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AN ACT

- To enhance energy conservation, research and development and to provide for security and diversity in the energy supply for the American people, and for other purposes.
 - 1 Be it enacted by the Senate and House of Representa-
 - 2 tives of the United States of America in Congress assembled,

1 SECTION 1. SHORT TITLE AND TABLE OF CONTENTS.

- 2 (a) SHORT TITLE.—This Act may be cited as the
- 3 "Securing America's Future Energy Act of 2001" or the
- 4 "SAFE Act of 2001".
- 5 (b) TABLE OF CONTENTS.—The table of contents for
- 6 this Act is as follows:

Sec. 1. Short title and table of contents. Sec. 2. Energy policy.

DIVISION A

Sec. 100. Short title.

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Sec. 101. Authorization of appropriations.

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- Sec. 122. Enhancement and extension of authority relating to Federal energy savings performance contracts.
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- Sec. 124. Federal central air conditioner and heat pump efficiency.
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- Sec. 152. Railroad efficiency.
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- Sec. 163. Study of benefits and feasibility of oil bypass filtration technology.
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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.
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- Sec. 207. Study of feasibility and effects of reducing use of fuel for automobiles.

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- Sec. 302. Cost recovery from Government agencies.
- Sec. 303. Depleted uranium hexafluoride.
- Sec. 304. Nuclear Regulatory Commission meetings.
- Sec. 305. Cooperative research and development and special demonstration projects for the uranium mining industry.
- Sec. 306. Maintenance of a viable domestic uranium conversion industry.
- Sec. 307. Paducah decontamination and decommissioning plan.
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- Sec. 402. FERC data on hydroelectric licensing.

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

TITLE VI—RENEWABLE ENERGY

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

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Sec. 604. Study of renewable fuel content.

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1 SEC. 2. ENERGY POLICY.

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

DIVISION A

12

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 19 fiscal year 2004, \$1,050,000,000; for fiscal year 2005, 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)—
- 23 (A) by striking "(1) Subject to paragraph
 24 (2)" and inserting "Subject to subsection (c)";
 25 and

1	(B) by striking "(2) An agency" and all
2	that follows through "such exclusion.".
3	(2) By amending subsection (c) of such section
4	543 to read as follows:
5	"(c) EXCLUSIONS.—(1) A Federal building may be
6	excluded from the requirements of subsections (a) and (b)
7	only if—
8	"(A) the President declares the building to re-
9	quire exclusion for national security reasons; and
10	"(B) the agency responsible for the building
11	has—
12	"(i) completed and submitted all federally
13	required energy management reports; and
14	"(ii) achieved compliance with the energy
15	efficiency requirements of this Act, the Energy
16	Policy Act of 1992, Executive Orders, and other
17	Federal law;
18	"(iii) implemented all practical, life cycle
19	cost-effective projects in the excluded building.
20	"(2) The President shall only declare buildings de-
21	scribed in paragraph (1)(A) to be excluded, not ancillary
22	or nearby facilities that are not in themselves national se-
23	curity facilities.".
24	(3) In section 548(b)(1)(A)—
25	(A) by striking "copy of the"; and

1	(B) by striking "sections $543(a)(2)$ and
2	543(c)(3)" and inserting "section $543(c)$ ".
3	(e) Acquisition Requirement.—Section 543(b) of
4	such Act is amended—
5	(1) in paragraph (1), by striking "(1) Not" and
6	inserting " (1) Except as provided in paragraph (5) ,
7	not"; and

8 (2) by adding at the end the following 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 the enactment of 20 21 paragraph, after considering recommendations by the Na-22 tional Electrical Manufacturers Association. The Sec-23 retary of Energy shall develop guidelines within 180 days 24 after the enactment of this paragraph for exemptions to

this section when equivalent products do not exist, are im-1 2 practical, or do not meet the agency mission requirements. 3 "(ii) The Administrator of the General Services Ad-4 ministration and the Secretary of Defense (acting through 5 the Defense Logistics Agency), with assistance from the 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

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.".
13 14	requirements of this section.". 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:

26

1	"(3) The terms 'energy savings contract' and
2	'energy savings performance contract' mean a con-
3	tract which provides for—
4	"(A) the performance of services for the
5	design, acquisition, installation, testing, oper-
6	ation, and, where appropriate, maintenance and
7	repair, of an identified energy or water con-
8	servation measure or series of measures at one
9	or more locations; or
10	"(B) energy savings through the construc-
11	tion and operation of one or more buildings or
12	facilities to replace one or more existing build-
13	ings or facilities.".
14	(3) Energy or water conservation meas-
15	URE.—Section 804(4) of the National Energy Con-
16	servation Policy Act (42 U.S.C. 8287c(4)) is amend-
17	ed to read as follows:
18	"(4) The term 'energy or water conservation
19	measure' means—
20	"(A) an energy conservation measure, as
21	defined in section $551(4)$ (42 U.S.C. $8259(4)$);
22	or
23	"(B) a water conservation measure that
24	improves water efficiency, is life cycle cost effec-
25	tive, and involves water conservation, water re-

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 the enactment 10 of 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-

ment, but may not establish standards less rigorous than
 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 3 years, 15 invite the Governor of each State to review and, if necessary, revise the energy conservation plan of such State 16 submitted under subsection (b) or (e). Such reviews should 17 consider the energy conservation plans of other States 18 within the region, and identify opportunities and actions 19 20 carried out in pursuit of common energy conservation 21 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 ************************ 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 or encourage energy conservation and energy efficiency
investments when compared to structures of the
same physical description and occupancy in compatible geographic locations;

20 (2) the extent to which education could increase
21 the conservation of low-income households who opt
22 to receive supplemental income instead of Low-In23 come Home Energy Assistance funds;

24 (3) the benefit in energy efficiency and energy25 savings that can be achieved through the annual

1 maintenance of heating and cooling appliances in the 2 homes of those receiving Low-Income Home Energy 3 Assistance funds; and 4 (4) the loss of energy conservation that results 5 from structural inadequacies in a structure that is 6 unhealthy, not energy efficient, and environmentally 7 unsound and that receives Low-Income Home En-8 ergy Assistance funds for weatherization. 9 SEC. 135. HIGH PERFORMANCE PUBLIC BUILDINGS. 10 (a) PROGRAM ESTABLISHMENT AND ADMINISTRA-11 TION.— 12 (1) ESTABLISHMENT.—There is established in 13 the Department of Energy the High Performance 14 Public Buildings Program (in this section referred to 15 as the "Program"). 16 (2) IN GENERAL.—The Secretary of Energy 17 may, through the Program, make grants— 18 (A) to assist units of local government in 19 the production, through construction or renova-20 tion of buildings and facilities they own and op-21 erate, of high performance public buildings and 22 facilities that are healthful, productive, energy 23 efficient, and environmentally sound;

1 (B) to State energy offices to administer 2 the program of assistance to units of local gov-3 ernment pursuant to this section; and 4 (C) to State energy offices to promote par-5 ticipation by units of local government in the 6 Program. 7 (3) Grants to assist units of local gov-8 ERNMENT.—Grants under paragraph (2)(A) for new 9 public buildings shall be used to achieve energy effi-10 ciency performance that reduces energy use at least 11 30 percent below that of a public building con-12 structed in compliance with standards prescribed in Chapter 8 of the 2000 International Energy Con-13 14 servation Code, or a similar State code intended to 15 achieve substantially equivalent results. Grants 16 under paragraph (2)(A) for existing public buildings 17 shall be used to achieve energy efficiency perform-18 ance that reduces energy use below the public build-19 ing baseline consumption, assuming a 3-year, weath-20 er-normalized average for calculating such baseline. 21 Grants under paragraph (2)(A) shall be made to 22 units of local government that have—

23 (A) demonstrated a need for such grants24 in order to respond appropriately to increasing

1	population or to make major investments in
2	renovation of public buildings; and
3	(B) made a commitment to use the grant
4	funds to develop high performance public build-
5	ings in accordance with a plan developed and
6	approved pursuant to paragraph $(5)(A)$.
7	(4) Other grants.—
8	(A) GRANTS FOR ADMINISTRATION.—
9	Grants under paragraph (2)(B) shall be used to
10	evaluate compliance by units of local govern-
11	ment with the requirements of this section, and
12	in addition may be used for—
13	(i) distributing information and mate-
14	rials to clearly define and promote the de-
15	velopment of high performance public
16	buildings for both new and existing facili-
17	ties;
18	(ii) organizing and conducting pro-
19	grams for local government personnel, ar-
20	chitects, engineers, and others to advance
21	the concepts of high performance public
22	buildings;
23	(iii) obtaining technical services and
24	assistance in planning and designing high
25	performance public buildings; and

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

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

12 (5) IMPLEMENTATION.—

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

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

25 (b) Allocation of Funds.—

41

1	(1) IN GENERAL.—Except as provided in para-
2	graph (3), funds appropriated to carry out this sec-
3	tion shall be provided to State energy offices.
4	(2) PURPOSES.—Except as provided in para-
5	graph (3), funds appropriated to carry out this sec-
6	tion shall be allocated as follows:
7	(A) Seventy percent shall be used to make
8	grants under subsection $(a)(2)(A)$.
9	(B) Fifteen percent shall be used to make
10	grants under subsection $(a)(2)(B)$.
11	(C) Fifteen percent shall be used to make
12	grants under subsection $(a)(2)(C)$.
13	(3) OTHER FUNDS.—The Secretary of Energy
14	may retain not to exceed \$300,000 per year from
15	amounts appropriated under subsection (c) to assist
16	State energy offices in coordinating and imple-
17	menting the Program. Such funds may be used to
18	develop reference materials to further define the
19	principles and criteria to achieve high performance
20	public buildings.
21	(c) Authorization of Appropriations.—There
22	are authorized to be appropriated to the Secretary of En-
23	ergy to carry out this section such sums as may be nec-
24	essary for each of the fiscal years 2002 through 2010.

