (2) amounts used for the program, project, or
 21 activity do not exceed—
- (A) 105 percent of the amount authorized
 for the program, project, or activity; or
- 24 (B) \$250,000 more than the amount au25 thorized for the program, project, or activity,
- 26 whichever is less; and

(3) the program, project, or activity has been
 presented to, or requested of, the Congress by the
 Secretary.

4 (b) REPORT.—(1) The report referred to in sub-5 section (a) is a report containing a full and complete state-6 ment of the action proposed to be taken and the facts and 7 circumstances relied upon in support of the proposed ac-8 tion.

9 (2) In the computation of the 30-day period under 10 subsection (a), there shall be excluded any day on which 11 either House of Congress is not in session because of an 12 adjournment of more than 3 days to a day certain.

(c) LIMITATIONS.—(1) In no event may the total
amount of funds obligated by the Secretary pursuant to
this division exceed the total amount authorized to be appropriated to the Secretary by this division.

17 (2) Funds appropriated to the Secretary pursuant to18 this division may not be used for an item for which Con-19 gress has declined to authorize funds.

20 Subtitle B—Other Miscellaneous 21 Provisions

22 SEC. 2611. NOTICE OF REORGANIZATION.

The Secretary shall provide notice to the appropriate
congressional committees not later than 15 days before
any reorganization of any environmental research or devel-

opment, scientific or energy research, development, or
 demonstration, or commercial application of energy tech nology program, project, or activity of the Department.

4 SEC. 2612. LIMITS ON GENERAL PLANT PROJECTS.

5 If, at any time during the construction of a civilian environmental research and development, scientific or en-6 7 ergy research, development, or demonstration, or commer-8 cial application of energy technology project of the Depart-9 ment for which no specific funding level is provided by 10 law, the estimated cost (including any revision thereof) of the project exceeds \$5,000,000, the Secretary may not 11 12 continue such construction unless the Secretary has fur-13 nished a complete report to the appropriate congressional committees explaining the project and the reasons for the 14 15 estimate or revision.

16 SEC. 2613. LIMITS ON CONSTRUCTION PROJECTS.

17 (a) LIMITATION.—Except as provided in subsection 18 (b), construction on a civilian environmental research and development, scientific or energy research, development, or 19 demonstration, or commercial application of energy tech-20 21 nology project of the Department for which funding has 22 been specifically provided by law may not be started, and 23 additional obligations may not be incurred in connection 24 with the project above the authorized funding amount,

whenever the current estimated cost of the construction 1 2 project exceeds by more than 10 percent the higher of— 3 (1) the amount authorized for the project, if the 4 entire project has been funded by the Congress; or 5 (2) the amount of the total estimated cost for 6 the project as shown in the most recent budget jus-7 tification data submitted to Congress. 8 (b) NOTICE.—An action described in subsection (a) may be taken if— 9 10 (1) the Secretary has submitted to the appro-11 priate congressional committees a report on the pro-12 posed actions and the circumstances making such 13 actions necessary; and 14 (2) a period of 30 days has elapsed after the 15 date on which the report is received by the commit-16 tees. 17 (c) EXCLUSION.—In the computation of the 30-day period described in subsection (b)(2), there shall be ex-18 cluded any day on which either House of Congress is not 19 in session because of an adjournment of more than 3 days 20 21 to a day certain. 22 (d) EXCEPTION.—Subsections (a) and (b) shall not 23 apply to any construction project that has a current esti-24 mated cost of less than \$5,000,000.

3 (a) REQUIREMENT FOR CONCEPTUAL DESIGN.—(1) Subject to paragraph (2) and except as provided in para-4 5 graph (3), before submitting to Congress a request for funds for a construction project that is in support of a 6 7 civilian environmental research and development, scientific 8 or energy research, development, or demonstration, or 9 commercial application of energy technology program, 10 project, or activity of the Department, the Secretary shall 11 complete a conceptual design for that project.

(2) If the estimated cost of completing a conceptual
design for a construction project exceeds \$750,000, the
Secretary shall submit to Congress a request for funds for
the conceptual design before submitting a request for
funds for the construction project.

17 (3) The requirement in paragraph (1) does not apply
18 to a request for funds for a construction project, the total
19 estimated cost of which is less than \$5,000,000.

(b) AUTHORITY FOR CONSTRUCTION DESIGN.—(1)
The Secretary may carry out construction design (including architectural and engineering services) in connection
with any proposed construction project that is in support
of a civilian environmental research and development, scientific or energy research, development, and demonstration, or commercial application of energy technology pro-

gram, project, or activity of the Department if the total
 estimated cost for such design does not exceed \$250,000.

3 (2) If the total estimated cost for construction design
4 in connection with any construction project described in
5 paragraph (1) exceeds \$250,000, funds for such design
6 must be specifically authorized by law.

7 SEC. 2615. NATIONAL ENERGY POLICY DEVELOPMENT 8 GROUP MANDATED REPORTS.

9 (a) THE SECRETARY'S REVIEW OF ENERGY EFFI-10 CIENCY RENEWABLE ENERGY, AND ALTERNATIVE EN-ERGY RESEARCH AND DEVELOPMENT.—Upon completion 11 12 of the Secretary's review of current funding and historic 13 performance of the Department's energy efficiency, renewable energy, and alternative energy research and develop-14 15 ment programs in response to the recommendations of the May 16, 2001, Report of the National Energy Policy De-16 17 velopment Group, the Secretary shall transmit a report 18 containing the results of such review to the appropriate 19 congressional committees.

(b) REVIEW AND RECOMMENDATIONS ON USING THE
NATION'S ENERGY RESOURCES MORE EFFICIENTLY.—
Upon completion of the Office of Science and Technology
Policy and the President's Council of Advisors on Science
and Technology reviewing and making recommendations
on using the Nation's energy resources more efficiently,

in response to the recommendation of the May 16, 2001,
 Report of the National Energy Policy Development Group,
 the Director of the Office of Science and Technology Pol icy shall transmit a report containing the results of such
 review and recommendations to the appropriate congres sional committees.

7 SEC. 2616. PERIODIC REVIEWS AND ASSESSMENTS.

8 The Secretary shall enter into appropriate arrange-9 ments with the National Academies of Sciences and Engi-10 neering to ensure that there be periodic reviews and assessments of the programs authorized by this division, as 11 12 well as the measurable cost and performance-based goals 13 for such programs as established under section 2004, and the progress on meeting such goals. Such reviews and as-14 15 sessments shall be conducted at least every 5 years, or more often as the Secretary considers necessary, and the 16 17 Secretary shall transmit to the appropriate congressional 18 committees reports containing the results of such reviews 19 and assessments.

DIVISION C

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2 SEC. 3001. SHORT TITLE.

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3 (a) SHORT TITLE.—This division may be cited as the
4 "Energy Tax Policy Act of 2001".

5 (b) AMENDMENT OF 1986 CODE.—Except as other-6 wise expressly provided, whenever in this division an 7 amendment or repeal is expressed in terms of an amend-8 ment to, or repeal of, a section or other provision, the ref-9 erence shall be considered to be made to a section or other 10 provision of the Internal Revenue Code of 1986.

11 **TITLE I—CONSERVATION**

12 SEC. 3101. CREDIT FOR RESIDENTIAL SOLAR ENERGY 13 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:

18 "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—

23 "(1) 15 percent of the qualified photovoltaic
24 property expenditures made by the taxpayer during
25 such year, and

1	((2) 15 percent of the qualified solar water
2	heating property expenditures made by the taxpayer
3	during the taxable year.
4	"(b) Limitations.—
5	"(1) MAXIMUM CREDIT.—The credit allowed
6	under subsection (a) shall not exceed—
7	"(A) \$2,000 for each system of property
8	described in subsection $(c)(1)$, and
9	"(B) \$2,000 for each system of property
10	described in subsection $(c)(2)$.
11	"(2) SAFETY CERTIFICATIONS.—No credit shall
12	be allowed under this section for an item of property
13	unless—
14	"(A) in the case of solar water heating
15	equipment, such equipment is certified for per-
16	formance and safety by the non-profit Solar
17	Rating Certification Corporation or a com-
18	parable entity endorsed by the government of
19	the State in which such property is installed,
20	and
21	"(B) in the case of a photovoltaic system,
22	such system meets appropriate fire and electric
23	code requirements.

1	"(3) LIMITATION BASED ON AMOUNT OF
2	TAX.—The credit allowed under subsection (a) for
3	the taxable year shall not exceed the excess of—
4	"(A) the sum of the regular tax liability
5	(as defined in section 26(b)) plus the tax im-
6	posed by section 55, over
7	"(B) the sum of the credits allowable
8	under this subpart (other than this section and
9	sections 23, 25D, and 25E) and section 27 for
10	the taxable year.
11	"(c) Definitions.—For purposes of this section—
12	"(1) Qualified solar water heating prop-
13	ERTY EXPENDITURE.—The term 'qualified solar
14	water heating property expenditure' means an ex-
15	penditure for property to heat water for use in a
16	dwelling unit located in the United States and used
17	as a residence if at least half of the energy used by
18	such property for such purpose is derived from the
19	sun.
20	"(2) Qualified photovoltaic property ex-
21	PENDITURE.—The term 'qualified photovoltaic prop-
22	erty expenditure' means an expenditure for property
23	that uses solar energy to generate electricity for use
24	in a dwelling unit.

"(3) SOLAR PANELS.—No expenditure relating

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to a solar panel or other property installed as a roof
(or portion thereof) shall fail to be treated as property described in paragraph (1) or (2) solely because
it constitutes a structural component of the structure on which it is installed.

"(4) LABOR COSTS.—Expenditures for labor
costs properly allocable to the onsite preparation, assembly, or original installation of the property described in paragraph (1) or (2) and for piping or
wiring to interconnect such property to the dwelling
unit shall be taken into account for purposes of this
section.

"(5) SWIMMING POOLS, ETC., USED AS STORAGE MEDIUM.—Expenditures which are properly allocable to a swimming pool, hot tub, or any other
energy storage medium which has a function other
than the function of such storage shall not be taken
into account for purposes of this section.

20 "(d) Special Rules.—

21 "(1) DOLLAR AMOUNTS IN CASE OF JOINT OC22 CUPANCY.—In the case of any dwelling unit which is
23 jointly occupied and used during any calendar year
24 as a residence by 2 or more individuals the following
25 shall apply:

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"(A) The amount of the credit allowable
under subsection (a) by reason of expenditures
(as the case may be) made during such cal-
endar year by any of such individuals with re-
spect to such dwelling unit shall be determined
by treating all of such individuals as 1 taxpayer
whose taxable year is such calendar year.

8 "(B) There shall be allowable with respect 9 to such expenditures to each of such individ-10 uals, a credit under subsection (a) for the tax-11 able year in which such calendar year ends in 12 an amount which bears the same ratio to the 13 amount determined under subparagraph (A) as 14 the amount of such expenditures made by such 15 individual during such calendar year bears to 16 the aggregate of such expenditures made by all 17 of such individuals during such calendar year. 18 "(2) TENANT-STOCKHOLDER IN COOPERATIVE 19 HOUSING CORPORATION.—In the case of an indi-20 vidual who is a tenant-stockholder (as defined in sec-21 tion 216) in a cooperative housing corporation (as 22 defined in such section), such individual shall be 23 treated as having made his tenant-stockholder's pro-24 portionate share (as defined in section 216(b)(3)) of 25 any expenditures of such corporation.

"(3) Condominiums.—

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2 "(A) IN GENERAL.—In the case of an indi3 vidual who is a member of a condominium man4 agement association with respect to a condo5 minium which he owns, such individual shall be
6 treated as having made his proportionate share
7 of any expenditures of such association.

"(B) CONDOMINIUM MANAGEMENT ASSO-8 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 units of which are used as residences. 15

"(4) ALLOCATION IN CERTAIN CASES.—If less
than 80 percent of the use of an item is for nonbusiness purposes, only that portion of the expenditures
for such item which is properly allocable to use for
nonbusiness purposes shall be taken into account.

21 "(5) WHEN EXPENDITURE MADE; AMOUNT OF
22 EXPENDITURE.—

23 "(A) IN GENERAL.—Except as provided in
24 subparagraph (B), an expenditure with respect

1	to an item shall be treated as made when the
2	original installation of the item is completed.
3	"(B) EXPENDITURES PART OF BUILDING
4	CONSTRUCTION.—In the case of an expenditure
5	in connection with the construction or recon-
6	struction of a structure, such expenditure shall
7	be treated as made when the original use of the
8	constructed or reconstructed structure by the
9	taxpayer begins.
10	"(C) AMOUNT.—The amount of any ex-
11	penditure shall be the cost thereof.
12	"(6) Property financed by subsidized en-
13	ERGY FINANCING.—For purposes of determining the
14	amount of expenditures made by any individual with
15	respect to any dwelling unit, there shall not be taken
16	in to account expenditures which are made from
17	subsidized energy financing (as defined in section
18	48(a)(4)(A)).
19	"(e) BASIS ADJUSTMENTS.—For purposes of this
20	subtitle, if a credit is allowed under this section for any
21	expenditure with respect to any property, the increase in
22	the basis of such property which would (but for this sub-
23	section) result from such expenditure shall be reduced by
24	the amount of the credit so allowed.

"(f) TERMINATION.—The credit allowed under this
 section shall not apply to taxable years beginning after
 December 31, 2006 (December 31, 2008, with respect to
 qualified photovoltaic property expenditures).".

5 (b) Conforming Amendments.—

6 (1) Subsection (a) of section 1016 is amended 7 by striking "and" at the end of paragraph (27), by 8 striking the period at the end of paragraph (28) and 9 inserting ", and", and by adding at the end the fol-10 lowing new paragraph:

"(29) to the extent provided in section 25C(e),
in the case of amounts with respect to which a credit
has been allowed under section 25C.".

14 (2) The table of sections for subpart A of part
15 IV of subchapter A of chapter 1 is amended by in16 serting after the item relating to section 25B the fol17 lowing new item:

"Sec. 25C. Residential solar energy property.".

18 (c) EFFECTIVE DATE.—The amendments made by
19 this section shall apply to taxable years ending after De20 cember 31, 2001.

21 SEC. 3102. EXTENSION AND EXPANSION OF CREDIT FOR
22 ELECTRICITY PRODUCED FROM RENEWABLE
23 RESOURCES.

24 (a) EXTENSION OF CREDIT FOR WIND AND CLOSED25 LOOP BIOMASS FACILITIES.—Subparagraphs (A) and (B)
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of section 45(c)(3) are each amended by striking "2002"
 and inserting "2007".

3 (b) EXPANSION OF CREDIT FOR OPEN-LOOP BIOMASS
4 AND LANDFILL GAS FACILITIES.—Paragraph (3) of sec5 tion 45(c) is amended by adding at the end the following
6 new subparagraphs:

"(D) OPEN-LOOP BIOMASS FACILITIES.—
In the case of a facility using open-loop biomass
to produce electricity, the term 'qualified facility' means any facility owned by the taxpayer
which is originally placed in service before January 1, 2007.

"(E) LANDFILL GAS FACILITIES.—In the
case of a facility producing electricity from gas
derived from the biodegradation of municipal
solid waste, the term 'qualified facility' means
any facility owned by the taxpayer which is
originally placed in service before January 1,
2007.".

20 (c) DEFINITION AND SPECIAL RULES.—Subsection
21 (c) of section 45 is amended by adding at the end the
22 following new paragraphs:

23 "(5) OPEN-LOOP BIOMASS.—The term 'open24 loop biomass' means any solid, nonhazardous, cel-

	-
1	lulosic waste material which is segregated from other
2	waste materials and which is derived from—
3	"(A) any of the following forest-related re-
4	sources: mill residues, precommercial thinnings,
5	slash, and brush, but not including old-growth
6	timber,
7	"(B) solid wood waste materials, including
8	waste pallets, crates, dunnage, manufacturing
9	and construction wood wastes (other than pres-
10	sure-treated, chemically-treated, or painted
11	wood wastes), and landscape or right-of-way
12	tree trimmings, but not including municipal
13	solid waste (garbage), gas derived from the bio-
14	degradation of solid waste, or paper that is
15	commonly recycled, or
16	"(C) agriculture sources, including orchard
17	tree crops, vineyard, grain, legumes, sugar, and
18	other crop by-products or residues.
19	Such term shall not include closed-loop biomass.
20	"(6) REDUCED CREDIT FOR CERTAIN
21	PREEFFECTIVE DATE FACILITIES.—In the case of
22	any facility described in subparagraph (D) or (E) of
23	paragraph (3) which is placed in service before the
24	date of the enactment of this subparagraph—

1	"(A) subsection $(a)(1)$ shall be applied by
2	substituting '1.0 cents' for '1.5 cents', and
3	"(B) the 5-year period beginning on the
4	date of the enactment of this paragraph shall
5	be substituted in lieu of the 10-year period in
6	subsection (a)(2)(A)(ii).
7	"(7) Limit on reductions for grants, etc.,
8	FOR OPEN-LOOP BIOMASS FACILITIES.—If the
9	amount of the credit determined under subsection
10	(a) with respect to any open-loop biomass facility is
11	required to be reduced under paragraph (3) of sub-
12	section (b), the fraction under such paragraph shall
13	in no event be greater than $\frac{4}{5}$.
14	"(8) COORDINATION WITH SECTION 29.—The
15	term 'qualified facility' shall not include any facility
16	the production from which is allowed as a credit
17	under section 29 for the taxable year or any prior
18	taxable year.".
19	(d) Effective Date.—The amendments made by
20	this section shall apply to electricity sold after the date
21	of the enactment of this Act.
22	SEC. 3103. CREDIT FOR QUALIFIED STATIONARY FUEL
23	CELL POWERPLANTS.
24	(a) BUSINESS PROPERTY.—

1	(1) IN GENERAL.—Subparagraph (A) of section
2	48(a)(3) (defining energy property) is amended by
3	striking "or" at the end of clause (i), by adding
4	"or" at the end of clause (ii), and by inserting after
5	clause (ii) the following new clause:
6	"(iii) equipment which is part of a
7	qualified stationary fuel cell powerplant,".
8	(2) QUALIFIED STATIONARY FUEL CELL POW-
9	ERPLANT.—Subsection (a) of section 48 is amended
10	by redesignating paragraphs (4) and (5) as para-
11	graphs (5) and (6) , respectively, and by inserting
12	after paragraph (3) the following new paragraph:
13	"(4) Qualified stationary fuel cell pow-
14	ERPLANT.—For purposes of this subsection—
15	"(A) IN GENERAL.—The term 'qualified
16	stationary fuel cell powerplant' means a sta-
17	tionary fuel cell power plant that has an elec-
18	tricity-only generation efficiency greater than
19	30 percent.
20	"(B) LIMITATION.—In the case of quali-
21	fied stationary fuel cell powerplant placed in
22	service during the taxable year, the credit under
23	subsection (a) for such year may not exceed
24	\$1,000 for each kilowatt of capacity.

1	"(C) STATIONARY FUEL CELL POWER
2	PLANT.—The term 'stationary fuel cell power
3	plant' means an integrated system comprised of
4	a fuel cell stack assembly and associated bal-
5	ance of plant components that converts a fuel
6	into electricity using electrochemical means.
7	"(D) TERMINATION.—Such term shall not
8	include any property placed in service after De-
9	cember 31, 2006."
10	(3) EFFECTIVE DATE.—The amendments made
11	by this subsection shall apply to property placed in
12	service after December 31, 2001, under rules similar
13	to the rules of section 48(m) of the Internal Revenue
14	Code of 1986 (as in effect on the day before the
15	date of the enactment of the Revenue Reconciliation
16	Act of 1990).
17	(b) Nonbusiness Property.—
18	(1) IN GENERAL.—Subpart A of part IV of sub-
19	chapter A of chapter 1 (relating to nonrefundable
20	personal credits) is amended by inserting after sec-
21	tion 25C the following new section:
22	"SEC. 25D. NONBUSINESS QUALIFIED STATIONARY FUEL
23	CELL POWERPLANT.
24	"(a) IN GENERAL.—In the case of an individual,
25	there shall be allowed as a credit against the tax imposed

1	by this chapter for the taxable year an amount equal to
2	10 percent of the qualified stationary fuel cell powerplant
3	expenditures which are paid or incurred during such year.
4	"(b) Limitations.—
5	"(1) IN GENERAL.—The credit allowed under
6	subsection (a) for the taxable year and all prior tax-
7	able years shall not exceed \$1,000 for each kilowatt
8	of capacity.
9	((2) 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	sections 23 and 25E) and section 27 for the
18	taxable year.
19	"(c) QUALIFIED STATIONARY FUEL CELL POWER-
20	PLANT EXPENDITURES.—For purposes of this section, the
21	term 'qualified stationary fuel cell powerplant expendi-
22	tures' means expenditures by the taxpayer for any quali-
23	fied stationary fuel cell powerplant (as defined in section
24	48(a)(4))—

1	"(1) which meets the requirements of subpara-
2	graphs (B) and (D) of section 48(a)(3), and
3	"(2) which is installed on or in connection with
4	a dwelling unit—
5	"(A) which is located in the United States,
6	and
7	"(B) which is used by the taxpayer as a
8	residence.
9	Such term includes expenditures for labor costs properly
10	allocable to the onsite preparation, assembly, or original
11	installation of the property.
12	"(d) Special Rules.—For purposes of this section,
13	rules similar to the rules of section 25C(d) shall apply.
14	"(e) BASIS ADJUSTMENTS.—For purposes of this
15	subtitle, if a credit is allowed under this section for any
16	expenditure with respect to any property, the increase in
17	the basis of such property which would (but for this sub-
18	section) result from such expenditure shall be reduced by
19	the amount of the credit so allowed.
20	"(f) TERMINATION.—This section shall not apply to
21	any expenditure made after December 31, 2006.".
22	(2) Conforming Amendments.—
23	(A) Subsection (a) of section 1016 is
24	amended by striking "and" at the end of para-
25	graph (28), by striking the period at the end of

1	paragraph (29) and inserting ", and", and by
2	adding at the end the following new paragraph:
3	"(30) to the extent provided in section $25D(e)$,
4	in the case of amounts with respect to which a credit
5	has been allowed under section 25D.".
6	(B) The table of sections for subpart A of
7	part IV of subchapter A of chapter 1 is amend-
8	ed by inserting after the item relating to section
9	25C the following new item:
	"Sec. 25D. Nonbusiness qualified stationary fuel cell power- plant.".
10	(3) Effective date.—The amendments made
11	by this subsection shall apply to expenditures paid
12	or incurred after December 31, 2001.
13	SEC. 3104. ALTERNATIVE MOTOR VEHICLE CREDIT.
14	(a) IN GENERAL.—Subpart B of part IV of sub-
15	chapter A of chapter 1 (relating to foreign tax credit, etc.)
16	is amended by adding at the end the following:
17	"SEC. 30B. ALTERNATIVE MOTOR VEHICLE CREDIT.
18	"(a) Allowance of Credit.—There shall be al-
19	lowed as a credit against the tax imposed by this chapter
20	for the taxable year an amount equal to the sum of—
21	((1) the new qualified fuel cell motor vehicle
22	credit determined under subsection (b),
23	((2) the new qualified hybrid motor vehicle
24	credit determined under subsection (c),

1	"(3) the new qualified alternative fuel motor ve-						
2	hicle credit determined under subsection (d), and						
3	"(4) the advanced lean burn technology motor						
4	vehicle credit determined under subsection (e).						
5	"(b) New Qualified Fuel Cell Motor Vehicle						
6	Credit.—						
7	"(1) IN GENERAL.—For purposes of subsection						
8	(a), the new qualified fuel cell motor vehicle credit						
9	determined under this subsection with respect to a						
10	new qualified fuel cell motor vehicle placed in service						
11	by the taxpayer during the taxable year is—						
12	"(A) \$4,000, if such vehicle has a gross ve-						
13	hicle weight rating of not more than 8,500						
14	pounds,						
15	"(B) \$10,000, if such vehicle has a gross						
16	vehicle weight rating of more than 8,500						
17	pounds but not more than 14,000 pounds,						
18	"(C) \$20,000, if such vehicle has a gross						
19	vehicle weight rating of more than 14,000						
20	pounds but not more than 26,000 pounds, and						
21	"(D) $$40,000$, if such vehicle has a gross						
22	vehicle weight rating of more than 26,000						
23	pounds.						
24	"(2) Increase for fuel efficiency.—						

1	"(A) IN GENERAL.—The amount deter-
2	mined under paragraph $(1)(A)$ with respect to
3	a new qualified fuel cell motor vehicle which is
4	a passenger automobile or light truck shall be
5	increased by—
6	"(i) \$1,000, if such vehicle achieves at
7	least 150 percent but less than 175 per-
8	cent of the 2000 model year city fuel econ-
9	omy,
10	"(ii) \$1,500, if such vehicle achieves
11	at least 175 percent but less than 200 per-
12	cent of the 2000 model year city fuel econ-
13	omy,
14	"(iii) \$2,000, if such vehicle achieves
15	at least 200 percent but less than 225 per-
16	cent of the 2000 model year city fuel econ-
17	omy,
18	"(iv) $$2,500$, if such vehicle achieves
19	at least 225 percent but less than 250 per-
20	cent of the 2000 model year city fuel econ-
21	omy,
22	"(v) \$3,000, if such vehicle achieves
23	at least 250 percent but less than 275 per-
24	cent of the 2000 model year city fuel econ-
25	omy,

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1	"(vi) \$3,500, if such vehicle achieves							
2	at least 275 percent but less than 300 per-							
3	cent of the 2000 model year city fuel econ-							
4	omy, and							
5	"(vii) \$4,000, if such vehicle achieves							
6	at least 300 percent of the 2000 model							
7	year city fuel economy.							
8	"(B) 2000 MODEL YEAR CITY FUEL ECON-							
9	OMY.—For purposes of subparagraph (A), the							
10	2000 model year city fuel economy with respect							
11	to a vehicle shall be determined in accordance							
12	with the following tables:							
13	"(i) In the case of a passenger auto-							
14	mobile:							
	"If vehicle inertia weight class is: The 2000 model year city fuel economy is: 1,500 or 1,750 lbs 43.7 mpg 2,000 lbs 38.3 mpg 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 15.5 mpg 5,000 lbs 14.1 mpg 6,000 lbs 12.9 mpg 6,500 lbs 11.9 mpg							
15	7,000 or 8,500 lbs 11.1 mpg. "(ii) In the case of a light truck:							

"If	vehicle	inertia	weight	The 2000) model	year	city	fuel
	class is:			econ	omy is:			
	1,500 or 1,	,750 lbs					37.6	mpg
							33.7	mpg
	2,250 lbs .						-30.6	mpg
							28.0	mpg
"If	vehicle	inertia	weight	The	$\boldsymbol{2000}$	model	year	city fuel
-----	------------	----------	--------	-----	---------------------	--------	------	----------------------
	class is:			e	econo	my is:		
	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						$12.0~\mathrm{mpg.}$

1	"(C) VEHICLE INERTIA WEIGHT CLASS.—
2	For purposes of subparagraph (B), the term
3	'vehicle inertia weight class' has the same
4	meaning as when defined in regulations pre-
5	scribed by the Administrator of the Environ-
6	mental Protection Agency for purposes of the
7	administration of title II of the Clean Air Act
8	(42 U.S.C. 7521 et seq.).

9 "(3) NEW QUALIFIED FUEL CELL MOTOR VEHI-10 CLE.—For purposes of this subsection, the term 11 'new qualified fuel cell motor vehicle' means a motor 12 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,

19 "(B) which, in the case of a passenger20 automobile or light truck—

1	"(i) for 2002 and later model vehicles,
2	has received a certificate of conformity
3	under the Clean Air Act and meets or ex-
4	ceeds the equivalent qualifying California
5	low emission vehicle standard under sec-
6	tion $243(e)(2)$ of the Clean Air Act for
7	that make and model year, and
8	"(ii) for 2004 and later model vehi-
9	cles, has received a certificate that such ve-
10	hicle meets or exceeds the Tier II emission
11	level established in regulations prescribed
12	by the Administrator of the Environmental
13	Protection Agency under section 202(i) of
14	the Clean Air Act for that make and model
15	year vehicle,
16	"(C) the original use of which commences
17	with the taxpayer,
18	"(D) which is acquired for use or lease by
19	the taxpayer and not for resale, and
20	"(E) which is made by a manufacturer.
21	"(c) New Qualified Hybrid Motor Vehicle
22	Credit.—
23	"(1) IN GENERAL.—For purposes of subsection
24	(a), the new qualified hybrid motor vehicle credit de-
25	termined under this subsection with respect to a new

1	qualified hybrid motor vehicle placed in service by
2	the taxpayer during the taxable year is the credit
3	amount determined under paragraph (2).
4	"(2) CREDIT AMOUNT.—
5	"(A) IN GENERAL.—The credit amount de-
6	termined under this paragraph shall be deter-
7	mined in accordance with the following tables:
8	"(i) In the case of a new qualified hy-
9	brid motor vehicle which is a passenger
10	automobile or light truck and which pro-
11	vides the following percentage of the max-
12	imum available power:
	"If percentage of the max- imum available power is:The credit amount is:At least 2.5 percent but less than 10 percent\$250At least 10 percent but less than 20 percent\$500At least 20 percent but less than 30 percent\$750At least 30 percent\$1,000.
13	"(ii) In the case of a new qualified hy-
14	brid motor vehicle which is a heavy duty
15	hybrid motor vehicle and which provides
16	the following percentage of the maximum
17	available power:
18	"(I) If such vehicle has a gross
19	vehicle weight rating of not more than
20	14,000 pounds:
	"If percentage of the max- The credit amount is: imum available power is:*********************************

	"If	percentage of the max- The credit amount is: imum available power is:
		At least 50 percent but less than 60 percent \$2,250 At least 60 percent \$2,500.
1		"(II) If such vehicle has a gross
2		vehicle weight rating of more than
3		14,000 but not more than 26,000
4		pounds:
	"If	percentage of the max- The credit amount is: imum available power is:
		At least 20 percent but less than 30 percent
		At least 30 percent but less than 40 percent
		At least 40 percent but less than 50 percent
		At least 50 percent but less than 60 percent
		At least 60 percent
5		"(III) If such vehicle has a gross
6		vehicle weight rating of more than
7		26,000 pounds:
	"If	percentage of the max- The credit amount is: imum available power is:
		At least 20 percent but less than 30 percent
		At least 30 percent but less than 40 percent
		At least 40 percent but less than 50 percent
		At least 50 percent but less than 60 percent
		At least 60 percent
8		"(B) INCREASE FOR FUEL EFFICIENCY.—
9		"(i) Amount.—The amount deter-
10		mined under subparagraph (A)(i) with re-
11		spect to a passenger automobile or light
12		truck shall be increased by—
13		((I) \$1,000, if such vehicle
14		
		achieves at least 125 percent but less
15		achieves at least 125 percent but less than 150 percent of the 2000 model

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1	((II) \$1,500, if such vehicle
2	achieves at least 150 percent but less
3	than 175 percent of the 2000 model
4	year city fuel economy,
5	((III) \$2,000, if such vehicle
6	achieves at least 175 percent but less
7	than 200 percent of the 2000 model
8	year city fuel economy,
9	((IV) \$2,500, if such vehicle)
10	achieves at least 200 percent but less
11	than 225 percent of the 2000 model
12	year city fuel economy,
13	((V) \$3,000, if such vehicle
14	achieves at least 225 percent but less
15	than 250 percent of the 2000 model
16	year city fuel economy, and
17	"(VI) \$3,500, if such vehicle
18	achieves at least 250 percent of the
19	2000 model year city fuel economy.
20	"(ii) 2000 model year city fuel
21	ECONOMY.—For purposes of clause (i), the
22	2000 model year city fuel economy with re-
23	spect to a vehicle shall be determined using
24	the tables provided in subsection $(b)(2)(B)$
25	with respect to such vehicle.