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

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

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

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

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

7 Subtitle D—Energy Efficiency for 8 Consumer Products

9 SEC. 141. ENERGY STAR PROGRAM.

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

13 "SEC. 324A. ENERGY STAR PROGRAM.

14 "(a) IN GENERAL.—There is established at the De-15 partment of Energy and the Environmental Protection Agency a program to identify and promote energy-efficient 16 17 products and buildings in order to reduce energy consumption, improve energy security, and reduce pollution 18 through labeling of products and buildings that meet the 19 highest energy efficiency standards. Responsibilities under 20 21 the program shall be divided between the Department of 22 Energy and the Environmental Protection Agency con-23 sistent with the terms of agreements between the two 24 agencies. The Administrator and the Secretary shall"(1) promote Energy Star compliant tech nologies as the preferred technologies in the market place for achieving energy efficiency and to reduce
 pollution;

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

7 "(3) preserve the integrity of the Energy Star8 label.

9 For the purposes of carrying out this section, there is au10 thorized to be appropriated for fiscal years 2002 through
11 2006 such sums as may be necessary, to remain available
12 until expended.

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

- 22 "(1) Air cleaners.
- 23 "(2) Ceiling fans.

24 "(3) Light commercial heating and cooling25 products.

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

roofing products industry to determine the appropriate
 solar reflective index of roofing products.".

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

"Sec. 324A. Energy Star program.".

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

9 (a) AMENDMENT.—The Energy Policy and Conserva10 tion Act (42 U.S.C. 6201 and following) is amended by
11 inserting the following after section 324A:

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

14 "(a) PROGRAM.—There is established at the Environ-15 mental Protection Agency and the Department of Energy a government-industry partnership program to identify 16 17 and promote the purchase of renewable and alternative energy products, to recognize companies that purchase re-18 19 newable and alternative energy products for the environ-20 mental and energy security benefits of such purchases, 21 and to educate consumers about the environmental and 22 energy security benefits of renewable and alternative en-23 ergy. Responsibilities under the program shall be divided between the Environmental Protection Agency and the 24 Department of Energy consistent with the terms of agree-25 HR 4 PCS

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

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

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

18 "(3) promote Energy Sun compliant products
19 and technologies as the preferred products and tech20 nologies in the marketplace for reducing pollution
21 and achieving energy security; and

"(4) work to enhance public awareness and preserve the integrity of the Energy Sun label.

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

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

"(1) Passive solar, solar thermal, concentrating
solar energy, solar water heating, and related solar
products and building technologies.

15 "(2) Solar photovoltaics and other solar electric16 power generation technologies.

17 "(3) Wind.

18 "(4) Geothermal.

19 "(5) Biomass.

20 "(6) Distributed energy (including, but not lim21 ited to, microturbines, combined heat and power,
22 fuel cells, and stirling heat engines).

23 "(7) Green power or other renewables and al24 ternative based electric power products (including

1	green tag credit programs) sold to retail consumers
2	of electricity.
3	"(8) Homes.
4	"(9) School buildings.
5	"(10) Retail buildings.
6	"(11) Health care facilities.
7	"(12) Hotels and other commercial lodging fa-
8	cilities.
9	"(13) Restaurants and other food service facili-
10	ties.
11	"(14) Rest area facilities along interstate high-
12	ways.
13	"(15) Sports stadia, arenas, and concert facili-
14	ties.
15	"(16) Any other product, technology or building
16	category, the accelerated recognition of which the
17	Administrator or the Secretary determines to be nec-
18	essary or appropriate for the achievement of the
19	purposes of this section.
20	Nothing in this subsection shall be construed to limit the
21	discretion of the Administrator or the Secretary under
22	subsection $(a)(1)$ to include in the Energy Sun program
23	additional products, technologies, and buildings not listed
24	in this subsection. Participation by private-sector entities
25	in programs or studies authorized by this section shall be

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

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

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

"Sec. 324B. Energy Sun renewable and alternative energy program.".

15 SEC. 142. LABELING OF ENERGY EFFICIENT APPLIANCES.

16 (a) STUDY.—Section 324(e) of the Energy Policy and
17 Conservation Act (42 U.S.C. 6294(e)) is amended as fol18 lows:

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

- 21 (2) By redesignating paragraphs (1) and (2) as
 22 subparagraphs (A) and (B), respectively.
- 23 (3) By adding the following new paragraph at24 the end:

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

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

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

19 "(G) Not later than 3 months after the date of the 20 enactment of this subparagraph, the Commission shall ini-21 tiate a rulemaking to consider the effectiveness of the cur-22 rent consumer products labeling program in assisting con-23 sumers in making purchasing decisions and improving en-24 ergy efficiency and to consider changes to the label that 25 would improve the effectiveness of the label. Such rule1 making shall be completed within 15 months of the date2 of the enactment of this subparagraph.".

3 SEC. 143. APPLIANCE STANDARDS.

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

8 "(u) STANDBY MODE ELECTRIC ENERGY CONSUMP9 TION BY HOUSEHOLD APPLIANCES.—(1) In this sub10 section:

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

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

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

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

24 "(B) In the case of analog televisions, the Secretary25 shall prescribe, on or after the date that is 2 years after

the date of the 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)).

6 "(3)(A) A manufacturer or importer of a household
7 appliance may submit to the Secretary an application for
8 an exemption of the household appliance from the stand9 ard under paragraph (2).

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

14 "(i) it is not technically feasible to modify the
15 household appliance to enable the household appli16 ance to meet the standard;

17 "(ii) the standard is incompatible with an en18 ergy efficiency standard applicable to the household
19 appliance under another subsection; or

20 "(iii) the cost of electricity that a typical con21 sumer would save in operating the household appli22 ance meeting the standard would not equal the in23 crease in the price of the household appliance that
24 would be attributable to the modifications that

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

"(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 1 year after the date of the enact-9 ment of the Energy Advancement and Conservation Act 10 of 2001, the Secretary shall conduct a rulemaking to 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 the en actment of this paragraph, covered products under this
 section.".

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 the enactment 14 15 of this subsection, develop and implement a public education campaign to educate homeowners and small busi-16 17 ness owners concerning the energy savings resulting from regularly scheduled maintenance of air conditioning, heat-18 19 ing, and ventilating systems. In developing and imple-20 menting this campaign, the Secretary shall consider sup-21 port by the Department of public education programs 22 sponsored by trade and professional and energy efficiency 23 organizations. The public service information shall provide 24 sufficient information to allow consumers to make in-25 formed choices from among professional, licensed (where

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 otherwise 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 the enact-16 ment of this subsection prescribe testing requirements for 17 18 residential furnace fans, residential central air conditioner fans, heat pump circulation fans, suspended ceiling fans, 19 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,

residential central air conditioner fans, heat pump circula-

tion fans, and suspended ceiling fans, such test procedures

24

25

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 the enactment 11 12 of this subsection, assess the current and projected future 13 market for residential furnace fans, residential central air conditioner and heat pump circulation fans, suspended 14 15 ceiling fans, and refrigerated bottled or canned beverage vending machines. This assessment shall include an exam-16 17 ination of the types of products sold, the number of products in use, annual sales of these products, energy used 18 19 by these products sold, the number of products in use, 20 annual sales of these products, energy used by these prod-21 ucts, estimates of the potential energy savings from spe-22 cific technical improvements to these products, and an ex-23 amination of the cost-effectiveness of these improvements. 24 Prior to the end of this time period, the Secretary shall 25 hold an initial scoping workshop to discuss and receive

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

3 "(2) The Secretary shall within 24 months after the 4 date on which testing requirements are prescribed by the 5 Secretary pursuant to section 323(f), prescribe, by rule, 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 the enactment of this section,
each agency shall provide a report to 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 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 the 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 re-1 2 sulting from extended idling of heavy-duty trucks and 3 other vehicles and engines, and shall update those models 4 as the Administrator deems appropriate. Additionally, 5 within 90-days after the date of the enactment of this subsection, the Administrator shall commence a review as to 6 7 the appropriate emissions reductions credit that should be 8 allotted under the Clean Air Act for the use of advanced 9 idle elimination systems, and whether such credits should 10 be subject to an emissions trading system, and shall revise Agency regulations and guidance as the Administrator 11 deems appropriate. 12

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:

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

8 (2) Other energy reductions accomplished 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 the enactment of this Act. Such report shall in-19 clude a description of the results of the analysis of each 20 of the subject described in subsection (b).

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

(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 amended-14 (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
14 15	SEC. 301. LICENSE PERIOD.
15 16	SEC. 301. LICENSE PERIOD.
15 16	SEC. 301. LICENSE PERIOD. Section 103 c. of the Atomic Energy Act of 1954 (42)
15 16 17	SEC. 301. LICENSE PERIOD. Section 103 c. of the Atomic Energy Act of 1954 (42) U.S.C. 2133(c)) is amended—
15 16 17 18	SEC. 301. LICENSE PERIOD. Section 103 c. of the Atomic Energy Act of 1954 (42 U.S.C. 2133(c)) is amended— (1) by striking "c. Each such" and inserting
15 16 17 18 19	SEC. 301. LICENSE PERIOD. Section 103 c. of the Atomic Energy Act of 1954 (42) U.S.C. 2133(c)) is amended— (1) by striking "c. Each such" and inserting the following:
15 16 17 18 19 20	SEC. 301. LICENSE PERIOD. Section 103 c. of the Atomic Energy Act of 1954 (42 U.S.C. 2133(c)) is amended— (1) by striking "c. Each such" and inserting the following: "c. LICENSE PERIOD.—
 15 16 17 18 19 20 21 	SEC. 301. LICENSE PERIOD. Section 103 c. of the Atomic Energy Act of 1954 (42 U.S.C. 2133(c)) is amended— (1) by striking "c. Each such" and inserting the following: "c. LICENSE PERIOD.— "(1) IN GENERAL.—Each such"; and
 15 16 17 18 19 20 21 22 	SEC. 301. LICENSE PERIOD. Section 103 c. of the Atomic Energy Act of 1954 (42 U.S.C. 2133(c)) is amended— (1) by striking "c. Each such" and inserting the following: "c. LICENSE PERIOD.— "(1) IN GENERAL.—Each such"; and (2) by adding at the end the following:

1	cense may not exceed 40 years from the date on
2	which the Commission finds, before operation of the
3	facility, that the acceptance criteria required by sec-
4	tion 185 b. are met.".
5	SEC. 302. COST RECOVERY FROM GOVERNMENT AGENCIES.
6	Section 161 w. of the Atomic Energy Act of 1954
7	(42 U.S.C. 2201(w)) is amended—
8	(1) by striking "for or is issued" and all that
9	follows through "1702" and inserting "to the Com-
10	mission for, or is issued by the Commission, a li-
11	cense or certificate";
12	(2) by striking "483a" and inserting "9701";
13	and
14	(3) by striking ", of applicants for, or holders
15	of, such licenses or certificates".
16	SEC. 303. DEPLETED URANIUM HEXAFLUORIDE.
17	Section 1(b) of Public Law 105–204 is amended by
18	striking "fiscal year 2002" and inserting "fiscal year
19	2005".
20	SEC. 304. NUCLEAR REGULATORY COMMISSION MEETINGS.
21	If a quorum of the Nuclear Regulatory Commission
22	gathers to discuss official Commission business the discus-
23	sions shall be recorded, and the Commission shall notify
24	the public of such discussions within 15 days after they
25	occur. The Commission shall promptly make a transcript

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

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

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

(1) cooperative, cost-shared, agreements between the Department of Energy and domestic uranium producers to identify, test, and develop improved in situ leaching mining technologies, including low-cost environmental restoration technologies
that may be applied to sites after completion of in
situ leaching operations; and

20 (2) funding for competitively selected dem21 onstration projects with domestic uranium producers
22 relating to—

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

(B) restoration of well fields; and

1 (C) decommissioning and decontamination 2 activities.

3 (b) DOMESTIC URANIUM PRODUCER.—For purposes
4 of this section, the term "domestic uranium producer" has
5 the meaning given that term in section 1018(4) of the En6 ergy Policy Act of 1992 (42 U.S.C. 2296b–7(4)), except
7 that the term shall not include any producer that has not
8 produced uranium from domestic reserves on or after July
9 30, 1998.

10SEC. 306. MAINTENANCE OF A VIABLE DOMESTIC URANIUM11CONVERSION INDUSTRY.

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

18 SEC. 307. PADUCAH DECONTAMINATION AND DECOMMIS-

19 SIONING PLAN.

The Secretary of Energy shall prepare and submit a plan to Congress within 180 days after the date of the enactment of this Act that establishes scope, cost, schedule, sequence of activities, and contracting strategy for— (1) the decontamination and decommissioning of the Department of Energy's surplus buildings and

- facilities at the Paducah Gaseous Diffusion Plant
 that have no future anticipated reuse; and
- 3 (2) the remediation of Department of Energy
 4 Material Storage Areas at the Paducah Gaseous Dif5 fusion Plant.

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

18 SEC. 308. STUDY TO DETERMINE FEASIBILITY OF DEVEL-

19 OPING COMMERCIAL NUCLEAR ENERGY PRO20 DUCTION FACILITIES AT EXISTING DEPART21 MENT OF ENERGY SITES.

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

3 (1) options for how and where nuclear power
4 plants can be developed on existing Department of
5 Energy sites;
6 (2) estimates on cost savings to the Federal
7 Government that may be realized by locating new

8 nuclear power plants on Federal sites;

9 (3) the feasibility of incorporating new tech10 nology into nuclear power plants located on Federal
11 sites;

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

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

(6) any other factors that the Secretary believeswould be relevant in making the determination.

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

1SEC. 309. PROHIBITION OF COMMERCIAL SALES OF URA-2NIUM BY THE UNITED STATES UNTIL 2009.

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

6 "(g) PROHIBITION ON SALES.—With the exception of 7 sales pursuant to subsection (b)(2) (42 U.S.C.2297h-8 10(b)(2), notwithstanding any other provision of law, the 9 United States Government shall not sell or transfer any 10 uranium (including natural uranium concentrates, natural uranium hexafluoride, enriched uranium, depleted ura-11 12 nium, or uranium in any other form) through March 23, 13 2009 (except sales or transfers for use by the Tennessee Valley Authority in relation to the Department of Ener-14 gy's HEU or Tritium programs, or the Department or En-15 16 ergy research reactor sales program, or any depleted uranium hexaflouride to be transferred to a designated De-17 18 partment of Energy contractor in conjunction with the 19 construction of the Depleted planned Uranium 20 Hexaflouride conversion plants in Portsmouth, Ohio, and Paducah, Kentucky, to any natural uranium transferred 21 22 to the U.S. Enrichment Corporation from the Department 23 of Energy to replace contaminated uranium received from 24 the Department of Energy when the U.S. Enrichment Corporation was privatized in July, 1998, or for emer-25 gency purposes in the event of a disruption in supply to 26 HR 4 PCS

end users in the United States). The aggregate of sales
 or transfers of uranium by the United States Government
 after March 23, 2009, shall not exceed 3,000,000 pounds
 U₃O₈ per calendar year.".

5 TITLE IV—HYDROELECTRIC 6 ENERGY

7 SEC. 401. ALTERNATIVE CONDITIONS AND FISHWAYS.

8 (a) ALTERNATIVE MANDATORY CONDITIONS.—Sec9 tion 4 of the Federal Power Act (16 U.S.C. 797) is
10 amended by adding at the end the following:

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

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

3	"(A) provides no less protection for the reserva-
4	tion than provided by the condition deemed nec-
5	essary by the Secretary; and
6	"(B) will either—
7	"(i) cost less to implement, or
8	"(ii) result in improved operation of the
9	project works for electricity production,
10	as compared to the condition deemed necessary by
11	the Secretary.
12	"(3) Within 1 year after the enactment of this sub-
13	section, each Secretary concerned shall, by rule, establish
14	a process to expeditiously resolve conflicts arising under
15	this subsection.".
16	(b) Alternative Fishways.—Section 18 of the
17	Federal Power Act (16 U.S.C. 811) is amended by—
18	(1) inserting "(a)" before the first sentence;
19	and
20	(2) adding at the end the following:
21	(b)(1) Whenever the Commission shall require a li-
22	censee to construct, maintain, or operate a fishway pre-
23	scribed by the Secretary of the Interior or the Secretary
24	of Commerce under this section, the licensee or any other

1	party to the proceeding may propose an alternative to such
2	prescription to construct, maintain, or operate a fishway.
3	"(2) Notwithstanding subsection (a), the Secretary of
4	the Interior or the Secretary of Commerce, as appropriate,
5	shall accept and prescribe, and the Commission shall re-
6	quire, the proposed alternative referred to in paragraph
7	(1), if the Secretary of the appropriate department deter-
8	mines, based on substantial evidence provided by the party
9	proposing such alternative, that the alternative—
10	"(A) will be no less effective than the fishway
11	initially prescribed by the Secretary, and
12	"(B) will either—
13	"(i) cost less to implement, or
14	"(ii) result in improved operation of the
15	project works for electricity production,
16	as compared to the fishway initially prescribed by
17	the Secretary.
18	"(3) Within 1 year after the enactment of this sub-
19	section, the Secretary of the Interior and the Secretary
20	of Commerce shall each, by rule, establish a process to
21	expeditiously resolve conflicts arising under this sub-
22	section.".
23	SEC. 402. FERC DATA ON HYDROELECTRIC LICENSING.
24	(a) DATA COLLECTION PROCEDURES.—The Federal

25 Energy Regulatory Commission shall revise its procedures

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

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

TITLE V—FUELS 2 SEC. 501. TANK DRAINING DURING TRANSITION TO SUM-3 **MERTIME RFG.**

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4 Not later than 60 days after the enactment of the 5 Act, the Administrator of the Environmental Protection Agency shall commence a rulemaking to determine wheth-6 er modifications to the regulations set forth in 40 CFR 7 8 Section 80.78 and any associated regulations regarding the transition to high ozone season reformulated gasoline 9 10 are necessary to ensure that the transition to high ozone 11 season reformulated gasoline is conducted in a manner 12 that minimizes disruptions to the general availability and 13 affordability of gasoline, and maximizes flexibility with re-14 gard to the draining and inventory management of gaso-15 line storage tanks located at refineries, terminals, wholesale and retail outlets, consistent with the goals of the 16 Clean Air Act. The Administrator shall propose and take 17 18 final action in such rulemaking to ensure that any modi-19 fications are effective and implemented at least 60 days 20 prior to the beginning of the high ozone season for the 21year 2002.