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1	"(iii) Option to use like vehi-
2	CLE.—For purposes of clause (i), at the
3	option of the vehicle manufacturer, the in-
4	crease for fuel efficiency may be calculated
5	by comparing the new qualified hybrid
6	motor vehicle to a 'like vehicle'.
7	"(C) INCREASE FOR ACCELERATED EMIS-
8	SIONS PERFORMANCE.—The amount deter-
9	mined under subparagraph (A)(ii) with respect
10	to an applicable heavy duty hybrid motor vehi-
11	cle shall be increased by the increase credit
12	amount determined in accordance with the fol-
13	lowing tables:
14	"(i) In the case of a vehicle which has
15	a gross vehicle weight rating of not more
16	than 14,000 pounds:
	"If the model year is: The increase credit amount is: 2002 \$3,500 2003 \$3,000 2004 \$2,500 2005 \$2,000 2006 \$1,500.
17	"(ii) In the case of a vehicle which
18	has a gross vehicle weight rating of more
19	than 14,000 pounds but not more than
20	26,000 pounds:
	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500

2004

\$6,500

	"If the model year is: The increase credit amount	
		5,250 1,000.
1	"(iii) In the case of a vehicle where where the the second	hich
2	has a gross vehicle weight rating of n	nore
3	than 26,000 pounds:	
		1,000
		2,000),000
		3,000
	2006\$6	3,000.
4	"(D) CONSERVATION CREDIT.—	
5	"(i) Amount.—The amount de	eter-
6	mined under subparagraph (A)(i) with	re-
7	spect to a passenger automobile or l	ight
8	truck shall be increased by—	
9	"(I) \$250, if such veh	nicle
10	achieves a lifetime fuel savings o	f at
11	least 1,500 gallons of gasoline, and	ł
12	((II) \$500, if such veh	nicle
13	achieves a lifetime fuel savings o	f at
14	least 2,500 gallons of gasoline.	
15	"(ii) LIFETIME FUEL SAVINGS	FOR
16	LIKE VEHICLE.—For purposes of cla	ause
17	(i), at the option of the vehicle manu	fac-
18	turer, the lifetime fuel savings fuel may	y be
19	calculated by comparing the new quali	ified
20	hybrid motor vehicle to a 'like vehicle'.	
21	"(E) DEFINITIONS.—	

1	"(i) Applicable heavy duty hy-
2	BRID MOTOR VEHICLE.—For purposes of
3	subparagraph (C), the term 'applicable
4	heavy duty hybrid motor vehicle' means a
5	heavy duty hybrid motor vehicle which is
6	powered by an internal combustion or heat
7	engine which is certified as meeting the
8	emission standards set in the regulations
9	prescribed by the Administrator of the En-
10	vironmental Protection Agency for 2007
11	and later model year diesel heavy duty en-
12	gines or 2008 and later model year
13	ottocycle heavy duty engines, as applicable.
14	"(ii) Heavy duty hybrid motor ve-
15	HICLE.—For purposes of this paragraph,
16	the term 'heavy duty hybrid motor vehicle'
17	means a new qualified hybrid motor vehicle
18	which has a gross vehicle weight rating of
19	more than 10,000 pounds and draws pro-
20	pulsion energy from both of the following
21	onboard sources of stored energy:
22	"(I) An internal combustion or
23	heat engine using consumable fuel
24	which, for 2002 and later model vehi-
25	cles, has received a certificate of con-

1	formity under the Clean Air Act and
2	meets or exceeds a level of not greater
3	than 3.0 grams per brake horsepower-
4	hour of oxides of nitrogen and 0.01
5	per brake horsepower-hour of particu-
6	late matter.
7	"(II) A rechargeable energy stor-
8	age system.
9	"(iii) Maximum available power.—
10	"(I) PASSENGER AUTOMOBILE
11	OR LIGHT TRUCK.—For purposes of
12	subparagraph (A)(i), the term 'max-
13	imum available power' means the
14	maximum power available from the
15	battery or other electrical storage de-
16	vice, during a standard 10 second
17	pulse power test, divided by the sum
18	of the battery or other electrical stor-
19	age device and the SAE net power of
20	the heat engine.
21	"(II) HEAVY DUTY HYBRID
22	MOTOR VEHICLE.—For purposes of
23	subparagraph (A)(ii), the term 'max-
24	imum available power' means the
25	maximum power available from the

1	battery or other electrical storage de-
2	vice, during a standard 10 second
3	pulse power test, divided by the vehi-
4	cle's total traction power. The term
5	'total traction power' means the sum
6	of the electric motor peak power and
7	the heat engine peak power of the ve-
8	hicle, except that if the electric motor
9	is the sole means by which the vehicle
10	can be driven, the total traction power
11	is the peak electric motor power.
12	"(iv) Like vehicle.—For purposes
13	of subparagraph (B)(iii), the term 'like ve-
14	hicle' for a new qualified hybrid motor ve-
15	hicle derived from a conventional produc-
16	tion vehicle produced in the same model
17	year means a model that is equivalent in
18	the following areas:
19	"(I) Body style (2-door or 4-
20	door).
21	"(II) Transmission (automatic or
22	manual).
23	"(III) Acceleration performance
24	$(\pm 0.05 \text{ seconds}).$

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1	"(IV) Drivetrain (2-wheel drive
2	or 4-wheel drive).
3	"(V) Certification by the Admin-
4	istrator of the Environmental Protec-
5	tion Agency.
6	"(v) LIFETIME FUEL SAVINGS.—For
7	purposes of subsection $(c)(2)(D)$, the term
8	'lifetime fuel savings' shall be calculated by
9	dividing 120,000 by the difference between
10	the 2000 model year city fuel economy for
11	the vehicle inertia weight class and the city
12	fuel economy for the new qualified hybrid
13	motor vehicle.
14	"(3) New qualified hybrid motor vehi-
15	CLE.—For purposes of this subsection, the term
16	'new qualified hybrid motor vehicle' means a motor
17	vehicle—
18	"(A) which draws propulsion energy from
19	onboard sources of stored energy which are
20	both—
21	"(i) an internal combustion or heat
22	engine using combustible fuel, and
23	"(ii) a rechargeable energy storage
24	system,

1	"(B) which, in the case of a passenger
2	automobile or light truck, for 2002 and later
3	model vehicles, has received a certificate of con-
4	formity under the Clean Air Act and meets or
5	exceeds the equivalent qualifying California low
6	emission vehicle standard under section
7	243(e)(2) of the Clean Air Act for that make
8	and model year,
9	"(C) the original use of which commences
10	with the taxpayer,
11	"(D) which is acquired for use or lease by
12	the taxpayer and not for resale, and
13	"(E) which is made by a manufacturer.
14	"(d) New Qualified Alternative Fuel Motor
15	Vehicle Credit.—
16	"(1) Allowance of credit.—Except as pro-
17	vided in paragraph (5), the credit determined under
18	this subsection is an amount equal to the applicable
19	percentage of the incremental cost of any new quali-
20	fied alternative fuel motor vehicle placed in service
21	by the taxpayer during the taxable year.
22	"(2) Applicable percentage.—For purposes
23	of paragraph (1), the applicable percentage with re-
24	spect to any new qualified alternative fuel motor ve-
25	hicle is—

"(A) 50 percent, plus 1 "(B) 30 percent, if such vehicle— 2 "(i) has received a certificate of con-3 4 formity under the Clean Air Act and meets 5 or exceeds the most stringent standard 6 available for certification under the Clean 7 Air Act for that make and model year vehi-8 cle (other than a zero emission standard), 9 or "(ii) has received an order from an 10 11 applicable State certifying the vehicle for 12 sale or lease in California and meets or ex-13 ceeds the most stringent standard available 14 for certification under the State laws of 15 California (enacted in accordance with a 16 waiver granted under section 209(b) of the 17 Clean Air Act) for that make and model 18 year vehicle (other than a zero emission 19 standard). 20 "(3) INCREMENTAL COST.—For purposes of 21 this subsection, the incremental cost of any new 22 qualified alternative fuel motor vehicle is equal to 23 the amount of the excess of the manufacturer's sug-24 gested retail price for such vehicle over such price

for a gasoline or diesel fuel motor vehicle of the

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1	same model, to the extent such amount does not
2	exceed—
3	"(A) \$5,000, 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) \$25,000, 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	"(4) QUALIFIED ALTERNATIVE FUEL MOTOR
16	VEHICLE DEFINED.—For purposes of this
17	subsection—
18	"(A) IN GENERAL.—The term 'qualified
19	alternative fuel motor vehicle' means any motor
20	vehicle—
21	"(i) which is only capable of operating
22	on an alternative fuel,
23	"(ii) the original use of which com-
24	mences with the taxpayer,

1	"(iii) which is acquired by the tax-
2	payer for use or lease, but not for resale,
3	and
4	"(iv) which is made by a manufac-
5	turer.
6	"(B) ALTERNATIVE FUEL.—The term 'al-
7	ternative fuel' means compressed natural gas,
8	liquefied natural gas, liquefied petroleum gas,
9	hydrogen, and any liquid at least 85 percent of
10	the volume of which consists of methanol.
11	"(5) Credit for mixed-fuel vehicles.—
12	"(A) IN GENERAL.—In the case of a
13	mixed-fuel vehicle placed in service by the tax-
14	payer during the taxable year, the credit deter-
15	mined under this subsection is an amount equal
16	to—
17	"(i) in the case of a 75/25 mixed-fuel
18	vehicle, 70 percent of the credit which
19	would have been allowed under this sub-
20	section if such vehicle was a qualified alter-
21	native fuel motor vehicle, and
22	"(ii) in the case of a 95/5 mixed-fuel
23	vehicle, 95 percent of the credit which
24	would have been allowed under this sub-

1	section if such vehicle was a qualified alter-
2	native fuel motor vehicle.
3	"(B) MIXED-FUEL VEHICLE.—For pur-
4	poses of this subsection, the term 'mixed-fuel
5	vehicle' means any motor vehicle described in
6	subparagraph (C) or (D) of paragraph (3),
7	which—
8	"(i) is certified by the manufacturer
9	as being able to perform efficiently in nor-
10	mal operation on a combination of an al-
11	ternative fuel and a petroleum-based fuel,
12	"(ii) either—
13	"(I) has received a certificate of
14	conformity under the Clean Air Act,
15	or
16	"(II) has received an order from
17	an applicable State certifying the vehi-
18	cle for sale or lease in California and
19	meets or exceeds the low emission ve-
20	hicle standard under section 88.105–
21	94 of title 40, Code of Federal Regu-
22	lations, for that make and model year
23	vehicle,
24	"(iii) the original use of which com-
25	mences with the taxpayer,

1	"(iv) which is acquired by the tax-
2	payer for use or lease, but not for resale,
3	and
4	"(v) which is made by a manufac-
5	turer.
6	"(C) 75/25 MIXED-FUEL VEHICLE.—For
7	purposes of this subsection, the term $'75/25$
8	mixed-fuel vehicle' means a mixed-fuel vehicle
9	which operates using at least 75 percent alter-
10	native fuel and not more than 25 percent petro-
11	leum-based fuel.
12	"(D) 95/5 MIXED-FUEL VEHICLE.—For
13	purposes of this subsection, the term $95/5$
14	mixed-fuel vehicle' means a mixed-fuel vehicle
15	which operates using at least 95 percent alter-
16	native fuel and not more than 5 percent petro-
17	leum-based fuel.
18	"(e) Advanced Lean Burn Technology Motor
19	Vehicle Credit.—
20	"(1) IN GENERAL.—For purposes of subsection
21	(a), the advanced lean burn technology motor vehicle
22	credit determined under this subsection with respect
23	to a new qualified advanced lean burn technology
24	motor vehicle placed in service by the taxpayer dur-

1	ing the taxable year is the credit amount determined
2	under paragraph (2).
3	"(2) Credit Amount.—
4	"(A) INCREASE FOR FUEL EFFICIENCY.—
5	The credit amount determined under this para-
6	graph shall be—
7	"(i) \$1,000, if such vehicle achieves at
8	least 125 percent but less than 150 per-
9	cent of the 2000 model year city fuel econ-
10	omy,
11	"(ii) \$1,500, if such vehicle achieves
12	at least 150 percent but less than 175 per-
13	cent of the 2000 model year city fuel econ-
14	omy,
15	"(iii) \$2,000, if such vehicle achieves
16	at least 175 percent but less than 200 per-
17	cent of the 2000 model year city fuel econ-
18	omy,
19	"(iv) $$2,500$, if such vehicle achieves
20	at least 200 percent but less than 225 per-
21	cent of the 2000 model year city fuel econ-
22	omy,
23	"(v) \$3,000, if such vehicle achieves
24	at least 225 percent but less than 250 per-

1	cent of the 2000 model year city fuel econ-
2	omy, and
3	"(vi) \$3,500, if such vehicle achieves
4	at least 250 percent of the 2000 model
5	year city fuel economy.
6	For purposes of clause (i), the 2000 model year
7	city fuel economy with respect to a vehicle shall
8	be determined using the tables provided in sub-
9	section $(b)(2)(B)$ with respect to such vehicle.
10	"(B) CONSERVATION CREDIT.—The
11	amount determined under subparagraph (A)
12	with respect to an advanced lean burn tech-
13	nology motor vehicle shall be increased by—
14	"(i) $$250$, if such vehicle achieves a
15	lifetime fuel savings of at least 1,500 gal-
16	lons of gasoline, and
17	"(ii) \$500, if such vehicle achieves a
18	lifetime fuel savings of at least 2,500 gal-
19	lons of gasoline.
20	"(C) Option to use like vehicle.—At
21	the option of the vehicle manufacturer, the in-
22	crease for fuel efficiency and conservation credit
23	may be calculated by comparing the new ad-
24	vanced lean-burn technology motor vehicle to a
25	like vehicle.

1	"(3) DEFINITIONS.—For purposes of this sub-
2	section.—
3	"(A) Advanced lean burn technology
4	MOTOR VEHICLE.—The term 'advanced lean
5	burn technology motor vehicle' means a motor
6	vehicle with an internal combustion engine
7	that—
8	"(i) is designed to operate primarily
9	using more air than is necessary for com-
10	plete combustion of the fuel,
11	"(ii) incorporates direct injection,
12	"(iii) achieves at least 125 percent of
13	the 2000 model year city fuel economy,
14	and
15	"(iv) for 2004 and later model vehi-
16	cles, has received a certificate that such ve-
17	hicle meets or exceeds the Bin 5, Tier 2
18	emission levels (for passenger vehicles) or
19	Bin 8, Tier 2 emission levels (for light
20	trucks) established in regulations pre-
21	scribed by the Administrator of the Envi-
22	ronmental Protection Agency under section
23	202(i) of the Clean Air Act for that make
24	and model year vehicle.

1	"(B) LIKE VEHICLE.—The term 'like vehi-
2	cle' for an advanced lean burn technology motor
3	vehicle derived from a conventional production
4	vehicle produced in the same model year means
5	a model that is equivalent in the following
6	areas:
7	"(i) Body style (2-door or 4-door),
8	"(ii) Transmission (automatic or man-
9	ual),
10	"(iii) Acceleration performance (\pm
11	0.05 seconds).
12	"(iv) Drivetrain (2-wheel drive or 4-
13	wheel drive).
14	"(v) Certification by the Adminis-
15	trator of the Environmental Protection
16	Agency.
17	"(C) LIFETIME FUEL SAVINGS.—The term
18	'lifetime fuel savings' shall be calculated by di-
19	viding 120,000 by the difference between the
20	2000 model year city fuel economy for the vehi-
21	cle inertia weight class and the city fuel econ-
22	omy for the new qualified hybrid motor vehicle.
23	"(f) Limitation Based on Amount of Tax.—The
24	credit allowed under subsection (a) for the taxable year
25	shall not exceed the excess of—

1	((1) the sum of the regular tax liability (as de-
2	fined in section 26(b)) plus the tax imposed by sec-
3	tion 55, over
4	((2) the sum of the credits allowable under sub-
5	part A and sections 27, 29, and 30A for the taxable
6	year.
7	"(g) Other Definitions and Special Rules.—
8	For purposes of this section—
9	"(1) Consumable fuel.—The term
10	'consumable fuel' means any solid, liquid, or gaseous
11	matter which releases energy when consumed by an
12	auxiliary power unit.
13	"(2) MOTOR VEHICLE.—The term 'motor vehi-
14	cle' has the meaning given such term by section
15	30(c)(2).
16	"(3) 2000 model year city fuel econ-
17	OMY.—The 2000 model year city fuel economy with
18	respect to any vehicle shall be measured under rules
19	similar to the rules under section 4064(c).
20	"(4) OTHER TERMS.—The terms 'automobile',
21	'passenger automobile', 'light truck', and 'manufac-
22	turer' have the meanings given such terms in regula-
23	tions prescribed by the Administrator of the Envi-
24	ronmental Protection Agency for purposes of the ad-

1	ministration of title II of the Clean Air Act (42)
2	U.S.C. 7521 et seq.).
3	"(5) REDUCTION IN BASIS.—For purposes of
4	this subtitle, the basis of any property for which a
5	credit is allowable under subsection (a) shall be re-
6	duced by the amount of such credit so allowed.
7	"(6) NO DOUBLE BENEFIT.—The amount of
8	any deduction or credit allowable under this chapter
9	(other than the credit allowable under this sec-
10	tion)—
11	"(A) for any incremental cost taken into
12	account in computing the amount of the credit
13	determined under subsection (d) shall be re-
14	duced by the amount of such credit attributable
15	to such cost, and
16	"(B) with respect to a vehicle described
17	under subsection (b) or (c), shall be reduced by
18	the amount of credit allowed under subsection
19	(a) for such vehicle for the taxable year.
20	"(7) PROPERTY USED BY TAX-EXEMPT ENTI-
21	TIES.—In the case of a credit amount which is al-
22	lowable with respect to a motor vehicle which is ac-
23	quired by an entity exempt from tax under this
24	chapter, the person which sells or leases such vehicle
25	to the entity shall be treated as the taxpayer with

respect to the vehicle for purposes of this section
and the credit shall be allowed to such person, but
only if the person clearly discloses to the entity in
any sale or lease document the specific amount of
any credit otherwise allowable to the entity under
this section and reduces the sale or lease price of
such vehicle by an equivalent amount of such credit.
"(8) RECAPTURE.—The Secretary shall, by reg-
ulations, provide for recapturing the benefit of any
credit allowable under subsection (a) with respect to
any property which ceases to be property eligible for
such credit (including recapture in the case of a
lease period of less than the economic life of a vehi-
cle).
"(9) PROPERTY USED OUTSIDE UNITED
STATES, ETC., NOT QUALIFIED.—No credit shall be
allowed under subsection (a) with respect to any
property referred to in section 50(b) or with respect
to the portion of the cost of any property taken into
account under section 179.
"(10) Election to not take credit.—No
credit shall be allowed under subsection (a) for any
vehicle if the taxpayer elects to not have this section
apply to such vehicle.
"(11) CARRYFORWARD ALLOWED.—

1	"(A) IN GENERAL.—If the credit amount
2	allowable under subsection (a) for a taxable
3	year exceeds the amount of the limitation under
4	subsection (f) for such taxable year (referred to
5	as the 'unused credit year' in this paragraph),
6	such excess shall be allowed as a credit
7	carryforward for each of the 20 taxable years
8	following the unused credit year.
9	"(B) RULES.—Rules similar to the rules of
10	section 39 shall apply with respect to the credit
11	carryforward under subparagraph (A).
12	((12) Interaction with air quality and
13	MOTOR VEHICLE SAFETY STANDARDS.—Unless oth-
14	erwise provided in this section, a motor vehicle shall
15	not be considered eligible for a credit under this sec-
16	tion unless such vehicle is in compliance with—
17	"(A) the applicable provisions of the Clean
18	Air Act for the applicable make and model year
19	of the vehicle (or applicable air quality provi-
20	sions of State law in the case of a State which
21	has adopted such provision under a waiver
22	under section 209(b) of the Clean Air Act), and
23	"(B) the motor vehicle safety provisions of
24	sections 30101 through 30169 of title 49 ,
25	United States Code.

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1 "(h) REGULATIONS.—

2	"(1) IN GENERAL.—The Secretary shall pro-
3	mulgate such regulations as necessary to carry out
4	the provisions of this section.

5 (2)Administrator \mathbf{OF} ENVIRONMENTAL 6 PROTECTION AGENCY.—The Administrator of the 7 Environmental Protection Agency, in coordination with the Secretary of Transportation and the Sec-8 9 retary of the Treasury, shall prescribe such regula-10 tions as necessary to determine whether a motor ve-11 hicle meets the requirements to be eligible for a 12 credit under this section.

13 "(i) TERMINATION.—This section shall not apply to14 any property placed in service after—

"(1) in the case of a new qualified fuel cell
motor vehicle (as described in subsection (b)), December 31, 2011, and

18 "(2) in the case of any other property, Decem-19 ber 31, 2007.".

20 (b) Conforming Amendments.—

(1) Section 1016(a) is amended by striking
"and" at the end of paragraph (29), by striking the
period at the end of paragraph (30) and inserting ",
and", and by adding at the end the following:

"(31) to the extent provided in section
 30B(g)(5).".

3 (2) Section 6501(m) is amended by inserting
4 "30B(g)(10)," after "30(d)(4),".

5 (3) The table of sections for subpart B of part
6 IV of subchapter A of chapter 1 is amended by in7 serting after the item relating to section 30A the fol8 lowing:

"Sec. 30B. Alternative motor vehicle credit.".

9 (c) EFFECTIVE DATE.—The amendments made by 10 this section shall apply to property placed in service after 11 December 31, 2001, in taxable years ending after such 12 date.

13 SEC. 3105. EXTENSION OF DEDUCTION FOR CERTAIN RE14 FUELING PROPERTY.

(a) IN GENERAL.—Section 179A(f) (relating to termination) is amended by striking "2004" and inserting
"2007".

18 (b) MODIFICATION OF PHASEOUT.—Subparagraph
19 (B) of section 179A(b)(1) is amended—

20 (1) in clause (i), by striking "2002" and insert21 ing "2005",

(2) in clause (ii), by striking "2003" and inserting "2006", and

24 (3) in clause (iii), by striking "2004" and in25 serting "2007".

1	SEC. 3106. MODIFICATION OF CREDIT FOR QUALIFIED
2	ELECTRIC VEHICLES.
3	(a) Amount of Credit.—
4	(1) IN GENERAL.—Section 30(a) (relating to al-
5	lowance of credit) is amended by striking "10 per-
6	cent of".
7	(2) LIMITATION OF CREDIT ACCORDING TO
8	TYPE OF VEHICLE.—Section 30(b) (relating to limi-
9	tations) is amended—
10	(A) by striking paragraphs (1) and (2) and
11	inserting the following:
12	"(1) LIMITATION ACCORDING TO TYPE OF VE-
13	HICLE.—The amount of the credit allowed under
14	subsection (a) for any vehicle shall not exceed the
15	greatest of the following amounts applicable to such
16	vehicle:
17	"(A) In the case of a vehicle which con-
18	forms to the Motor Vehicle Safety Standard
19	500 prescribed by the Secretary of Transpor-
20	tation, the lesser of—
21	"(i) 10 percent of the manufacturer's
22	suggested retail price of the vehicle, or
23	"(ii) \$4,000.
24	"(B) In the case of a vehicle not described
25	in subparagraph (A) with a gross vehicle weight
26	rating not exceeding 8,500 pounds—

1	"(i) \$4,000, or
2	"(ii) \$5,000, if such vehicle is—
3	"(I) capable of a driving range of
4	at least 70 miles on a single charge of
5	the vehicle's rechargeable batteries
6	and measured pursuant to the urban
7	dynamometer schedules under appen-
8	dix I to part 86 of title 40, Code of
9	Federal Regulations, or
10	"(II) capable of a payload capac-
11	ity of at least 1,000 pounds.
12	"(C) In the case of a vehicle with a gross
13	vehicle weight rating exceeding 8,500 pounds
14	but not exceeding 14,000 pounds, \$10,000.
15	"(D) In the case of a vehicle with a gross
16	vehicle weight rating exceeding 14,000 pounds
17	but not exceeding 26,000 pounds, \$20,000.
18	"(E) In the case of a vehicle with a gross
19	vehicle weight rating exceeding 26,000 pounds,
20	\$40,000.", and
21	(B) by redesignating paragraph (3) as
22	paragraph (2).
23	(3) Conforming Amendments.—

1	(A) Section $53(d)(1)(B)(iii)$ is amended by
2	striking "section $30(b)(3)(B)$ " and inserting
3	"section 30(b)(2)(B)".
4	(B) Section $55(c)(2)$ is amended by strik-
5	ing "30(b)(3)" and inserting "30(b)(2)".
6	(b) QUALIFIED BATTERY ELECTRIC VEHICLE.—
7	(1) IN GENERAL.—Section $30(c)(1)(A)$ (defin-
8	ing qualified electric vehicle) is amended to read as
9	follows:
10	"(A) which is—
11	"(i) operated solely by use of a bat-
12	tery or battery pack, or
13	"(ii) powered primarily through the
14	use of an electric battery or battery pack
15	using a flywheel or capacitor which stores
16	energy produced by an electric motor
17	through regenerative braking to assist in
18	vehicle operation,".
19	(2) Leased vehicles.—Section $30(c)(1)(C)$ is
20	amended by inserting "or lease" after "use".
21	(3) Conforming Amendments.—
22	(A) Subsections (a), and (c) of section 30
23	are each amended by inserting "battery" after
24	"qualified" each place it appears.

1	(B) The heading of subsection (c) of sec-
2	tion 30 is amended by inserting "BATTERY"
3	after "QUALIFIED".
4	(C) The heading of section 30 is amended
5	by inserting " BATTERY " after " QUALIFIED ".
6	(D) The item relating to section 30 in the
7	table of sections for subpart B of part IV of
8	subchapter A of chapter 1 is amended by in-
9	serting "battery" after "qualified".
10	(E) Section $179A(c)(3)$ is amended by in-
11	serting "battery" before "electric".
12	(F) The heading of paragraph (3) of sec-
13	tion 179A(c) is amended by inserting "BAT-
14	TERY" before "ELECTRIC".
15	(c) Additional Special Rules.—Section 30(d)
16	(relating to special rules) is amended by adding at the end
17	the following:
18	"(5) NO DOUBLE BENEFIT.—The amount of
19	any deduction or credit allowable under this chapter
20	for any cost taken into account in computing the
21	amount of the credit determined under subsection
22	(a) shall be reduced by the amount of such credit at-
23	tributable to such cost.
24	"(6) PROPERTY USED BY TAX-EXEMPT ENTI-
25	TIES.—In the case of a credit amount which is al-

1 lowable with respect to a vehicle which is acquired 2 by an entity exempt from tax under this chapter, the 3 person which sells or leases such vehicle to the entity 4 shall be treated as the taxpayer with respect to the 5 vehicle for purposes of this section and the credit 6 shall be allowed to such person, but only if the per-7 son clearly discloses to the entity in any sale or lease 8 contract the specific amount of any credit otherwise 9 allowable to the entity under this section and re-10 duces the sale or lease price of such vehicle by an 11 equivalent amount of such credit. 12 "(7) CARRYFORWARD ALLOWED.— 13 "(A) IN GENERAL.—If the credit amount 14 allowable under subsection (a) for a taxable 15 year exceeds the amount of the limitation under 16 subsection (b)(3) for such taxable year, such ex-17 cess shall be allowed as a credit carryforward 18 for each of the 20 taxable years following such 19 taxable year. 20 "(B) RULES.—Rules similar to the rules of 21 section 39 shall apply with respect to the credit 22 carryforward under subparagraph (A)." 23 (d) EXTENSION.—Section 30(e) (relating to termination) is amended by striking "2004" and inserting 24 "2007". 25

(e) EFFECTIVE DATE.—The amendments made by
 this section shall apply to property placed in service after
 December 31, 2001, in taxable years ending after such
 date.

5 SEC. 3107. TAX CREDIT FOR ENERGY EFFICIENT APPLI-6 ANCES.

7 (a) IN GENERAL.—Subpart D of part IV of sub8 chapter A of chapter 1 (relating to business-related cred9 its) is amended by adding at the end the following new
10 section:

11 "SEC. 45G. ENERGY EFFICIENT APPLIANCE CREDIT.

12 "(a) GENERAL RULE.—For purposes of section 38, 13 the energy efficient appliance credit determined under this 14 section for the taxable year is an amount equal to the ap-15 plicable amount determined under subsection (b) with re-16 spect to the eligible production of qualified energy efficient 17 appliances produced by the taxpayer during the calendar 18 year ending with or within the taxable year.

19 "(b) APPLICABLE AMOUNT; ELIGIBLE PRODUC-20 TION.—For purposes of subsection (a)—

21 "(1) APPLICABLE AMOUNT.—The applicable
22 amount is—

23 "(A) \$50 in the case of an energy efficient
24 clothes washer described in subsection (d)(2)(A)

1	or an energy efficient refrigerator described in
2	subsection $(d)(3)(B)(i)$, and
3	"(B) \$100 in the case of any other energy
4	efficient clothes washer or energy efficient re-
5	frigerator.
6	"(2) ELIGIBLE PRODUCTION.—
7	"(A) IN GENERAL.—The eligible produc-
8	tion of each category of qualified energy effi-
9	cient appliances is the excess of—
10	"(i) the number of appliances in such
11	category which are produced by the tax-
12	payer during such calendar year, over
13	"(ii) the average number of appliances
14	in such category which were produced by
15	the taxpayer during calendar years 1998,
16	1999, and 2000.
17	"(B) CATEGORIES.—For purposes of sub-
18	paragraph (A), the categories are—
19	"(i) energy efficient clothes washers
20	described in subsection $(d)(2)(A)$,
21	"(ii) energy efficient clothes washers
22	described in subsection (d)(2)(B),
23	"(iii) energy efficient refrigerators de-
24	scribed in subsection $(d)(3)(B)(i)$, and

"(iv) energy efficient refrigerators de-1 2 scribed in subsection (d)(3)(B)(ii). "(C) Special rule for 2001 produc-3 4 TION.—For purposes of determining eligible 5 production for calendar year 2001— 6 "(i) only production after the date of 7 the enactment of this section shall be 8 taken into account under subparagraph 9 (A)(i), and 10 "(ii) the amount taken into account 11 under subparagraph (A)(ii) shall be an 12 amount which bears the same ratio to the 13 amount which would (but for this subpara-14 graph) be taken into account under sub-15 paragraph (A)(ii) as— "(I) the number of days in cal-16 17 endar year 2001 after the date of the 18 enactment of this section, bears to 19 "(II) 365. 20 "(c) LIMITATION ON MAXIMUM CREDIT.— "(1) IN GENERAL.—The maximum amount of 21 22 credit allowed under subsection (a) with respect to 23 a taxpayer for all taxable years shall be— "(A) \$30,000,000 with respect to the cred-24 25 it determined under subsection (b)(1)(A), and

1	"(B) $30,000,000$ with respect to the cred-
2	it determined under subsection (b)(1)(B).
3	"(2) LIMITATION BASED ON GROSS RE-
4	CEIPTS.—The credit allowed under subsection (a)
5	with respect to a taxpayer for the taxable year shall
6	not exceed an amount equal to 2 percent of the aver-
7	age annual gross receipts of the taxpayer for the 3
8	taxable years preceding the taxable year in which
9	the credit is determined.
10	"(3) GROSS RECEIPTS.—For purposes of this
11	subsection, the rules of paragraphs (2) and (3) of
12	section 448(c) shall apply.
13	"(d) Qualified Energy Efficient Appliance.—
13 14	For purposes of this section:
14	For purposes of this section:
14 15	For purposes of this section: "(1) IN GENERAL.—The term 'qualified energy
14 15 16	For purposes of this section: "(1) IN GENERAL.—The term 'qualified energy efficient appliance' means—
14 15 16 17	For purposes of this section: "(1) IN GENERAL.—The term 'qualified energy efficient appliance' means— "(A) an energy efficient clothes washer, or
14 15 16 17 18	For purposes of this section: "(1) IN GENERAL.—The term 'qualified energy efficient appliance' means— "(A) an energy efficient clothes washer, or "(B) an energy efficient refrigerator.
14 15 16 17 18 19	For purposes of this section: "(1) IN GENERAL.—The term 'qualified energy efficient appliance' means— "(A) an energy efficient clothes washer, or "(B) an energy efficient refrigerator. "(2) ENERGY EFFICIENT CLOTHES WASHER.—
14 15 16 17 18 19 20	For purposes of this section: "(1) IN GENERAL.—The term 'qualified energy efficient appliance' means— "(A) an energy efficient clothes washer, or "(B) an energy efficient refrigerator. "(2) ENERGY EFFICIENT CLOTHES WASHER.— The term 'energy efficient clothes washer' means a
 14 15 16 17 18 19 20 21 	 For purposes of this section: "(1) IN GENERAL.—The term 'qualified energy efficient appliance' means— "(A) an energy efficient clothes washer, or "(B) an energy efficient refrigerator. "(2) ENERGY EFFICIENT CLOTHES WASHER.— The term 'energy efficient clothes washer' means a residential clothes washer, including a residential
"(B) a 1.42 MEF (1.5 MEF for washers	

produced after 2004) or greater.	
"(3) Energy efficient refrigerator.—The	
term 'energy efficient refrigerator' means an auto-	
matic defrost refrigerator-freezer which—	
"(A) has an internal volume of at least	
16.5 cubic feet, and	
"(B) consumes—	
"(i) 10 percent less kw/hr/yr than the	
energy conservation standards promulgated	
by the Department of Energy for refrig-	
erators produced during 2001, and	
"(ii) 15 percent less kw/hr/yr than	
such energy conservation standards for re-	
frigerators produced after 2001.	
"(4) MEF.—The term 'MEF' means Modified	
Energy Factor (as determined by the Secretary of	
Energy).	
"(e) Special Rules.—	
"(1) IN GENERAL.—Rules similar to the rules	
of subsections (c), (d), and (e) of section 52 shall	
apply for purposes of this section.	
"(2) Aggregation Rules.—All persons treat-	
ed as a single employer under subsection (a) or (b)	
of section 52 or subsection (m) or (o) of section 414	

shall be treated as 1 person for purposes of sub section (a).

3 "(f) VERIFICATION.—The taxpayer shall submit such
4 information or certification as the Secretary, in consulta5 tion with the Secretary of Energy, determines necessary
6 to claim the credit amount under subsection (a).

7 "(g) TERMINATION.—This section shall not apply—
8 "(1) with respect to energy efficient refrig9 erators described in subsection (d)(3)(B)(i) produced
10 after 2004, and

11 "(2) with respect to all other qualified energy
12 efficient appliances produced after 2006.".

(b) LIMITATION ON CARRYBACK.—Section 39(d) (re14 lating to transition rules) is amended by adding at the
15 end the following new paragraph:

"(11) NO CARRYBACK OF ENERGY EFFICIENT
APPLIANCE CREDIT BEFORE EFFECTIVE DATE.—No
portion of the unused business credit for any taxable
year which is attributable to the energy efficient appliance credit determined under section 45G may be
carried to a taxable year ending before the date of
the enactment of section 45G.".

(c) CONFORMING AMENDMENT.—Section 38(b) (relating to general business credit) is amended by striking
"plus" at the end of paragraph (14), by striking the period

1 at the end of paragraph (15) and inserting ", plus", and2 by adding at the end the following new paragraph:

3 "(16) the energy efficient appliance credit de4 termined under section 45G(a).".

5 (d) CLERICAL AMENDMENT.—The table of sections
6 for subpart D of part IV of subchapter A of chapter 1
7 is amended by inserting after the item relating to section
8 45F the following new item:

"Sec. 45G. Energy efficient appliance credit.".

9 (e) EFFECTIVE DATE.—The amendments made by
10 this section shall apply to taxable years ending after the
11 date of the enactment of this Act.

12 SEC. 3108. CREDIT FOR ENERGY EFFICIENCY IMPROVE13 MENTS TO EXISTING HOMES.

(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 25D the following new section:

18 "SEC. 25E. ENERGY EFFICIENCY IMPROVEMENTS TO EXIST19 ING HOMES.

20 "(a) ALLOWANCE OF CREDIT.—In the case of an in-21 dividual, there shall be allowed as a credit against the tax 22 imposed by this chapter for the taxable year an amount 23 equal to 20 percent of the amount paid or incurred by 24 the taxpayer for qualified energy efficiency improvements 25 installed during such taxable year. 1 "(b) LIMITATIONS.—

2 "(1) MAXIMUM CREDIT.—The credit allowed by
3 this section with respect to a dwelling shall not exceed \$2,000.

"(2) PRIOR CREDIT AMOUNTS FOR TAXPAYER 5 6 ON SAME DWELLING TAKEN INTO ACCOUNT .--- If a credit was allowed to the taxpayer under subsection 7 8 (a) with respect to a dwelling in 1 or more prior tax-9 able years, the amount of the credit otherwise allow-10 able for the taxable year with respect to that dwell-11 ing shall not exceed the amount of \$2,000 reduced 12 by the sum of the credits allowed under subsection 13 (a) to the taxpayer with respect to the dwelling for 14 all prior taxable years.

15 "(3) LIMITATION BASED ON AMOUNT OF
16 TAX.—The credit allowed under subsection (a) for
17 the taxable year shall not exceed the excess of—

18 "(A) the sum of the regular tax liability
19 (as defined in section 26(b)) plus the tax imposed by section 55, over

21 "(B) the sum of the credits allowable
22 under this subpart (other than this section and
23 section 23) and section 27 for the taxable year.
24 "(c) CARRYFORWARD OF UNUSED CREDIT.—If the
25 credit allowable under subsection (a) exceeds the limita-

1 tion imposed by subsection (b)(3) for such taxable year,
2 such excess shall be carried to the succeeding taxable year
3 and added to the credit allowable under subsection (a) for
4 such succeeding taxable year.

5 "(d) QUALIFIED ENERGY EFFICIENCY IMPROVE-6 MENTS.—For purposes of this section, the term 'qualified 7 energy efficiency improvements' means any energy effi-8 cient building envelope component which meets the pre-9 scriptive criteria for such component established by the 10 1998 International Energy Conservation Code, if—

11 "(1) such component is installed in or on a
12 dwelling—

"(A) located in the United States, and
"(B) owned and used by the taxpayer as
the taxpayer's principal residence (within the
meaning of section 121),

17 "(2) the original use of such component com-18 mences with the taxpayer, and

19 "(3) such component reasonably can be ex20 pected to remain in use for at least 5 years.

21 If the aggregate cost of such components with respect to
22 any dwelling exceeds \$1,000, such components shall be
23 treated as qualified energy efficiency improvements only
24 if such components are also certified in accordance with
25 subsection (e) as meeting such criteria.

"(e) CERTIFICATION.—The certification described in
 subsection (d) shall be—

"(1) determined on the basis of the technical
specifications or applicable ratings (including product labeling requirements) for the measurement of
energy efficiency, based upon energy use or building
envelope component performance, for the energy efficient building envelope component,

9 "(2) provided by a local building regulatory au-10 thority, a utility, a manufactured home production 11 inspection primary inspection agency (IPIA), or an 12 accredited home energy rating system provider who 13 is accredited by or otherwise authorized to use ap-14 proved energy performance measurement methods by 15 the Home Energy Ratings Systems Council or the 16 National Association of State Energy Officials, and 17 "(3) made in writing in a manner that specifies

in readily verifiable fashion the energy efficient
building envelope components installed and their respective energy efficiency levels.