22 SEC. 502. GASOLINE BLENDSTOCK REQUIREMENTS.

23 Not later than 60 days after the enactment of this 24 Act, the Administrator of the Environmental Protection 25 Agency shall commence a rulemaking to determine wheth-

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

21 SEC. 503. BOUTIQUE FUELS.

(a) JOINT STUDY.—The Administrator of the Environmental Protection Agency and the Secretary of Energy
shall jointly conduct a study of all Federal, State, and
local requirements regarding motor vehicle fuels, including

1	requirements relating to reformulated gasoline, volatility
2	(Reid Vapor Pressure), oxygenated fuel, diesel fuel and
3	other requirements that vary from State to State, region
4	to region, or locality to locality. The study shall analyze—
5	(1) the effect of the variety of such require-
6	ments on the price of motor vehicle fuels to the con-
7	sumer;
8	(2) the availability and affordability of motor
9	vehicle fuels in different States and localities;
10	(3) the effect of Federal, State, and local regu-
11	lations, including multiple fuel requirements, on do-
12	mestic refineries and the fuel distribution system;
13	(4) the effect of such requirements on local, re-
14	gional, and national air quality requirements and
15	goals;
16	(5) the effect of such requirements on vehicle
17	emissions;
18	(6) the feasibility of developing national or re-
19	gional fuel specifications for the contiguous United
20	States that would—
21	(A) enhance flexibility in the fuel distribu-
22	tion infrastructure and improve fuel fungibility;
23	(B) reduce price volatility and costs to con-
24	sumers and producers;

1	(C) meet local, regional, and national air
2	quality requirements and goals; and
3	(D) provide increased gasoline market li-
4	quidity;
5	(7) the extent to which the Environmental Pro-
6	tection Agency's Tier II requirements for conven-
7	tional gasoline may achieve in future years the same
8	or similar air quality results as State reformulated
9	gasoline programs and State programs regarding
10	gasoline volatility (RVP); and
11	(8) the feasibility of providing incentives to pro-
12	mote cleaner burning fuel.
13	(b) REPORT.—By December 31, 2001, the Adminis-
14	trator of the Environmental Protection Agency and the
15	Secretary of Energy shall submit a report to the Congress
16	containing the results of the study conducted under sub-
17	section (a). Such report shall contain recommendations for
18	legislative and administrative actions that may be taken
19	to simplify the national distribution system for motor vehi-
20	cle fuel, make such system more cost-effective, and reduce
21	the costs and increase the availability of motor vehicle fuel
22	to the end user while meeting the requirements of the
23	Clean Air Act. Such recommendations shall take into ac-
24	count the need to provide lead time for refinery and fuel

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

3 SEC. 504. FUNDING FOR MTBE CONTAMINATION.

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

15 TITLE VI—RENEWABLE ENERGY

16 SEC. 601. ASSESSMENT OF RENEWABLE ENERGY RE-

17 SOURCES.

(a) RESOURCE ASSESSMENT.—Not later than 1 year
after the date of the enactment of this Act, and each year
thereafter, the Secretary of Energy shall publish an assessment by the National Laboratories of all renewable energy resources available within the United States.

23 (b) CONTENTS OF REPORT.—The report published24 under subsection (a) shall contain each of the following:

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

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

12 SEC. 602. RENEWABLE ENERGY PRODUCTION INCENTIVE.

13 Section 1212 of the Energy Policy Act of 1992 (4214 U.S.C. 13317) is amended as follows:

15 (1) In subsection (a) by striking "and which satisfies" and all that follows through "Secretary 16 17 shall establish." and inserting ". The Secretary shall 18 establish other procedures necessary for efficient ad-19 ministration of the program. The Secretary shall not 20 establish any criteria or procedures that have the ef-21 fect of assigning to proposals a higher or lower pri-22 ority for eligibility or allocation of appropriated 23 funds on the basis of the energy source proposed.". 24 (2) In subsection (b)—

(A) by striking "a State or any political" 1 2 and all that follows through "nonprofit electrical cooperative" and inserting "an electricity-3 4 generating cooperative exempt from taxation 5 under section 501(c)(12)section or 6 1381(a)(2)(C) of the Internal Revenue Code of 7 1986, a public utility described in section 115 8 of such Code, a State, Commonwealth, terri-9 tory, or possession of the United States or the 10 District of Columbia, or a political subdivision 11 thereof, or an Indian tribal government or sub-12 division thereof,"; and 13 (B) By inserting "landfill gas," after 14 "wind, biomass,". 15 (3) In subsection (c) by striking "during the 16 10-fiscal year period beginning with the first full fis-17 cal year occurring after the enactment of this sec-18 tion" and inserting "before October 1, 2013". 19 (4) In subsection (d) by inserting "or in which 20 the Secretary finds that all necessary Federal and 21 State authorizations have been obtained to begin 22 construction of the facility" after "eligible for such

23 payments".

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

11	SEC. 603. STUDY OF ETHANOL FROM SOLID WASTE LOAN
10	this section.".
9	available until expended." after "purposes of
8	priated pursuant to this subsection to remain
7	(B) by inserting "Funds may be appro-
6	and inserting "2003 through 2023"; and
5	(A) by striking "1993, 1994, and 1995"
4	(7) In subsection (g)—
3	and inserting "September 30, 2023".
2	of" and all that follows through "of this section"
1	(6) In subsection (f) by striking "the expiration

12

GUARANTEE PROGRAM.

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

21 SEC. 604. STUDY OF RENEWABLE FUEL CONTENT.

(a) STUDY.—The Administrator of the Environmental Protection Agency and the Secretary of Energy
shall jointly conduct a study of the feasibility of developing
a requirement that motor vehicle fuel sold or introduced

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

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

15 **TITLE VII—PIPELINES**

16 SEC. 701. PROHIBITION ON CERTAIN PIPELINE ROUTE.

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

(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. 702. HISTORIC PIPELINES.

4 Section 7 of the Natural Gas Act (15 U.S.C. 717(f))
5 is amended by adding at the end the following new sub6 section:

7 "(i) Notwithstanding the National Historic Preserva8 tion Act, a transportation facility shall not be eligible for
9 inclusion on the National Register of Historic Places
10 unless—

"(1) the Commission has permitted the abandonment of the transportation facility pursuant to
subsection (b) of this section, or

14 "(2) the owner of the facility has given written15 consent to such eligibility.

16 Any transportation facility deemed eligible for inclusion on
17 the National Register of Historic Places prior to the date
18 of the enactment of this subsection shall no longer be eligi19 ble unless the owner of the facility gives written consent
20 to such eligibility.".

21 TITLE VIII—MISCELLANEOUS 22 PROVISIONS

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

(a) GRANT AUTHORITY.—The Secretary of Energy isauthorized to make a single grant to a qualified institution

to examine and develop the feasibility of burning post-con sumer carpet in cement kilns as an alternative energy
 source. The purposes of the grant shall include
 determining—
 (1) how post-consumer carpet can be burned

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

7 (2) the extent to which overall kiln emissions8 may be reduced; and

9 (3) how this process provides benefits to both10 cement kiln operations and carpet suppliers.

(b) QUALIFIED INSTITUTION.—For the purposes of
subsection (a), a qualified institution is a research-intensive institution of higher learning with demonstrated expertise in the fields of fiber recycling and logistical modeling of carpet waste collection and preparation.

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

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

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

18 (1) increase the use of renewable domestic en19 ergy sources, including conventional and nonconven20 tional sources;

(2) conserve energy resources, including improving 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.

3 SEC. 803. STUDY OF AIRCRAFT EMISSIONS.

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

3 **DIVISION B**

4 SEC. 2001. SHORT TITLE.

5 This division may be cited as the "Comprehensive6 Energy Research and Technology Act of 2001".

7 SEC. 2002. FINDINGS.

8 The Congress finds that—

9 (1) the Nation's prosperity and way of life are10 sustained by energy use;

(2) the growing imbalance between domestic energy production and consumption means that the
Nation is becoming increasingly reliant on imported
energy, which has the potential to undermine the
Nation's economy, standard of living, and national
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 do-mestic energy supplies will ensure that future gen-

erations 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 environmental impacts and are vital to delivering clean energy to fuel the Nation's economic growth;

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

19 (7) Federal funding should focus on those pro20 grams, projects, and activities that are long-term,
21 high-risk, noncommercial, and well-managed, and
22 that provide the potential for scientific and techno23 logical advances; and

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

1 SEC. 2003. PURPOSES.

2 The purposes of this division are to—

3 (1) protect and strengthen the Nation's econ4 omy, standard of living, and national security by re5 ducing dependence on imported energy;

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

(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;

17 (4) consider the comparative environmental im18 pacts of the energy saved or produced by specific
19 programs, projects, or activities;

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

(6) foster international cooperation by developing international markets for domestically produced sustainable energy technologies, and by trans-

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

4 (7) provide sufficient funding of programs,
5 projects, and activities that are performance-based
6 and modeled as public-private partnerships, as ap7 propriate; and

8 (8) enhance the contribution of a given pro9 gram, project, or activity to fundamental scientific
10 knowledge.

11 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.

19 (1) ENERGY CONSERVATION AND ENERGY EFFI20 CIENCY.—

21 (A) For the Building Technology, State
22 and Community Sector, the program should de23 velop technologies, housing components, de24 signs, and production methods that will, by
25 2010—

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1	(i) reduce the monthly energy cost of
2	new housing by 20 percent, compared to
3	the cost as of the date of the enactment of
4	this Act;
5	(ii) cut the environmental impact and
6	energy use of new housing by 50 percent,
7	compared to the impact and use as of the
8	date of the enactment of this Act; and
9	(iii) improve durability and reduce
10	maintenance costs by 50 percent compared
11	to the durability and costs as of the date
12	of the enactment of this Act.
13	(B) For the Industry Sector, the program
14	should, in cooperation with the affected indus-
15	tries, improve the energy intensity of the major
16	energy-consuming industries by at least 25 per-
17	cent by 2010, compared to the energy intensity
18	as of the date of the enactment of this Act.
19	(C) For Power Technologies, the program
20	should, in cooperation with the affected
21	industries—
22	(i) develop a microturbine (40 to 300
23	kilowatt) that is more than 40 percent
24	more efficient by 2006, and more than 50
25	percent more efficient by 2010, compared

1	to the efficiency as of the date of the en-
2	actment of this Act; and
3	(ii) develop advanced materials for
4	combustion systems that reduce emissions
5	of nitrogen oxides by 30 to 50 percent
6	while increasing efficiency 5 to 10 percent
7	by 2007, compared to such emissions as of
8	the date of the enactment of this Act.
9	(D) For the Transportation Sector, the
10	program should, in cooperation with affected
11	industries—
12	(i) develop a production prototype
13	passenger automobile that has fuel econ-
14	omy equivalent to 80 miles per gallon of
15	gasoline by 2004;
16	(ii) develop class 7 and 8 heavy duty
17	trucks and buses with ultra low emissions
18	and the ability to use an alternative fuel
19	that has an average fuel economy equiva-
20	lent to—
21	(I) 10 miles per gallon of gaso-
22	line by 2007; and
23	(II) 13 miles per gallon of gaso-
24	line by 2010;

1	(iii) develop a production prototype of
2	a passenger automobile with zero equiva-
3	lent emissions that has an average fuel
4	economy of 100 miles per gallon of gaso-
5	line by 2010; and
6	(iv) improve, by 2010, the average
7	fuel economy of trucks—
8	(I) in classes 1 and 2 by 300 per-
9	cent; and
10	(II) in classes 3 through 6 by
11	200 percent,
12	compared to the fuel economy as of the
13	date of the enactment of this Act.
14	(2) Renewable energy.—
15	(A) For Hydrogen Research, to carry out
16	the Spark M. Matsunaga Hydrogen Research,
17	Development, and Demonstration Act of 1990,
18	as amended by subtitle A of title II of this divi-
19	sion.
20	(B) For bioenergy:
21	(i) The program should reduce the
22	cost of bioenergy relative to other energy
23	sources to enable the United States to tri-
24	ple bioenergy use by 2010.

1	(ii) For biopower systems, the pro-
2	gram should reduce the cost of such sys-
3	tems to enable commercialization of inte-
4	grated power-generating technologies that
5	employ gas turbines and fuel cells inte-
6	grated with bioenergy gasifiers within 5
7	years after the date of the enactment of
8	this Act.
9	(iii) For biofuels, the program should
10	accelerate research, development, and dem-
11	onstration on advanced enzymatic hydrol-
12	ysis technology for making ethanol from
13	cellulosic feedstock, with the goal that be-
14	tween 2010 and 2015 ethanol produced

cellulosic feedstock, with the goal that between 2010 and 2015 ethanol produced
from energy crops would be fully competitive in terms of price with gasoline as a
neat fuel, in either internal combustion engines or fuel cell vehicles.

19 (C) For Geothermal Technology Develop20 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.

(G) For Solar Building Technology Research, the program should complete research
and development on new polymers and manufacturing processes to reduce the cost of solar
water heating by 50 percent by 2004, compared
to the cost as of the date of the enactment of
this Act.

1 (H) For Wind Energy Systems, the pro-2 gram should reduce the cost of wind energy to 3 three cents per kilowatt-hour at Class 6 (15) 4 miles-per-hour annual average) wind sites by 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.

(J) For the International Renewable	En-
ergy and Renewable Energy Production In	cen-
tive programs, and Renewable Program S	Sup-
port, the program should encourage the e	eom-
mercial application of renewable energy t	ech-

mercial application of renewable energy tech-
nologies by developed and developing countries,
State and local governmental entities and non-
profit electric cooperatives, and by the competi-
tive domestic market.

10 (3) NUCLEAR ENERGY.—

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

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

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

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

1	(E) For Nuclear Energy Technologies, the
2	program should carry out the provisions of sec-
3	tion 2343 of this Act.
4	(F) For Advanced Radioisotope Power
5	Systems, the program should ensure that the
6	United States has adequate capability to power
7	future satellite and space missions.
8	(4) Fossil energy.—
9	(A) For core fossil energy research and de-
10	velopment, the program should achieve the
11	goals outlined by the Department's Vision 21
12	Program. This research should address fuel-
13	flexible gasification and turbines, fuel cells, ad-
14	vanced-combustion systems, advanced fuels and
15	chemicals, advanced modeling and systems
16	analysis, materials and heat exchangers, envi-
17	ronmental control technologies, gas-stream pu-
18	rification, gas-separation technology, and se-
19	questration research and development focused
20	on cost-effective novel concepts for capturing,
21	reusing or storing, or otherwise mitigating car-
22	bon and other greenhouse gas emissions.
23	(B) For offshore oil and natural gas re-
24	sources, the program should investigate and de-

25 velop technologies to—

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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;
0	(D) maintain anomala and amand as an

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

16 (C) ensure that its fundamental energy
17 sciences programs, where appropriate, help 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;

	-
1	(ii) by liquefied natural gas;
2	(iii) by compressed natural gas;
3	(iv) by liquefied petroleum gas;
4	(v) by hydrogen;
5	(vi) by methanol or ethanol at no less
6	than 85 percent by volume; or
7	(vii) by propane.
8	(B) EXCLUSIONS.—The term "alternative
9	fuel vehicle" does not include—
10	(i) any vehicle designed to operate
11	solely on gasoline or diesel derived from
12	fossil fuels, regardless of whether it can
13	also be operated on an alternative fuel; or
14	(ii) any vehicle that the Secretary de-
15	termines, by rule, does not yield substan-
16	tial environmental benefits over a vehicle
17	operating solely on gasoline or diesel de-
18	rived from fossil fuels.
19	(2) PILOT PROGRAM.—The term "pilot pro-
20	gram" means the competitive grant program estab-
21	lished under section 2103.
22	(3) Ultra-low sulfur diesel vehicle.—
23	The term "ultra-low sulfur diesel vehicle" means a
24	vehicle powered by a heavy-duty diesel engine that—

1	(A) is fueled by diesel fuel which contains
2	sulfur at not more than 15 parts per million;
3	and
4	(B) emits not more than the lesser of—
5	(i) for vehicles manufactured in—
6	(I) model years 2001 through
7	2003, 3.0 grams per brake horse-
8	power-hour of nonmethane hydro-
9	carbons and oxides of nitrogen and
10	.01 grams per brake horsepower-hour
11	of particulate matter; and
12	(II) model years 2004 through
13	2006, 2.5 grams per brake horse-
14	power-hour of nonmethane hydro-
15	carbons and oxides of nitrogen and
16	.01 grams per brake horsepower-hour
17	of particulate matter; or
18	(ii) the emissions of nonmethane hy-
19	drocarbons, oxides of nitrogen, and partic-
20	ulate matter of the best performing tech-
21	nology of ultra-low sulfur diesel vehicles of
22	the same type that are commercially avail-
23	able.

1 SEC. 2103. PILOT PROGRAM.

2	(a) ESTABLISHMENT.—The Secretary shall establish
3	a competitive grant pilot program to provide not more
4	than 15 grants to State governments, local governments,
5	or metropolitan transportation authorities to carry out a
6	project or projects for the purposes described in subsection
7	(b).
8	(b) GRANT PURPOSES.—Grants under this section
9	may be used for the following purposes:
10	(1) The acquisition of alternative fuel vehicles,
11	including—
12	(A) passenger vehicles;
13	(B) buses used for public transportation or
14	transportation to and from schools;
15	(C) delivery vehicles for goods or services;
16	(D) ground support vehicles at public air-
17	ports, including vehicles to carry baggage or
18	push airplanes away from terminal gates; and
19	(E) motorized two-wheel bicycles, scooters,
20	or other vehicles for use by law enforcement
21	personnel or other State or local government or
22	metropolitan transportation authority employ-
23	ees.
24	(2) The acquisition of ultra-low sulfur diesel ve-
25	hicles.