21 "(f) Definitions and Special Rules.—

"(1) TENANT-STOCKHOLDER IN COOPERATIVE
HOUSING CORPORATION.—In the case of an individual who is a tenant-stockholder (as defined in section 216) in a cooperative housing corporation (as

1	defined in such section), such individual shall be
2	treated as having paid his tenant-stockholder's pro-
3	portionate share (as defined in section $216(b)(3)$) of
4	the cost of qualified energy efficiency improvements
5	made by such corporation.
6	"(2) Condominiums.—
7	"(A) IN GENERAL.—In the case of an indi-
8	vidual who is a member of a condominium man-
9	agement association with respect to a condo-
10	minium which he owns, such individual shall be
11	treated as having paid his proportionate share
12	of the cost of qualified energy efficiency im-
13	provements made by such association.
14	"(B) Condominium management asso-
15	CIATION.—For purposes of this paragraph, the
16	term 'condominium management association'
17	means an organization which meets the require-
18	ments of paragraph (1) of section $528(c)$ (other
19	than subparagraph (E) thereof) with respect to
20	a condominium project substantially all of the
21	units of which are used as residences.
22	"(3) Building envelope component.—The
23	term 'building envelope component' means insulation

material or system which is specifically and pri-25 marily designed to reduce the heat loss or gain of a

24

dwelling when installed in or on such dwelling, exte rior windows (including skylights) and doors, and
 metal roofs with appropriate pigmented coatings
 which are specifically and primarily designed to re duce the heat gain of a dwelling when installed in
 or on such dwelling.

7 "(4) MANUFACTURED HOMES INCLUDED.—For
8 purposes of this section, the term 'dwelling' includes
9 a manufactured home which conforms to Federal
10 Manufactured Home Construction and Safety Stand11 ards (24 C.F.R. 3280).

12 "(g) BASIS ADJUSTMENT.—For purposes of this sub-13 title, if a credit is allowed under this section for any ex-14 penditure with respect to any property, the increase in the 15 basis of such property which would (but for this sub-16 section) result from such expenditure shall be reduced by 17 the amount of the credit so allowed.

18 "(h) APPLICATION OF SECTION.—This section shall
19 apply to qualified energy efficiency improvements installed
20 after December 31, 2001 and before January 1, 2007.".

21 (b) Conforming Amendments.—

(1) Subsection (a) of section 1016 is amended
by striking "and" at the end of paragraph (30), by
striking the period at the end of paragraph (31) and

1	inserting ", and", and by adding at the end the fol-
2	lowing new paragraph:
3	"(32) to the extent provided in section $25E(g)$,
4	in the case of amounts with respect to which a credit
5	has been allowed under section 25E.".
6	(2) The table of sections for subpart A of part
7	IV of subchapter A of chapter 1 is amended by in-
8	serting after the item relating to section 25D the
9	following new item:
	"Sec. 25E. Energy efficiency improvements to existing homes.".
10	(c) EFFECTIVE DATE.—The amendments made by
11	this section shall apply to taxable years ending after De-
12	cember 31, 2001.
13	SEC. 3109. BUSINESS CREDIT FOR CONSTRUCTION OF NEW
13 14	SEC. 3109. BUSINESS CREDIT FOR CONSTRUCTION OF NEW ENERGY EFFICIENT HOME.
14	ENERGY EFFICIENT HOME.
14 15 16	ENERGY EFFICIENT HOME. (a) IN GENERAL.—Subpart D of part IV of sub-
14 15 16	ENERGY EFFICIENT HOME. (a) IN GENERAL.—Subpart D of part IV of sub- chapter A of chapter 1 (relating to business related cred-
14 15 16 17	ENERGY EFFICIENT HOME. (a) IN GENERAL.—Subpart D of part IV of sub- chapter A of chapter 1 (relating to business related cred- its) is amended by inserting after section 45G the fol-
14 15 16 17 18	ENERGY EFFICIENT HOME. (a) IN GENERAL.—Subpart D of part IV of sub- chapter A of chapter 1 (relating to business related cred- its) is amended by inserting after section 45G the fol- lowing new section:
14 15 16 17 18 19	ENERGY EFFICIENT HOME. (a) IN GENERAL.—Subpart D of part IV of sub- chapter A of chapter 1 (relating to business related cred- its) is amended by inserting after section 45G the fol- lowing new section: "SEC. 45H. NEW ENERGY EFFICIENT HOME CREDIT.
14 15 16 17 18 19 20	ENERGY EFFICIENT HOME. (a) IN GENERAL.—Subpart D of part IV of sub- chapter A of chapter 1 (relating to business related cred- its) is amended by inserting after section 45G the fol- lowing new section: "SEC. 45H. NEW ENERGY EFFICIENT HOME CREDIT. "(a) IN GENERAL.—For purposes of section 38, in
 14 15 16 17 18 19 20 21 22 	ENERGY EFFICIENT HOME. (a) IN GENERAL.—Subpart D of part IV of sub- chapter A of chapter 1 (relating to business related cred- its) is amended by inserting after section 45G the fol- lowing new section: "SEC. 45H. NEW ENERGY EFFICIENT HOME CREDIT. "(a) IN GENERAL.—For purposes of section 38, in the case of an eligible contractor, the credit determined
 14 15 16 17 18 19 20 21 22 	ENERGY EFFICIENT HOME. (a) IN GENERAL.—Subpart D of part IV of sub- chapter A of chapter 1 (relating to business related cred- its) is amended by inserting after section 45G the fol- lowing new section: "SEC. 45H. NEW ENERGY EFFICIENT HOME CREDIT. "(a) IN GENERAL.—For purposes of section 38, in the case of an eligible contractor, the credit determined under this section for the taxable year is an amount equal

1	"(b) Limitations.—
2	"(1) MAXIMUM CREDIT.—
3	"(A) IN GENERAL.—The credit allowed by
4	this section with respect to a dwelling shall not
5	exceed \$2,000.
6	"(B) PRIOR CREDIT AMOUNTS ON SAME
7	DWELLING TAKEN INTO ACCOUNTIf a credit
8	was allowed under subsection (a) with respect
9	to a dwelling in 1 or more prior taxable years,
10	the amount of the credit otherwise allowable for
11	the taxable year with respect to that dwelling
12	shall not exceed the amount of $$2,000$ reduced
13	by the sum of the credits allowed under sub-
14	section (a) with respect to the dwelling for all
15	prior taxable years.
16	"(2) Coordination with rehabilitation
17	AND ENERGY CREDITS.—For purposes of this
18	section—
19	"(A) the basis of any property referred to
20	in subsection (a) shall be reduced by that por-
21	tion of the basis of any property which is attrib-
22	utable to qualified rehabilitation expenditures
23	(as defined in section $47(c)(2)$) or to the energy
24	percentage of energy property (as determined

25 under section 48(a)), and

1	"(B) expenditures taken into account
2	under either section 47 or $48(a)$ shall not be
3	taken into account under this section.
4	"(c) Definitions.—For purposes of this section—
5	"(1) ELIGIBLE CONTRACTOR.—The term 'eligi-
6	ble contractor' means the person who constructed
7	the new energy efficient home, or in the case of a
8	manufactured home which conforms to Federal
9	Manufactured Home Construction and Safety Stand-
10	ards (24 C.F.R. 3280), the manufactured home pro-
11	ducer of such home.
12	"(2) Energy efficient property.—The
13	term 'energy efficient property' means any energy
14	efficient building envelope component, and any en-
15	ergy efficient heating or cooling appliance.
16	"(3) QUALIFIED NEW ENERGY EFFICIENT
17	HOME.—The term 'qualified new energy efficient
18	home' means a dwelling—
19	"(A) located in the United States,
20	"(B) the construction of which is substan-
21	tially completed after December 31, 2001,
22	"(C) the original use of which is as a prin-
23	cipal residence (within the meaning of section
24	121) which commences with the person who ac-

1	quires such dwelling from the eligible con-
2	tractor, and
3	"(D) which is certified to have a level of
4	annual heating and cooling energy consumption
5	that is at least 30 percent below the annual
6	level of heating and cooling energy consumption
7	of a comparable dwelling constructed in accord-
8	ance with the standards of the 1998 Inter-
9	national Energy Conservation Code.
10	"(4) CONSTRUCTION.—The term 'construction'
11	includes reconstruction and rehabilitation.
12	"(5) ACQUIRE.—The term 'acquire' includes
13	purchase and, in the case of reconstruction and re-
14	habilitation, such term includes a binding written
15	contract for such reconstruction or rehabilitation.
16	"(6) 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	"(7) Manufactured home included.—The
2	term 'dwelling' includes a manufactured home con-
3	forming to Federal Manufactured Home Construc-
4	tion and Safety Standards (24 C.F.R. 3280).
5	"(d) CERTIFICATION.—
6	"(1) Method.—A certification described in
7	subsection $(c)(3)(D)$ shall be determined on the
8	basis of one of the following methods:
9	"(A) The technical specifications or appli-
10	cable ratings (including product labeling re-
11	quirements) for the measurement of energy effi-
12	ciency for the energy efficient building envelope
13	component or energy efficient heating or cooling
14	appliance, based upon energy use or building
15	envelope component performance.
16	"(B) An energy performance measurement
17	method that utilizes computer software ap-
18	proved by organizations designated by the Sec-
19	retary.
20	"(2) PROVIDER.—Such certification shall be
21	provided by—
22	"(A) in the case of a method described in
23	paragraph (1)(A), a local building regulatory
24	authority, a utility, a manufactured home pro-
25	duction inspection primary inspection agency

1	(IPIA), or an accredited home energy rating
2	systems provider who is accredited by, or other-
3	wise authorized to use, approved energy per-
4	formance measurement methods by the Home
5	Energy Ratings Systems Council or the Na-
6	tional Association of State Energy Officials, or
7	"(B) in the case of a method described in
8	paragraph $(1)(B)$, an individual recognized by
9	an organization designated by the Secretary for
10	such purposes.
11	"(3) FORM.—Such certification shall be made
12	in writing in a manner that specifies in readily
13	verifiable fashion the energy efficient building enve-
14	lope components and energy efficient heating or
15	cooling appliances installed and their respective en-
16	ergy efficiency levels, and in the case of a method
17	described in subparagraph (B) of paragraph (1), ac-
18	companied by written analysis documenting the
19	proper application of a permissible energy perform-
20	ance measurement method to the specific cir-
21	cumstances of such dwelling.
22	"(4) Regulations.—
23	"(A) IN GENERAL.—In prescribing regula-
24	tions under this subsection for energy perform-

ance measurement methods, the Secretary shall

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1	prescribe procedures for calculating annual en-
2	ergy costs for heating and cooling and cost sav-
3	ings and for the reporting of the results. Such
4	regulations shall—
5	"(i) be based on the National Home
6	Energy Rating Technical Guidelines of the
7	National Association of State Energy Offi-
8	cials, the Home Energy Rating Guidelines
9	of the Home Energy Rating Systems
10	Council, or the modified 1998 California
11	Residential ACM manual,
12	"(ii) provide that any calculation pro-
13	cedures be developed such that the same
14	energy efficiency measures allow a home to
15	qualify for the credit under this section re-
16	gardless of whether the house uses a gas
17	or oil furnace or boiler or an electric heat
18	pump, and
19	"(iii) require that any computer soft-
20	ware allow for the printing of the Federal
21	tax forms necessary for the credit under
22	this section and explanations for the home-
23	buyer of the energy efficient features that
24	were used to comply with the requirements
25	of this section.

1 "(B) PROVIDERS.—For purposes of para-2 graph (2)(B), the Secretary shall establish re-3 quirements for the designation of individuals based on the requirements for energy consult-4 5 ants and home energy raters specified by the 6 National Association of State Energy Officials. 7 "(e) BASIS ADJUSTMENT.—For purposes of this sub-8 title, if a credit is allowed under this section for any ex-9 penditure with respect to any property, the increase in the 10 basis of such property which would (but for this sub-11 section) result from such expenditure shall be reduced by 12 the amount of the credit so allowed.

13 "(f) APPLICATION OF SECTION.—Subsection (a) shall apply to dwellings purchased during the period beginning 14 15 on January 1, 2002, and ending on December 31, 2006.". 16 (b) CREDIT MADE PART OF GENERAL BUSINESS 17 CREDIT.—Subsection (b) of section 38 (relating to current year business credit) is amended by striking "plus" at the 18 19 end of paragraph (15), by striking the period at the end of paragraph (16) and inserting ", plus", and by adding 20 21 at the end thereof the following new paragraph:

22 "(17) the new energy efficient home credit de-23 termined under section 45H.".

24 (c) DENIAL OF DOUBLE BENEFIT.—Section 280C25 (relating to certain expenses for which credits are allow-

1 able) is amended by adding at the end thereof the fol-2 lowing new subsection:

3 "(d) NEW ENERGY EFFICIENT HOME EXPENSES.— 4 No deduction shall be allowed for that portion of expenses 5 for a new energy efficient home otherwise allowable as a 6 deduction for the taxable year which is equal to the 7 amount of the credit determined for such taxable year 8 under section 45H.".

9 (d) LIMITATION ON CARRYBACK.—Subsection (d) of
10 section 39 is amended by adding at the end the following
11 new paragraph:

12 "(12) NO CARRYBACK OF NEW ENERGY EFFI-13 CIENT HOME CREDIT BEFORE EFFECTIVE DATE.-14 No portion of the unused business credit for any 15 taxable year which is attributable to the credit deter-16 mined under section 45H may be carried back to 17 any taxable year ending before January 1, 2002.". 18 (e) DEDUCTION FOR CERTAIN UNUSED BUSINESS CREDITS.—Subsection (c) of section 196 is amended by 19 20 striking "and" at the end of paragraph (9), by striking 21 the period at the end of paragraph (10) and inserting ", 22 and", and by adding after paragraph (10) the following 23 new paragraph:

24 "(11) the new energy efficient home credit de-25 termined under section 45H.".

(f) CLERICAL AMENDMENT.—The table of sections
 for subpart D of part IV of subchapter A of chapter 1
 is amended by inserting after the item relating to section
 45G the following new item:

"Sec. 45H. New energy efficient home credit.".

5 (g) EFFECTIVE DATE.—The amendments made by
6 this section shall apply to taxable years ending after De7 cember 31, 2001.

8 SEC. 3110. ALLOWANCE OF DEDUCTION FOR ENERGY EFFI9 CIENT COMMERCIAL BUILDING PROPERTY.

(a) IN GENERAL.—Part VI of subchapter B of chapter 1 (relating to itemized deductions for individuals and
corporations) is amended by inserting after section 179A
the following new section:

14 "SEC. 179B. DEDUCTION FOR ENERGY EFFICIENT COMMER-

15 CIAL BUILDING PROPERTY.

16 "(a) Allowance of Deduction.—

17 "(1) IN GENERAL.—There shall be allowed as a
18 deduction an amount equal to energy efficient com19 mercial building property expenditures made by a
20 taxpayer for the taxable year.

21 "(2) MAXIMUM AMOUNT OF DEDUCTION.—The
22 amount of energy efficient commercial building prop23 erty expenditures taken into account under para24 graph (1) shall not exceed an amount equal to the
25 product of—

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"(A) \$2.25, and

1

2 "(B) the square footage of the building
3 with respect to which the expenditures are
4 made.

5 "(3) YEAR DEDUCTION ALLOWED.—The deduc-6 tion under paragraph (1) shall be allowed for the 7 taxable year in which the building is placed in serv-8 ice.

9 "(b) ENERGY EFFICIENT COMMERCIAL BUILDING 10 PROPERTY EXPENDITURES.—For purposes of this sec-11 tion, the term 'energy efficient commercial building prop-12 erty expenditures' means an amount paid or incurred for 13 energy efficient commercial building property installed on 14 or in connection with new construction or reconstruction 15 of property—

16 "(1) for which depreciation is allowable under17 section 167,

"(2) which is located in the United States, and
"(3) the construction or erection of which is
completed by the taxpayer.

21 Such property includes all residential rental property, in22 cluding low-rise multifamily structures and single family
23 housing property which is not within the scope of Stand24 ard 90.1–1999 (described in subsection (c)). Such term
25 includes expenditures for labor costs properly allocable to

the onsite preparation, assembly, or original installation
 of the property.

3 "(c) ENERGY EFFICIENT COMMERCIAL BUILDING
4 PROPERTY.—For purposes of subsection (b)—

5 "(1) IN GENERAL.—The term 'energy efficient commercial building property' means any property 6 which reduces total annual energy and power costs 7 8 with respect to the lighting, heating, cooling, ventila-9 tion, and hot water supply systems of the building 10 by 50 percent or more in comparison to a reference 11 building which meets the requirements of Standard 12 90.1–1999 of the American Society of Heating, Re-13 frigerating, and Air Conditioning Engineers and the 14 Illuminating Engineering Society of North America 15 using methods of calculation under paragraph (2)16 and certified by qualified professionals as provided 17 under subsection (f).

18 "(2) Methods of Calculation.—The Sec-19 retary, in consultation with the Secretary of Energy, 20 shall promulgate regulations which describe in detail 21 methods for calculating and verifying energy and 22 power consumption and cost, taking into consider-23 ation the provisions of the 1998 California Nonresi-24 dential ACM Manual. These procedures shall meet 25 the following requirements:

1	"(A) In calculating tradeoffs and energy
2	performance, the regulations shall prescribe the
3	costs per unit of energy and power, such as kil-
4	owatt hour, kilowatt, gallon of fuel oil, and
5	cubic foot or Btu of natural gas, which may be
6	dependent on time of usage.
7	"(B) The calculational methodology shall
8	require that compliance be demonstrated for a
9	whole building. If some systems of the building,
10	such as lighting, are designed later than other
11	systems of the building, the method shall pro-
12	vide that either—
13	"(i) the expenses taken into account
14	under subsection (a) shall not occur until
15	the date designs for all energy-using sys-
16	tems of the building are completed,
17	"(ii) the energy performance of all
18	systems and components not yet designed
19	shall be assumed to comply minimally with
20	the requirements of such Standard 90.1–
21	1999, or
22	"(iii) the expenses taken into account
23	under subsection (a) shall be a fraction of
24	such expenses based on the performance of

1	less than all energy-using systems in ac-
2	cordance with subparagraph (C).
3	"(C) The expenditures in connection with
4	the design of subsystems in the building, such
5	as the envelope, the heating, ventilation, air
6	conditioning and water heating system, and the
7	lighting system shall be allocated to the appro-
8	priate building subsystem based on system-spe-
9	cific energy cost savings targets in regulations
10	promulgated by the Secretary of Energy which
11	are equivalent, using the calculation method-
12	ology, to the whole building requirement of 50
13	percent savings.
14	"(D) The calculational methods under this
15	subparagraph need not comply fully with sec-
16	tion 11 of such Standard 90.1–1999.
17	"(E) The calculational methods shall be
18	fuel neutral, such that the same energy effi-
19	ciency features shall qualify a building for the
20	deduction under this subsection regardless of
21	whether the heating source is a gas or oil fur-
22	nace or an electric heat pump.
23	"(F) The calculational methods shall pro-
24	vide appropriate calculated energy savings for
25	design methods and technologies not otherwise

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credited in either such Standard 90.1–1999 or
in the 1998 California Nonresidential ACM
Manual, including the following:
"(i) Natural ventilation.
"(ii) Evaporative cooling.
"(iii) Automatic lighting controls such
as occupancy sensors, photocells, and time-
clocks.
"(iv) Daylighting.
"(v) Designs utilizing semi-condi-
tioned spaces that maintain adequate com-
fort conditions without air conditioning or
without heating.
"(vi) Improved fan system efficiency,

ficiency,

including reductions in static pressure. Advanced unloading mecha-"(vii)

nisms for mechanical cooling, such as mul-tiple or variable speed compressors.

"(viii) The calculational methods may take into account the extent of commis-sioning in the building, and allow the tax-payer to take into account measured per-formance that exceeds typical performance. "(3) Computer software.—

1	"(A) IN GENERAL.—Any calculation under
2	this subsection shall be prepared by qualified
3	computer software.
4	"(B) QUALIFIED COMPUTER SOFTWARE.—
5	For purposes of this paragraph, the term
6	'qualified computer software' means software—
7	"(i) for which the software designer
8	has certified that the software meets all
9	procedures and detailed methods for calcu-
10	lating energy and power consumption and
11	costs as required by the Secretary,
12	"(ii) which provides such forms as re-
13	quired to be filed by the Secretary in con-
14	nection with energy efficiency of property
15	and the deduction allowed under this sec-
16	tion, and
17	"(iii) which provides a notice form
18	which summarizes the energy efficiency
19	features of the building and its projected
20	annual energy costs.
21	"(d) Allocation of Deduction for Public
22	PROPERTY.—In the case of energy efficient commercial
23	building property installed on or in public property, the
24	Secretary shall promulgate a regulation to allow the allo-
25	cation of the deduction to the person primarily responsible

for designing the property in lieu of the public entity which
 is the owner of such property. Such person shall be treated
 as the taxpayer for purposes of this section.

4 "(e) NOTICE TO OWNER.—The qualified individual
5 shall provide an explanation to the owner of the building
6 regarding the energy efficiency features of the building
7 and its projected annual energy costs as provided in the
8 notice under subsection (c)(3)(B)(iii).

9 "(f) CERTIFICATION.—The Secretary, in consultation
10 with the Secretary of Energy, shall establish requirements
11 for certification and compliance procedures similar to the
12 procedures under section 45H(d).

"(g) BASIS REDUCTION.—For purposes of this title,
the basis of any property shall be reduced by the amount
of the deduction with respect to such property which is
allowed by subsection (a).

17 "(h) TERMINATION.—This section shall not apply to18 property placed in service after December 31, 2006.".

19 (b) CONFORMING AMENDMENTS.—

(1) Section 1016(a) is amended by striking
"and" at the end of paragraph (31), by striking the
period at the end of paragraph (32) and inserting ",
and", and by inserting the following new paragraph:
"(33) to the extent provided in section
179B(g).".

1	(2) Section $1245(a)$ is amended by inserting
2	"179B," after "179A," both places it appears in
3	paragraphs $(2)(C)$ and $(3)(C)$.
4	(3) Section $1250(b)(3)$ is amended by inserting
5	before the period at the end of the first sentence "or
6	by section 179B".
7	(4) Section $263(a)(1)$ is amended by striking
8	"or" at the end of subparagraph (G), by striking the
9	period at the end of subparagraph (H) and inserting
10	", or", and by inserting after subparagraph (H) the
11	following new subparagraph:
12	((I) expenditures for which a deduction is
13	allowed under section 179B.".
14	(5) Section $312(k)(3)(B)$ is amended by strik-
15	ing "or 179A" each place it appears in the heading
16	and text and inserting ", 179A, or 179B".
17	(c) Clerical Amendment.—The table of sections
18	for part VI of subchapter B of chapter 1 is amended by
19	adding after section 179A the following new item:
	"Sec. 179B. Deduction for energy efficient commercial building property.".
20	(d) EFFECTIVE DATE.—The amendments made by
21	this section shall apply to taxable years beginning after
22	December 31, 2001.

SEC. 3111. ALLOWANCE OF DEDUCTION FOR QUALIFIED EN ERGY MANAGEMENT DEVICES AND RETRO FITTED QUALIFIED METERS.

4 (a) IN GENERAL.—Part VI of subchapter B of chap5 ter 1 (relating to itemized deductions for individuals and
6 corporations) is amended by inserting after section 179B
7 the following new section:

8 "SEC. 179C. DEDUCTION FOR QUALIFIED ENERGY MANAGE9 MENT DEVICES AND RETROFITTED METERS.

10 "(a) ALLOWANCE OF DEDUCTION.—In the case of a 11 taxpayer who is a supplier of electric energy or natural 12 gas or a provider of electric energy or natural gas services, 13 there shall be allowed as a deduction an amount equal to 14 the cost of each qualified energy management device 15 placed in service during the taxable year.

16 "(b) MAXIMUM DEDUCTION.—The deduction allowed
17 by this section with respect to each qualified energy man18 agement device shall not exceed \$30.

19 "(c) QUALIFIED ENERGY MANAGEMENT DEVICE.—
20 The term 'qualified energy management device' means any
21 tangible property to which section 168 applies if such
22 property is a meter or metering device—

23 "(1) which is acquired and used by the tax24 payer to enable consumers to manage their purchase
25 or use of electricity or natural gas in response to en26 ergy price and usage signals, and

"(2) which permits reading of energy price and
 usage signals on at least a daily basis.

3 "(d) PROPERTY USED OUTSIDE THE UNITED 4 STATES NOT QUALIFIED.—No deduction shall be allowed 5 under subsection (a) with respect to property which is 6 used predominantly outside the United States or with re-7 spect to the portion of the cost of any property taken into 8 account under section 179.

9 "(e) BASIS REDUCTION.—

"(1) IN GENERAL.—For purposes of this title,
the basis of any property shall be reduced by the
amount of the deduction with respect to such property which is allowed by subsection (a).

"(2) ORDINARY INCOME RECAPTURE.—For
purposes of section 1245, the amount of the deduction allowable under subsection (a) with respect to
any property that is of a character subject to the allowance for depreciation shall be treated as a deduction allowed for depreciation under section 167.".

20 (b) Conforming Amendments.—

(1) Section 263(a)(1) is amended by striking
"or" at the end of subparagraph (H), by striking
the period at the end of subparagraph (I) and inserting ", or", and by inserting after subparagraph
(I) the following new subparagraph:

1	"(J) expenditures for which a deduction is
2	allowed under section 179C.".
3	(2) Section $312(k)(3)(B)$ is amended by strik-
4	ing "or 179B" each place it appears in the heading
5	and text and inserting ", 179B, or 179C".
6	(3) Section 1016(a) is amended by striking
7	"and" at the end of paragraph (32), by striking the
8	period at the end of paragraph (33) and inserting ",
9	and", and by inserting after paragraph (33) the fol-
10	lowing new paragraph:
11	"(34) to the extent provided in section
12	179C(e)(1).".
13	(4) Section $1245(a)$ is amended by inserting
14	"179C," after "179B," both places it appears in
15	paragraphs $(2)(C)$ and $(3)(C)$.
16	(5) The table of contents for subpart B of part
17	IV of subchapter A of chapter 1 is amended by in-
18	serting after the item relating to section 179B the
19	following new item:
	"Sec. 179C. Deduction for qualified energy management devices and retrofitted meters.".
20	(c) EFFECTIVE DATE.—The amendments made by
21	this section shall apply to qualified energy management
22	devices placed in service after the date of the enactment
23	of this Act.

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1	SEC. 3112. 3-YEAR APPLICABLE RECOVERY PERIOD FOR DE-
2	PRECIATION OF QUALIFIED ENERGY MAN-
3	AGEMENT DEVICES.
4	(a) IN GENERAL.—Subparagraph (A) of section
5	168(e)(3) (relating to classification of property) is amend-
6	ed by striking "and" at the end of clause (ii), by striking
7	the period at the end of clause (iii) and inserting ", and",
8	and by adding at the end the following new clause:
9	"(iv) any qualified energy manage-
10	ment device.".
11	(b) Definition of Qualified Energy Manage-
12	MENT DEVICE.—Section 168(i) (relating to definitions
13	and special rules) is amended by inserting at the end the
14	following new paragraph:
15	((15) Qualified energy management de-
16	VICE.—The term 'qualified energy management de-

vice' means any qualified energy management device
as defined in section 179C(c) which is placed in
service by a taxpayer who is a supplier of electric energy or natural gas or a provider of electric energy
or natural gas services.".

(c) EFFECTIVE DATE.—The amendments made by
this section shall apply to property placed in service after
the date of the enactment of this Act.

1SEC. 3113. ENERGY CREDIT FOR COMBINED HEAT AND2POWER SYSTEM PROPERTY.

3 (a) IN GENERAL.—Subparagraph (A) of section
4 48(a)(3) (defining energy property) is amended by strik5 ing "or" at the end of clause (ii), by adding "or" at the
6 end of clause (iii), and by inserting after clause (iii) the
7 following new clause:

8 "(iv) combined heat and power system9 property,".

10 (b) COMBINED HEAT AND POWER SYSTEM PROP-11 ERTY.—Subsection (a) of section 48 is amended by redes-12 ignating paragraphs (5) and (6) as paragraphs (6) and 13 (7), respectively, and by inserting after paragraph (4) the 14 following new paragraph:

15 "(5) COMBINED HEAT AND POWER SYSTEM
16 PROPERTY.—For purposes of this subsection—

17 "(A) COMBINED HEAT AND POWER SYS18 TEM PROPERTY.—The term 'combined heat and
19 power system property' means property com20 prising a system—

21 "(i) which uses the same energy
22 source for the simultaneous or sequential
23 generation of electrical power, mechanical
24 shaft power, or both, in combination with
25 the generation of steam or other forms of

1	useful thermal energy (including heating
2	and cooling applications),
3	"(ii) which has an electrical capacity
4	of more than 50 kilowatts or a mechanical
5	energy capacity of more than 67 horse-
6	power or an equivalent combination of elec-
7	trical and mechanical energy capacities,
8	"(iii) which produces—
9	"(I) at least 20 percent of its
10	total useful energy in the form of
11	thermal energy, and
12	"(II) at least 20 percent of its
13	total useful energy in the form of elec-
14	trical or mechanical power (or com-
15	bination thereof),
16	"(iv) the energy efficiency percentage
17	of which exceeds 60 percent (70 percent in
18	the case of a system with an electrical ca-
19	pacity in excess of 50 megawatts or a me-
20	chanical energy capacity in excess of
21	67,000 horsepower, or an equivalent com-
22	bination of electrical and mechanical en-
23	ergy capacities), and

1	"(v) which is placed in service after
2	December 31, 2001, and before January 1,
3	2007.
4	"(B) Special rules.—
5	"(i) Energy efficiency percent-
6	AGE.—For purposes of subparagraph
7	(A)(iv), the energy efficiency percentage of
8	a system is the fraction—
9	"(I) the numerator of which is
10	the total useful electrical, thermal,
11	and mechanical power produced by
12	the system at normal operating rates,
13	and
14	"(II) the denominator of which is
15	the lower heating value of the primary
16	fuel source for the system.
17	"(ii) Determinations made on btu
18	BASIS.—The energy efficiency percentage
19	and the percentages under subparagraph
20	(A)(iii) shall be determined on a Btu basis.
21	"(iii) INPUT AND OUTPUT PROPERTY
22	NOT INCLUDED.—The term 'combined heat
23	and power system property' does not in-
24	clude property used to transport the en-

1	ergy source to the facility or to distribute
2	energy produced by the facility.
3	"(iv) Public utility property.—
4	"(I) Accounting rule for
5	PUBLIC UTILITY PROPERTY.—If the
6	combined heat and power system
7	property is public utility property (as
8	defined in section $168(i)(1)$), the tax-
9	payer may only claim the credit under
10	the subsection if, with respect to such
11	property, the taxpayer uses a normal-
12	ization method of accounting.
13	"(II) CERTAIN EXCEPTION NOT
14	TO APPLY.—The matter in paragraph
15	(3) which follows subparagraph (D)
16	shall not apply to combined heat and
17	power system property.
18	"(C) EXTENSION OF DEPRECIATION RE-
19	COVERY PERIOD.—If a taxpayer is allowed cred-
20	it under this section for combined heat and
21	power system property and such property would
22	(but for this subparagraph) have a class life of
23	15 years or less under section 168, such prop-
24	erty shall be treated as having a 22-year class
25	life for purposes of section 168.".

(c) NO CARRYBACK OF ENERGY CREDIT BEFORE
 2 EFFECTIVE DATE.—Subsection (d) of section 39 is
 3 amended by adding at the end the following new para 4 graph:

5 "(13) NO CARRYBACK OF ENERGY CREDIT BE6 FORE EFFECTIVE DATE.—No portion of the unused
7 business credit for any taxable year which is attrib8 utable to the energy credit with respect to property
9 described in section 48(a)(5) may be carried back to
10 a taxable year ending before January 1, 2002.".

(d) EFFECTIVE DATE.—The amendments made by
this section shall apply to property placed in service after
December 31, 2001.

14 SEC. 3114. NEW NONREFUNDABLE PERSONAL CREDITS AL-

15 LOWED AGAINST REGULAR AND MINIMUM
16 TAXES.

(a) IN GENERAL.—Paragraph (1) of section 26(a) is
amended by striking "and 25B" and inserting "25B, 25C,
25D, and 25E".

20 (b) Conforming Amendments.—

21 (1) Section 24(b)(3)(B) is amended by striking
22 "and 25B" and inserting ", 25B, 25C, 25D, and
23 25E".

24 (2) Section 25(e)(1)(C) is amended by inserting
25 "25C, 25D, and 25E" after "25B,".

1	(3) Section $25B(g)(2)$ is amended by striking
2	"section 23" and inserting "sections 23, 25C, 25D,
3	and 25E".
4	(4) Section 904(h) is amended by striking "and
5	25B" and inserting "25B, 25C, 25D, and 25E".
6	(5) Section 1400C(d) is amended by striking
7	"and 25B" and inserting "25B, 25C, 25D, and
8	25E".
9	(c) EFFECTIVE DATE.—The amendments made by
10	this section shall apply to taxable years beginning after
11	December 31, 2001.
12	SEC. 3115. PHASEOUT OF 4.3-CENT MOTOR FUEL EXCISE
13	TAXES ON RAILROADS AND INLAND WATER-
13 14	TAXES ON RAILROADS AND INLAND WATER- WAY TRANSPORTATION WHICH REMAIN IN
14	WAY TRANSPORTATION WHICH REMAIN IN
14 15	WAY TRANSPORTATION WHICH REMAIN IN GENERAL FUND.
14 15 16	WAY TRANSPORTATION WHICH REMAIN IN GENERAL FUND. (a) TAXES ON TRAINS.—
14 15 16 17	 WAY TRANSPORTATION WHICH REMAIN IN GENERAL FUND. (a) TAXES ON TRAINS.— (1) IN GENERAL.—Clause (ii) of section
14 15 16 17 18	 WAY TRANSPORTATION WHICH REMAIN IN GENERAL FUND. (a) TAXES ON TRAINS.— (1) IN GENERAL.—Clause (ii) of section 4041(a)(1)(C) is amended by striking subclauses (I),
14 15 16 17 18 19	 WAY TRANSPORTATION WHICH REMAIN IN GENERAL FUND. (a) TAXES ON TRAINS.— (1) IN GENERAL.—Clause (ii) of section 4041(a)(1)(C) is amended by striking subclauses (I), (II), and (III) and inserting the following new sub-
14 15 16 17 18 19 20	WAY TRANSPORTATION WHICH REMAIN IN GENERAL FUND. (a) TAXES ON TRAINS.— (1) IN GENERAL.—Clause (ii) of section 4041(a)(1)(C) is amended by striking subclauses (I), (II), and (III) and inserting the following new sub- clauses:
	020
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1	((II) 2.3 cents per gallon after
2	December 31, 2004, and before Janu-
3	ary 1, 2007,
4	"(III) 1.3 cents per gallon after
5	December 31, 2006, and before Janu-
6	ary 1, 2009,
7	"(IV) 0.3 cent per gallon after
8	December 31, 2008, and before Janu-
9	ary 1, 2010, and
10	"(V) 0 after December 31,
11	2009.''.
12	(2) Conforming Amendments.—
13	(A) Subsection (d) of section 4041 is
14	amended by redesignating paragraph (3) as
15	paragraph (4) and by inserting after paragraph
16	(2) the following new paragraph:
17	"(3) DIESEL FUEL USED IN TRAINS.—In the
18	case of any sale for use (or use) after September 30,
19	2010, there is hereby imposed a tax of 0.1 cent per
20	gallon on any liquid other than gasoline (as defined
21	in section 4083)—
22	"(A) sold by any person to an owner, les-
23	see, or other operator of a diesel-powered train
24	for use as a fuel in such train, or

1	"(B) used by any person as a fuel in a die-
2	sel-powered train unless there was a taxable
3	sale of such fuel under subparagraph (A).
4	No tax shall be imposed by this paragraph on the
5	sale or use of any liquid if tax was imposed on such
6	liquid under section 4081."
7	(B) Subsection (f) of section 4082 is
8	amended by striking "section $4041(a)(1)$ " and
9	inserting "subsections $(a)(1)$ and $(d)(3)$ of sec-
10	tion 4041".
11	(C) Subparagraph (B) of section
12	6421(f)(3) is amended to read as follows:
13	"(B) so much of the rate specified in sec-
14	tion $4081(a)(2)(A)$ as does not exceed the rate
15	applicable under section 4041(a)(1)(C)(ii).".
16	(D) Subparagraph (B) of section
17	6427(1)(3) is amended to read as follows:
18	"(B) so much of the rate specified in sec-
19	tion $4081(a)(2)(A)$ as does not exceed the rate
20	applicable under section 4041(a)(1)(C)(ii).".
21	(b) FUEL USED ON INLAND WATERWAYS.—Subpara-
22	graph (C) of section $4042(b)(2)$ is amended to read as
23	follows:
24	"(C) The deficit reduction rate is—

1	"(i) 3.3 cents per gallon after Sep-
2	tember 30, 2001, and before January 1,
3	2005,
4	"(ii) 2.3 cents per gallon after Decem-
5	ber 31, 2004, and before January 1, 2007,
6	"(iii) 1.3 cents per gallon after De-
7	cember 31, 2006, and before January 1,
8	2009,
9	"(iv) 0.3 cent per gallon after Decem-
10	ber 31, 2008, and before January 1, 2010,
11	and
12	"(v) 0 after December 31, 2009.".
13	(c) EFFECTIVE DATE.—The amendments made by
14	this section shall take effect on October 1, 2001.
15	SEC. 3116. REDUCED MOTOR FUEL EXCISE TAX ON CER-
16	TAIN MIXTURES OF DIESEL FUEL.
17	(a) IN GENERAL.—Clause (iii) of section
18	4081(a)(2)(A) is amended by inserting before the period
19	"(19.7 cents per gallon in the case of a diesel-water fuel
20	emulsion at least 14 percent of which is water)".
21	(b) Refunds for Tax-Paid Purchases.—
22	(1) IN GENERAL.—Section 6427 is amended by
23	redesignating subsections (m) through (p) as sub-
24	sections (n) through (q), respectively, and by insert-
25	ing after subsection (1) the following new subsection:

1 "(m) DIESEL FUEL USED TO PRODUCE EMUL-2 SION.—

3 "(1) IN GENERAL.—Except as provided in sub-4 section (k), if any diesel fuel on which tax was im-5 posed by section 4081 at the regular tax rate is used 6 by any person in producing an emulsion described in 7 section 4081(a)(2)(A) which is sold or used in such 8 person's trade or business, the Secretary shall pay 9 (without interest) to such person an amount equal to 10 the excess of the regular tax rate over the incentive 11 tax rate with respect to such fuel. 12 "(2) DEFINITIONS.—For purposes of paragraph 13 (1)— 14 "(A) REGULAR TAX RATE.—The term 'reg-15 ular tax rate' means the aggregate rate of tax 16 imposed by section 4081 determined without re-17 to the gard parenthetical in section 18 4081(a)(2)(A).

19 "(B) INCENTIVE TAX RATE.—The term
20 'incentive tax rate' means the aggregate rate of
21 tax imposed by section 4081 determined with
22 regard to the parenthetical in section
23 4081(a)(2)(A)."

24 (c) EFFECTIVE DATE.—The amendments made by25 this section shall take effect on October 1, 2001.

1SEC. 3117. CREDIT FOR INVESTMENT IN QUALIFYING AD-2VANCED CLEAN COAL TECHNOLOGY.

3 (a) ALLOWANCE OF QUALIFYING ADVANCED CLEAN
4 COAL TECHNOLOGY FACILITY CREDIT.—Section 46 (re5 lating to amount of credit) is amended by striking "and"
6 at the end of paragraph (2), by striking the period at the
7 end of paragraph (3) and inserting ", and", and by adding
8 at the end the following:

9 "(4) the qualifying advanced clean coal tech-10 nology facility credit.".

(b) AMOUNT OF QUALIFYING ADVANCED CLEAN
COAL TECHNOLOGY FACILITY CREDIT.—Subpart E of
part IV of subchapter A of chapter 1 (relating to rules
for computing investment credit) is amended by inserting
after section 48 the following:

16 "SEC. 48A. QUALIFYING ADVANCED CLEAN COAL TECH-17NOLOGY FACILITY CREDIT.

18 "(a) IN GENERAL.—For purposes of section 46, the 19 qualifying advanced clean coal technology facility credit 20 for any taxable year is an amount equal to 10 percent 21 of the qualified investment in a qualifying advanced clean 22 coal technology facility for such taxable year.

23 "(b) QUALIFYING ADVANCED CLEAN COAL TECH-24 NOLOGY FACILITY.—

25 "(1) IN GENERAL.—For purposes of subsection
26 (a), the term 'qualifying advanced clean coal tech•HR 4 IH

1	nology facility' means a facility of the taxpayer
2	which—
3	"(A)(i)(I) original use of which commences
4	with the taxpayer, or
5	"(II) is a retrofitted or repowered conven-
6	tional technology facility, the retrofitting or
7	repowering of which is completed by the tax-
8	payer (but only with respect to that portion of
9	the basis which is properly attributable to such
10	retrofitting or repowering), or
11	"(ii) is acquired through purchase (as de-
12	fined by section $179(d)(2)$,
13	"(B) is depreciable under section 167,
14	"(C) has a useful life of not less than 4
15	years,
16	"(D) is located in the United States, and
17	((E) uses qualifying advanced clean coal
18	technology.
19	"(2) Special rule for sale-leasebacks.—
20	For purposes of subparagraph (A) of paragraph (1),
21	in the case of a facility which—
22	"(A) is originally placed in service by a
23	person, and
24	"(B) is sold and leased back by such per-
25	son, or is leased to such person, within 3

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1	months after the date such facility was origi-
2	nally placed in service, for a period of not less
3	than 12 years,
4	such facility shall be treated as originally placed in
5	service not earlier than the date on which such prop-
6	erty is used under the leaseback (or lease) referred
7	to in subparagraph (B). The preceding sentence
8	shall not apply to any property if the lessee and les-
9	sor of such property make an election under this
10	sentence. Such an election, once made, may be re-
11	voked only with the consent of the Secretary.
12	"(c) Qualifying Advanced Clean Coal Tech-
13	NOLOGY.—For purposes of this section—
14	"(1) IN GENERAL.—The term 'qualifying ad-
15	vanced clean coal technology' means, with respect to
16	clean coal technology—
17	"(A) which has—
18	"(i) multiple applications, with a com-
19	bined capacity of not more than 5,000
20	megawatts (4,000 megawatts before 2009),
21	of advanced pulverized coal or atmospheric
22	fluidized bed combustion technology—
23	"(I) installed as a new, retrofit,
24	or repowering application,

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1	((II) operated between 2000 and
2	2012, and
3	"(III) having a design net heat
4	rate of not more than 9,500 Btu per
5	kilowatt hour when the design coal
6	has a heat content of more than 9,000
7	Btu per pound, or a design net heat
8	rate of not more than 9,900 Btu per
9	kilowatt hour when the design coal
10	has a heat content of 9,000 Btu per
11	pound or less,
12	"(ii) multiple applications, with a
13	combined capacity of not more than 1,000
14	megawatts (500 megawatts before 2009
15	and 750 megawatts before 2013), of pres-
16	surized fluidized bed combustion
17	technology-
18	"(I) installed as a new, retrofit,
19	or repowering application,
20	((II) operated between 2000 and
21	2016, and
22	"(III) having a design net heat
23	rate of not more than 8,400 Btu per
24	kilowatt hour when the design coal
25	has a heat content of more than 9,000

1	Btu per pound, or a design net heat
2	rate of not more than 9,900 Btu's per
3	kilowatt hour when the design coal
4	has a heat content of 9,000 Btu per
5	pound or less, and
6	"(iii) multiple applications, with a
7	combined capacity of not more than 2,000
8	megawatts $(1,000 \text{ megawatts before } 2009$
9	and 1,500 megawatts before 2013), of in-
10	tegrated gasification combined cycle tech-
11	nology, with or without fuel or chemical co-
12	production—
13	"(I) installed as a new, retrofit,
14	or repowering application,
15	"(II) operated between 2000 and
16	2016,
17	"(III) having a design net heat
18	rate of not more than 8,550 Btu per
19	kilowatt hour when the design coal
20	has a heat content of more than 9,000
21	Btu per pound, or a design net heat
22	rate of not more than 9,900 Btu per
23	kilowatt hour when the design coal
24	has a heat content of 9,000 Btu per
25	pound or less, and

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1	"(IV) having a net thermal effi-
2	ciency on any fuel or chemical co-pro-
3	duction of not less than 39 percent
4	(higher heating value), or
5	"(iv) multiple applications, with a
6	combined capacity of not more than 2,000
7	megawatts $(1,000 \text{ megawatts before } 2009$
8	and 1,500 megawatts before 2013) of tech-
9	nology for the production of electricity—
10	"(I) installed as a new, retrofit,
11	or repowering application,
12	"(II) operated between 2000 and
13	2016, and
14	"(III) having a carbon emission
15	rate which is not more than 85 per-
16	cent of conventional technology, and
17	"(B) which reduces the discharge into the
18	atmosphere of 1 or more of the following pollut-
19	ants to not more than—
20	"(i) 5 percent of the potential com-
21	bustion concentration sulfur dioxide emis-
22	sions for a coal with a potential combus-
23	tion concentration sulfur emission of 1.2
24	lb/million btu of heat input or greater,

1	"(ii) 15 percent of the potential com-
2	bustion concentration sulfur dioxide emis-
3	sions for a coal with a potential combus-
4	tion concentration sulfur emission of less
5	than 1.2 lb/million btu of heat input,
6	"(iii) nitrogen oxide emissions of 0.1
7	lb per million btu of heat input from other
8	than cyclone-fired boilers,
9	"(iv) 15 percent of the uncontrolled
10	nitrogen oxide emissions from cyclone-fired
11	boilers,
12	"(v) particulate emissions of 0.02 lb
13	per million btu of heat input, and
14	"(vi) the emission levels specified in
15	the new source performance standards of
16	the Clean Air Act (42 U.S.C. 7411) in ef-
17	fect at the time of retrofitting, repowering,
18	or replacement of the qualifying clean coal
19	technology unit for the category of source
20	if such level is lower than the levels speci-
21	fied in clause (i), (ii), (iii), (iv), or (v).
22	"(2) EXCEPTIONS.—Such term shall not in-
23	clude any projects receiving or scheduled to receive
24	funding under the Clean Coal Technology Program,

or the Power Plant Improvement administered by
 the Secretary of the Department of Energy.

3 "(d) CLEAN COAL TECHNOLOGY.—For purposes of 4 this section, the term 'clean coal technology' means ad-5 vanced technology which uses coal to produce 75 percent or more of its thermal output as electricity including ad-6 7 vanced pulverized coal or atmospheric fluidized bed com-8 bustion, pressurized fluidized bed combustion, integrated 9 gasification combined cycle with or without fuel or chem-10 ical co-production, and any other technology for the production of electricity which exceeds the performance of 11 12 conventional technology.

13 "(e) CONVENTIONAL TECHNOLOGY.—The term 'con-14 ventional technology' means—

15 "(1) coal-fired combustion technology with a de-16 sign net heat rate of not less than 9,500 Btu per kil-17 owatt hour (HHV) and a carbon equivalents emis-18 sion rate of not more than 0.54 pounds of carbon 19 per kilowatt hour when the design coal has a heat 20 content of more than 9,000 Btu per pound,

21 "(2) coal-fired combustion technology with a de22 sign net heat rate of not less than 10,500 Btu per
23 kilowatt hour (HHV) and a carbon equivalents emis24 sion rate of not more than 0.60 pounds of carbon

1	per kilowatt hour when the design coal has a heat
2	content of 9,000 Btu per pound or less, or
3	"(3) natural gas-fired combustion technology
4	with a design net heat rate of not less than 7,500
5	Btu per kilowatt hour (HHV) and a carbon equiva-
6	lents emission rate of not more than 0.24 pounds of
7	carbon per kilowatt hour.
8	"(f) DESIGN NET HEAT RATE.—The design net heat
9	rate shall be based on the design annual heat input to
10	and the design annual net electrical output from the quali-
11	fying advanced clean coal technology (determined without
12	regard to such technology's co-generation of steam).
13	"(g) Selection Criteria.—Selection criteria for
14	qualifying advanced clean coal technology facilities—
15	"(1) shall be established by the Secretary of
16	Energy as part of a competitive solicitation,
17	((2) shall include primary criteria of minimum
18	design net heat rate, maximum design thermal effi-
19	ciency, environmental performance, and lowest cost
20	to the government, and
21	"(3) shall include supplemental criteria as de-
22	termined appropriate by the Secretary of Energy.
23	"(h) Qualified Investment.—For purposes of
24	subsection (a), the term 'qualified investment' means, with
25	respect to any taxable year, the basis of a qualifying ad-

vanced clean coal technology facility placed in service by
 the taxpayer during such taxable year.

3 "(i) QUALIFIED PROGRESS EXPENDITURES.—

"(1) INCREASE IN QUALIFIED INVESTMENT.— 4 5 In the case of a taxpayer who has made an election 6 under paragraph (5), the amount of the qualified in-7 vestment of such taxpayer for the taxable year (de-8 termined under subsection (c) without regard to this 9 section) shall be increased by an amount equal to 10 the aggregate of each qualified progress expenditure 11 for the taxable year with respect to progress expend-12 iture property.

13 "(2) PROGRESS EXPENDITURE PROPERTY DE-14 FINED.—For purposes of this subsection, the term 15 'progress expenditure property' means any property 16 being constructed by or for the taxpayer and which 17 it is reasonable to believe will qualify as a qualifying 18 advanced clean coal technology facility which is 19 being constructed by or for the taxpayer when it is 20 placed in service.

21 "(3) QUALIFIED PROGRESS EXPENDITURES DE22 FINED.—For purposes of this subsection—

23 "(A) SELF-CONSTRUCTED PROPERTY.—In
24 the case of any self-constructed property, the
25 term 'qualified progress expenditures' means

1	the amount which, for purposes of this subpart,
2	is properly chargeable (during such taxable
3	year) to capital account with respect to such
4	property.
5	"(B) NONSELF-CONSTRUCTED PROP-
6	ERTY.—In the case of nonself-constructed prop-
7	erty, the term 'qualified progress expenditures'
8	means the amount paid during the taxable year
9	to another person for the construction of such
10	property.
11	"(4) Other definitions.—For purposes of
12	this subsection—
13	"(A) Self-constructed property.—
14	The term 'self-constructed property' means
15	property for which it is reasonable to believe
16	that more than half of the construction expendi-
17	tures will be made directly by the taxpayer.
18	"(B) NONSELF-CONSTRUCTED PROP-
19	ERTY.—The term 'nonself-constructed property'
20	means property which is not self-constructed
21	property.
22	"(C) CONSTRUCTION, ETC.—The term
23	'construction' includes reconstruction and erec-
24	tion, and the term 'constructed' includes recon-
25	structed and erected.

"(D) ONLY CONSTRUCTION OF QUALI FYING ADVANCED CLEAN COAL TECHNOLOGY
 FACILITY TO BE TAKEN INTO ACCOUNT.—Con struction shall be taken into account only if, for
 purposes of this subpart, expenditures therefor
 are properly chargeable to capital account with
 respect to the property.

8 "(5) ELECTION.—An election under this sub-9 section may be made at such time and in such man-10 ner as the Secretary may by regulations prescribe. 11 Such an election shall apply to the taxable year for 12 which made and to all subsequent taxable years. 13 Such an election, once made, may not be revoked ex-14 cept with the consent of the Secretary.

15 "(j) COORDINATION WITH OTHER CREDITS.—This 16 section shall not apply to any property with respect to 17 which the rehabilitation credit under section 47 or the en-18 ergy credit under section 48 is allowed unless the taxpayer 19 elects to waive the application of such credit to such prop-20 erty.

21 "(k) TERMINATION.—This section shall not apply
22 with respect to any qualified investment made after De23 cember 31, 2011.

24 "(I) NATIONAL LIMITATION.—

1	"(1) IN GENERAL.—Notwithstanding any other
2	provision of this section, the term 'qualifying ad-
3	vanced clean coal technology facility' shall include
4	such a facility only to the extent that such facility
5	is allocated a portion of the national megawatt limi-
6	tation under this subsection.
7	"(2) NATIONAL MEGAWATT LIMITATION.—The
8	national megawatt limitation under this subsection
9	is 7,500 megawatts.
10	"(3) Allocation of limitation.—The na-
11	tional megawatt limitation shall be allocated by the
12	Secretary under rules prescribed by the Secretary.
13	Not later than 6 months after the date of enactment
14	of this subsection, the Secretary shall prescribe such
15	regulations as may be necessary or appropriate to
16	carry out the purposes of this section, including
17	regulations—
18	"(A) to limit which facility qualifies as
19	'qualified advanced clean coal technology' in
20	subsection (c) to particular facilities, a portion
21	of particular facilities, or a portion of the pro-
22	duction from particular facilities, so that when
23	all such facilities (or portions thereof) are
24	placed in service over the ten year period in sec-
25	tion (k), the combination of facilities approved

1	for tax credits (and/or portions of facilities ap-
2	proved for tax credits) will not exceed a com-
3	bined capacity of 7,500 megawatts;
4	"(B) to provide a certification process in
5	consultation with the Secretary of Energy
6	under subsection (g) that will approve and allo-
7	cate the 7,500 megawatts of available tax cred-
8	its authority—
9	"(i) to encourage that facilities with
10	the highest thermal efficiencies and envi-
11	ronmental performance be placed in service
12	as soon as possible;
13	"(ii) to allocate credits to taxpayers
14	that have a definite and credible plan for
15	placing into commercial operation a quali-
16	fying advanced clean coal technology facil-
17	ity, including—
18	"(I) a site,
19	"(II) contractual commitments
20	for procurement and construction,
21	"(III) filings for all necessary
22	preconstruction approvals,
23	"(IV) a demonstrated record of
24	having successfully completed com-
25	parable projects on a timely basis, and

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1	"(V) such other factors that the
2	Secretary shall determine are appro-
3	priate;
4	"(iii) to allocate credits to a portion of
5	a facility (or a portion of the production
6	from a facility) if the Secretary determines
7	that such an allocation should maximize
8	the amount of efficient production encour-
9	aged with the available tax credits;
10	"(C) to set progress requirements and con-
11	ditional approvals so that credits for approved
12	projects that become unlikely to meet the nec-
13	essary conditions that can be reallocated by the
14	Secretary to other projects;
15	"(D) to reallocate credits that are not allo-
16	cated to 1 technology described in clauses (i)
17	through (iv) of subsection $(c)(1)(A)$ because an
18	insufficient number of qualifying facilities re-
19	quested credits for one technology, to another
20	technology described in another subparagraph
21	of subsection (c) in order to maximize the
22	amount of energy efficient production encour-
23	aged with the available tax credits; and
24	"(E) to provide taxpayers with opportuni-
<i>∠</i> - 1	(12) to provide taxpayers with op

ties to correct administrative errors and omis-

1	sions with respect to allocations and record-
2	keeping within a reasonable period after their
3	discovery, taking into account the availability of
4	regulations and other administrative guidance
5	from the Secretary.".
6	(c) RECAPTURE.—Section 50(a) (relating to other
7	special rules) is amended by adding at the end the fol-
8	lowing:
9	"(6) Special rules relating to qualifying
10	ADVANCED CLEAN COAL TECHNOLOGY FACILITY.—
11	For purposes of applying this subsection in the case
12	of any credit allowable by reason of section 48A, the
13	following shall apply:
14	"(A) GENERAL RULE.—In lieu of the
15	amount of the increase in tax under paragraph
16	(1), the increase in tax shall be an amount
17	equal to the investment tax credit allowed under
18	section 38 for all prior taxable years with re-
19	spect to a qualifying advanced clean coal tech-
20	nology facility (as defined by section $48A(b)(1)$)
21	multiplied by a fraction whose numerator is the
22	number of years remaining to fully depreciate
23	under this title the qualifying advanced clean
24	coal technology facility disposed of, and whose
25	denominator is the total number of years over

which such facility would otherwise have been
subject to depreciation. For purposes of the
preceding sentence, the year of disposition of
the qualifying advanced clean coal technology
facility property shall be treated as a year of remaining depreciation.

7 "(B) PROPERTY CEASES TO QUALIFY FOR PROGRESS EXPENDITURES.—Rules similar to 8 9 the rules of paragraph (2) shall apply in the 10 case of qualified progress expenditures for a 11 qualifying advanced clean coal technology facil-12 ity under section 48A, except that the amount 13 of the increase in tax under subparagraph (A) 14 of this paragraph shall be substituted in lieu of 15 the amount described in such paragraph (2).

16 "(C) APPLICATION OF PARAGRAPH.—This
17 paragraph shall be applied separately with re18 spect to the credit allowed under section 38 re19 garding a qualifying advanced clean coal tech20 nology facility.".

(d) TRANSITIONAL RULE.—Section 39(d) (relating to
transitional rules) is amended by adding at the end the
following:

24 "(14) NO CARRYBACK OF SECTION 48A CREDIT
25 BEFORE EFFECTIVE DATE.—No portion of the un-

1	used business credit for any taxable year which is
2	attributable to the qualifying advanced clean coal
3	technology facility credit determined under section
4	48A may be carried back to a taxable year ending
5	before January 1, 2002.".
6	(e) Technical Amendments.—
7	(1) Section $49(a)(1)(C)$ is amended by striking
8	"and" at the end of clause (ii), by striking the pe-
9	riod at the end of clause (iii) and inserting ", and",
10	and by adding at the end the following:
11	"(iv) the portion of the basis of any
12	qualifying advanced clean coal technology
13	facility attributable to any qualified invest-
14	ment (as defined by section 48A(c))."
15	(2) Section $50(a)(4)$ is amended by striking
16	"and (2)" and inserting ", (2), and (6)".
17	(3) Section 50(c) is amended by adding at the
18	end the following new paragraph:
19	"(6) Special rule for qualifying ad-
20	VANCED CLEAN COAL TECHNOLOGY FACILITIES.—
21	Paragraphs (1) and (2) shall not apply to any prop-
22	erty with respect to the credit determined under sec-
23	tion 48A."
24	(4) The table of sections for subpart E of part

serting after the item relating to section 48 the fol lowing:

"Sec. 48A. Qualifying advanced clean coal technology facility credit.".

3 (f) EFFECTIVE DATE.—The amendments made by
4 this section shall apply to periods after December 31,
5 2001, under rules similar to the rules of section 48(m)
6 of the Internal Revenue Code of 1986 (as in effect on the
7 day before the date of enactment of the Revenue Reconcili8 ation Act of 1990).

9 SEC. 3118. CREDIT FOR PRODUCTION FROM QUALIFYING 10 ADVANCED CLEAN COAL TECHNOLOGY.

(a) CREDIT FOR PRODUCTION FROM QUALIFYING
ADVANCED CLEAN COAL TECHNOLOGY.—Subpart D of
part IV of subchapter A of chapter 1 (relating to business
related credits) is amended by adding after section 45J
the following:

16 "SEC. 45K. CREDIT FOR PRODUCTION FROM QUALIFYING

17 ADVANCED CLEAN COAL TECHNOLOGY.

18 "(a) GENERAL RULE.—For purposes of section 38,
19 the qualifying advanced clean coal technology production
20 credit of any taxpayer for any taxable year is equal to—

- 21 "(1) the applicable amount of advanced clean22 coal technology production credit, multiplied by
- 23 "(2) the sum of—

24 "(A) the kilowatt hours of electricity, plus

"(B) each 3,413 Btu of fuels or chemicals,
 produced by the taxpayer during such taxable year
 at a qualifying advanced clean coal technology facil ity during the 10-year period beginning on the date
 the facility was originally placed in service.
 "(b) APPLICABLE AMOUNT.—For purposes of this

(b) APPLICABLE AMOUNT.—For purposes of this
r section, the applicable amount of advanced clean coal tech8 nology production credit with respect to production from
9 a qualifying advanced clean coal technology facility shall
10 be determined as follows:

11 "(1) Where the design coal has a heat content12 of more than 9,000 Btu per pound:

13 "(A) In the case of a facility originally
14 placed in service before 2009, if—

(ITTIN) 's	The applicable amount is:	
"The facility design net heat rate, Btu/kWh (HHV) is equal to:	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.

15 "(B) In the case of a facility originally
16 placed in service after 2008 and before 2013,

17

if—

"The facility design not have note Day (LWI) (IIIIV) is	The applicable amount is:	
"The facility design net heat rate, Btu/kWh (HHV) is	For 1st 5 years	For 2d 5 years of
equal to:	of such service	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 applicable amount is:	
"The facility design net heat rate, Btu/kWh (HHV) is	For 1st 5 years	For 2d 5 years of
equal to:	of such service	such service
Not more than 7,380	\$.0140	\$.01
More than 7,380 but not more than 7,720	\$.0120	\$.0090.

4 "(2) Where the design coal has a heat content
5 of not more than 9,000 Btu per pound:

6 "(A) In the case of a facility originally
7 placed in service before 2009, if—

	The applicable amount is:	
"The facility design net heat rate, Btu/kWh (HHV) is equal to:	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,500More than 8,500 but not more than 8,650More than 8,650 but not more than 8,750	\$.0060 \$.0025 \$.0010	\$.0038 \$.0010 \$.0010.

8 "(B) In the case of a facility originally
9 placed in service after 2008 and before 2013,
10 if—

	The applicable amount is:	
"The facility design net heat rate, Btu/kWh (HHV) is equal to:	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.

11 "(C) In the case of a facility originally
12 placed in service after 2012 and before 2017,
13 if—

"The facility design not heat note Pty/I-Wh (HHW) is	The applicable amount is:	
"The facility design net heat rate, Btu/kWh (HHV) is equal to:	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,800	\$.0140	\$.0115

"The facility desires not hast note Dty/LWL (HHW) is	The applicable amount is:	
"The facility design net heat rate, Btu/kWh (HHV) is equal to:	For 1st 5 years of such service	For 2d 5 years of such service
fore than 7,800 but not more than 7,950	\$.0120	\$.0090.

1	"(3) Where the clean coal technology facility is
2	producing fuel or chemicals:
3	"(A) In the case of a facility originally
4	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.

5 "(B) In the case of a facility originally
6 placed in service after 2008 and before 2013,
7 if—

	The applicable amount is:	
"The facility design net thermal efficiency (HHV) is equal to:	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.

8 "(C) In the case of a facility originally
9 placed in service after 2012 and before 2017,
10 if—

(The facility loging not the second off size or (THTW) is second	The applicable amount is:	
"The facility design net thermal efficiency (HHV) is equal	For 1st 5 years	For 2d 5 years of
to:	of such service	such service
Not less than 44.2 percent	\$.0140	\$.0115
Less than 44.2 but not less than 43.6 percent	\$.0120	\$.0090.

11 "(c) INFLATION ADJUSTMENT FACTOR.—For cal-12 endar years after 2001, each amount in paragraphs (1),

1 (2), and (3) shall be adjusted by multiplying such amount
2 by the inflation adjustment factor for the calendar year
3 in which the amount is applied. If any amount as in4 creased under the preceding sentence is not a multiple of
5 0.01 cent, such amount shall be rounded to the nearest
6 multiple of 0.01 cent.

7 "(d) DEFINITIONS AND SPECIAL RULES.—For pur8 poses of this section—

9 "(1) IN GENERAL.—Any term used in this sec10 tion which is also used in section 48A shall have the
11 meaning given such term in section 48A.

12 "(2) APPLICABLE RULES.—The rules of para13 graphs (3), (4), and (5) of section 45 shall apply.

14 "(3) INFLATION ADJUSTMENT FACTOR.—The
15 term 'inflation adjustment factor' means, with re16 spect to a calendar year, a fraction the numerator
17 of which is the GDP implicit price deflator for the
18 preceding calendar year and the denominator of
19 which is the GDP implicit price deflator for the cal20 endar year 2001.

21 "(4) GDP IMPLICIT PRICE DEFLATOR.—The
22 term 'GDP implicit price deflator' means the most
23 recent revision of the implicit price deflator for the
24 gross domestic product as computed by the Depart-

ment of Commerce before March 15 of the calendar
 year.".

3 (b) CREDIT TREATED AS BUSINESS CREDIT.—Sec-4 tion 38(b) is amended by striking "plus" at the end of 5 paragraph (18), by striking the period at the end of para-6 graph (19) and inserting ", plus", and by adding at the 7 end the following:

8 "(20) the qualifying advanced clean coal tech9 nology production credit determined under section
10 45K(a).".

(c) TRANSITIONAL RULE.—Section 39(d) (relating to
transitional rules) is amended by adding after paragraph
(14) the following:

14 "(15) NO CARRYBACK OF SECTION 45K CREDIT 15 BEFORE EFFECTIVE DATE.—No portion of the un-16 used business credit for any taxable year which is 17 attributable to the qualifying advanced clean coal 18 technology production credit determined under sec-19 tion 45K may be carried back to a taxable year end-20 ing before the date of enactment of section 45K.". 21 (d) CLERICAL AMENDMENT.—The table of sections 22 for subpart D of part IV of subchapter A of chapter 1 23 is amended by adding at the end the following:

"Sec. 45K. Credit for production from qualifying advanced clean coal technology.".

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

TITLE II—RELIABILITY

5 SEC. 3201. NATURAL GAS GATHERING LINES TREATED AS 7-

6 YEAR PROPERTY.

4

7 (a) IN GENERAL.—Subparagraph (C) of section
8 168(e)(3) (relating to classification of certain property) is
9 amended by striking "and" at the end of clause (i), by
10 redesignating clause (ii) as clause (iii), and by inserting
11 after clause (i) the following new clause:

12 "(ii) any natural gas gathering line,13 and".

(b) NATURAL GAS GATHERING LINE.—Subsection (i)
of section 168 is amended by adding after paragraph (15)
the following new paragraph:

17 "(16) NATURAL GAS GATHERING LINE.—The
18 term 'natural gas gathering line' means—

"(A) the pipe, equipment, and appurtenances determined to be a gathering line by
the Federal Energy Regulatory Commission, or
"(B) the pipe, equipment, and appurtenances used to deliver natural gas from the
wellhead or a commonpoint to the point at
which such gas first reaches—

1	"(i) a gas processing plant,
2	"(ii) an interconnection with a trans-
3	mission pipeline certificated by the Federal
4	Energy Regulatory Commission as an
5	interstate transmission pipeline,
6	"(iii) an interconnection with an
7	intrastate transmission pipeline, or
8	"(iv) a direct interconnection with a
9	local distribution company, a gas storage
10	facility, or an industrial consumer.".
11	(c) Alternative System.—The table contained in
12	section $168(g)(3)(B)$ is amended by inserting after the
13	item relating to subparagraph (C)(i) the following:
	"(C)(ii) 10".
14	(d) Alternative Minimum Tax Exception.—Sub-
15	paragraph (B) of section $56(a)(1)$ is amended by inserting
16	before the period the following: "or in clause (ii) of section
17	168(e)(3)(C)".
18	(e) EFFECTIVE DATE.—The amendments made by
19	this section shall apply to property placed in service after
20	the date of the enactment of this Act.
21	SEC. 3202. NATURAL GAS DISTRIBUTION LINES TREATED
22	AS 10-YEAR PROPERTY.
23	(a) IN GENERAL.—Subparagraph (D) of section
24	168(e)(3) (relating to classification of certain property) is
25	amended by striking "and" at the end of clause (i), by
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4 "(iii) any natural gas distribution 5 line."

6 (b) ALTERNATIVE SYSTEM.—The table contained in
7 section 168(g)(3)(B) is amended by inserting after the
8 item relating to subparagraph (D)(ii) the following:

9 (c) ALTERNATIVE MINIMUM TAX EXCEPTION.—Sub10 paragraph (B) of section 56(a)(1) is amended by inserting
11 before the period the following: "or in clause (iii) of section
12 168(e)(3)(D)".

13 (d) EFFECTIVE DATE.—The amendments made by
14 this section shall apply to property placed in service after
15 the date of the enactment of this Act.

16 SEC. 3203. PETROLEUM REFINING PROPERTY TREATED AS 17 7-YEAR PROPERTY.

(a) IN GENERAL.—Subparagraph (C) of section
19 168(e)(3) (relating to classification of certain property),
20 as amended by section 3201, is amended by striking
21 "and" at the end of clause (ii), by redesignating clause
22 (iii) as clause (iv), and by inserting after clause (ii) the
23 following new clause:

24 "(iii) any property used for the dis-25 tillation, fractionation, and catalytic crack-

3 (b) ALTERNATIVE SYSTEM.—The table contained in
4 section 168(g)(3)(B), as amended by section 3201, is
5 amended by inserting after the item relating to subpara6 graph (C)(ii) the following:

7 (c) ALTERNATIVE MINIMUM TAX EXCEPTION.—Sub8 paragraph (B) of section 56(a)(1), as amended by section
9 3201, is amended by inserting "or (iii)" after "clause
10 (ii)".

(d) EFFECTIVE DATE.—The amendment made bythis section shall apply to property placed in service afterthe date of the enactment of this Act.

14SEC. 3204. EXPENSING OF CAPITAL COSTS INCURRED IN15COMPLYING WITH ENVIRONMENTAL PROTEC-

16 TION AGENCY SULFUR REGULATIONS.

17 (a) IN GENERAL.—Section 179(b) (relating to elec18 tion to expense certain depreciable business assets) is
19 amended by adding at the end the following new para20 graph:

21 "(5) LIMITATION FOR SMALL BUSINESS REFIN22 ERS.—

23 "(A) IN GENERAL.—In the case of a small
24 business refiner electing to expense qualified
25 costs, in lieu of the dollar limitations in para-

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1 graph (1), the limitation on the aggregate costs 2 which may be taken into account under sub-3 section (a) for any taxable year shall not exceed 4 75 percent of the qualified costs. "(B) QUALIFIED COSTS.—For purposes of 5 6 this paragraph, the term 'qualified costs' means 7 costs paid or incurred by a small business re-8 finer for the purpose of complying with the 9 Highway Diesel Fuel Sulfur Control Require-10 ments of the Environmental Protection Agency. 11 "(C) SMALL BUSINESS REFINER.—For 12 purposes of this paragraph, the term 'small 13 business refiner' means, with respect to any 14 taxable year, a refiner which, within the refin-15 ing operations of the business, employs not 16 more than 1,500 employees on business days 17 during such taxable year performing services in 18 the refining operations of such businesses and

has an average total capacity of 155,000 barrels per day or less.".
(b) EFFECTIVE DATE.—The amendment made by

this section shall apply to expenses paid or incurred afterthe date of the enactment of this Act.

1 SEC. 3205. ENVIRONMENTAL TAX CREDIT.

2 (a) IN GENERAL.—Subpart D of part IV of sub3 chapter A of chapter 1 (relating to business-related cred4 its) is amended by adding at the end the following new
5 section:

6 "SEC. 45I. ENVIRONMENTAL TAX CREDIT.

7 "(a) IN GENERAL.—For purposes of section 38, the
8 amount of the environmental tax credit determined under
9 this section with respect to any small business refiner for
10 any taxable year is an amount equal to 5 cents for every
11 gallon of 15 parts per million or less sulfur diesel produced
12 at a facility by such small business refiner.