(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 the 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 date of the enactment of this Act, and annually thereafter 4 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 the enactment of this Act, the Secretary, in consultation with other appro-14 15 priate Federal agencies, shall prepare and transmit to the Congress a 5-year program plan to guide activities under 16 17 this 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 the enactment of this Act 5 and at 2-year intervals thereafter, the Secretary, jointly 6 with other appropriate Federal agencies, shall transmit a 7 report to Congress describing the progress made to 8 achieve the purposes of this subtitle.

9 SEC. 2128. VOLUNTARY CONSENSUS STANDARDS.

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

21

20

Subtitle C—Secondary Electric 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 use of such batteries was in transportation applications. 12 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

 school buses— (1) with a gross vehicle weight of greater than 14,000 pounds; (2) that are powered by a heavy duty engine; (3) that, in the case of alternative fuel school buses, emit not more than— (A) for buses manufactured in model years 2001 and 2002, 2.5 grams per brake horse- power-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of nonmethane hydrocarbons and (B) for buses manufactured in model years 2003 through 2006, 1.8 grams per brake horse- power-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and (4) that, in the case of ultra-low sulfur diesel school buses, emit not more than— (A) for buses manufactured in model years 2001 through 2003, 3.0 grams per brake horse- power-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horse- 	1	alternative fuel school buses or ultra-low sulfur diesel
 4 14,000 pounds; 5 (2) that are powered by a heavy duty engine; 6 (3) that, in the case of alternative fuel school 7 buses, emit not more than— 8 (A) for buses manufactured in model years 9 2001 and 2002, 2.5 grams per brake horse- 10 power-hour of nonmethane hydrocarbons and 11 oxides of nitrogen and .01 grams per brake 12 horsepower-hour of particulate matter; and 13 (B) for buses manufactured in model years 14 2003 through 2006, 1.8 grams per brake horse- 15 power-hour of nonmethane hydrocarbons and 16 oxides of nitrogen and .01 grams per brake 17 horsepower-hour of particulate matter; and 18 (4) that, in the case of ultra-low sulfur diesel 19 school buses, emit not more than— 20 (A) for buses manufactured in model years 21 2001 through 2003, 3.0 grams per brake horse- 22 power-hour of nonmethane hydrocarbons and 	2	school buses—
 (2) that are powered by a heavy duty engine; (3) that, in the case of alternative fuel school buses, emit not more than— (A) for buses manufactured in model years 2001 and 2002, 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; and (B) for buses manufactured in model years 2003 through 2006, 1.8 grams per brake horse- power-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of nonmethane hydrocarbons and (B) for buses manufactured in model years 2003 through 2006, 1.8 grams per brake horse- power-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and (4) that, in the case of ultra-low sulfur diesel school buses, emit not more than— (A) for buses manufactured in model years 2001 through 2003, 3.0 grams per brake horse- power-hour of nonmethane hydrocarbons and 	3	(1) with a gross vehicle weight of greater than
 6 (3) that, in the case of alternative fuel school buses, emit not more than— 8 (A) for buses manufactured in model years 9 2001 and 2002, 2.5 grams per brake horse- 10 power-hour of nonmethane hydrocarbons and 11 oxides of nitrogen and .01 grams per brake 12 horsepower-hour of particulate matter; and 13 (B) for buses manufactured in model years 14 2003 through 2006, 1.8 grams per brake horse- 15 power-hour of nonmethane hydrocarbons and 16 oxides of nitrogen and .01 grams per brake 17 horsepower-hour of particulate matter; and 18 (4) that, in the case of ultra-low sulfur diesel 19 school buses, emit not more than— 20 (A) for buses manufactured in model years 21 2001 through 2003, 3.0 grams per brake horse- 22 power-hour of nonmethane hydrocarbons and 	4	14,000 pounds;
 buses, emit not more than— (A) for buses manufactured in model years 2001 and 2002, 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; and (B) for buses manufactured in model years 2003 through 2006, 1.8 grams per brake horse- power-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horse- power-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horse- power-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horse- power-hour of particulate matter; and (4) that, in the case of ultra-low sulfur diesel school buses, emit not more than— (A) for buses manufactured in model years 2001 through 2003, 3.0 grams per brake horse- power-hour of nonmethane hydrocarbons and 	5	(2) that are powered by a heavy duty engine;
 (A) for buses manufactured in model years 2001 and 2002, 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; and (B) for buses manufactured in model years 2003 through 2006, 1.8 grams per brake horse- power-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horse- power-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horse- power-hour of particulate matter; and (4) that, in the case of ultra-low sulfur diesel school buses, emit not more than— (A) for buses manufactured in model years 2001 through 2003, 3.0 grams per brake horse- power-hour of nonmethane hydrocarbons and 	6	(3) that, in the case of alternative fuel school
 2001 and 2002, 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; and (B) for buses manufactured in model years 2003 through 2006, 1.8 grams per brake horse- power-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and (4) that, in the case of ultra-low sulfur diesel school buses, emit not more than— (A) for buses manufactured in model years 2001 through 2003, 3.0 grams per brake horse- power-hour of nonmethane hydrocarbons and 	7	buses, emit not more than—
10power-hour of nonmethane hydrocarbons and11oxides of nitrogen and .01 grams per brake12horsepower-hour of particulate matter; and13(B) for buses manufactured in model years142003 through 2006, 1.8 grams per brake horse-15power-hour of nonmethane hydrocarbons and16oxides of nitrogen and .01 grams per brake17horsepower-hour of particulate matter; and18(4) that, in the case of ultra-low sulfur diesel19school buses, emit not more than—20(A) for buses manufactured in model years212001 through 2003, 3.0 grams per brake horse-22power-hour of nonmethane hydrocarbons and	8	(A) for buses manufactured in model years
11oxides of nitrogen and .01 grams per brake12horsepower-hour of particulate matter; and13(B) for buses manufactured in model years142003 through 2006, 1.8 grams per brake horse-15power-hour of nonmethane hydrocarbons and16oxides of nitrogen and .01 grams per brake17horsepower-hour of particulate matter; and18(4) that, in the case of ultra-low sulfur diesel19school buses, emit not more than—20(A) for buses manufactured in model years212001 through 2003, 3.0 grams per brake horse-22power-hour of nonmethane hydrocarbons and	9	2001 and 2002, 2.5 grams per brake horse-
 horsepower-hour of particulate matter; and (B) for buses manufactured in model years 2003 through 2006, 1.8 grams per brake horse- power-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and (4) that, in the case of ultra-low sulfur diesel school buses, emit not more than— (A) for buses manufactured in model years 2001 through 2003, 3.0 grams per brake horse- power-hour of nonmethane hydrocarbons and 	10	power-hour of nonmethane hydrocarbons and
 (B) for buses manufactured in model years 2003 through 2006, 1.8 grams per brake horse- power-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and (4) that, in the case of ultra-low sulfur diesel school buses, emit not more than— (A) for buses manufactured in model years 2001 through 2003, 3.0 grams per brake horse- power-hour of nonmethane hydrocarbons and 	11	oxides of nitrogen and .01 grams per brake
142003 through 2006, 1.8 grams per brake horse-15power-hour of nonmethane hydrocarbons and16oxides of nitrogen and .01 grams per brake17horsepower-hour of particulate matter; and18(4) that, in the case of ultra-low sulfur diesel19school buses, emit not more than—20(A) for buses manufactured in model years212001 through 2003, 3.0 grams per brake horse-22power-hour of nonmethane hydrocarbons and	12	horsepower-hour of particulate matter; and
15power-hour of nonmethane hydrocarbons and16oxides of nitrogen and .01 grams per brake17horsepower-hour of particulate matter; and18(4) that, in the case of ultra-low sulfur diesel19school buses, emit not more than—20(A) for buses manufactured in model years212001 through 2003, 3.0 grams per brake horse-22power-hour of nonmethane hydrocarbons and	13	(B) for buses manufactured in model years
16oxides of nitrogen and .01 grams per brake17horsepower-hour of particulate matter; and18(4) that, in the case of ultra-low sulfur diesel19school buses, emit not more than—20(A) for buses manufactured in model years212001 through 2003, 3.0 grams per brake horse-22power-hour of nonmethane hydrocarbons and	14	2003 through 2006, 1.8 grams per brake horse-
 horsepower-hour of particulate matter; and (4) that, in the case of ultra-low sulfur diesel school buses, emit not more than— (A) for buses manufactured in model years 20 (A) for buses manufactured in model years 21 2001 through 2003, 3.0 grams per brake horse- power-hour of nonmethane hydrocarbons and 	15	power-hour of nonmethane hydrocarbons and
 18 (4) that, in the case of ultra-low sulfur diesel 19 school buses, emit not more than— 20 (A) for buses manufactured in model years 21 2001 through 2003, 3.0 grams per brake horse- 22 power-hour of nonmethane hydrocarbons and 	16	oxides of nitrogen and .01 grams per brake
 19 school buses, emit not more than— 20 (A) for buses manufactured in model years 21 2001 through 2003, 3.0 grams per brake horse- 22 power-hour of nonmethane hydrocarbons and 	17	horsepower-hour of particulate matter; and
 20 (A) for buses manufactured in model years 21 2001 through 2003, 3.0 grams per brake horse- 22 power-hour of nonmethane hydrocarbons and 	18	(4) that, in the case of ultra-low sulfur diesel
 2001 through 2003, 3.0 grams per brake horse- power-hour of nonmethane hydrocarbons and 	19	school buses, emit not more than—
22 power-hour of nonmethane hydrocarbons and	20	(A) for buses manufactured in model years
1 6	21	2001 through 2003, 3.0 grams per brake horse-
23 oxides of nitrogen and .01 grams per brake	22	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.
11	SEC. 2143. FUEL CELL BUS DEVELOPMENT AND DEM-
12	ONSTRATION PROGRAM.
13	(a) Establishment of Program.—The Secretary
14	shall establish a program for entering into cooperative
15	agreements with private sector fuel cell bus developers for
16	the development of fuel cell-powered school buses, and

10 the development of fuel cell-powered school buses, and 17 subsequently with not less than 2 units of local govern-18 ment using natural gas-powered school buses and such 19 private sector fuel cell bus developers to demonstrate the 20 use of fuel cell-powered school buses.