13 "(b) MAXIMUM CREDIT.—For any small business refiner, the aggregate amount allowable as a credit under 14 subsection (a) for any taxable year with respect to any 15 16 facility shall not exceed 25 percent of the qualified capital costs incurred by such small business refiner with respect 17 18 to such facility not taken into account in determining the 19 credit under subsection (a) for any preceding taxable year. "(c) DEFINITIONS.—For purposes of this section— 20"(1) Small business refiner.—The term 21 'small business refiner' means, with respect to any 22 23 taxable year, a refiner which, within the refining op-24 erations of the business, employs not more than 25 1,500 employees on business days during such tax-26 able year performing services in the refining oper-

"(2) QUALIFIED CAPITAL COSTS.—The term 3 4 'qualified capital costs' means, with respect to any 5 facility, those costs paid or incurred during the ap-6 plicable period for compliance with the applicable 7 EPA regulations with respect to such facility, includ-8 ing expenditures for the construction of new process 9 operation units or the dismantling and reconstruc-10 tion of existing process units to be used in the pro-11 duction of 15 parts per million or less sulfur diesel 12 fuel, associated adjacent or offsite equipment (in-13 cluding tankage, catalyst, and power supply), engi-14 neering, construction period interest, and sitework.

15 "(3) APPLICABLE EPA REGULATIONS.—The
16 term 'applicable EPA regulations' means the High17 way Diesel Fuel Sulfur Control Requirements of the
18 Environmental Protection Agency.

19 "(4) APPLICABLE PERIOD.—The term 'applica-20 ble period' means, with respect to any facility, the 21 period beginning on the day after the date of the en-22 actment of this section and ending with the date 23 which is one year after the date on which the tax-24 payer must comply with the applicable EPA regula-25 tions with respect to such facility. 1 "(d) REDUCTION IN BASIS.—For purposes of this 2 subtitle, if a credit is determined under this section with 3 respect to any property by reason of qualified capital 4 costs, the basis of such property shall be reduced by the 5 amount of the credit so determined.

6 "(e) CERTIFICATION.—

"(1) REQUIRED.—Not later than the date 7 8 which is 30 months after the first day of the first 9 taxable year in which the environmental tax credit is 10 allowed with respect to a facility, the small business 11 refiner must obtain certification from the Secretary, 12 in consultation with the Administrator of the Envi-13 ronmental Protection Agency, that the taxpayer's 14 qualified capital costs with respect to such facility 15 will result in compliance with the applicable EPA 16 regulations.

17 "(2) CONTENTS OF APPLICATION.—An applica-18 tion for certification shall include relevant informa-19 tion regarding unit capacities and operating charac-20 teristics sufficient for the Secretary, in consultation 21 with the Administrator of the Environmental Protec-22 tion Agency, to determine that such qualified capital 23 costs are necessary for compliance with the applica-24 ble EPA regulations.
"(3) REVIEW PERIOD.—Any application shall
 be reviewed and notice of certification, if applicable,
 shall be made within 60 days of receipt of such application.

5 "(4) RECAPTURE.—Notwithstanding subsection
6 (f), failure to obtain certification under paragraph
7 (1) constitutes a recapture event under subsection
8 (f) with an applicable percentage of 100 percent.

9 "(f) Recapture of Environmental Tax Cred-10 it.—

11 "(1) IN GENERAL.—Except as provided in sub-12 section (e), if, as of the close of any taxable year, 13 there is a recapture event with respect to any facility 14 of the small business refiner, then the tax of such 15 refiner under this chapter for such taxable year shall 16 be increased by an amount equal to the product of— "(A) the applicable recapture percentage, 17 18 and

"(B) the aggregate decrease in the credits
allowed under section 38 for all prior taxable
years which would have resulted if the qualified
capital costs of the taxpayer described in subsection (c)(2) with respect to such facility had
been zero.

25 "(2) Applicable recapture percentage.—

1	"(A) IN GENERAL.—For purposes of this
2	subsection, the applicable recapture percentage
3	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.

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4	"(B) YEARS.—For purposes of subpara-
5	graph (A), year 1 shall begin on the first day
6	of the taxable year in which the qualified cap-
7	ital costs with respect to a facility described in
8	subsection $(c)(2)$ are paid or incurred by the
9	taxpayer.

10 "(3) RECAPTURE EVENT DEFINED.—For pur11 poses of this subsection, the term 'recapture event'
12 means—

13 "(A) FAILURE TO COMPLY.—The failure
14 by the small business refiner to meet the appli15 cable EPA regulations within the applicable pe16 riod with respect to the facility.

17 "(B) CESSATION OF OPERATION.—The
18 cessation of the operation of the facility as a fa19 cility which produces 15 parts per million or
20 less sulfur diesel after the applicable period.

21 "(C) CHANGE IN OWNERSHIP.—

505
"(i) IN GENERAL.—Except as pro-
vided in clause (ii), the disposition of a
small business refiner's interest in the fa-
cility with respect to which the credit de-
scribed in subsection (a) was allowable.
"(ii) Agreement to assume recap-
ture liability.—Clause (i) shall not
apply if the person acquiring such interest
in the facility agrees in writing to assume
the recapture liability of the person dis-
posing of such interest in effect imme-
diately before such disposition. In the
event of such an assumption, the person
acquiring the interest in the facility shall
be treated as the taxpayer for purposes of
assessing any recapture liability (computed
as if there had been no change in owner-
ship).
"(4) Special Rules.—
"(A) TAX BENEFIT RULE.—The tax for
the taxable year shall be increased under para-
graph (1) only with respect to credits allowed
by reason of this section which were used to re-
duce tax liability. In the case of credits not so
used to reduce tax liability, the carryforwards

and carrybacks under section 39 shall be appro-
priately adjusted.
"(B) NO CREDITS AGAINST TAX.—Any in-
crease in tax under this subsection shall not be
treated as a tax imposed by this chapter for
purposes of determining the amount of any
credit under this chapter or for purposes of sec-
tion 55.
"(C) NO RECAPTURE BY REASON OF CAS-
UALTY LOSS.—The increase in tax under this
subsection shall not apply to a cessation of op-
eration of the facility by reason of a casualty
loss to the extent such loss is restored by recon-
struction or replacement within a reasonable pe-
riod established by the Secretary.
"(g) Controlled Groups.—For purposes of this
section, all persons treated as a single employer under sub-
section (b), (c), (m), or (o) of section 414 shall be treated
as a single employer.".
(b) Credit Made Part of General Business
CREDIT.—Subsection (b) of section 38 (relating to general
business credit) is amended by striking "plus" at the end
of paragraph (16), by striking the period at the end of
paragraph (17) and inserting ", plus", and by adding at

25 the end the following new paragraph:

"(18) in the case of a small business refiner,
 the environmental tax credit determined under sec tion 45I(a).".

4 (c) DENIAL OF DOUBLE BENEFIT.—Section 280C
5 (relating to certain expenses for which credits are allow6 able) is amended by adding after subsection (d) the fol7 lowing new subsection:

8 "(e) ENVIRONMENTAL TAX CREDIT.—No deduction 9 shall be allowed for that portion of the expenses otherwise 10 allowable as a deduction for the taxable year which is 11 equal to the amount of the credit determined for the tax-12 able year under section 45I(a).".

(d) BASIS ADJUSTMENT.—Section 1016(a) (relating
to adjustments to basis) is amended by striking "and" at
the end of paragraph (33), by striking the period at the
end of paragraph (34) and inserting ", and", and by adding at the end the following new paragraph:

18 "(35) in the case of a facility with respect to
19 which a credit was allowed under section 45I, to the
20 extent provided in section 45I(d).".

(e) CLERICAL AMENDMENT.—The table of sections
for subpart D of part IV of subchapter A of chapter 1
is amended by adding at the end the following new item: "Sec. 45I. Environmental tax credit.". (f) EFFECTIVE DATE.—The amendments made by
 this section shall apply to expenses paid or incurred after
 the date of the enactment of this Act.

4 SEC. 3206. DETERMINATION OF SMALL REFINER EXCEP-5 TION TO OIL DEPLETION DEDUCTION.

6 (a) IN GENERAL.—Paragraph (4) of section 613A(d)
7 (relating to certain refiners excluded) is amended to read
8 as follows:

9 "(4) CERTAIN REFINERS EXCLUDED.—If the 10 taxpayer or a related person engages in the refining 11 of crude oil, subsection (c) shall not apply to the 12 taxpayer for a taxable year if the average daily refin-13 ery runs of the taxpayer and the related person for 14 the taxable year exceed 75,000 barrels. For purposes 15 of this paragraph, the average daily refinery runs for 16 any taxable year shall be determined by dividing the 17 aggregate refinery runs for the taxable year by the 18 number of days in the taxable year.".

19 (b) EFFECTIVE DATE.—The amendment made by20 this section shall apply to taxable years beginning after21 December 31, 2001.

22 SEC. 3207. TAX-EXEMPT BOND FINANCING OF CERTAIN 23 ELECTRIC FACILITIES.

(a) IN GENERAL.—Subpart A of part IV of sub-chapter B of chapter 1 (relating to tax exemption require-

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1	ments for State and local bonds) is amended by inserting
2	after section 141 the following new section:
3	"SEC. 141A. TREATMENT OF GOVERNMENT-OWNED ELEC-
4	TRIC OUTPUT FACILITIES.
5	"(a) Exceptions From Private Business Use
6	Limitations Where Open Access Requirements
7	Met.—
8	"(1) GENERAL RULE.—For purposes of this
9	part, the term 'private business use' shall not
10	include—
11	"(A) any permitted open access activity by
12	a governmental unit with respect to an electric
13	output facility owned by such unit, or
14	"(B) any permitted sale of electricity by a
15	governmental unit which is generated at an ex-
16	isting generation facility owned by such unit.
17	"(2) Permitted open access activity.—For
18	purposes of this section—
19	"(A) IN GENERAL.—The term 'permitted
20	open access activity' means any activity meeting
21	the open access requirements of any of the fol-
22	lowing clauses with respect to such electric out-
23	put facility:
24	"(i) TRANSMISSION AND ANCILLARY
25	FACILITY.—In the case of a transmission

1	facility or a facility providing ancillary
2	services, the provision of transmission serv-
3	ice and ancillary services meets the open
4	access requirements of this clause only if
5	such services are provided on a non-
6	discriminatory open access basis—
7	"(I) pursuant to an open access
8	transmission tariff filed with and ap-
9	proved by FERC, including an accept-
10	able reciprocity tariff, or
11	"(II) under a regional trans-
12	mission organization agreement ap-
13	proved by FERC.
14	"(ii) DISTRIBUTION FACILITIES.—In
15	the case of a distribution facility, the deliv-
16	ery of electric energy meets the open ac-
17	cess requirements of this clause only if
18	such delivery is made on a nondiscrim-
19	inatory open access basis.
20	"(iii) GENERATION FACILITIES.—In
21	the case of a generation facility, the deliv-
22	ery of electric energy generated by such fa-
23	cility meets the open access requirements
24	of this clause only if—

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1	"(I) such facility is directly con-
2	nected to distribution facilities owned
3	by the governmental unit which owns
4	the generation facility, and
5	"(II) such distribution facilities
6	meet the open access requirements of
7	clause (ii).
8	"(B) Special rules.—
9	"(i) Voluntarily filed tariffs.—
10	Subparagraph (A)(i)(I) shall apply in the
11	case of a voluntarily filed tariff only if the
12	governmental unit files a report with
13	FERC within 90 days after the date of the
14	enactment of this section relating to
15	whether or not such governmental unit will
16	join a regional transmission organization.
17	"(ii) Control of transmission fa-
18	CILITIES BY REGIONAL TRANSMISSION OR-
19	GANIZATION.—A governmental unit shall
20	be treated as meeting the open access re-
21	quirements of subparagraph (A)(i) if a re-
22	gional transmission organization controls
23	the transmission facilities.
24	"(iii) ERCOT UTILITY.—References
25	to FERC in subparagraph (A) shall be

1	treated as references to the Public Utility
2	Commission of Texas with respect to any
3	ERCOT utility (as defined in section
4	212(k)(2)(B) of the Federal Power Act (16
5	U.S.C. 824k(k)(2)(B))).
6	"(3) PERMITTED SALE.—For purposes of this
7	subsection—
8	"(A) IN GENERAL.—The term 'permitted
9	sale' means—
10	"(i) any sale of electricity to an on-
11	system purchaser if the seller meets the
12	open access requirements of paragraph (2)
13	with respect to all distribution and trans-
14	mission facilities (if any) owned by such
15	seller, and
16	"(ii) subject to subparagraphs (B)
17	and (C), any sale of electricity to a whole-
18	sale native load purchaser, and any load
19	loss sale, if—
20	"(I) the seller meets the open ac-
21	cess requirements of paragraph (2)
22	with respect to all transmission facili-
23	ties (if any) owned by such seller, or
24	"(II) in any case in which the
25	seller does not own any transmission

1	facilities, all persons providing trans-
2	mission services to the seller's whole-
3	sale native load purchasers meet the
4	open access requirements of para-
5	graph (2) with respect to all trans-
6	mission facilities owned by such per-
7	sons.
8	"(B) LIMITATION ON SALES TO WHOLE-
9	SALE NATIVE LOAD PURCHASERS.—A sale to a
10	wholesale native load purchaser shall be treated
11	as a permitted sale only to the extent that—
12	"(i) such purchaser resells the elec-
13	tricity directly at retail to persons within
14	the purchaser's distribution area, or
15	"(ii) such electricity is resold by such
16	purchaser through one or more wholesale
17	purchasers (each of whom as of June 30,
18	2000, was a party to a requirements con-
19	tract or a firm power contract described in
20	paragraph $(5)(B)(ii))$ to retail purchasers
21	in the ultimate wholesale purchaser's dis-
22	tribution area.
23	"(C) Load loss sales.—

"(i) IN GENERAL.—The term 'load 1 2 loss sale' means any sale at wholesale to 3 the extent that— "(I) the aggregate sales at whole-4 sale during the recovery period does 5 6 not exceed the load loss mitigation 7 sales limit for such period, and 8 "(II) the aggregate sales at 9 wholesale during the first calendar 10 year after the recovery period does not 11 exceed the excess carried under clause 12 (iv) to such year. "(ii) LOAD LOSS MITIGATION SALES 13 14 LIMIT.—For purposes of clause (i), the 15 load loss mitigation sales limit for the re-16 covery period is the sum of the annual load 17 losses for each year of such period. 18 "(iii) ANNUAL LOAD LOSS.—A govern-19 mental unit's annual load loss for each 20 year of the recovery period is the amount 21 (if any) by which— "(I) the megawatt hours of elec-22 23 tric energy sold during such year to 24 wholesale native load purchasers

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1	which do not constitute private busi-
2	ness use are less than
3	"(III) the megawatt hours of
4	electric energy sold during the base
5	year to wholesale native load pur-
6	chasers which do not constitute pri-
7	vate business use.
8	The annual load loss for any year shall not
9	exceed the portion of the amount deter-
10	mined under the preceding sentence which
11	is attributable to open access requirements.
12	"(iv) CARRYOVERS.—If the limitation
13	under clause (i) for the recovery period ex-
14	ceeds the aggregate sales during such pe-
15	riod which are taken into account under
16	clause (i), such excess (but not more than
17	10 percent of such limitation) may be car-
18	ried over to the first calendar year fol-
19	lowing the recovery period.
20	"(v) Recovery period.—The recov-
21	ery period is the 7-year period beginning
22	with the start-up year.
23	"(vi) Start-up year.—The start-up
24	year is the calendar year which includes
25	the date of the enactment of this section

1	or, if later, at the election of the govern-
2	mental unit—
3	"(I) the first year that the gov-
4	ernmental unit offers nondiscrim-
5	inatory open transmission access, or
6	"(II) the first year in which at
7	least 10 percent of the governmental
8	unit's wholesale customers' aggregate
9	retail native load is open to retail
10	competition.
11	"(4) ON-SYSTEM PURCHASER.—For purposes of
12	this section, the term 'on-system purchaser' means
13	any person whose electric equipment is directly con-
14	nected with any transmission or distribution facility
15	owned by the governmental unit owning the existing
16	generation facility if—
17	"(A) such person—
18	"(i) purchases electric energy from
19	such governmental unit at retail, and
20	"(ii)(I) was within such unit's dis-
21	tribution area at the close of the base year
22	or
23	"(II) is a person as to whom the gov-
24	ernmental unit has a statutory service obli-
25	gation, or

1	"(B) is a wholesale native load purchaser
2	from such governmental unit.
3	"(5) Wholesale native load purchaser.—
4	For purposes of this section—
5	"(A) IN GENERAL.—The term 'wholesale
6	native load purchaser' means a wholesale pur-
7	chaser as to whom the governmental unit had—
8	"(i) a statutory service obligation at
9	wholesale at the close of the base year, or
10	"(ii) an obligation at the close of the
11	base year under a requirements or firm
12	sales contract if, as of June 30, 2000, such
13	contract had been in effect for (or had an
14	initial term of) at least 10 years.
15	"(B) Permitted sales under existing
16	CONTRACTS.—A private business use sale dur-
17	ing any year to a wholesale native load pur-
18	chaser (other than a person to whom the gov-
19	ernmental unit had a statutory service obliga-
20	tion) under a contract shall be treated as a per-
21	mitted sale by reason of being a load loss sale
22	only to the extent that the private business use
23	sales under the contract during such year ex-
24	ceed the lesser of—

"(i) the private business use sales 1 2 under the contract during the base year, or "(ii) the maximum private business 3 4 use sales which would (but for this section) 5 be permitted without causing the bonds to 6 be private activity bonds. 7 This subparagraph shall only apply to the ex-8 tent that the sale is allocable to bonds issued 9 before the date of the enactment of this section 10 (or bonds issued to refund such bonds). 11 "(6) Special rules.— "(A) TIME OF SALE RULE.—For purposes 12 13 of paragraphs (3)(C)(iii) and (5)(B), the deter-14 mination of whether a sale after the date of the 15 enactment of this section is a private business 16 use shall be made with regard to this section. 17 "(B) JOINT ACTION AGENCIES.—To the 18 extent provided in regulations, a joint action 19 agency, or a member of (or a wholesale native 20 load purchaser from) a joint action agency, 21 which is entitled to make a sale described in 22 subparagraph (A) or (B) in a year, may trans-23 fer the entitlement to make that sale to the 24 member (or purchaser), or the joint action

agency, respectively.

1	"(b) Certain Bonds for Transmission and Dis-
2	TRIBUTION FACILITIES NOT TAX EXEMPT.—
3	"(1) IN GENERAL.—Section 103 shall not apply
4	to any bond issued on or after the date of the enact-
5	ment of this section if any portion of the proceeds
6	of the issue of which such bond is a part is used (di-
7	rectly or indirectly) to finance—
8	"(A) any electric transmission facility, or
9	"(B) any start-up electric utility distribu-
10	tion facility.
11	"(2) Exceptions relating to transmission
12	FACILITIES.—Paragraph (1)(A) shall not apply to
13	any bond issued to finance—
14	"(A) any repair of a transmission facility
15	in service on the date of the enactment of this
16	section, so long as the repair does not—
17	"(i) increase the voltage level of such
18	facility over its level at the close of the
19	base year, or
20	"(ii) increase the thermal load limit of
21	such facility by more than 3 percent over
22	such limit at the close of the base year,
23	"(B) any qualifying upgrade of an electric
24	transmission facility in service on the date of
25	the enactment of this section, or

1	"(C) any transmission facility necessary to
2	comply with an obligation under a shared or re-
3	ciprocal transmission agreement in effect on
4	such date.
5	"(3) Exception for local electric trans-
6	MISSION FACILITY.—For purposes of this
7	subsection—
8	"(A) IN GENERAL.—In the case of a gov-
9	ernmental unit which owns distribution facili-

ties, paragraph (1)(A) shall not apply to any bond issued to finance an electric transmission facility owned by such governmental unit and located within such governmental unit's dis-tribution area, but only to the extent such facil-ity is, or will be, necessary to supply electricity to serve the retail native load, or wholesale na-tive load, of such governmental unit or of 1 or more other governmental units owning distribu-tion facilities which are directly connected to such electric transmission facility.

"(B) RETAIL LOAD.—The term 'retail load' means, with respect to a governmental unit, the electric load of end-users in the dis-tribution area of the governmental unit.

1	"(C) WHOLESALE NATIVE LOAD.—The
2	term 'wholesale native load' means—
3	"(i) the retail load of such unit's
4	wholesale native load purchasers (or of an
5	ultimate wholesale purchaser described in
6	subsection $(a)(3)(B)(ii))$, and
7	"(ii) the electric load of purchasers
8	(not described in clause (i)) under whole-
9	sale requirements contracts which—
10	"(I) do not constitute private
11	business use (determined without re-
12	gard to this section), and
13	"(II) were in effect in the base
14	year.
15	"(D) NECESSARY TO SERVE LOAD.—For
16	purposes of determining whether a transmission
17	facility is, or will be, necessary to supply elec-
18	tricity to retail native load or wholesale native
19	load—
20	"(i) the governmental unit's available
21	transmission rights shall be taken into ac-
22	count,
23	"(ii) electric reliability standards or
24	requirements of national or regional reli-
25	ability organizations, regional transmission

1	organizations and the Electric Reliability
2	Council of Texas shall be taken into ac-
3	count, and
4	"(iii) transmission, siting and con-
5	struction decisions of regional transmission
6	organizations and State and Federal regu-
7	latory and siting agencies, after a pro-
8	ceeding that provides for public input,
9	shall be presumptive evidence regarding
10	whether transmission facilities are nec-
11	essary to serve native load.
12	"(E) QUALIFYING UPGRADE.—The term
13	'qualifying upgrade' means an improvement or
14	addition to transmission facilities of the govern-
15	mental unit in service on the date of the enact-
16	ment of this section which—
17	"(i) is ordered or approved by a re-
18	gional transmission organization or by a
19	State regulatory or siting agency, after a
20	proceeding that provides for public input,
21	and
22	"(ii) is, or will be, necessary to supply
23	electricity to serve the retail native load, or
24	wholesale native load, of such govern-
25	mental unit or of one or more govern-

1	mental units owning distribution facilities
2	which are directly connected to such trans-
3	mission facility.
4	"(4) Start-up electric utility distribu-
5	TION FACILITY DEFINED.—For purposes of this sub-
6	section, the term 'start-up electric utility distribution
7	facility' means any distribution facility to provide
8	electric service for sale to the public if such facility
9	is placed in service—
10	"(A) by a governmental unit that did not
11	operate an electric utility on the date of the en-
12	actment of this section, and
13	"(B) during the first 10 years after the
14	date such governmental unit begins operating
15	an electric utility.
16	A governmental unit is treated as having operated
17	an electric utility on the date of the enactment of
18	this section if it operates electric output facilities
19	which were (on such date) operated by another gov-
20	ernmental unit to provide electric service for sale to
21	the public.
22	"(5) Exception for refunding bonds.—
23	"(A) IN GENERAL.—Paragraph (1) shall
24	not apply to any eligible refunding bond.

1	"(B) ELIGIBLE REFUNDING BOND.—For
2	purposes of subparagraph (A), the term 'eligible
3	refunding bond' means any bond (or series of
4	bonds) issued to refund any bond issued before
5	the date of the enactment of this section if the
6	average maturity date of the issue of which the
7	refunding bond is a part is not later than the
8	average maturity date of the bonds to be re-
9	funded by such issue.
10	"(c) Definitions; Special Rules.—For purposes
11	of this section—
12	"(1) BASE YEAR.—The term 'base year'
13	means—
14	"(A) the calendar year preceding the start-
15	up year, or
16	"(B) at the election of the governmental
17	unit, the second or third calendar years pre-
18	ceding the start-up year.
19	"(2) DISTRIBUTION AREA.—The term 'distribu-
20	tion area' means the area in which a governmental
21	unit owns distribution facilities.
22	"(3) ELECTRIC OUTPUT FACILITY.—The term
23	'electric output facility' means an output facility
24	that is an electric generation, transmission, or dis-
25	tribution facility.

"(4) DISTRIBUTION FACILITY.—The term 'dis tribution facility' means an electric output facility
 that is not a generation or transmission facility.

((5))4 TRANSMISSION FACILITY.—The term 5 'transmission facility' means an electric output facil-6 ity (other than a generation facility) that operates at 7 an electric voltage of 69 kV or greater. To the ex-8 tent provided in regulations, such term includes any 9 output facility that FERC determines is a trans-10 mission facility under standards applied by FERC 11 under the Federal Power Act (as in effect on the 12 date of the enactment of this section).

13 "(6) EXISTING GENERATION FACILITY.—

14 ''(A) IN GENERAL.—The term 'existing
15 generation facility' means any electric genera16 tion facility if—

17 "(i) such facility is originally placed in
18 service on or before the date of enactment
19 of this Act and is owned by any govern20 mental unit on such date, or

21 "(ii) such facility is originally placed
22 in service after such date if the construc23 tion of the facility commenced before June
24 1, 2000, and such facility is owned by any

1	governmental unit when it is placed in
2	service.
3	"(B) DENIAL OF TREATMENT TO EXPAN-
4	SIONS.—Such term shall not include any facility
5	to the extent the generating capacity of such fa-
6	cility as of any date is 3 percent above the
7	greater of its nameplate or rated capacity as of
8	the date of the enactment of this section (or, in
9	the case of a facility described in subparagraph
10	(A)(ii), the date that the facility is placed in
11	service).
12	"(7) REGIONAL TRANSMISSION ORGANIZA-
13	TION.—The term 'regional transmission organiza-
14	tion' includes an independent system operator.
15	"(8) FERC.—The term 'FERC' means the
16	Federal Energy Regulatory Commission.
17	"(9) Government-owned facility.—An elec-
18	tric transmission facility shall be treated as owned
19	by a governmental unit as of any date to the extent
20	that—
21	"(A) such unit acquired (before the base
22	year) long-term firm transmission capacity (as
23	determined under regulations) of such facility
24	for the purposes of serving customers to which
25	such unit had at the close of the base year—

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1	"(i) a statutory service obligation, or
2	"(ii) an obligation under a require-
3	ments contract, and
4	"(B) such unit holds such capacity as of
5	such date.
6	"(10) STATUTORY SERVICE OBLIGATION.—The
7	term 'statutory service obligation' means an obliga-
8	tion under State or Federal law (exclusive of an obli-
9	gation arising solely under a contract entered into
10	with a person) to provide electric distribution serv-
11	ices or electric sales services, as provided in such
12	law.
13	"(11) Contract modifications.—A material
14	modification of a contract shall be treated as a new
15	contract.
16	"(d) Election To Terminate Tax-Exempt Bond
17	FINANCING FOR CERTAIN ELECTRIC OUTPUT FACILI-
18	TIES.—
19	"(1) IN GENERAL.—At the election of a govern-
20	mental unit, section 103(a) shall not apply to any
21	bond issued by or on behalf of such unit after the
22	date of such election if any portion of the proceeds
23	of the issue of which such bond is a part are used
24	to provide any electric output facilities. Such an
25	election, once made, shall be irrevocable.

1	"(2) Other effects of election.—During
2	the period that the election under paragraph (1) is
3	in effect with respect to a governmental unit, the
4	term 'private activity bond' shall not include—
5	"(A) any bond issued by such unit before
6	the date of the enactment of this section to pro-
7	vide an electric output facility if, as of the date
8	of the election, such bond was not a private ac-
9	tivity bond, and
10	"(B) any bond to which paragraph (1)
11	does not apply by reason of paragraph (3).
12	"(3) Exceptions for certain property.—
13	"(A) IN GENERAL.—Paragraph (1) shall
14	not apply to any bond issued to provide prop-
15	erty owned by a governmental unit if such prop-
16	erty is—
17	"(i) any qualifying transmission facil-
18	ity,
19	"(ii) any qualifying distribution facil-
20	ity,
21	"(iii) any facility necessary to meet
22	Federal or State environmental require-
23	ments applicable to an existing generation
24	facility owned by the governmental unit as
25	of the date of the election,

"(iv) any property to repair any exist-1 2 ing generation facility owned by the governmental unit as of the date of the elec-3 4 tion, "(v) any qualified facility (as defined 5 6 in section 45(c)(3) producing electricity 7 from any qualified energy resource (as de-8 fined in section 45(c)(1), and 9 "(vi) any energy property (as defined 10 in section 48(a)(3) placed in service dur-11 ing a period that the energy percentage 12 under section 48(a) is greater than zero. 13 "(B) LIMITATION ON USE BY NONGOVERN-14 MENTAL PERSONS.—Subparagraph (A) shall 15 not apply to any property constructed, acquired 16 or financed for a principal purpose of providing 17 the facility (or the output thereof) to non-18 governmental persons.

19 DEFINITIONS.—For purposes (4)of this 20 subsection-

21 "(A) QUALIFYING DISTRIBUTION FACIL-22 ITY.—The term 'qualifying distribution facility' 23 means a distribution facility meeting the open 24 access requirements of subsection (a)(2)(A)(ii).

1	"(B) QUALIFYING TRANSMISSION FACIL-
2	ITY.—The term 'qualifying transmission facil-
3	ity' means a local transmission facility (as de-
4	fined in subsection $(b)(3)$ meeting the open ac-
5	cess requirements of subsection $(a)(2)(A)(i)$.
6	"(5) Effect of election.—
7	"(A) IN GENERAL.—An election under
8	paragraph (1) shall be binding on any successor
9	in interest to, or any related party with respect
10	to, the electing governmental unit. For purposes
11	of this paragraph, a governmental unit shall be
12	treated as related to another governmental unit
13	if it is a member of the same controlled group
14	(as determined under regulations).
15	"(B) TREATMENT OF ELECTING GOVERN-
16	MENTAL UNIT.—A governmental unit which
17	makes an election under paragraph (1) shall be
18	treated for purposes of section 141 as a
19	person—
20	"(i) which is not a governmental unit,
21	and
22	"(ii) which is engaged in a trade or
23	business,
24	with respect to its purchase of electricity gen-
25	erated by an electric output facility placed in

service after the date of such election if such
 purchase is under a contract executed after
 such date."

4 (b) WAIVER OF CERTAIN LIMITATIONS NOT TO
5 APPLY TO DISTRIBUTION FACILITIES.—Section 141(d)(5)
6 is amended by inserting "(except in the case of an electric
7 output facility that is a distribution facility)" after "this
8 subsection".

9 (c) CLERICAL AMENDMENT.—The table of sections
10 for subpart A of part IV of subchapter B of chapter 1
11 is amended by inserting after the item relating to section
12 141 the following new item:

"Sec. 141A. Treatment of government-owned electric output facilities."

13 (d) Effective Date.—

14 (1) IN GENERAL.—The amendments made by
15 this section shall take effect on the date of the en16 actment of this Act, except that a governmental unit
17 may elect to have section 141A(a)(1) of the Internal
18 Revenue Code of 1986, as added by subsection (a),
19 take effect on April 14, 1996.

20 (2) BINDING CONTRACTS.—The amendment
21 made by subsection (b) (relating to waiver of certain
22 limitations not to apply to distribution facilities)
23 shall not apply to facilities acquired pursuant to a
24 contract which was entered into before the date of

the enactment of this Act and which was binding on
 such date and at all times thereafter before such ac quisition.

4 (3)COMPARABLE TREATMENT TO BONDS 5 UNDER 1954CODE RULES.—References in the 6 amendments made by this Act to sections of the In-7 ternal Revenue Code of 1986 shall be deemed to in-8 clude references to comparable sections of the Inter-9 nal Revenue Code of 1954.

10SEC. 3208. SALES OR DISPOSITIONS TO IMPLEMENT FED-11ERAL ENERGY REGULATORY COMMISSION12OR STATE ELECTRIC RESTRUCTURING POL-13ICY.

(a) IN GENERAL.—Section 1033 (relating to involuntary conversions) is amended by redesignating subsection
(k) as subsection (l) and by inserting after subsection (j)
the following new subsection:

18 "(k) SALES OR DISPOSITIONS TO IMPLEMENT FED19 ERAL ENERGY REGULATORY COMMISSION OR STATE
20 ELECTRIC RESTRUCTURING POLICY.—

21 "(1) IN GENERAL.—For purposes of this sub22 title, if a taxpayer elects the application of this sub23 section to a qualifying electric transmission
24 transaction—

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1	"(A) such transaction shall be treated as
2	an involuntary conversion to which this section
3	applies, and
4	"(B) exempt utility property shall be treat-
5	ed as property which is similar or related in
6	service or use to the property disposed of in
7	such transaction.
8	"(2) EXTENSION OF REPLACEMENT PERIOD.—
9	In the case of any involuntary conversion described
10	in paragraph (1), subsection $(a)(2)(B)$ shall be ap-
11	plied by substituting '4 years' for '2 years' in clause
12	(i) thereof.
13	"(3) QUALIFYING ELECTRIC TRANSMISSION
14	TRANSACTION.—For purposes of this subsection, the
15	term 'qualifying electric transmission transaction'
16	means any sale or other disposition before January
17	1, 2009, of—
18	"(A) property used in the trade or business
19	of providing electric transmission services, or
20	"(B) any stock or partnership interest in a
21	corporation or partnership, as the case may be,
22	whose principal trade or business consists of
23	providing electric transmission services,
24	but only if such sale or disposition is to an inde-
25	pendent transmission company.

1	"(4) INDEPENDENT TRANSMISSION COM-
2	PANY.—For purposes of this subsection, the term
3	'independent transmission company' means—
4	"(A) a regional transmission organization
5	approved by the Federal Energy Regulatory
6	Commission,
7	"(B) a person—
8	"(i) who the Federal Energy Regu-
9	latory Commission determines in its au-
10	thorization of the transaction under section
11	203 of the Federal Power Act (16 U.S.C.
12	823b) is not a market participant within
13	the meaning of such Commission's rules
14	applicable to regional transmission organi-
15	zations, and
16	"(ii) whose transmission facilities to
17	which the election under this subsection
18	applies are under the operational control of
19	a Federal Energy Regulatory Commission-
20	approved regional transmission organiza-
21	tion before the close of the period specified
22	in such authorization, but not later than
23	the close of the period applicable under
24	subsection $(a)(2)(B)$ as extended under
25	paragraph (2), or

1	"(C) in the case of facilities subject to the
2	exclusive jurisdiction of the Public Utility Com-
3	mission of Texas, a person which is approved by
4	that Commission as consistent with Texas State
5	law regarding an independent transmission or-
6	ganization.
7	"(5) EXEMPT UTILITY PROPERTY.—For pur-
8	poses of this subsection—
9	"(A) IN GENERAL.—The term 'exempt
10	utility property' means property used in the
11	trade or business of—
12	"(i) generating, transmitting, distrib-
13	uting, or selling electricity, or
14	"(ii) producing, transmitting, distrib-
15	uting, or selling natural gas.
16	"(B) NONRECOGNITION OF GAIN BY REA-
17	SON OF ACQUISITION OF STOCK.—Acquisition of
18	control of a corporation shall be taken into ac-
19	count under this section with respect to a quali-
20	fying electric transmission transaction only if
21	the principal trade or business of such corpora-
22	tion is a trade or business referred to in sub-
23	paragraph (A).
24	"(6) Special rule for consolidated
25	GROUPS.—In the case of a corporation which is a

member of an affiliated group filing a consolidated return, such corporation shall be treated as satisfying the purchase requirement of subsection (a)(2) with respect to any qualifying electric transmission transaction engaged in by such corporation to the extent such requirement is satisfied by another member of such group.

8 "(7) ELECTION.—An election under paragraph
9 (1), once made, shall be irrevocable."