(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.

There are authorized to be appropriated to the Secretary for carrying out this subtitle, to remain available
until expended—

- 21 (1) \$40,000,000 for fiscal year 2002;
- 22 (2) \$50,000,000 for fiscal year 2003;
- 23 (3) \$60,000,000 for fiscal year 2004;
- 24 (4) \$70,000,000 for fiscal year 2005; and
- 25 (5) \$80,000,000 for fiscal year 2006.

Subtitle E—Next Generation Lighting Initiative

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;
- (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 the 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—

(A) Residential Building Energy Codes;
(B) Commercial Building Energy Codes;
(C) Lighting and Appliance Standards;

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

9 SEC. 2171. SHORT TITLE.

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 2002,\$126,800,000 for fiscal 2003,year and \$131,800,000 for fiscal year 2004 to remain available 18 19 until expended, of which—

20 (1) \$52,731,000 for fiscal year 2002,
21 \$54,800,000 for fiscal year 2003, and \$57,000,000
22 for fiscal year 2004 shall be for Buildings;

23 (2) \$32,441,000 for fiscal year 2002,
24 \$33,700,000 for fiscal year 2003, and \$35,000,000
25 for fiscal year 2004 shall be for Transportation;

1	(3) $$27,295,000$ for fiscal year 2002,
2	\$28,400,000 for fiscal year 2003, and \$29,500,000
3	for fiscal year 2004 shall be for Industry;
4	(4) \$1,700,000 for fiscal year 2002, \$1,800,000
5	for fiscal year 2003, and \$1,900,000 for fiscal year
6	2004 shall be for Carbon Removal;
7	(5) \$2,500,000 for fiscal year 2002, \$2,600,000
8	for fiscal year 2003, and \$2,700,000 for fiscal year
9	2004 shall be for State and Local Climate; and
10	(6) \$5,275,000 for fiscal year 2002, \$5,500,000
11	for fiscal year 2003, and \$5,700,000 for fiscal year
12	2004 shall be for International Capacity Building.
13	SEC. 2173. LIMITS ON USE OF FUNDS.
14	(a) Production or Provision of Articles or
15	SERVICES.—None of the funds authorized to be appro-
16	priated by this subtitle may be used to produce or provide
17	articles or services for the purpose of selling the articles
18	or services to a person outside the Federal Government,
19	unless the Administrator determines that comparable arti-
20	cles or services are not available from a commercial source
21	in the United States.
22	(b) REQUESTS FOR PROPOSALS.—None of the funds
23	authorized to be appropriated by this subtitle may be used

24 by the Environmental Protection Agency to prepare or ini-

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

(2) the collection and dissemination in a usable
form of research results and other pertinent information to the design and construction industry, government 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, multi-

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family, 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 program of technology assessment, information dissemination, and education in which Federal, State, and
local agencies, members of the energy, transportation, 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;

	110
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. Of the funds authorized under this sub-
21	section, at least \$5,000,000 for each fiscal year shall be
22	for training and education targeted to minority and social
23	disadvantaged farmers and ranchers.
24	(d) INTERPORTED ADDITIONS A mount on them

24 (d) INTEGRATED APPLICATIONS.—Amounts author-25 ized 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.

4 Subtitle C—Transmission 5 Infrastructure Systems

6 SEC. 2241. TRANSMISSION INFRASTRUCTURE SYSTEMS RE-

7 SEARCH, DEVELOPMENT, DEMONSTRATION, 8 AND COMMERCIAL APPLICATION.

9 (a) IN GENERAL.—The Secretary shall develop and 10 implement a comprehensive research, development, demonstration, and commercial application program to ensure 11 12 the reliability, efficiency, and environmental integrity of 13 electrical transmission systems. Such program shall include advanced energy technologies and systems, high ca-14 15 pacity superconducting transmission lines and generators, advanced grid reliability and efficiency technologies devel-16 opment, technologies contributing to significant load re-17 18 ductions, advanced metering, load management and control technologies, and technology transfer and education. 19 20 (b) TECHNOLOGY.—In carrying out this subtitle, the 21 Secretary may include research, development, and dem-22 onstration on and commercial application of improved 23 transmission technologies including the integration of the 24 following technologies into improved transmission systems: 25 (1) High temperature superconductivity.

(2) Advanced transmission materials.
 (3) Self-adjusting equipment, processes, or soft ware for survivability, security, and failure contain ment.
 (4) Enhancements of energy transfer over exist ing lines.

7 (5) Any other infrastructure technologies, as8 appropriate.

9 SEC. 2242. PROGRAM PLAN.

10 Within 4 months after the date of the enactment of this Act, the Secretary, in consultation with other appro-11 12 priate Federal agencies, shall prepare and transmit to 13 Congress a 5-year program plan to guide activities under this subtitle. In preparing the program plan, the Secretary 14 15 shall consult with appropriate representatives of the transmission infrastructure systems industry to select and 16 prioritize appropriate program areas. The Secretary shall 17 also seek the advice of utilities, energy services providers, 18 manufacturers, institutions of higher learning, other ap-19 20 propriate State and local agencies, environmental organi-21 zations, professional and technical societies, and any other 22 persons as the Secretary considers appropriate.

23 SEC. 2243. REPORT.

Two years after the date of the enactment of this Act,and at 2-year intervals thereafter, the Secretary, in con-

sultation 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.

7 Subtitle D—Department of Energy 8 Authorization of Appropriations

9 SEC. 2261. AUTHORIZATION OF APPROPRIATIONS.

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

1 \$639,000,000 for fiscal year 2003, and \$683,000,000 for2 fiscal year 2004, to remain available until expended.

3 (b) WAVE POWERED ELECTRIC GENERATION.— 4 Within the amounts authorized to be appropriated to the 5 Secretary under subsection (a), the Secretary shall carry 6 out a research program, in conjunction with other appro-7 priate Federal agencies, on wave powered electric genera-8 tion.

9 (c) Assessment of Renewable Energy Re-10 sources.—

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

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

1	and load centers, nearby energy infrastructure, and
2	location of energy resources.
3	(3) AVAILABILITY.—The information and cost
4	estimates in this report shall be updated annually
5	and made available to the public, along with the
6	data used to create the report.
7	(4) SUNSET.—This subsection shall expire at
8	the end of fiscal year 2004.
9	(d) LIMITS ON USE OF FUNDS.—None of the funds
10	authorized to be appropriated in subsection (a) may be
11	used for—
12	(1) Departmental Energy Management Pro-
13	gram; or
14	(2) Renewable Indian Energy Resources.
15	TITLE III—NUCLEAR ENERGY
15 16	TITLE III—NUCLEAR ENERGY Subtitle A—University Nuclear
16	Subtitle A—University Nuclear
16 17	Subtitle A—University Nuclear Science and Engineering
16 17 18	Subtitle A—University Nuclear Science and Engineering SEC. 2301. SHORT TITLE.
16 17 18 19	Subtitle A—University Nuclear Science and Engineering SEC. 2301. SHORT TITLE. This subtitle may be cited as "Department of Energy
16 17 18 19 20	Subtitle A—University Nuclear Science and Engineering SEC. 2301. SHORT TITLE. This subtitle may be cited as "Department of Energy University Nuclear Science and Engineering Act".
16 17 18 19 20 21	Subtitle A—University Nuclear Science and Engineering 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 21 22 	Subtitle A—University Nuclear Science and Engineering 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 22 23 	Subtitle A—University Nuclear Science and Engineering 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

1 year low. Since 1980, the number of nuclear engi-2 neering university programs has declined nearly 40 3 percent, and over two-thirds of the faculty in these 4 programs are 45 years of age or older. Also, since 5 1980, the number of university research and train-6 ing reactors in the United States has declined by 7 over 50 percent. Most of these reactors were built in 8 the late 1950s and 1960s with 30-year to 40-year 9 operating licenses, and many will require relicensing 10 in the next several years.