(b) EXCEPTION FROM GAIN RECOGNITION UNDER
SECTION 1245.—Subsection (b) of section 1245 is amended by adding at the end the following new paragraph:

13 "(9) DISPOSITIONS TO IMPLEMENT FEDERAL 14 ENERGY REGULATORY COMMISSION OR STATE ELEC-15 TRIC RESTRUCTURING POLICY.—At the election of 16 the taxpayer, the amount of gain which would (but 17 for this paragraph) be recognized under this section 18 on any qualified electric transmission transaction (as 19 defined in section 1033(k)) for which an election 20 under section 1033 is made shall be reduced by the 21 aggregate reduction in the basis of section 1245 22 property held by the taxpayer or, if insufficient, by 23 a member of an affiliated group which includes the 24 taxpayer at any time during the taxable year in 25 which such transaction occurred. The manner and

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1	amount of such reduction shall be determined under
2	regulations prescribed by the Secretary."
3	(c) EFFECTIVE DATE.—The amendments made by
4	this section shall apply to transactions occurring after the
5	date of the enactment of this Act.
6	SEC. 3209. DISTRIBUTIONS OF STOCK TO IMPLEMENT FED-
7	ERAL ENERGY REGULATORY COMMISSION
8	OR STATE ELECTRIC RESTRUCTURING POL-
9	ICY.
10	(a) IN GENERAL.—Subparagraph (A) of section
11	355(e)(3) (relating to special rules relating to acquisi-
12	tions) is amended by inserting after clause (iv) the fol-
13	lowing new clause:
14	"(v) The acquisition of stock in any
15	controlled corporation in a qualifying elec-
16	tric transmission transaction (as defined in
17	section 1033(k)).".
18	(b) EFFECTIVE DATE.—The amendment made by
19	subsection (a) shall apply to distributions after the date
20	of the enactment of this Act.
21	SEC. 3210. MODIFICATIONS TO SPECIAL RULES FOR NU-
22	CLEAR DECOMMISSIONING COSTS.
23	(a) Repeal of Limitation on Deposits Into
24	FUND BASED ON COST OF SERVICE; CONTRIBUTIONS

AFTER FUNDING PERIOD.—Subsection (b) of section
 468A is amended to read as follows:

"(b) LIMITATION ON AMOUNTS PAID INTO FUND.—
"(1) IN GENERAL.—The amount which a taxpayer may pay into the Fund for any taxable year
shall not exceed the ruling amount applicable to
such taxable year.

8 "(2) Contributions after funding pe-9 RIOD.—Notwithstanding any other provision of this 10 section, a taxpayer may pay into the Fund in any 11 taxable year after the last taxable year to which the 12 ruling amount applies. Payments may not be made 13 under the preceding sentence to the extent such pay-14 ments would cause the assets of the Fund to exceed 15 the nuclear decommissioning costs allocable to the 16 taxpayer's current or former interest in the nuclear 17 powerplant to which the Fund relates. The limita-18 tion under the preceding sentence shall be deter-19 mined by taking into account a reasonable rate of 20 inflation for the nuclear decommissioning costs and 21 a reasonable after-tax rate of return on the assets 22 of the Fund until such assets are anticipated to be 23 expended.".
(b) CLARIFICATION OF TREATMENT OF FUND
 TRANSFERS.—Subsection (e) of section 468A is amended
 by adding at the end the following new paragraph:

4 "(8) TREATMENT OF FUND TRANSFERS.—If, in 5 connection with the transfer of the taxpayer's inter-6 est in a nuclear powerplant, the taxpayer transfers 7 the Fund with respect to such powerplant to the 8 transferee of such interest and the transferee elects 9 to continue the application of this section to such 10 Fund—

"(A) the transfer of such Fund shall not
cause such Fund to be disqualified from the application of this section, and

14 "(B) no amount shall be treated as distrib15 uted from such Fund, or be includible in gross
16 income, by reason of such transfer.".

17 (c) TREATMENT OF CERTAIN DECOMMISSIONING18 COSTS.—

(1) IN GENERAL.—Section 468A is amended by
redesignating subsections (f) and (g) as subsections
(g) and (h), respectively, and by inserting after subsection (e) the following new subsection:

23 "(f) TRANSFERS INTO QUALIFIED FUNDS.—

24 "(1) IN GENERAL.—Notwithstanding subsection25 (b), any taxpayer maintaining a Fund to which this

1	section applies with respect to a nuclear powerplant
2	may transfer into such Fund up to an amount equal
3	to the excess of the total nuclear decommissioning
4	costs with respect to such nuclear powerplant over
5	the portion of such costs taken into account in de-
6	termining the ruling amount in effect immediately
7	before the transfer.
8	"(2) DEDUCTION FOR AMOUNTS TRANS-
9	FERRED.—
10	"(A) IN GENERAL.—The deduction allowed
11	by subsection (a) for any transfer permitted by
12	this subsection shall be allowed ratably over the
13	remaining estimated useful life (within the
14	meaning of subsection $(d)(2)(A)$ of the nuclear
15	powerplant beginning with the taxable year dur-
16	ing which the transfer is made.
17	"(B) DENIAL OF DEDUCTION FOR PRE-
18	VIOUSLY DEDUCTED AMOUNTS.—No deduction
19	shall be allowed for any transfer under this sub-
20	section of an amount for which a deduction was
21	previously allowed or a corresponding amount
22	was not included in gross income. For purposes
23	of the preceding sentence, a ratable portion of
24	each transfer shall be treated as being from

1	previously deducted or excluded amounts to the
2	extent thereof.
3	"(C) TRANSFERS OF QUALIFIED FUNDS.—
4	If—
5	"(i) any transfer permitted by this
6	subsection is made to any Fund to which
7	this section applies, and
8	"(ii) such Fund is transferred there-
9	after,
10	any deduction under this subsection for taxable
11	years ending after the date that such Fund is
12	transferred shall be allowed to the transferee
13	and not to the transferor. The preceding sen-
14	tence shall not apply if the transferor is an or-
15	ganization exempt from tax imposed by this
16	chapter.
17	"(D) Special rules.—
18	"(i) GAIN OR LOSS NOT RECOG-
19	NIZED.—No gain or loss shall be recog-
20	nized on any transfer permitted by this
21	subsection.
22	"(ii) TRANSFERS OF APPRECIATED
23	PROPERTY.—If appreciated property is
24	transferred in a transfer permitted by this
25	subsection, the amount of the deduction

1	shall be the adjusted basis of such prop-
2	erty.
3	"(3) New Ruling Amount Required.—Para-
4	graph (1) shall not apply to any transfer unless the
5	taxpayer requests from the Secretary a new schedule
6	of ruling amounts in connection with such transfer.
7	"(4) NO BASIS IN QUALIFIED FUNDS.—Not-
8	withstanding any other provision of law, the tax-
9	payer's basis in any Fund to which this section ap-
10	plies shall not be increased by reason of any transfer
11	permitted by this subsection.".
12	(2) New ruling amount to take into ac-
13	COUNT TOTAL COSTS.—Subparagraph (A) of section
14	468A(d)(2) is amended to read as follows:
15	"(A) fund the total nuclear decommis-
16	sioning costs with respect to such powerplant
17	over the estimated useful life of such power-
18	plant, and".
19	(d) Deduction for Nuclear Decommissioning
20	COSTS WHEN PAID.—Paragraph (2) of section 468A(c)
21	is amended to read as follows:
22	"(2) DEDUCTION OF NUCLEAR DECOMMIS-
23	SIONING COSTS.—In addition to any deduction under
24	subsection (a), nuclear decommissioning costs paid
25	or incurred by the taxpayer during any taxable year

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1	shall constitute ordinary and necessary expenses in
2	carrying on a trade or business under section 162.".
3	(e) EFFECTIVE DATE.—The amendments made by
4	this section shall apply to taxable years beginning after
5	December 31, 2001.
6	SEC. 3211. TREATMENT OF CERTAIN INCOME OF COOPERA-
7	TIVES.
8	(a) Income From Open Access and Nuclear De-
9	COMMISSIONING TRANSACTIONS.—
10	(1) IN GENERAL.—Subparagraph (C) of section
11	501(c)(12) is amended by striking "or" at the end
12	of clause (i), by striking the period at the end of
13	clause (ii) and inserting a comma, and by adding at
14	the end the following new clauses:
15	"(iii) from any open access trans-
16	action (other than income received or ac-
17	crued directly or indirectly from a mem-
18	ber), or
19	"(iv) from any nuclear decommis-
20	sioning transaction."
21	(2) Definitions.—Paragraph (12) of section
22	501(c) is amended by adding at the end the fol-
23	lowing new subparagraph:
24	"(E) For purposes of subparagraph (C)—

1	"(i) The term 'open access trans-
2	action' means any activity which would be
3	a permitted open access activity (as de-
4	fined in section $141A(a)(2)$) if the coopera-
5	tive were a governmental unit.
6	"(ii) The term 'nuclear decommis-
7	sioning transaction' means—
8	"(I) any transfer into a trust,
9	fund, or instrument established to pay
10	any nuclear decommissioning costs if
11	the transfer is in connection with the
12	transfer of the cooperative's interest
13	in a nuclear powerplant or nuclear
14	powerplant unit,
15	"(II) any distribution from such
16	a trust, fund, or instrument, or
17	"(III) any earnings from such a
18	trust, fund, or instrument."
19	(b) Income From Load Loss Transactions
20	TREATED AS MEMBER INCOME.—Paragraph (12) of sec-
21	tion 501(c) is amended by adding after subparagraph (E)
22	the following new subparagraph:
23	"(F)(i) In the case of a mutual or coopera-
24	tive electric company, income received or ac-
25	crued from a load loss transaction shall be

1	treated as an amount collected from members
2	for the sole purpose of meeting losses and ex-
3	penses.
4	"(ii) For purposes of clause (i), the term
5	'load loss transaction' means any sale (whether
6	at wholesale or at retail) which would be a load
7	loss sale under rules similar to the rules of sec-
8	tion 141A(a)(3)(C).
9	"(iii) A company shall not fail to be treat-
10	ed as a mutual cooperative company for pur-
11	poses of this paragraph by reason of the treat-
12	ment under clause (i).
13	"(iv) A rule similar to the rule of this sub-
14	paragraph shall apply to an organization to
15	which section 1381 does not apply by reason of
16	section 1381(a)(2)(C)."
17	(c) Exception From Unrelated Business Tax-
18	ABLE INCOME.—Subsection (b) of section 512 (relating to
19	modifications) is amended by adding at the end the fol-
20	lowing new paragraph:
21	"(18) TREATMENT OF LOAD LOSS SALES OF
22	MUTUAL OR COOPERATIVE ELECTRIC COMPANIES.—
23	In the case of a mutual or cooperative electric com-
24	pany described in section $501(c)(12)$, there shall be

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1	excluded income which is treated as member income
2	under subparagraph (F) thereof."
3	(d) EFFECTIVE DATE.—The amendments made by
4	this section shall apply to taxable years beginning after
5	the date of the enactment of this Act.
6	SEC. 3212. REPEAL OF REQUIREMENT OF CERTAIN AP-
7	PROVED TERMINALS TO OFFER DYED DIESEL
8	FUEL AND KEROSENE FOR NONTAXABLE
9	PURPOSES.
10	Section 4101 (relating to certain approved terminals
11	of registered persons required to offer dyed diesel fuel and
12	kerosene for nontaxable purposes) is amended by striking
13	subsection (e).
14	SEC. 3213. ARBITRAGE RULES NOT TO APPLY TO PREPAY-
15	MENTS FOR NATURAL GAS.
16	(a) IN GENERAL.—Subsection (b) of section 148 (de-
17	fining higher yielding investments) is amended by adding
18	at the end the following new paragraph:
19	"(4) EXCEPTION FOR CERTAIN PREPAYMENTS
20	to ensure natural gas supply.—The term 'in-
21	vestment property' shall not include any prepayment
22	for the purpose of obtaining a supply of a natural
23	gas—

"(A) at least 85 percent of which is to be
 used in the State in which the issuer is located,
 and

4 "(B) which is to be used in a business of
5 one or more utilities each of which is owned and
6 operated by a State or local government, any
7 political subdivision or instrumentality thereof,
8 or any governmental unit acting for or on behalf of such a utility.".

10 (b) PRIVATE LOAN FINANCING TEST NOT TO APPLY 11 TO PREPAYMENTS FOR NATURAL GAS.—Paragraph (2) of 12 section 141(c) (providing exceptions to the private loan fi-13 nancing test) is amended by striking "or" at the end of 14 subparagraph (A), by striking the period at the end of 15 subparagraph (B) and inserting ", or", and by adding at 16 the end the following new subparagraph:

17 "(C) arises from a transaction described in18 section 148(b)(4).".

(c) EFFECTIVE DATE.—The amendments made by
this section shall apply to obligations issued after October
22, 1986; except that section 148(b)(4)(A) of the Internal
Revenue Code of 1986, as added by this section, shall
apply only to obligations issued after the date of the enactment of this Act.

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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—

100
"(i) in the case of qualified crude oil
production, the reference price determined
under section $29(d)(2)(C)$, and
"(ii) in the case of qualified natural
gas production, the Secretary's estimate of
the annual average wellhead price per
1,000 cubic feet for all domestic natural
gas.
"(c) Qualified Crude Oil and Natural Gas
PRODUCTION.—For purposes of this section—
"(1) IN GENERAL.—The terms 'qualified crude
oil production' and 'qualified natural gas production'
mean domestic crude oil or natural gas which is pro-
duced from a qualified marginal well.
"(2) Limitation on amount of production
WHICH MAY QUALIFY.—
"(A) IN GENERAL.—Crude oil or natural
gas produced during any taxable year from any
well shall not be treated or qualified crude oil
production or qualified natural gas production
to the extent production from the well during
the taxable year exceeds 1,095 barrels or barrel
equivalents.
"(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—

"(I) has average daily production
of not more than 25 barrel equiva-
lents, and
"(II) produces water at a rate
not less than 95 percent of total well
effluent.
"(B) CRUDE OIL, ETC.—The terms 'crude
oil', 'natural gas', 'domestic', and 'barrel' have
the meanings given such terms by section
613A(e).
"(C) BARREL EQUIVALENT.—The term
'barrel equivalent' means, with respect to nat-
ural gas, a conversation ratio of 6,000 cubic
feet of natural gas to 1 barrel of crude oil.
"(d) Other Rules.—
"(1) Production attributable to the tax-
PAYER.—In the case of a qualified marginal well in
which there is more than one owner of operating in-
terests in the well and the crude oil or natural gas
production exceeds the limitation under subsection
(c)(2), qualifying crude oil production or qualifying
natural gas production attributable to the taxpayer
shall be determined on the basis of the ratio which
taxpayer's revenue interest in the production bears

to the aggregate of the revenue interests of all oper 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.

"(3) PRODUCTION FROM NONCONVENTIONAL
SOURCES EXCLUDED.—In the case of production
from a qualified marginal well which is eligible for
the credit allowed under section 29 for the taxable
year, no credit shall be allowable under this section
unless the taxpayer elects not to claim the credit
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.".

(b) CREDIT TREATED AS BUSINESS CREDIT.—Section 38(b) is amended by striking "plus" at the end of
paragraph (17), by striking the period at the end of paragraph (18) and inserting ", plus", and by adding at the
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".

(e) CLERICAL AMENDMENT.—The table of sections
 for subpart D of part IV of subchapter A of chapter I
 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 be6 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 TAX10 ABLE INCOME LIMIT WITH RESPECT TO MAR11 GINAL PRODUCTION.

(a) LIMITATION BASED ON 65 PERCENT OF TAXABLE INCOME.—Subsection (d) of section 613A (relating
to limitation on percentage depletion in case of oil and
gas wells) is amended by adding at the end the following
new paragraph:

17 "(6) TEMPORARY SUSPENSION OF TAXABLE IN18 COME LIMIT.—Paragraph (1) shall not apply to tax19 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 para22 graph (1) to such taxable years.".

(b) EXTENSION OF SUSPENSION OF TAXABLE IN24 COME LIMIT WITH RESPECT TO MARGINAL PRODUC25 TION.—Subparagraph (H) of section 613A(c)(6) (relating

to temporary suspension of taxable income limit with re spect to marginal production) is amended by striking
 "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.".

(b) CONFORMING AMENDMENT.—Section 263A(c)(3)
 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 tax5 able years beginning after December 31, 2001.

6 SEC. 3304. ELECTION TO EXPENSE GEOLOGICAL AND GEO7 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 geological and geophysical expenses incurred in connection 14 15 with the exploration for, or development of, oil or gas within the United States (as defined in section 638) as ex-16 17 penses which are not chargeable to capital account. Any expenses so treated shall be allowed as a deduction in the 18 taxable year in which paid or incurred.". 19

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),".

(c) EFFECTIVE DATE.—The amendments made by
this section shall apply to costs paid or incurred in taxable
years beginning after December 31, 2001.

1 SEC. 3305. 5-YEAR NET OPERATING LOSS CARRYBACK FOR

2	LOSSES ATTRIBUTABLE TO OPERATING MIN-
3	ERAL 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-

1	scribed in subparagraph (A) or (B)(i) of subsection
2	(c)(1)—
3	"(A) Application of credit for new
4	WELLS.—Notwithstanding subsection (f), this
5	section shall apply with respect to such fuels—
6	"(i) which are produced from a well
7	drilled after the date of the enactment of
8	this subsection and before January 1,
9	2007, and
10	"(ii) which are sold not later than the
11	close of the 4-year period beginning on the
12	date that such well is drilled, or, if earlier,
13	January 1, 2010.
14	"(B) EXTENSION OF CREDIT FOR OLD
15	WELLS.—Subsection $(f)(2)$ shall be applied by
16	substituting '2007' for '2003' with respect to
17	wells described in subsection $(f)(1)(A)$ with re-
18	spect to such fuels.
19	"(2) EXTENSION FOR FACILITIES PRODUCING
20	QUALIFIED FUEL FROM LANDFILL GAS.—
21	"(A) IN GENERAL.—In the case of a facil-
22	ity for producing qualified fuel from landfill gas
23	which was placed in service after June 30,
24	1998, and before January 1, 2007, this section
25	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.
13 14	AGAINST REGULAR AND MINIMUM TAX. (a) IN GENERAL.—Subsection (c) of section 38 (re-
14	(a) IN GENERAL.—Subsection (c) of section 38 (re- lating to limitation based on amount of tax) is amended
14 15	(a) IN GENERAL.—Subsection (c) of section 38 (re- lating to limitation based on amount of tax) is amended
14 15 16	(a) IN GENERAL.—Subsection (c) of section 38 (re- lating to limitation based on amount of tax) is amended by redesignating paragraph (3) as paragraph (4) and by
14 15 16 17	(a) IN GENERAL.—Subsection (c) of section 38 (re- lating to limitation based on amount of tax) is amended by redesignating paragraph (3) as paragraph (4) and by inserting after paragraph (2) the following new paragraph:
14 15 16 17 18	 (a) IN GENERAL.—Subsection (c) of section 38 (relating to limitation based on amount of tax) is amended by redesignating paragraph (3) as paragraph (4) and by inserting after paragraph (2) the following new paragraph: "(3) SPECIAL RULES FOR SPECIFIED ENERGY
14 15 16 17 18 19	 (a) IN GENERAL.—Subsection (c) of section 38 (relating to limitation based on amount of tax) is amended by redesignating paragraph (3) as paragraph (4) and by inserting after paragraph (2) the following new paragraph: "(3) SPECIAL RULES FOR SPECIFIED ENERGY CREDITS.—
 14 15 16 17 18 19 20 	 (a) IN GENERAL.—Subsection (c) of section 38 (relating to limitation based on amount of tax) is amended by redesignating paragraph (3) as paragraph (4) and by inserting after paragraph (2) the following new paragraph: "(3) SPECIAL RULES FOR SPECIFIED ENERGY CREDITS.— "(A) IN GENERAL.—In the case of speci-
 14 15 16 17 18 19 20 21 	 (a) IN GENERAL.—Subsection (c) of section 38 (relating to limitation based on amount of tax) is amended by redesignating paragraph (3) as paragraph (4) and by inserting after paragraph (2) the following new paragraph: "(3) SPECIAL RULES FOR SPECIFIED ENERGY CREDITS.— "(A) IN GENERAL.—In the case of specified energy credits—

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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 enactment of this Act.
21	SEC. 3308. TEMPORARY REPEAL OF ALTERNATIVE MIN-
22	IMUM TAX PREFERENCE FOR INTANGIBLE
23	DRILLING COSTS.
23 24	DRILLING COSTS. (a) IN GENERAL.—Clause (ii) of section 57(a)(2)(E)

tence: "The preceding sentence shall not apply to taxable
 years beginning after December 31, 2001, and before Jan 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."

(b) EFFECTIVE DATE.—The amendment made by
this section shall apply to taxable years beginning after
December 31, 2001.

17 SEC. 3310. EXTENSION OF CERTAIN BENEFITS FOR EN-

18 ERGY-RELATED BUSINESSES ON INDIAN RES19 ERVATIONS.

(a) DEPRECIATION FOR PROPERTY ON INDIAN RES21 ERVATIONS.—Paragraph (8) of section 168(j) (relating to
22 termination) is amended by adding at the end the fol23 lowing new sentence: "The preceding sentence shall be ap24 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)."

DIVISION D 1 2 SEC. 4101. CAPACITY BUILDING FOR ENERGY-EFFICIENT, 3 AFFORDABLE HOUSING. 4 Section 4(b) of the HUD Demonstration Act of 1993 (42 U.S.C. 9816 note) is amended— 5 6 (1) in paragraph (1), by inserting before the semicolon at the end the following: ", including ca-7 8 pabilities regarding the provision of energy efficient, 9 affordable housing and residential energy conserva-10 tion measures"; and 11 (2) in paragraph (2), by inserting before the semicolon the following: ", including such activities 12 13 relating to the provision of energy efficient, afford-14 able housing and residential energy conservation 15 measures that benefit low-income families". 16 SEC. 4102. INCREASE OF CDBG PUBLIC SERVICES CAP FOR 17 ENERGY CONSERVATION AND EFFICIENCY 18 **ACTIVITIES.** 19 Section 105(a)(8) of the Housing and Community Development Act of 1974 (42 U.S.C. 5305(a)(8)) is 20 21 amended-(1) by inserting "or efficiency" after "energy 22 23 conservation"; 24 (2) by striking ", and except that" and inserting "; except that"; and 25

1 (3) by inserting before the period at the end the 2 following: "; and except that each percentage limita-3 tion under this paragraph on the amount of assistance provided under this title that may be used for 4 5 the provision of public services is hereby increased 6 by 10 percent, but such percentage increase may be 7 used only for the provision of public services con-8 cerning energy conservation or efficiency". 9 SEC. 4103. FHA MORTGAGE INSURANCE INCENTIVES FOR 10 **ENERGY EFFICIENT HOUSING.** 11 (a) SINGLE FAMILY HOUSING MORTGAGE INSUR-12 ANCE.—Section 203(b)(2) of the National Housing Act (12 U.S.C. 1709(b)(2)) is amended, in the first undesig-13 nated paragraph beginning after subparagraph (B)(iii) 14 15 (relating to solar energy systems)— (1) by inserting "or paragraph (10)"; and 16 17 (2) by striking "20 percent" and inserting "30 18 percent". 19 (b) MULTIFAMILY HOUSING MORTGAGE INSUR-

20 ANCE.—Section 207(c) of the National Housing Act (12
21 U.S.C. 1713(c)) is amended, in the second undesignated
22 paragraph beginning after paragraph (3) (relating to solar
23 energy systems and residential energy conservation meas24 ures), by striking "20 percent" and inserting "30 per25 cent".

(c) COOPERATIVE HOUSING MORTGAGE INSUR ANCE.—Section 213(p) of the National Housing Act (12
 U.S.C. 1715e(p)) is amended by striking "20 per centum"
 and inserting "30 percent".

(d) REHABILITATION AND NEIGHBORHOOD CON6 SERVATION HOUSING MORTGAGE INSURANCE.—Section
7 220(d)(3)(B)(iii) of the National Housing Act (12 U.S.C.
8 1715k(d)(3)(B)(iii)) is amended by striking "20 per cen9 tum" and inserting "30 percent".

(e) LOW-INCOME MULTIFAMILY HOUSING MORTGAGE INSURANCE.—Section 221(k) of the National Housing Act (12 U.S.C. 1715l(k)) is amended by striking "20
per centum" and inserting "30 percent".

(f) ELDERLY HOUSING MORTGAGE INSURANCE.—
The proviso at the end of section 213(c)(2) of the National
Housing Act (12 U.S.C. 1715v(c)(2)) is amended by striking "20 per centum" and inserting "30 percent".

(g) CONDOMINIUM HOUSING MORTGAGE INSURANCE.—Section 234(j) of the National Housing Act (12
U.S.C. 1715y(j)) is amended by striking "20 per centum"
and inserting "30 percent".

22 SEC. 4104. PUBLIC HOUSING CAPITAL FUND.

23 Section 9(d)(1) of the United States Housing Act of
24 1937 (42 U.S.C. 1437g(d)(1)) is amended—

1	(1) in subparagraph (I), by striking "and" at
2	the end;
3	(2) in subparagraph (K), by striking the period
4	at the end and inserting "; and"; and
5	(3) by adding at the end the following new sub-
6	paragraph:
7	"(L) improvement of energy and water-use
8	efficiency by installing fixtures and fittings that
9	conform to the American Society of Mechanical
10	Engineers/American National Standards Insti-
11	tute standards A112.19.2-1998 and A112.18.1-
12	2000, or any revision thereto, applicable at the
13	time of installation, and by increasing energy
14	efficiency and water conservation by such other
15	means as the Secretary determines are appro-
16	priate.".
17	SEC. 4105. GRANTS FOR ENERGY-CONSERVING IMPROVE-
18	MENTS FOR ASSISTED HOUSING.
19	Section 251(b)(1) of the National Energy Conserva-
20	tion Policy Act (42 U.S.C. 8231(1)) is amended—
21	(1) by striking "financed with loans" and in-
22	serting "assisted";
23	(2) by inserting after "1959," the following:
24	"which are eligible multifamily housing projects (as
25	such term is defined in section 512 of the Multi-

family Assisted Housing Reform and Affordability
 Act of 1997 (42 U.S.C. 1437f note)) and are subject
 to a mortgage restructuring and rental assistance
 sufficiency plans under such Act,"; and

(3) by inserting after the period at the end of 5 6 the first sentence the following new sentence: "Such 7 improvements may also include the installation of 8 energy and water conserving fixtures and fittings 9 that conform to the American Society of Mechanical 10 Engineers/American National Standards Institute 11 standards A112.19.2-1998 and A112.18.1-2000, or 12 any revision thereto, applicable at the time of installation.". 13

14 SEC. 4106. NORTH AMERICAN DEVELOPMENT BANK.

Part 2 of subtitle D of title V of the North American
Free Trade Agreement Implementation Act (22 U.S.C.
290m–290m-3) is amended by adding at the end the following:

19 "SEC. 545. SUPPORT FOR CERTAIN ENERGY POLICIES.

20 "Consistent with the focus of the Bank's Charter on 21 environmental infrastructure projects, the Board members 22 representing the United States should use their voice and 23 vote to encourage the Bank to finance projects related to 24 clean and efficient energy, including energy conservation, that prevent, control, or reduce environmental pollutants
 or contaminants.".

DIVISION E

4 SEC. 5000. SHORT TITLE.

3

5 This division may be cited as the "Clean Coal Power6 Initiative Act of 2001".

7 SEC. 5001. FINDINGS.

8 Congress finds that—

9 (1) reliable, affordable, increasingly clean elec10 tricity will continue to power the growing United
11 States economy;

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

(3) coal, which, as of the date of enactment of
this Act, accounts for more than ¹/₂ of all electricity
generated in the United States, is the most abundant fossil energy resource of the United States;

(4) coal comprises more than 85 percent of all
fossil resources in the United States and exists in
quantities sufficient to supply the United States for
25 250 years at current usage rates;

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

7 (6) continuous improvement in efficiency and
8 environmental performance from electricity gener9 ating facilities would allow continued use of coal and
10 preserve less abundant energy resources for other
11 energy uses;

(7) new ways to convert coal into electricity can
effectively eliminate health-threatening emissions
and improve efficiency by as much as 50 percent,
but initial deployment of new coal generation methods and equipment entails significant risk that generators may be unable to accept in a newly competitive electricity market; and

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

24 SEC. 5002. DEFINITIONS.

25 In this division:

1	(1) COST AND PERFORMANCE GOALS.—The
2	term "cost and performance goals" means the cost
3	and performance goals established under section
4	5004.
5	(2) Secretary.—The term "Secretary" means
6	the Secretary of Energy.
7	SEC. 5003. CLEAN COAL POWER INITIATIVE.
8	(a) IN GENERAL.—The Secretary shall carry out a
9	program under—
10	(1) this division;
11	(2) the Federal Nonnuclear Energy Research
12	and Development Act of 1974 (42 U.S.C. 5901 et
13	seq.);
14	(3) the Energy Reorganization Act of 1974 (42)
15	U.S.C. 5801 et seq.); and
16	(4) title XIII of the Energy Policy Act of 1992
17	(42 U.S.C. 13331 et seq.),
18	to achieve cost and performance goals established by the
19	Secretary under section 5004.
20	SEC. 5004. COST AND PERFORMANCE GOALS.
21	(a) Review and Assessment.—The Secretary shall
22	perform an assessment that establishes measurable cost
23	and performance goals for 2005, 2010, 2015, and 2020
24	for the programs authorized by this division. Such assess-

1	ment shall be based on the latest scientific, economic, and
2	technical knowledge.
3	(b) CONSULTATION.—In establishing the cost and
4	performance goals, the Secretary shall consult with rep-
5	resentatives of—
6	(1) the United States coal industry;
7	(2) State coal development agencies;
8	(3) the electric utility industry;
9	(4) railroads and other transportation indus-
10	tries;
11	(5) manufacturers of advanced coal-based
12	equipment;
13	(6) institutions of higher learning, national lab-
14	oratories, and professional and technical societies;
15	(7) organizations representing workers;
16	(8) organizations formed to—
17	(A) promote the use of coal;
18	(B) further the goals of environmental pro-
19	tection; and

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

23 (9) other appropriate Federal and State agen-24 cies.

25 (c) TIMING.—The Secretary shall—
(1) not later than 120 days after the date of
 enactment of this Act, issue a set of draft cost and
 performance goals for public comment; and

4 (2) not later than 180 days after the date of
5 enactment of this Act, after taking into consider6 ation any public comments received, submit to the
7 Committee on Energy and Commerce and the Com8 mittee on Science of the House of Representatives,
9 and to the Senate, the final cost and performance
10 goals.

11 SEC. 5005. AUTHORIZATION OF APPROPRIATIONS.

(a) CLEAN COAL POWER INITIATIVE.—Except as
provided in subsection (c), there are authorized to be appropriated to the Secretary to carry out the Clean Coal
Power Initiative under section 5003 \$200,000,000 for
each of the fiscal years 2002 through 2011, to remain
available until expended.

(b) LIMIT ON USE OF FUNDS.—Notwithstanding subsection (a), no funds may be used to carry out the activities authorized by this Act after September 30, 2002, unless the Secretary has transmitted to the Committee on
Energy and Commerce and the Committee on Science of
the House of Representatives, and to the Senate, the report required by this subsection and 1 month has elapsed

1	since that transmission. The report shall include, with re-
2	spect to subsection (a), a 10-year plan containing—
3	(1) a detailed assessment of whether the aggre-
4	gate funding levels provided under subsection (a) are
5	the appropriate funding levels for that program;
6	(2) a detailed description of how proposals will
7	be solicited and evaluated, including a list of all ac-
8	tivities expected to be undertaken;
9	(3) a detailed list of technical milestones for
10	each coal and related technology that will be pur-
11	sued;
12	(4) recommendations for a mechanism for
13	recoupment of Federal funding for successful com-
14	mercial projects; and
15	(5) a detailed description of how the program
16	will avoid problems enumerated in General Account-
17	ing Office reports on the Clean Coal Technology
18	Program, including problems that have resulted in
19	unspent funds and projects that failed either finan-
20	cially or scientifically.
21	(c) Applicability.—Subsection (b) shall not apply
22	to any project begun before September 30, 2002.
23	SEC. 5006. PROJECT CRITERIA.
24	(a) IN GENERAL.—The Secretary shall not provide
25	funding under this division for any project that does not

advance efficiency, environmental performance, and cost
 competitiveness well beyond the level of technologies that
 are in operation or have been demonstrated as of the date
 of the enactment of this Act.

5 (b) TECHNICAL CRITERIA FOR CLEAN COAL POWER6 INITIATIVE.—

7 (1) GASIFICATION.—(A) In allocating the funds
8 authorized under section 5005(a), the Secretary
9 shall ensure that at least 80 percent of the funds are
10 used only for projects on coal-based gasification
11 technologies, including gasification combined cycle,
12 gasification fuel cells, gasification coproduction and
13 hybrid gasification/combustion.

(B) The Secretary shall set technical milestones
specifying emissions levels that coal gasification
projects must be designed to and reasonably expected to achieve. The milestones shall get more restrictive through the life of the program. The milestones shall be designed to achieve by 2020 coal gasification projects able—

21 (i) to remove 99 percent of sulfur dioxide;
22 (ii) to emit no more than .05 lbs of NOx
23 per million BTU;

24 (iii) to achieve substantial reductions in25 mercury emissions; and

1	(iv) to achieve a thermal efficiency of 60
2	percent (higher heating value).
3	(2) OTHER PROJECTS.—For projects not de-
4	scribed in paragraph (1), the Secretary shall set
5	technical milestones specifying emissions levels that
6	the projects must be designed to and reasonably ex-
7	pected to achieve. The milestones shall get more re-
8	strictive through the life of the program. The mile-
9	stones shall be designed to achieve by 2010 projects
10	able—
11	(A) to remove 97 percent of sulfur dioxide;
12	(B) to emit no more than .08 lbs of NOx
13	per million BTU;
14	(C) to achieve substantial reductions in
15	mercury emissions; and
16	(D) to achieve a thermal efficiency of 45
17	percent (higher heating value).
18	(c) FINANCIAL CRITERIA.—The Secretary shall not
19	provide a funding award under this division unless the re-
20	cipient has documented to the satisfaction of the Secretary
21	that—
22	(1) the award recipient is financially viable
23	without the receipt of additional Federal funding;
24	(2) the recipient will provide sufficient informa-
25	tion to the Secretary for the Secretary to ensure

that the award funds are spent efficiently and effec tively; and

3 (3) a market exists for the technology being
4 demonstrated or applied, as evidenced by statements
5 of interest in writing from potential purchasers of
6 the technology.

7 (d) FEDERAL SHARE.—The Federal share of the cost
8 of a coal or related technology project funded by the Sec9 retary shall not exceed 50 percent.

10 (e) APPLICABILITY.—Neither the use of any particular technology, nor the achievement of any emission 11 reduction, by any facility receiving assistance under this 12 13 title shall be taken into account for purposes of making any determination under the Clean Air Act in applying 14 15 the provisions of that Act to a facility not receiving assistance under this title, including any determination con-16 17 cerning new source performance standards, lowest achievable emission rate, best available control technology, or 18 any other standard, requirement, or limitation. 19

20 SEC. 5007. STUDY.

(a) IN GENERAL.—Not later than 1 year after the
date of enactment of this Act, and once every 2 years
thereafter through 2016, the Secretary, in cooperation
with other appropriate Federal agencies, shall transmit to
the Committee on Energy and Commerce and the Com-

mittee on Science of the House of Representatives, and
 to the Senate, a report containing the results of a study
 to—

4 (1) identify efforts (and the costs and periods
5 of time associated with those efforts) that, by them6 selves or in combination with other efforts, may be
7 capable of achieving the cost and performance goals;
8 (2) develop recommendations for the Depart9 ment of Energy to promote the efforts identified
10 under paragraph (1); and

(3) develop recommendations for additional authorities required to achieve the cost and performance goals.

(b) EXPERT ADVICE.—In carrying out this section,
the Secretary shall give due weight to the expert advice
of representatives of the entities described in section
5004(b).

- 18 **DIVISION F**
- 19 SEC. 6001. SHORT TITLE.

20 This division may be cited as the "Energy Security21 Act".

TITLE I—GENERAL PROTEC TIONS FOR ENERGY SUPPLY AND SECURITY

4 SEC. 6101. STUDY OF EXISTING RIGHTS-OF-WAY ON FED5 ERAL LANDS TO DETERMINE CAPABILITY TO
6 SUPPORT NEW PIPELINES OR OTHER TRANS7 MISSION FACILITIES.

8 (a) IN GENERAL.—Within one year after the date of 9 enactment of this Act, the head of each Federal agency 10 that has authorized a right-of-way across Federal lands for transportation of energy supplies or transmission of 11 12 electricity shall review each such right-of-way and submit a report to the Secretary of Energy and the Chairman 13 14 of the Federal Energy Regulatory Commission regarding-15

- 16 (1) whether the right-of-way can be used to17 support new or additional capacity; and
- (2) what modifications or other changes, if any,
 would be necessary to accommodate such additional
 capacity.

(b) CONSULTATIONS AND CONSIDERATIONS.—In performing the review, the head of each agency shall—

(1) consult with agencies of State, tribal, orlocal units of government as appropriate; and

(2) consider whether safety or other concerns
 related to current uses might preclude the avail ability of a right-of-way for additional or new trans portation or transmission facilities, and set forth
 those considerations in the report.

6 SEC. 6102. INVENTORY OF ENERGY PRODUCTION POTEN7 TIAL OF ALL FEDERAL PUBLIC LANDS.

8 (a) INVENTORY REQUIREMENT.—The Secretary of 9 the Interior, in consultation with the Secretary of Agri-10 culture and the Secretary of Energy, shall conduct an in-11 ventory of the energy production potential of all Federal 12 public lands other than national park lands and lands in 13 any wilderness area, with respect to wind, solar, coal, and 14 geothermal power production.

15 (b) LIMITATIONS.—

- 16 (1) IN GENERAL.—The Secretary shall not in17 clude in the inventory under this section the matters
 18 to be identified in the inventory under section 604
 19 of the Energy Act of 2000 (42 U.S.C. 6217).
- 20 (2) WIND AND SOLAR POWER.—The inventory
 21 under this section—
- (A) with respect to wind power production
 shall be limited to sites having a mean average
 wind speed—

1	(i) exceeding 12.5 miles per hour at a
2	height of 33 feet; and
3	(ii) exceeding 15.7 miles per hour at
4	a height of 164 feet; and
5	(B) with respect to solar power production
6	shall be limited to areas rated as receiving 450
7	watts per square meter or greater.
8	(c) Examination of Restrictions and Impedi-
9	MENTS.—The inventory shall identify the extent and na-
10	ture of any restrictions or impediments to the development
11	of such energy production potential.
12	(d) Geothermal Power.—The inventory shall in-
13	clude an update of the 1978 Assessment of Geothermal
14	Resources by the United States Geological Survey.
15	(e) Completion and Updating.—The Secretary—
15 16	(e) COMPLETION AND UPDATING.—The Secretary—(1) shall complete the inventory by not later
16	(1) shall complete the inventory by not later
16 17	(1) shall complete the inventory by not later than 2 years after the date of the enactment of this
16 17 18	(1) shall complete the inventory by not later than 2 years after the date of the enactment of this Act; and
16 17 18 19	 (1) shall complete the inventory by not later than 2 years after the date of the enactment of this Act; and (2) shall update the inventory regularly there-
16 17 18 19 20	 (1) shall complete the inventory by not later than 2 years after the date of the enactment of this Act; and (2) shall update the inventory regularly thereafter.
 16 17 18 19 20 21 	 (1) shall complete the inventory by not later than 2 years after the date of the enactment of this Act; and (2) shall update the inventory regularly thereafter. (f) REPORTS.—The Secretary shall submit to the
 16 17 18 19 20 21 22 	 (1) shall complete the inventory by not later than 2 years after the date of the enactment of this Act; and (2) shall update the inventory regularly thereafter. (f) REPORTS.—The Secretary shall submit to the Committee on Resources of the House of Representatives

(1) a report containing the inventory under this
 section, by not later than 2 years after the effective
 date of this section; and

4 (2) each update of such inventory.

5 SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BAR-

6

RIERS TO EMERGING ENERGY TECHNOLOGY.

7 (a) IN GENERAL.—Each Federal agency shall carry
8 out a review of its regulations and standards to determine
9 those that act as a barrier to market entry for emerging
10 energy-efficient technologies, including fuel cells, combined
11 heat and power, and distributed generation (including
12 small-scale renewable energy).

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

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

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4 (a) IN GENERAL.—The Secretary of Energy, in co-5 ordination with the Federal Energy Regulatory Commis-6 sion, shall establish an administrative interagency task 7 force to develop an interagency agreement to expedite and 8 facilitate the environmental review and permitting of 9 interstate natural gas pipeline projects.

(b) TASK FORCE MEMBERS.—The task force shall in-10 11 clude a representative of each of the Bureau of Land Man-12 agement, the United States Fish and Wildlife Service, the 13 Army Corps of Engineers, the Forest Service, the Environmental Protection Agency, the Advisory Council on 14 Historic Preservation, and such other agencies as the Sec-15 retary of Energy and the Federal Energy Regulatory 16 Commission consider appropriate. 17

(c) TERMS OF AGREEMENT.—The interagency agreement shall require that agencies complete their review of
interstate pipeline projects within a specific period of time
after referral of the matter by the Federal Energy Regulatory Commission.

23 (d) SUBMITTAL OF AGREEMENT.—The Secretary of
24 Energy shall submit a final interagency agreement under
25 this section to the Congress by not later than 6 months
26 after the effective date of this section.

444

3 (a) SENSE OF THE CONGRESS.—It is the sense of
4 Congress that Federal land managing agencies should en5 hance the use of energy efficient technologies in the man6 agement of natural resources.

7 (b) ENERGY EFFICIENT BUILDINGS.—To the extent 8 economically practicable, the Secretary of the Interior and 9 the Secretary of Agriculture shall seek to incorporate en-10 ergy efficient technologies in public and administrative 11 buildings associated with management of the National 12 Park System, National Wildlife Refuge System, National 13 Forest System, and other public lands and resources man-14 aged by such Secretaries.

15 (c) ENERGY EFFICIENT VEHICLES.—To the extent 16 economically practicable, the Secretary of the Interior and 17 the Secretary of Agriculture shall seek to use energy effi-18 cient motor vehicles, including vehicles equipped with bio-19 diesel or hybrid engine technologies, in the management 20 of the National Park System, National Wildlife Refuge 21 System, and other public lands and managed by the Secre-22 taries.

TITLE II—OIL AND GAS DEVELOPMENT Subtitle A—Offshore Oil and Gas

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4 SEC. 6201. SHORT TITLE.

5 This subtitle may be referred to as the "Royalty Re-6 lief Extension Act of 2001".

7 SEC. 6202. LEASE SALES IN WESTERN AND CENTRAL PLAN8 NING AREA OF THE GULF OF MEXICO.

9 (a) IN GENERAL.—For all tracts located in water 10 depths of greater than 200 meters in the Western and 11 Central Planning Area of the Gulf of Mexico, including that portion of the Eastern Planning Area of the Gulf of 12 13 Mexico encompassing whole lease blocks lying west of 87 14 degrees, 30 minutes West longitude, any oil or gas lease sale under the Outer Continental Shelf Lands Act occur-15 ring within 2 years after the date of enactment of this 16 Act shall use the bidding system authorized in section 17 18 8(a)(1)(H) of the Outer Continental Shelf Lands Act (30) U.S.C. 1337(a)(1)(H), except that the suspension of roy-19 20alties shall be set at a volume of not less than the fol-21 lowing:

(1) 5 million barrels of oil equivalent for each lease in water depths of 400 to 800 meters.

24 (2) 9 million barrels of oil equivalent for each
25 lease in water depths of 800 to 1,600 meters.

(3) 12 million barrels of oil equivalent for each
 lease in water depths greater than 1,600 meters.

3 (b) RELATIONSHIP TO EXISTING AUTHORITY.—Ex4 cept as expressly provided in this section, nothing in this
5 section is intended to limit the authority of the Secretary
6 of the Interior under the Outer Continental Shelf Lands
7 Act (43 U.S.C. 1301 et seq.) to provide royalty suspen8 sion.

9 SEC. 6203. SAVINGS CLAUSE.

Nothing in this subtitle shall be construed to affect
any offshore pre-leasing, leasing, or development moratorium, including any moratorium applicable to the Eastern
Planning Area of the Gulf of Mexico located off the Gulf
Coast of Florida.

15 SEC. 6204. ANALYSIS OF GULF OF MEXICO FIELD SIZE DIS-

16 TRIBUTION, INTERNATIONAL COMPETITIVE17 NESS, AND INCENTIVES FOR DEVELOPMENT.

(a) IN GENERAL.—The Secretary of the Interior and
the Secretary of Energy shall enter into appropriate arrangements with the National Academy of Sciences to
commission the Academy to perform the following:

(1) Conduct an analysis and review of existing
Gulf of Mexico oil and natural gas resource assessments, including—

1	(A) analysis and review of assessments re-
2	cently performed by the Minerals Management
3	Service, the 1999 National Petroleum Council
4	Gas Study, the Department of Energy's Off-
5	shore Marginal Property Study, and the Ad-
6	vanced Resources International, Inc. Deepwater
7	Gulf of Mexico model; and
8	(B) evaluation and comparison of the accu-
9	racy of assumptions of the existing assessments
10	with respect to resource field size distribution,
11	hydrocarbon potential, and scenarios for leas-
12	ing, exploration, and development.
13	(2) Evaluate the lease terms and conditions of-
14	fered by the Minerals Management Service for Lease
15	Sale 178, and compare the financial incentives of-
16	fered by such terms and conditions to financial in-
17	centives offered by the terms and conditions that
18	apply under leases for other offshore areas that are
19	competing for the same limited offshore oil and gas
20	exploration and development capital, including off-
21	shore areas of West Africa and Brazil.
22	(3) Recommend what level of incentives for all
23	water depths are appropriate in order to ensure that
24	the United States optimizes the domestic supply of
25	oil and natural gas from the offshore areas of the

Gulf of Mexico that are not subject to current leas ing moratoria. Recommendations under this para graph should be made in the context of the impor tance of the oil and natural gas resources of the
 Gulf of Mexico to the future energy and economic
 needs of the United States.

7 (b) REPORT.—Not later than 180 days after the date 8 of enactment of this Act, the Secretary of the Interior 9 shall submit a report to the Committee on Resources in 10 the House of Representatives and the Committee on Energy and Natural Resources in the Senate, summarizing 11 the findings of the National Academy of Sciences pursuant 12 13 to subsection (a) and providing recommendations of the Secretary for new policies or other actions that could help 14 15 to further increase oil and natural gas production from the Gulf of Mexico. 16

17 Subtitle B—Improvements to

Federal Oil and Gas Management

19 SEC. 6221. SHORT TITLE.

20 This subtitle may be cited as the "Federal Oil and
21 Gas Lease Management Improvement Demonstration Pro22 gram Act of 2001".

3 (a) IN GENERAL.—The Secretary of the Interior and 4 the Secretary of Agriculture shall jointly undertake a 5 study of the impediments to efficient oil and gas leasing 6 and operations on Federal onshore lands in order to iden-7 tify means by which unnecessary impediments to the expe-8 ditious exploration and production of oil and natural gas 9 on such lands can be removed.

10 (b) CONTENTS.—The study under subsection (a)11 shall include the following:

(1) A review of the process by which Federal
land managers accept or reject an offer to lease, including the timeframes in which such offers are
acted upon, the reasons for any delays in acting
upon such offers, and any recommendations for expediting the response to such offers.

(2) A review of the approval process for applications for permits to drill, including the timeframes
in which such applications are approved, the impact
of compliance with other Federal laws on such timeframes, any other reasons for delays in making such
approvals, and any recommendations for expediting
such approvals.

25 (3) A review of the approval process for surface
26 use plans of operation, including the timeframes in
•HR 4 IH

which such applications are approved, the impact of
 compliance with other Federal laws on such time frames, any other reasons for delays in making such
 approvals, and any recommendations for expediting
 such approvals.

6 (4) A review of the process for administrative 7 appeal of decisions or orders of officers or employees 8 of the Bureau of Land Management with respect to 9 a Federal oil or gas lease, including the timeframes 10 in which such appeals are heard and decided, any 11 reasons for delays in hearing or deciding such ap-12 peals, and any recommendations for expediting the 13 appeals process.

(c) REPORT.—The Secretaries shall report the findings and recommendations resulting from the study required by this section to the Committee on Resources of
the House of Representatives and to the Committee on
Energy and Natural Resources of the Senate no later than
6 months after the date of the enactment of this Act.

20 SEC. 6223. ELIMINATION OF UNWARRANTED DENIALS AND
21 STAYS.

(a) IN GENERAL.—The Secretary shall ensure that
unwarranted denials and stays of lease issuance and unwarranted restrictions on lease operations are eliminated

from the administration of oil and natural gas leasing on
 Federal land.

3 (b) LAND DESIGNATED FOR MULTIPLE USE.—Federal land available for oil and natural gas leasing under 4 5 any Bureau of Land Management resource management plan or Forest Service leasing analysis shall be available 6 7 without lease stipulations more stringent than restrictions 8 on surface use and operations imposed under the laws (in-9 cluding regulations) of the oil and natural gas conserva-10 tion authority of the State in which the lands are located, 11 unless the Secretary includes in the decision approving the 12 management plan or leasing analysis or in the Secretary's 13 acceptance of an offer to lease a written explanation why 14 more stringent stipulations are warranted.

15 (c) Rejection of Offer To Lease.—

16 (1) IN GENERAL.—If the Secretary rejects an
offer to lease Federal lands for oil or natural gas development on the ground that the land is unavailable
for oil and natural gas leasing, the Secretary shall
provide a written, detailed explanation of the reasons
the land is unavailable for leasing.

(2) PREVIOUS RESOURCE MANAGEMENT DECISION.—If the determination of unavailability is
based on a previous resource management decision,
the explanation shall include a careful assessment of

whether the reasons underlying the previous decision
 are still persuasive.

3 (3) Segregation of available land from 4 UNAVAILABLE LAND.—The Secretary may not reject 5 an offer to lease Federal land for oil and natural gas 6 development that is available for such leasing on the 7 ground that the offer includes land unavailable for 8 leasing. The Secretary shall segregate available land 9 from unavailable land, on the offeror's request fol-10 lowing notice by the Secretary, before acting on the 11 offer to lease.

12 (d) DISAPPROVAL OR REQUIRED MODIFICATION OF 13 SURFACE USE PLANS OF OPERATIONS AND APPLICATION FOR PERMIT TO DRILL.—The Secretary shall provide a 14 15 written, detailed explanation of the reasons for disapproving or requiring modifications of any surface use 16 plan of operations or application for permit to drill with 17 respect to oil or natural gas development on Federal lands. 18 19 SEC. 6224. LIMITATION ON COST RECOVERY FOR APPLICA-

20

TIONS.

Notwithstanding sections 304 and 504 of the Federal
Land Policy and Management Act of 1976 (43 U.S.C.
1734, 1764) and section 9701 of title 31, United States
Code, the Secretary shall not recover the Secretary's costs

with respect to applications and other documents relating
 to oil and gas leases.

3 SEC. 6225. CONSULTATION WITH SECRETARY OF AGRI-4 CULTURE.

5 Section 17(h) of the Mineral Leasing Act (30 U.S.C.
6 226(h)) is amended to read as follows:

7 "(h)(1) In issuing any lease on National Forest Sys8 tem lands reserved from the public domain, the Secretary
9 of the Interior shall consult with the Secretary of Agri10 culture in determining stipulations on surface use under
11 the lease.

12 "(2)(A) A lease on lands referred to in paragraph (1) 13 may not be issued if the Secretary of Agriculture determines, after consultation under paragraph (1), that the 14 15 terms and conditions of the lease, including any prohibition on surface occupancy for lease operations, will not 16 be sufficient to adequately protect such lands under the 17 18 National Forest Management Act of 1976 (16 U.S.C. 19 1600 et seq.).

"(B) The authority of the Secretary of Agriculture
under this paragraph may be delegated only to the Undersecretary of Agriculture for Natural Resources and Environment.".

1

Subtitle C—Miscellaneous

454

2 SEC. 6231. OFFSHORE SUBSALT DEVELOPMENT.

3 Section 5 of the Outer Continental Shelf Lands Act
4 of 1953 (43 U.S.C. 1334) is amended by adding at the
5 end the following:

6 "(k) SUSPENSION OF OPERATIONS FOR SUBSALT EXPLORATION.—Notwithstanding any other provision of 7 law or regulation, to prevent waste caused by the drilling 8 9 of unnecessary wells and to facilitate the discovery of addi-10 tional hydrocarbon reserves, the Secretary may grant a re-11 quest for a suspension of operations under any lease to 12 allow the reprocessing and reinterpretation of geophysical 13 data to identify and define drilling objectives beneath 14 allocthonus salt sheets.".

15 SEC. 6232. PROGRAM ON OIL AND GAS ROYALTIES IN KIND.

16 (a) APPLICABILITY OF SECTION.—Notwithstanding any other provision of law, the provisions of this section 17 18 shall apply to all royalty in kind accepted by the Secretary 19 of the Interior under any Federal oil or gas lease or permit 20under section 36 of the Mineral Leasing Act (30 U.S.C. 21192), section 27 of the Outer Continental Shelf Lands Act 22 (43 U.S.C. 1353), or any other mineral leasing law, in 23 the period beginning on the date of enactment of this Act 24 through September 30, 2006.

1 (b) TERMS AND CONDITIONS.—All royalty accruing to the United States under any Federal oil or gas lease 2 3 or permit under the Mineral Leasing Act (30 U.S.C. 181 4 et seq.) or the Outer Continental Shelf Lands Act (43 5 U.S.C. 1331 et seq.) shall, on the demand of the Secretary of the Interior, be paid in oil or gas. If the Secretary of 6 7 the Interior makes such a demand, the following provi-8 sions apply to such payment:

9 (1) Delivery by, or on behalf of, the lessee of 10 the royalty amount and quality due under the lease 11 satisfies the lessee's royalty obligation for the 12 amount delivered, except that transportation and 13 processing reimbursements paid to, or deductions 14 claimed by, the lessee shall be subject to review and 15 audit.

16 (2) Royalty production shall be placed in mar17 ketable condition by the lessee at no cost to the
18 United States.

19 (3) The Secretary of the Interior may—

20 (A) sell or otherwise dispose of any royalty 21 oil or gas taken in kind (other than oil or gas 22 taken under section 27(a)(3) of the Outer Con-23 tinental Shlef Lands Act (43)U.S.C. 24 1353(a)(3) for not less than the market price; 25 and

	100
1	(B) transport or process any oil or gas roy-
2	alty taken in kind.
3	(4) The Secretary of the Interior may, notwith-
4	standing section 3302 of title 31, United States
5	Code, retain and use a portion of the revenues from
6	the sale of oil and gas royalties taken in kind that
7	otherwise would be deposited to miscellaneous re-
8	ceipts, without regard to fiscal year limitation, or
9	may use royalty production, to pay the cost of—
10	(A) transporting the oil or gas,
11	(B) processing the gas, or
12	(C) disposing of the oil or gas.
13	(5) The Secretary may not use revenues from
14	the sale of oil and gas royalties taken in kind to pay
15	for personnel, travel, or other administrative costs of
16	the Federal Government.
17	(c) Reimbursement of Cost.—If the lessee, pursu-
18	ant to an agreement with the United States or as provided
19	in the lease, processes the royalty gas or delivers the roy-
20	alty oil or gas at a point not on or adjacent to the lease
21	area, the Secretary of the Interior shall—
22	(1) reimburse the lessee for the reasonable costs
23	of transportation (not including gathering) from the
24	lease to the point of delivery or for processing costs;
25	or

(2) at the discretion of the Secretary of the In terior, allow the lessee to deduct such transportation
 or processing costs in reporting and paying royalties
 in value for other Federal oil and gas leases.

5 (d) BENEFIT TO THE UNITED STATES REQUIRED.—
6 The Secretary may receive oil or gas royalties in kind only
7 if the Secretary determines that receiving such royalties
8 provides benefits to the United States greater than or
9 equal to those that would be realized under a comparable
10 royalty in value program.

(e) REPORT TO CONGRESS.—For each of the fiscal
years 2002 through 2006 in which the United States takes
oil or gas royalties in kind from production in any State
or from the Outer Continental Shelf, excluding royalties
taken in kind and sold to refineries under subsection (h),
the Secretary of the Interior shall provide a report to the
Congress describing—

(1) the methodology or methodologies used by
the Secretary to determine compliance with subsection (d), including performance standards for
comparing amounts received by the United States
derived from such royalties in kind to amounts likely
to have been received had royalties been taken in
value;

1	(2) an explanation of the evaluation that led the
2	Secretary to take royalties in kind from a lease or
3	group of leases, including the expected revenue effect
4	of taking royalties in kind;
5	(3) actual amounts received by the United
6	States derived from taking royalties in kind, and
7	costs and savings incurred by the United States as-
8	sociated with taking royalties in kind; and
9	(4) an evaluation of other relevant public bene-
10	fits or detriments associated with taking royalties in
11	kind.
12	(f) DEDUCTION OF EXPENSES.—
13	(1) IN GENERAL.—Before making payments
14	under section 35 of the Mineral Leasing Act (30
15	U.S.C. 191) or section 8(g) of the Outer Continental
16	Shelf Lands Act (30 U.S.C. 1337(g)) of revenues
17	derived from the sale of royalty production taken in
18	kind from a lease, the Secretary of the Interior shall
19	deduct amounts paid or deducted under subsections
20	(b)(4) and (c), and shall deposit such amounts to
21	miscellaneous receipts.
22	(2) Accounting for deductions.—If the
23	Secretary of the Interior allows the lessee to deduct
24	transportation or processing costs under subsection

(c), the Secretary may not reduce any payments to

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recipients of revenues derived from any other Fed eral oil and gas lease as a consequence of that de duction.

4 (g) CONSULTATION WITH STATES.—The Secretary
5 of the Interior—

6 (1) shall consult with a State before conducting 7 a royalty in kind program under this title within the 8 State, and may delegate management of any portion 9 of the Federal royalty in kind program to such State 10 except as otherwise prohibited by Federal law; and 11 (2) shall consult annually with any State from

12 which Federal oil or gas royalty is being taken in 13 kind to ensure to the maximum extent practicable 14 that the royalty in kind program provides revenues 15 to the State greater than or equal to those which 16 would be realized under a comparable royalty in 17 value program.

18 (h) Provisions for Small Refineries.—

(1) PREFERENCE.—If the Secretary of the Interior determines that sufficient supplies of crude oil
are not available in the open market to refineries not
having their own source of supply for crude oil, the
Secretary may grant preference to such refineries in
the sale of any royalty oil accruing or reserved to the
United States under Federal oil and gas leases

issued under any mineral leasing law, for processing
 or use in such refineries at private sale at not less
 than the market price.

4 (2) PRORATION AMONG REFINERIES IN PRO5 DUCTION AREA.—In disposing of oil under this sub6 section, the Secretary of the Interior may, at the
7 discretion of the Secretary, prorate such oil among
8 such refineries in the area in which the oil is pro9 duced.

10 (i) DISPOSITION TO FEDERAL AGENCIES.—

(1) ONSHORE ROYALTY.—Any royalty oil or gas
taken by the Secretary in kind from onshore oil and
gas leases may be sold at not less than the market
price to any department or agency of the United
States.

16 (2) OFFSHORE ROYALTY.—Any royalty oil or
17 gas taken in kind from Federal oil and gas leases on
18 the Outer Continental Shelf may be disposed of only
19 under section 27 of the Outer Continental Shelf
20 Lands Act (43 U.S.C. 1353).

(j) PREFERENCE FOR FEDERAL LOW-INCOME ENERGY ASSISTANCE PROGRAMS.—In disposing of royalty oil
or gas taken in kind under this section, the Secretary may
grant a preference to any person, including any State or
Federal agency, for the purpose of providing additional re-

sources to any Federal low-income energy assistance pro gram.

3 SEC. 6233. MARGINAL WELL PRODUCTION INCENTIVES.

4 To enhance the economics of marginal oil and gas 5 production by increasing the ultimate recovery from marginal wells when the cash price of West Texas Inter-6 7 mediate crude oil, as posted on the Dow Jones Commod-8 ities Index chart, is less than \$15 per barrel for 180 con-9 secutive pricing days or when the price of natural gas de-10 livered at Henry Hub, Louisiana, is less than \$2.00 per million British thermal units for 180 consecutive days, the 11 12 Secretary shall reduce the royalty rate as production declines for— 13

- 14 (1) onshore oil wells producing less than 3015 barrels per day;
- 16 (2) onshore gas wells producing less than 12017 million British thermal units per day;
- 18 (3) offshore oil wells producing less than 30019 barrels of oil per day; and
- 20 (4) offshore gas wells producing less than 1,20021 million British thermal units per day.

22 SEC. 6234. REIMBURSEMENT FOR COSTS OF NEPA ANAL23 YSES, DOCUMENTATION, AND STUDIES.

The Mineral Leasing Act (30 U.S.C. 181 et seq.) isamended by inserting after section 37 the following:

1 "REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES,

2

DOCUMENTATION, AND STUDIES

3 "SEC. 38. (a) IN GENERAL.—The Secretary of the 4 Interior may reimburse a person who is a lessee, operator, 5 operating rights owner, or applicant for an oil or gas lease 6 under this Act for costs incurred by the person in pre-7 paring any project-level analysis, documentation, or re-8 lated study required under the National Environmental 9 Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect 10 to the lease, through royalty credits attributable to the lease, unit agreement, or project area for which the anal-11 12 ysis, documentation, or related study is prepared.

13 "(b) CONDITIONS.—The Secretary may provide reim14 bursement under subsection (b) only if—

15 "(1) adequate funding to enable the Secretary
16 to timely prepare the analysis, documentation, or re17 lated study is not appropriated;

18 "(2) the person paid the costs voluntarily; and
19 "(3) the person maintains records of its costs
20 in accordance with regulations prescribed by the
21 Secretary.".

(c) APPLICATION.—The amendments made by this
section shall apply with respect to any lease entered into
before, on, or after the date of the enactment of this Act.

(d) DEADLINE FOR REGULATIONS.—The Secretary
 shall issue regulations implementing the amendments
 made by this section by not later than 90 days after the
 date of the enactment of this Act.

5 **TITLE III—GEOTHERMAL** 6 **ENERGY DEVELOPMENT**

7 SEC. 6301. ROYALTY REDUCTION AND RELIEF.

8 (a) ROYALTY REDUCTION.—Section 5(a) of the Geo-9 thermal Steam Act of 1970 (30 U.S.C. 1004(a)) is amend-10 ed by striking "not less than 10 per centum or more than 11 15 per centum" and inserting "not more than 8 per cen-12 tum".

13 (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

23 (B) on qualified expansion geothermal en-24 ergy.

1	(2) 3-YEAR APPLICATION.—Paragraph (1) ap-
2	plies only to commercial production of heat or en-
3	ergy from a facility in the first 3 years of such pro-
4	duction.
5	(c) DEFINITIONS.—In this section:
6	(1) QUALIFIED EXPANSION GEOTHERMAL EN-
7	ERGY.—The term "qualified expansion geothermal
8	energy"—
9	(A) subject to subparagraph (B), means
10	geothermal energy produced from a generation
11	facility for which the rated capacity is increased
12	by more than 10 percent as a result of expan-
13	sion of the facility carried out in the 5-year pe-
14	riod beginning on the date of enactment of this
15	Act; and
16	(B) does not include the rated capacity of
17	the generation facility on the date of enactment
18	of this Act.
19	(2) Qualified geothermal energy
20	LEASE.—The term "qualified geothermal energy
21	lease" means a lease under the Geothermal Steam
22	Act of 1970 (30 U.S.C. 1001 et seq.)—
23	(A) that was executed before the end of
24	the 5-year period beginning on the date of the
25	enactment of this Act; and

1	(B) under which no commercial production
2	of any form of heat or energy occurred before
3	the date of the enactment of this Act.
4	SEC. 6302. EXEMPTION FROM ROYALTIES FOR DIRECT USE
5	OF LOW TEMPERATURE GEOTHERMAL EN-
6	ERGY RESOURCES.
7	Section 5 of the Geothermal Steam Act of 1970 (30
8	U.S.C. 1004) is amended—
9	(1) in paragraph (c) by redesignating subpara-
10	graphs (1) and (2) as subparagraphs (A) and (B);
11	(2) by redesignating paragraphs (a) through (d)
12	in order as paragraphs (1) through (4);
13	(3) by inserting "(a) IN GENERAL.—" after
14	"SEC. 5."; and
15	(4) by adding at the end the following new sub-
16	section:
17	"(b) Exemption for Use of Low Temperature
18	RESOURCES.—
19	"(1) IN GENERAL.—In lieu of any royalty or
20	rental under subsection (a), a lease for qualified de-
21	velopment and direct utilization of low temperature
22	geothermal resources shall provide for payment by
23	the lessee of an annual fee of not less than \$100,
24	and not more than \$1,000, in accordance with the
25	schedule issued under paragraph (2).

1	"(2) Schedule.—The Secretary shall issue a
2	schedule of fees under this section under which a fee
3	is based on the scale of development and utilization
4	to which the fee applies.
5	"(3) DEFINITIONS.—In this subsection:
6	"(A) Low temperature geothermal
7	RESOURCES.—The term 'low temperature geo-
8	thermal resources' means geothermal steam and
9	associated geothermal resources having a tem-
10	perature of less than 195 degrees Fahrenheit.
11	"(B) QUALIFIED DEVELOPMENT AND DI-
12	RECT UTILIZATION.—The term 'qualified devel-
13	opment and direct utilization' means develop-
14	ment and utilization in which all products of
15	geothermal resources, other than any heat uti-
16	lized, are returned to the geothermal formation
17	from which they are produced.".
18	SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOR-
19	EST SERVICE LANDS.
20	The Geothermal Steam Act of 1970 is amended—
21	(1) in section 15(b) (30 U.S.C. 1014(b))—
22	(A) by inserting "(1)" after "(b)"; and
23	(B) in paragraph (1) (as designated by
24	subparagraph (A) of this paragraph) in the
25	first sentence—

(i) by striking "with the consent of, 1 2 and" and inserting "after consultation with the Secretary of Agriculture and"; 3 4 and (ii) by striking "the head of that De-5 6 partment" and inserting "the Secretary of 7 Agriculture"; and 8 (2) by adding at the end the following:

9 ((2)(A) A geothermal lease for lands withdrawn or 10 acquired in aid of functions of the Department of Agri-11 culture may not be issued if the Secretary of Agriculture, 12 after the consultation required by paragraph (1), deter-13 mines that no terms or conditions, including a prohibition on surface occupancy for lease operations, would be suffi-14 15 cient to adequately protect such lands under the National Forest Management Act of 1976 (16 U.S.C. 1600 et seq.). 16 17 "(B) The authority of the Secretary of Agriculture

18 under this paragraph may be delegated only to the Under19 secretary of Agriculture for Natural Resources and Envi20 ronment.".

21 SEC. 6304. DEADLINE FOR DETERMINATION ON PENDING 22 NONCOMPETITIVE LEASE APPLICATIONS.

Not later than 90 days after the date of the enactment of this Act, the Secretary of the Interior shall, with
respect to each application pending on the date of the en-

actment of this Act for a lease under the Geothermal
 Steam Act of 1970 (30 U.S.C. 1001 et seq.), issue a final
 determination of—

4 (1) whether or not to conduct a lease sale by5 competitive bidding; and

6 (2) whether or not to award a lease without7 competitive bidding.

8 SEC. 6305. OPENING OF PUBLIC LANDS UNDER MILITARY 9 JURISDICTION.

10 (a) IN GENERAL.—Except as otherwise provided in the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et 11 seq.) and other provisions of Federal law applicable to de-12 13 velopment of geothermal energy resources within public lands, all public lands under the jurisdiction of a Secretary 14 15 of a military department shall be open to the operation of such laws and development and utilization of geo-16 17 thermal steam and associated geothermal resources, as that term is defined in section 2 of the Geothermal Steam 18 Act of 1970 (30 U.S.C. 1001), without the necessity for 19 20 further action by the Secretary or the Congress.

(b) CONFORMING AMENDMENT.—Section 2689 of
title 10, United States Code, is amended by striking "including public lands," and inserting "other than public
lands,".
1 (c) TREATMENT OF EXISTING LEASES.—Upon the 2 expiration of any lease in effect on the date of the enact-3 ment of this Act of public lands under the jurisdiction of 4 a military department for the development of any geo-5 thermal resource, such lease may, at the option of the 6 lessee—

7 (1) be treated as a lease under the Geothermal
8 Steam Act of 1970 (30 U.S.C. 1001 et seq.), and be
9 renewed in accordance with such Act; or

10 (2) be renewed in accordance with the terms of
11 the lease, if such renewal is authorized by such
12 terms.

13 (d) REGULATIONS.—The Secretary of the Interior, with the advice and concurrence of the Secretary of the 14 15 military department concerned, shall prescribe such regulations to carry out this section as may be necessary. Such 16 regulations shall contain guidelines to assist in deter-17 mining how much, if any, of the surface of any lands 18 19 opened pursuant to this section may be used for purposes 20 incident to geothermal energy resources development and 21 utilization.

(e) CLOSURE FOR PURPOSES OF NATIONAL DEFENSE OR SECURITY.—In the event of a national emergency or for purposes of national defense or security, the
Secretary of the Interior, at the request of the Secretary

of the military department concerned, shall close any lands
 that have been opened to geothermal energy resources
 leasing pursuant to this section.

4 SEC. 6306. APPLICATION OF AMENDMENTS.

5 The amendments made by this title apply with re-6 spect to any lease executed before, on, or after the date7 of the enactment of this Act.

8 SEC. 6307. REVIEW AND REPORT TO CONGRESS.

9 The Secretary of the Interior shall promptly review 10 and report to the Congress regarding the status of all moratoria on and withdrawals from leasing under the Geo-11 thermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) of 12 known geothermal resources areas (as that term is defined 13 in section 2 of that Act (30 U.S.C. 1001), specifying for 14 15 each such area whether the basis for such moratoria or withdrawal still applies. 16

17 SEC. 6308. REIMBURSEMENT FOR COSTS OF NEPA ANAL-

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YSES, DOCUMENTATION, AND STUDIES.

(a) IN GENERAL.—The Geothermal Steam Act of
20 1970 (30 U.S.C. 1001 et seq.) is amended by adding at
21 the end the following:

22 "REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES,

23 DOCUMENTATION, AND STUDIES

24 "SEC. 30. (a) IN GENERAL.—The Secretary of the
25 Interior may reimburse a person who is a lessee, operator,
26 operating rights owner, or applicant for a lease under this
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Act for costs incurred by the person in preparing any
 project-level analysis, documentation, or related study re quired under the National Environmental Policy Act of
 1969 (42 U.S.C. 4321 et seq.) with respect to the lease,
 through royalty credits attributable to the lease, unit
 agreement, or project area for which the analysis, docu mentation, or related study is prepared.

8 "(b) CONDITIONS.—The Secretary shall may provide
9 reimbursement under subsection (a) only if—

"(1) adequate funding to enable the Secretary
to timely prepare the analysis, documentation, or related study is not appropriated;

"(2) the person paid the costs voluntarily; and
"(3) the person maintains records of its costs
in accordance with regulations prescribed by the
Secretary.".

(b) APPLICATION.—The amendments made by this
section shall apply with respect to any lease entered into
before, on, or after the date of the enactment of this Act.
(c) DEADLINE FOR REGULATIONS.—The Secretary
shall issue regulations implementing the amendments
made by this section by not later than 90 days after the
date of the enactment of this Act.

TITLE IV—HYDROPOWER 1 2 SEC. 6401. STUDY AND REPORT ON INCREASING ELECTRIC 3 POWER PRODUCTION CAPABILITY OF EXIST-4 **ING FACILITIES.** 5 (a) IN GENERAL.—The Secretary of the Interior shall conduct a study of the potential for increasing electric 6 7 power production capability at existing facilities under the 8 administrative jurisdiction of the Secretary. 9 (b) CONTENT.—The study under this section shall in-10 clude identification and description in detail of each facil-11 ity that is capable, with or without modification, of pro-12 ducing additional hydroelectric power, including estimation of the existing potential for the facility to generate 13 14 hydroelectric power. 15 (c) REPORT.—The Secretary shall submit to the Con-

(c) REPORT.—The Secretary shall submit to the Congress a report on the findings, conclusions, and recommendations of the study under this section by not later
than 12 months after the date of enactment of this Act.
The Secretary shall include in the report the following:
(1) The identifications, descriptions, and esti-

21 mations referred to in subsection (b).

(2) A description of activities the Secretary is
currently conducting or considering, or that could be
considered, to produce additional hydroelectric power
from each identified facility.

1	(3) A summary of action that has already been
2	taken by the Secretary to produce additional hydro-
3	electric power from each identified facility.
4	(4) The costs to install, upgrade, or modify
5	equipment or take other actions to produce addi-
6	tional hydroelectric power from each identified facil-
7	ity.
8	(5) The benefits that would be achieved by such
9	installation, upgrade, modification, or other action,
10	including quantified estimates of any additional en-
11	ergy or capacity from each facility identified under
12	subsection (b).
13	(6) A description of actions that are planned,
14	underway, or might reasonably be considered to in-
15	crease hydroelectric power production by replacing
16	turbine runners.
17	(7) A description of actions that are planned,
18	underway, or might reasonably be considered to in-
19	crease hydroelectric power production by performing
20	generator uprates and rewinds.
21	(8) The impact of increased hydroelectric power
22	production on irrigation, fish, wildlife, Indian tribes,
23	river health, water quality, navigation, recreation,
24	fishing, and flood control.

(9) Any additional recommendations the Sec retary considers advisable to increase hydroelectric
 power production from, and reduce costs and im prove efficiency at, facilities under the jurisdiction of
 the Secretary.

6 SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM 7 POWER PLANT, CALIFORNIA.

8 (a) IN GENERAL.—The Secretary of the Interior may 9 install a powerformer at the Bureau of Reclamation Fol-10 som power plant in Folsom, California, to replace a gener-11 ator and transformer that are due for replacement due 12 to age.

(b) REIMBURSABLE COSTS.—Costs incurred by the
United States for installation of a powerformer under this
section shall be treated as reimbursable costs and shall
bear interest at current long-term borrowing rates of the
United States Treasury at the time of acquisition.

(c) LOCAL COST SHARING.—In addition to reimbursable costs under subsection (b), the Secretary shall seek
contributions from power users toward the costs of the
powerformer and its installation.

1SEC. 6403. STUDY AND IMPLEMENTATION OF INCREASED2OPERATIONAL EFFICIENCIES IN HYDRO-3ELECTRIC POWER PROJECTS.

4 (a) IN GENERAL.—The Secretary of Interior shall
5 conduct a study of operational methods and water sched6 uling techniques at all hydroelectric power plants under
7 the administrative jurisdiction of the Secretary that have
8 an electric power production capacity greater than 50
9 megawatts, to—

10 (1) determine whether such power plants and
11 associated river systems are operated so as to maxi12 mize energy and capacity capabilities; and

(2) identify measures that can be taken to improve operational flexibility at such plants to achieve
such maximization.

16 (b) REPORT.—The Secretary shall submit a report on 17 the findings, conclusions, and recommendations of the 18 study under this section by not later than 18 months after 19 the date of the enactment of this Act, including a sum-20 mary of the determinations and identifications under 21 paragraphs (1) and (2) of subsection (a).

(c) COOPERATION BY FEDERAL POWER MARKETING
ADMINISTRATIONS.—The Secretary shall coordinate with
the Administrator of each Federal power marketing administration in—

1 (1) determining how the value of electric power 2 produced by each hydroelectric power facility that 3 produces power marketed by the administration can 4 be maximized; and (2) implementing measures identified under 5 6 subsection (a)(2). (d) LIMITATION ON IMPLEMENTATION OF MEAS-7 URES.—Implementation under subsections (a)(2) and 8 9 (b)(2) shall be limited to those measures that can be im-10 plemented within the constraints imposed on Department 11 of the Interior facilities by other uses required by law. 12 SEC. 6404. SHIFT OF PROJECT LOADS TO OFF-PEAK PERI-13 ODS. 14 (a) IN GENERAL.—The Secretary of the Interior 15 shall— 16 (1) review electric power consumption by Bu-17 reau of Reclamation facilities for water pumping 18 purposes; and 19 (2) make such adjustments in such pumping as 20 possible to minimize the amount of electric power 21 consumed for such pumping during periods of peak 22 electric power consumption, including by performing 23 as much of such pumping as possible during off-24 peak hours at night.

1 (b) CONSENT OF AFFECTED IRRIGATION CUSTOMERS 2 REQUIRED.—The Secretary may not under this section 3 make any adjustment in pumping at a facility without the 4 consent of each person that has contracted with the 5 United States for delivery of water from the facility for 6 use for irrigation and that would be affected by such ad-7 justment.

8 (c) EXISTING OBLIGATIONS NOT AFFECTED.—This 9 section shall not be construed to affect any existing obliga-10 tion of the Secretary to provide electric power, water, or 11 other benefits from Bureau of Reclamation facilities.

12 TITLE V—ARCTIC COASTAL 13 PLAIN DOMESTIC ENERGY

14 SEC. 6501. SHORT TITLE.

15 This title may be cited as the "Arctic Coastal Plain16 Domestic Energy Security Act of 2001".

17 SEC. 6502. DEFINITIONS.

18 In this title:

19 "Coastal PLAIN.—The term (1)COASTAL 20 Plain" means that area identified as such in the 21 map entitled "Arctic National Wildlife Refuge", 22 dated August 1980, as referenced in section 1002(b) 23 of the Alaska National Interest Lands Conservation 24 Act of 1980 (16 U.S.C. 3142(b)(1)), comprising ap-25 proximately 1,549,000 acres.

(2) SECRETARY.—The term "Secretary", except 1 2 as otherwise provided, means the Secretary of the 3 Interior or the Secretary's designee. 4 SEC. 6503. LEASING PROGRAM FOR LANDS WITHIN THE 5 COASTAL PLAIN. (a) IN GENERAL.—The Secretary shall take such ac-6 7 tions as are necessary— 8 (1) to establish and implement in accordance 9 with this title a competitive oil and gas leasing pro-10 gram under the Mineral Leasing Act (30 U.S.C. 181 11 et seq.) that will result in an environmentally sound 12 program for the exploration, development, and pro-13 duction of the oil and gas resources of the Coastal 14 Plain; and 15 (2) to administer the provisions of this title 16 through regulations, lease terms, conditions, restric-17 tions, prohibitions, stipulations, and other provisions 18 that ensure the oil and gas exploration, development, 19 and production activities on the Coastal Plain will 20 result in no significant adverse effect on fish and 21 wildlife, their habitat, subsistence resources, and the 22 environment, and including, in furtherance of this 23 goal, by requiring the application of the best com-24 mercially available technology for oil and gas explo-25 ration, development, and production to all exploration, development, and production operations
 under this title in a manner that ensures the receipt
 of fair market value by the public for the mineral re sources to be leased.

5 (b) REPEAL.—Section 1003 of the Alaska National
6 Interest Lands Conservation Act of 1980 (16 U.S.C.
7 3143) is repealed.

8 (c) COMPLIANCE WITH REQUIREMENTS UNDER CER-9 TAIN OTHER LAWS.—

10 (1) COMPATIBILITY.—For purposes of the Na-11 tional Wildlife Refuge System Administration Act of 12 1966, the oil and gas leasing program and activities 13 authorized by this section in the Coastal Plain are 14 deemed to be compatible with the purposes for which 15 the Arctic National Wildlife Refuge was established, 16 and that no further findings or decisions are re-17 quired to implement this determination.

18 (2) ADEQUACY OF THE DEPARTMENT OF THE 19 INTERIOR'S LEGISLATIVE ENVIRONMENTAL IMPACT 20 STATEMENT.—The "Final Legislative Environ-21 mental Impact Statement" (April 1987) on the 22 Coastal Plain prepared pursuant to section 1002 of 23 the Alaska National Interest Lands Conservation 24 Act of 1980 (16 U.S.C. 3142) and section 102(2)(C)25 of the National Environmental Policy Act of 1969

(42 U.S.C. 4332(2)(C)) is deemed to satisfy the re quirements under the National Environmental Policy
 Act of 1969 that apply with respect to actions au thorized to be taken by the Secretary to develop and
 promulgate the regulations for the establishment of
 a leasing program authorized by this title before the
 conduct of the first lease sale.

8 (3) Compliance with Nepa for other ac-9 TIONS.—Before conducting the first lease sale under 10 this title, the Secretary shall prepare an environ-11 mental impact statement under the National Envi-12 ronmental Policy Act of 1969 with respect to the ac-13 tions authorized by this title that are not referred to 14 in paragraph (2). Notwithstanding any other law, 15 the Secretary is not required to identify nonleasing 16 alternative courses of action or to analyze the envi-17 ronmental effects of such courses of action. The Sec-18 retary shall only identify a preferred action for such 19 leasing and a single leasing alternative, and analyze 20 the environmental effects and potential mitigation 21 measures for those two alternatives. The identifica-22 tion of the preferred action and related analysis for 23 the first lease sale under this title shall be completed 24 within 18 months after the date of enactment of this 25 Act. The Secretary shall only consider public com1 ments that specifically address the Secretary's pre2 ferred action and that are filed within 20 days after
3 publication of an environmental analysis. Notwith4 standing any other law, compliance with this para5 graph is deemed to satisfy all requirements for the
6 analysis and consideration of the environmental ef7 fects of proposed leasing under this title.

8 (d) RELATIONSHIP TO STATE AND LOCAL AUTHOR9 ITY.—Nothing in this title shall be considered to expand
10 or limit State and local regulatory authority.

11 (e) Special Areas.—

12 (1) IN GENERAL.—The Secretary, after con-13 sultation with the State of Alaska, the city of 14 Kaktovik, and the North Slope Borough, may des-15 ignate up to a total of 45,000 acres of the Coastal 16 Plain as a Special Area if the Secretary determines 17 that the Special Area is of such unique character 18 and interest so as to require special management 19 and regulatory protection. The Secretary shall des-20 ignate as such a Special Area the Sadlerochit Spring 21 area, comprising approximately 4,000 acres as depicted on the map referred to in section 6502(1). 22

23 (2) MANAGEMENT.—Each such Special Area24 shall be managed so as to protect and preserve the

1	area's unique and diverse character including its
2	fish, wildlife, and subsistence resource values.
3	(3) EXCLUSION FROM LEASING OR SURFACE
4	OCCUPANCY.—The Secretary may exclude any Spe-
5	cial Area from leasing. If the Secretary leases a Spe-
6	cial Area, or any part thereof, for purposes of oil
7	and gas exploration, development, production, and
8	related activities, there shall be no surface occu-
9	pancy of the lands comprising the Special Area.
10	(4) DIRECTIONAL DRILLING.—Notwithstanding
11	the other provisions of this subsection, the Secretary
12	may lease all or a portion of a Special Area under
13	terms that permit the use of horizontal drilling tech-
14	nology from sites on leases located outside the area.
15	(f) LIMITATION ON CLOSED AREAS.—The Sec-
16	retary's sole authority to close lands within the Coastal
17	Plain to oil and gas leasing and to exploration, develop-
18	ment, and production is that set forth in this title.
19	(c) RECULATIONS —

19 (g) REGULATIONS.—

(1) IN GENERAL.—The Secretary shall prescribe such regulations as may be necessary to carry
out this title, including rules and regulations relating
to protection of the fish and wildlife, their habitat,
subsistence resources, and environment of the Coast-

al Plain, by no later than 15 months after the date
 of enactment of this Act.

3 (2) REVISION OF REGULATIONS.—The Sec4 retary shall periodically review and, if appropriate,
5 revise the rules and regulations issued under sub6 section (a) to reflect any significant biological, envi7 ronmental, or engineering data that come to the Sec8 retary's attention.

9 SEC. 6504. LEASE SALES.

(a) IN GENERAL.—Lands may be leased pursuant to
this title to any person qualified to obtain a lease for deposits of oil and gas under the Mineral Leasing Act (30
U.S.C. 181 et seq.).

14 (b) PROCEDURES.—The Secretary shall, by regula-15 tion, establish procedures for—

16 (1) receipt and consideration of sealed nomina17 tions for any area in the Coastal Plain for inclusion
18 in, or exclusion (as provided in subsection (c)) from,
19 a lease sale;

20 (2) the holding of lease sales after such nomina-21 tion process; and

(3) public notice of and comment on designation of areas to be included in, or excluded from, a
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—

(1) conduct the first lease sale under this title
within 22 months after the date of enactment of this
title; and

(2) conduct additional sales so long as sufficient
interest in development exists to warrant, in the Secretary's judgment, the conduct of such sales.

17 SEC. 6505. GRANT OF LEASES BY THE SECRETARY.

(a) IN GENERAL.—The Secretary may grant to the
highest responsible qualified bidder in a lease sale conducted pursuant to section 6504 any lands to be leased
on the Coastal Plain upon payment by the lessee of such
bonus as may be accepted by the Secretary.

(b) SUBSEQUENT TRANSFERS.—No lease issued
under this title may be sold, exchanged, assigned, sublet,
or otherwise transferred except with the approval of the

Secretary. Prior to any such approval the Secretary shall
 consult with, and give due consideration to the views of,
 the Attorney General.

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 12¹/₂ percent in amount or value of the
9 production removed or sold from the lease, as deter10 mined by the Secretary under the regulations appli11 cable to other Federal oil and gas leases;

(2) provide that the Secretary may close, on a
seasonal basis, portions of the Coastal Plain to exploratory drilling activities as necessary to protect
caribou calving areas and other species of fish and
wildlife;

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;

(4) provide that the lessee may not delegate or
 convey, by contract or otherwise, the reclamation re sponsibility and liability to another person without
 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 be, as nearly as practicable, a condition capable of 7 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;

(6) contain terms and conditions relating to
protection of fish and wildlife, their habitat, and the
environment as required pursuant to section
6503(a)(2);

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;

(8) prohibit the export of oil produced under
 the lease; and

3 (9) contain such other provisions as the Sec4 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 management to meet the particular needs and conditions 11 of projects to be developed under the leases issued pursu-12 13 ant to this title and the special concerns of the parties to such leases, shall require that the lessee and its agents 14 15 and contractors negotiate to obtain a project labor agreement for the employment of laborers and mechanics on 16 17 production, maintenance, and construction under the 18 lease.

19 SEC. 6507. COASTAL PLAIN ENVIRONMENTAL PROTECTION.

(a) NO SIGNIFICANT ADVERSE EFFECT STANDARD
TO GOVERN AUTHORIZED COASTAL PLAIN ACTIVITIES.—
The Secretary shall, consistent with the requirements of
section 6503, administer the provisions of this title
through regulations, lease terms, conditions, restrictions,
prohibitions, stipulations, and other provisions that—

1	(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; and
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	(b) SITE-SPECIFIC ASSESSMENT AND MITIGATION.—
10	The Secretary shall also require, with respect to any pro-
11	posed drilling and related activities, that—
12	(1) a site-specific analysis be made of the prob-
13	able effects, if any, that the drilling or related activi-
14	ties will have on fish and wildlife, their habitat, and
15	the environment;
16	(2) a plan be implemented to avoid, minimize,
17	and mitigate (in that order and to the extent prac-
18	ticable) any significant adverse effect identified
19	under paragraph (1); and
20	(3) the development of the plan shall occur
21	after consultation with the agency or agencies hav-
22	ing jurisdiction over matters mitigated by the plan.
23	(c) Regulations To Protect Coastal Plain
24	FISH AND WILDLIFE RESOURCES, SUBSISTENCE USERS,
25	AND THE ENVIRONMENT.—Before implementing the leas-

ing program authorized by this title, the Secretary shall
 prepare and promulgate regulations, lease terms, condi tions, restrictions, prohibitions, stipulations, and other
 measures designed to ensure that the activities undertaken
 on the Coastal Plain under this title are conducted in a
 manner consistent with the purposes and environmental
 requirements of this title.

8 (d) COMPLIANCE WITH FEDERAL AND STATE ENVI-9 RONMENTAL LAWS AND OTHER REQUIREMENTS.—The 10 proposed regulations, lease terms, conditions, restrictions, 11 prohibitions, and stipulations for the leasing program 12 under this title shall require compliance with all applicable 13 provisions of Federal and State environmental law and 14 shall also require the following:

(1) Standards at least as effective as the safety
and environmental mitigation measures set forth in
items 1 through 29 at pages 167 through 169 of the
"Final Legislative Environmental Impact Statement" (April 1987) on the Coastal Plain.

20 (2) Seasonal limitations on exploration, develop21 ment, and related activities, where necessary, to
22 avoid significant adverse effects during periods of
23 concentrated fish and wildlife breeding, denning,
24 nesting, spawning, and migration.

1	(3) That exploration activities, except for sur-
2	face geological studies, be limited to the period be-
3	tween approximately November 1 and May 1 each
4	year and that exploration activities shall be sup-
5	ported by ice roads, winter trails with adequate snow
6	cover, ice pads, ice airstrips, and air transport meth-
7	ods, except that such exploration activities may
8	occur at other times, if—
9	(A) the Secretary determines, after afford-
10	ing an opportunity for public comment and re-
11	view, that special circumstances exist necessi-
12	tating that exploration activities be conducted
13	at other times of the year; and
14	(B) the Secretary finds that such explo-
15	ration will have no significant adverse effect on
16	the fish and wildlife, their habitat, and the envi-
17	ronment of the Coastal Plain.
18	(4) Design safety and construction standards
19	for all pipelines and any access and service roads,
20	that—
21	(A) minimize, to the maximum extent pos-
22	sible, adverse effects upon the passage of mi-
23	gratory species such as caribou; and

1	(B) minimize adverse effects upon the flow
2	of surface water by requiring the use of cul-
3	verts, bridges, and other structural devices.
4	(5) Prohibitions on public access and use on all
5	pipeline access and service roads.
6	(6) Stringent reclamation and rehabilitation re-
7	quirements, consistent with the standards set forth
8	in this title, requiring the removal from the Coastal
9	Plain of all oil and gas development and production
10	facilities, structures, and equipment upon completion
11	of oil and gas production operations, except that the
12	Secretary may exempt from the requirements of this
13	paragraph those facilities, structures, or equipment
14	that the Secretary determines would assist in the
15	management of the Arctic National Wildlife Refuge
16	and that are donated to the United States for that
17	purpose.
18	(7) Appropriate prohibitions or restrictions on
19	access by all modes of transportation.
20	(8) Appropriate prohibitions or restrictions on
21	sand and gravel extraction.
22	(9) Consolidation of facility siting.

23 (10) Appropriate prohibitions or restrictions on24 use of explosives.

1	(11) Avoidance, to the extent practicable, of
2	springs, streams, and river system; the protection of
3	natural surface drainage patterns, wetlands, and ri-
4	parian habitats; and the regulation of methods or
5	techniques for developing or transporting adequate
6	supplies of water for exploratory drilling.
7	(12) Avoidance or reduction of air traffic-re-
8	lated disturbance to fish and wildlife.
9	(13) Treatment and disposal of hazardous and
10	toxic wastes, solid wastes, reserve pit fluids, drilling
11	muds and cuttings, and domestic wastewater, includ-
12	ing an annual waste management report, a haz-
13	ardous materials tracking system, and a prohibition
14	on chlorinated solvents, in accordance with applica-
15	ble Federal and State environmental law.
16	(14) Fuel storage and oil spill contingency plan-
17	ning.
18	(15) Research, monitoring, and reporting re-
19	quirements.
20	(16) Field crew environmental briefings.
21	(17) Avoidance of significant adverse effects
22	upon subsistence hunting, fishing, and trapping by
23	subsistence users.
24	(18) Compliance with applicable air and water
25	quality standards.

1 (19) Appropriate seasonal and safety zone des-2 ignations around well sites, within which subsistence 3 hunting and trapping shall be limited. 4 (20) Reasonable stipulations for protection of 5 cultural and archeological resources. 6 (21) All other protective environmental stipula-7 tions, restrictions, terms, and conditions deemed 8 necessary by the Secretary. 9 (e) CONSIDERATIONS.—In preparing and promul-10 gating regulations, lease terms, conditions, restrictions, prohibitions, and stipulations under this section, the Sec-11 retary shall consider the following: 12 13 (1) The stipulations and conditions that govern 14 the National Petroleum Reserve-Alaska leasing pro-15 gram, as set forth in the 1999 Northeast National Petroleum Reserve-Alaska Final Integrated Activity 16 17 Plan/Environmental Impact Statement. 18 The environmental protection standards (2)19 that governed the initial Coastal Plain seismic explo-20 ration program under parts 37.31 to 37.33 of title 21 50, Code of Federal Regulations. 22 (3) The land use stipulations for exploratory 23 drilling on the KIC–ASRC private lands that are set 24 forth in Appendix 2 of the August 9, 1983, agree-

1	ment between Arctic Slope Regional Corporation and
2	the United States.
3	(f) FACILITY CONSOLIDATION PLANNING.—
4	(1) IN GENERAL.—The Secretary shall, after
5	providing for public notice and comment, prepare
6	and update periodically a plan to govern, guide, and
7	direct the siting and construction of facilities for the
8	exploration, development, production, and transpor-
9	tation of Coastal Plain oil and gas resources.
10	(2) Objectives.—The plan shall have the fol-
11	lowing objectives:
12	(A) Avoiding unnecessary duplication of fa-
13	cilities and activities.
14	(B) Encouraging consolidation of common
15	facilities and activities.
16	(C) Locating or confining facilities and ac-
17	tivities to areas that will minimize impact on
18	fish and wildlife, their habitat, and the environ-
19	ment.
20	(D) Utilizing existing facilities wherever
21	practicable.
22	(E) Enhancing compatibility between wild-
23	life values and development activities.
24	SEC. 6508. EXPEDITED JUDICIAL REVIEW.
25	(a) FILING OF COMPLAINT.—

1	(1) DEADLINE.—Subject to paragraph (2), any
2	complaint seeking judicial review of any provision of
3	this title or any action of the Secretary under this
4	title shall be filed in any appropriate district court
5	of the United States—
6	(A) except as provided in subparagraph
7	(B), within the 90-day period beginning on the
8	date of the action being challenged; or
9	(B) in the case of a complaint based solely
10	on grounds arising after such period, within 90
11	days after the complainant knew or reasonably
12	should have known of the grounds for the com-
13	plaint.
14	(2) VENUE.—Any complaint seeking judicial re-
15	view of an action of the Secretary under this title
16	may be filed only in the United States Court of Ap-
17	peals for the District of Columbia.
18	(3) LIMITATION ON SCOPE OF CERTAIN RE-
19	VIEW.—Judicial review of a Secretarial decision to
20	conduct a lease sale under this title, including the
21	environmental analysis thereof, shall be limited to
22	whether the Secretary has complied with the terms
23	of this division and shall be based upon the adminis-
24	trative record of that decision. The Secretary's iden-
25	tification of a preferred course of action to enable

leasing to proceed and the Secretary's analysis of
 environmental effects under this division shall be
 presumed to be correct unless shown otherwise by
 clear and convincing evidence to the contrary.

5 (b) LIMITATION ON OTHER REVIEW.—Actions of the
6 Secretary with respect to which review could have been
7 obtained under this section shall not be subject to judicial
8 review in any civil or criminal proceeding for enforcement.

9 SEC. 6509. RIGHTS-OF-WAY ACROSS THE COASTAL PLAIN.

(a) EXEMPTION.—Title XI of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3161
et seq.) shall not apply to the issuance by the Secretary
under section 28 of the Mineral Leasing Act (30 U.S.C.
185) of rights-of-way and easements across the Coastal
Plain for the transportation of oil and gas.

(b) TERMS AND CONDITIONS.—The Secretary shall 16 include in any right-of-way or easement referred to in sub-17 section (a) such terms and conditions as may be necessary 18 19 to ensure that transportation of oil and gas does not result 20 in a significant adverse effect on the fish and wildlife, sub-21 sistence resources, their habitat, and the environment of 22 the Coastal Plain, including requirements that facilities be 23 sited or designed so as to avoid unnecessary duplication 24 of roads and pipelines.

(c) REGULATIONS.—The Secretary shall include in
 regulations under section 6503(g) provisions granting
 rights-of-way and easements described in subsection (a)
 of this section.

5 SEC. 6510. CONVEYANCE.

In order to maximize Federal revenues by removing
clouds on title to lands and clarifying land ownership patterns within the Coastal Plain, the Secretary, notwithstanding the provisions of section 1302(h)(2) of the Alaska National Interest Lands Conservation Act (16 U.S.C.
3192(h)(2)), shall convey—

(1) to the Kaktovik Inupiat Corporation the
surface estate of the lands described in paragraph 2
of Public Land Order 6959, to the extent necessary
to fulfill the Corporation's entitlement under section
12 of the Alaska Native Claims Settlement Act (43
U.S.C. 1611); and

(2) to the Arctic Slope Regional Corporation
the subsurface estate beneath such surface estate
pursuant to the August 9, 1983, agreement between
the Arctic Slope Regional Corporation and the
United States of America.

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 for13 financial assistance under this section.

14 (b) USE OF ASSISTANCE.—Financial assistance15 under this section may be used only for—

16 (1) planning for mitigation of the potential ef17 fects of oil and gas exploration and development on
18 environmental, social, cultural, recreational and sub19 sistence values;

20 (2) implementing mitigation plans and main-21 taining mitigation projects; and

(3) developing, carrying out, and maintaining
projects and programs that provide new or expanded
public facilities and services to address needs and
problems associated with such effects, including 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) IN GENERAL.—Notwithstanding section 6504,
18	the Mineral Leasing Act (30 U.S.C. 181 et seq.), or any
19	other law—
20	(1) 50 percent of the adjusted bonus, rental,
21	and royalty revenues from oil and gas leasing and
22	operations authorized under this title shall be paid
23	to the State of Alaska; and
24	(2) the balance of such revenues shall be depos-
25	ited into the Treasury as miscellaneous receipts.

1 (b) ADJUSTMENTS.—Adjustments to bonus, rental, 2 and royalty amounts from oil and gas leasing and oper-3 ations authorized under this title shall be made as nec-4 essary for overpayments and refunds from lease revenues 5 received in current or subsequent periods, prior to dis-6 tribution of such revenues pursuant to this section.

7 (c) PAYMENTS TO STATE.—Payments to the State of8 Alaska under this section shall be made quarterly.

9 TITLE VI—CONSERVATION OF 10 ENERGY BY THE DEPART11 MENT OF THE INTERIOR

12 SEC. 6601. ENERGY CONSERVATION BY THE DEPARTMENT

13 **OF THE INTERIOR.**

14 (a) IN GENERAL.—The Secretary of the Interior15 shall—

16 (1) conduct a study to identify, evaluate, and
17 recommend opportunities for conserving energy by
18 reducing the amount of energy used by facilities of
19 the Department of the Interior; and

20 (2) wherever feasible and appropriate, reduce
21 the use of energy from traditional sources by encour22 aging use of alternative energy sources, including
23 solar power and power from fuel cells, throughout
24 such facilities and the public lands of the United
25 States.

1	(b) REPORTS.—The Secretary shall submit to the
2	Congress—
3	(1) by not later than 90 days after the date of
4	the enactment of this Act, a report containing the
5	findings, conclusions, and recommendations of the
6	study under subsection $(a)(1)$; and
7	(2) by not later than December 31 each year,
8	an annual report describing progress made in—
9	(A) conserving energy through opportuni-
10	ties recommended in the report under para-
11	graph (1) ; and
12	(B) encouraging use of alternative energy
13	sources under subsection (a)(2).
14	TITLE VII—COAL
15	SEC. 6701. LIMITATION ON FEES WITH RESPECT TO COAL
16	LEASE APPLICATIONS AND DOCUMENTS.
17	Notwithstanding sections 304 and 504 of the Federal
18	Land Policy and Management Act of 1976 (43 U.S.C.
19	1734, 1764) and section 9701 of title 31, United States
20	Code, the Secretary shall not recover the Secretary's costs
21	with respect to applications and other documents relating
22	coal leases.
23	SEC. 6702. MINING PLANS.

24 Section 2(d)(2) of the Mineral Leasing Act (30
25 U.S.C. 202a(2)) is amended—

(1) by inserting "(A)" after "(2)"; and 1 2 (2) by adding at the end the following: 3 "(B) The Secretary may establish a period of more 4 than 40 years if the Secretary determines that the longer 5 period-6 "(i) will ensure the maximum economic recovery 7 of a coal deposit; or 8 "(ii) the longer period is in the interest of the 9 orderly, efficient, or economic development of a coal 10 resources.". 11 SEC. 6703. PAYMENT OF ADVANCE ROYALTIES UNDER COAL 12 LEASES. 13 (a) IN GENERAL.—Section 7(b) of the Mineral Leasing Act of 1920 (30 U.S.C. 207(b)) is amended to read 14 15 as follows: 16 (b)(1) Each lease shall be subjected to the condition 17 of diligent development and continued operation of the mine or mines, except where operations under the lease 18 19 are interrupted by strikes, the elements, or casualties not

20 attributable to the lessee.

21 "(2)(A) The Secretary of the Interior, upon deter22 mining that the public interest will be served thereby, may
23 suspend the condition of continued operation upon the
24 payment of advance royalties.

"(B) Such advance royalties shall be computed based
 on the average price for coal sold in the spot market from
 the same region during the last month of each applicable
 continued operation year.

5 "(C) The aggregate number of years during the ini-6 tial and any extended term of any lease for which advance 7 royalties may be accepted in lieu of the condition of contin-8 ued operation shall not exceed 20.

9 "(3) The amount of any production royalty paid for 10 any year shall be reduced (but not below zero) by the 11 amount of any advance royalties paid under such lease to 12 the extent that such advance royalties have not been used 13 to reduce production royalties for a prior year.

"(4) This subsection shall be applicable to any lease
or logical mining unit in existence on the date of the enactment of this paragraph or issued or approved after such
date.

"(5) Nothing in this subsection shall be construed to
affect the requirement contained in the second sentence
of subsection (a) relating to commencement of production
at the end of 10 years.".

(b) AUTHORITY TO WAIVE, SUSPEND, OR REDUCE
ADVANCE ROYALTIES.—Section 39 of the Mineral Leasing Act (30 U.S.C. 209) is amended by striking the last
sentence.

SEC. 6704. ELIMINATION OF DEADLINE FOR SUBMISSION OF COAL LEASE OPERATION AND RECLAMA TION PLAN.

4 Section 7(c) of the Mineral Leasing Act (30 U.S.C.
5 207(c)) is amended by striking "and not later than three
6 years after a lease is issued,".

7 TITLE VIII—INSULAR AREAS 8 ENERGY SECURITY

9 SEC. 6801. INSULAR AREAS ENERGY SECURITY.

10 Section 604 of the Act entitled "An Act to authorize 11 appropriations for certain insular areas of the United 12 States, and for other purposes", approved December 24, 13 1980 (Public Law 96–597; 94 Stat. 3480–3481), is 14 amended—

15 (1) in subsection (a)(4) by striking the period16 and inserting a semicolon;

17 (2) by adding at the end of subsection (a) the18 following new paragraphs:

"(5) electric power transmission and distribution lines in insular areas are inadequate to withstand damage caused by the hurricanes and typhoons which frequently occur in insular areas and
such damage often costs millions of dollars to repair;
and

25 "(6) the refinement of renewable energy tech26 nologies since the publication of the 1982 Territorial
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1 Energy Assessment prepared pursuant to subsection 2 (c) reveals the need to reassess the state of energy 3 production, consumption, infrastructure, reliance on 4 imported energy, and indigenous sources in regard 5 to the insular areas."; 6 (3) by amending subsection (e) to read as fol-7 lows: "(e)(1) The Secretary of the Interior, in consultation 8 9 with the Secretary of Energy and the chief executive officer of each insular area, shall update the plans required 10 11 under subsection (c) by— "(A) updating the contents required by sub-12 13 section (c); 14 "(B) drafting long-term energy plans for such 15 insular areas with the objective of reducing, to the 16 extent feasible, their reliance on energy imports by 17 the year 2010 and maximizing, to the extent fea-18 sible, use of indigenous energy sources; and "(C) drafting long-term energy transmission 19 20 line plans for such insular areas with the objective 21 that the maximum percentage feasible of electric 22 power transmission and distribution lines in each in-23 sular area be protected from damage caused by hur-24 ricanes and typhoons.

1	"(2) Not later than May 31, 2003, the Secretary of
2	the Interior shall submit to Congress the updated plans
3	for each insular area required by this subsection."; and
4	(4) by amending subsection $(g)(4)$ to read as
5	follows:
6	"(4) Power line grants for terri-
7	TORIES.—
8	"(A) IN GENERAL.—The Secretary of the
9	Interior is authorized to make grants to govern-
10	ments of territories of the United States to
11	carry out eligible projects to protect electric
12	power transmission and distribution lines in
13	such territories from damage caused by hurri-
14	canes and typhoons.
15	"(B) ELIGIBLE PROJECTS.—The Secretary
16	may award grants under subparagraph (A) only
17	to governments of territories of the United
18	States that submit written project plans to the
19	Secretary for projects that meet the following
20	criteria:
21	"(i) The project is designed to protect
22	electric power transmission and distribu-
23	tion lines located in one or more of the ter-
24	ritories of the United States from damage
25	caused by hurricanes and typhoons.

1	"(ii) The project is likely to substan-
2	tially reduce the risk of future damage,
3	hardship, loss, or suffering.
4	"(iii) The project addresses one or
5	more problems that have been repetitive or
6	that pose a significant risk to public health
7	and safety.
8	"(iv) The project is not likely to cost
9	more than the value of the reduction in di-
10	rect damage and other negative impacts
11	that the project is designed to prevent or
12	mitigate. The cost benefit analysis required
13	by this criterion shall be computed on a
14	net present value basis.
15	"(v) The project design has taken into
16	consideration long-term changes to the
17	areas and persons it is designed to protect
18	and has manageable future maintenance
19	and modification requirements.
20	"(vi) The project plan includes an
21	analysis of a range of options to address
22	the problem it is designed to prevent or
23	mitigate and a justification for the selec-
24	tion of the project in light of that analysis.

1	"(vii) The applicant has demonstrated
2	to the Secretary that the matching funds
3	required by subparagraph (D) are avail-
4	able.
5	"(C) PRIORITY.—When making grants
6	under this paragraph, the Secretary shall give
7	priority to grants for projects which are likely
8	to—
9	"(i) have the greatest impact on re-
10	ducing future disaster losses; and
11	"(ii) best conform with plans that
12	have been approved by the Federal Govern-
13	ment or the government of the territory
14	where the project is to be carried out for
15	development or hazard mitigation for that
16	territory.
17	"(D) MATCHING REQUIREMENT.—The
18	Federal share of the cost for a project for which
19	a grant is provided under this paragraph shall
20	not exceed 75 percent of the total cost of that
21	project. The non-Federal share of the cost may
22	be provided in the form of cash or services.
23	"(E) TREATMENT OF FUNDS FOR CERTAIN
24	PURPOSES.—Grants provided under this para-
25	graph shall not be considered as income, a re-

1	source, or a duplicative program when deter-
2	mining eligibility or benefit levels for Federal
3	major disaster and emergency assistance.
4	"(F) AUTHORIZATION OF APPROPRIA-
5	TIONS.—There is authorized to be appropriated
6	to carry out this paragraph \$5,000,000 for each
7	fiscal year beginning after the date of the en-
8	actment of this paragraph.".