11 (2) A decline in a competent nuclear workforce, 12 and the lack of adequately trained nuclear scientists 13 and engineers, will affect the ability of the United 14 States to solve future nuclear waste storage issues, 15 operate existing and design future fission reactors in 16 the United States, respond to future nuclear events 17 worldwide, help stem the proliferation of nuclear 18 weapons, and design and operate naval nuclear reac-19 tors.

20 (3) The Department of Energy's Office of Nu21 clear Energy, Science and Technology, a principal
22 Federal agency for civilian research in nuclear
23 science and engineering, is well suited to help main24 tain tomorrow's human resource and training invest25 ment 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 applica-9 tion of energy technology.

(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.

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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	
23	NUCLEAR SCIENCE AND ENGINEERING.—Of the funds
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-

25 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—

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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 the
enactment of this Act;

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

	200
1	(6) substantially improved thermal efficiency, as
2	compared with the thermal efficiency of reactors in
3	operation on the date of the enactment of this Act.
4	(c) CONSULTATION.—In conducting the study under
5	subsection (a), the Secretary shall consult with appro-
6	priate representatives of industry, institutions of higher
7	education, Federal agencies, and international, profes-
8	sional, and technical organizations.
9	(d) Report.—
10	(1) IN GENERAL.—Not later than December 31,
11	2002, the Secretary shall transmit to the appro-
12	priate congressional committees a report describing
13	the activities of the Secretary under this section, and
14	plans for research and development leading to a
15	public/private cooperative demonstration of one or
16	more Generation IV nuclear energy systems.
17	(2) CONTENTS.—The report shall contain—
18	(A) an assessment of all available tech-
19	nologies;

(B) a summary of actions needed for the
most promising candidates to be considered as
viable commercial options within the five to ten
years after the date of the report, with consideration of regulatory, economic, and technical
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.
10	TITLE IV—FOSSIL ENERGY
13	IIILE IV—FUSSIL ENERGI
13 14	Subtitle A—Coal
14	Subtitle A—Coal
14 15	Subtitle A—Coal sec. 2401. COAL AND RELATED TECHNOLOGIES PRO-
14 15 16	Subtitle A—Coal sec. 2401. coal and related technologies pro- grams.
14 15 16 17	Subtitle A—Coal sec. 2401. coal and related technologies pro- grams. (a) Authorization of Appropriations.—There
14 15 16 17 18	Subtitle A—Coal SEC. 2401. COAL AND RELATED TECHNOLOGIES PRO- GRAMS. (a) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary
14 15 16 17 18 19	Subtitle A—Coal 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-
 14 15 16 17 18 19 20 	Subtitle A—Coal 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
 14 15 16 17 18 19 20 21 	Subtitle A—Coal 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
 14 15 16 17 18 19 20 21 22 	Subtitle A—Coal 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 section will be carried out so as to complement and not duplicate activities authorized
under division E.

(c) GASIFICATION.—The Secretary shall fund at least
 one gasification project with the funds authorized under
 this section.

Subtitle B—Oil and Gas

5 SEC. 2421. PETROLEUM-OIL TECHNOLOGY.

6 The Secretary shall conduct a program of research,
7 development, demonstration, and commercial application
8 on petroleum-oil technology. The program shall address—
9 (1) Exploration and Production Supporting Re10 search;

11 (2) Oil Technology Reservoir Management/Ex-12 tension; and

13 (3) Effective Environmental Protection.

14 SEC. 2422. GAS.

4

15 The Secretary shall conduct a program of research,
16 development, demonstration, and commercial application
17 on natural gas technologies. The program shall address—

18 (1) Exploration and Production;

19 (2) Infrastructure; and

20 (3) Effective Environmental Protection.

21 SEC. 2423. NATURAL GAS AND OIL DEPOSITS REPORT.

Two years after the date of the enactment of this Act, and at 2-year intervals thereafter, the Secretary of the Interior, in consultation with other appropriate Federal agencies, shall transmit a report to the Congress assessing the contents of natural gas and oil deposits at existing
 drilling sites off the coast of Louisiana and Texas.

3 SEC. 2424. OIL SHALE RESEARCH.

4 There are authorized to be appropriated to the Sec5 retary of Energy for fiscal year 2002 \$10,000,000, to be
6 divided equally between grants for research on Eastern oil
7 shale and grants for research on Western oil shale.

8 Subtitle C—Ultra-Deepwater and 9 Unconventional Drilling

10 SEC. 2441. SHORT TITLE.

This subtitle may be cited as the "Natural Gas andOther Petroleum Research, Development, and Demonstra-tion Act of 2001".

14 SEC. 2442. DEFINITIONS.

15 For purposes of this subtitle—

(1) the term "deepwater" means water depths
greater than 200 meters but less than 1,500 meters;
(2) the term "Fund" means the Ultra-Deepwater and Unconventional Gas Research Fund established 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

8 land.

9 SEC. 2443. ULTRA-DEEPWATER PROGRAM.

10 The Secretary shall establish a program of research, 11 development, and demonstration of ultra-deepwater nat-12 ural gas and other petroleum exploration and production 13 technologies, in areas currently available for Outer Conti-14 nental Shelf leasing. The program shall be carried out by 15 the Research Organization as provided in this subtitle.

16 SEC. 2444. NATIONAL ENERGY TECHNOLOGY LABORATORY.

17 The National Energy Technology Laboratory and the 18 United States Geological Survey, when appropriate, shall 19 carry out programs of long-term research into new natural 20 gas and other petroleum exploration and production tech-21 nologies and environmental mitigation technologies for 22 production from unconventional and ultra-deepwater re-23 sources, including methane hydrates. Such Laboratory 24 shall also conduct a program of research, development, 25 and demonstration of new technologies for the reduction

of greenhouse gas emissions from unconventional and
 ultra-deepwater natural gas or other petroleum explo ration and production activities, including sub-sea floor
 carbon sequestration technologies.

5 SEC. 2445. ADVISORY COMMITTEE.

6 (a) ESTABLISHMENT.—The Secretary shall, within 3 7 months after the date of the enactment of this Act, estab-8 lish an Advisory Committee consisting of 7 members, each 9 having extensive operational knowledge of and experience 10 in the natural gas and other petroleum exploration and production industry who are not Federal Government em-11 ployees or contractors. A minimum of 4 members shall 12 have extensive knowledge of ultra-deepwater natural gas 13 or other petroleum exploration and production tech-14 15 nologies, a minimum of 2 members shall have extensive knowledge of unconventional natural gas or other petro-16 17 leum exploration and production technologies, and at least 1 member shall have extensive knowledge of greenhouse 18 gas emission reduction technologies, including carbon se-19 20 questration.

(b) FUNCTION.—The Advisory Committee shall advise the Secretary on the selection of an organization to
create the Research Organization and on the implementation of this subtitle.

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

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

10 (e) DURATION OF ADVISORY COMMITTEE.—Section
11 14 of the Federal Advisory Committee Act shall not apply
12 to the Advisory Committee.

13 SEC. 2446. RESEARCH ORGANIZATION.

(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 create the Research Organization.

20 (b) ELIGIBLE ENTITIES.—Entities eligible to create
21 the Research Organization shall—

(1) have been in existence as of the date of theenactment of this Act;

1 (2) be entities exempt from tax under section 2 501(c)(3) of the Internal Revenue Code of 1986; 3 and 4 (3) be experienced in planning and managing 5 programs in natural gas or other petroleum explo-6 ration and production research, development, and 7 demonstration. 8 (c) PROPOSALS.—A proposal from an entity seeking 9 to create the Research Organization shall include a de-10 tailed description of the proposed membership and structure of the Research Organization. 11 12 (d) FUNCTIONS.—The Research Organization shall— 13 (1) award grants on a competitive basis to 14 qualified— 15 (A) research institutions; 16 (B) institutions of higher education; 17 (C) companies; and 18 (D) consortia formed among institutions 19 and companies described in subparagraphs (A) 20 through (C) for the purpose of conducting re-21 search, development, and demonstration of un-22 conventional and ultra-deepwater natural gas or 23 other petroleum exploration and production

24 technologies; and

(2) review activities under those grants to en sure that they comply with the requirements of this
 subtitle and serve the purposes for which the grant
 was made.

5 SEC. 2447. GRANTS.

6 (a) Types of Grants.—

7 (1) UNCONVENTIONAL.—The Research Organi-8 zation shall award grants for research, development, 9 and demonstration of technologies to maximize the 10 value of the Government's natural gas and other pe-11 troleum resources in unconventional reservoirs, and 12 to develop technologies to increase the supply of nat-13 ural gas and other petroleum resources by lowering 14 the cost and improving the efficiency of exploration 15 and production of unconventional reservoirs, while 16 improving safety and minimizing environmental im-17 pacts.

18 (2) ULTRA-DEEPWATER.—The Research Orga19 nization shall award grants for research, develop20 ment, and demonstration of natural gas or other pe21 troleum exploration and production technologies
22 to—

23 (A) maximize the value of the Federal
24 Government's natural gas and other petroleum
25 resources in the ultra-deepwater areas;

1 (B) increase the supply of natural gas and 2 other petroleum resources by lowering the cost 3 and improving the efficiency of exploration and 4 production of ultra-deepwater reservoirs; and 5 (C) improve safety and minimize the envi-6 ronmental impacts of ultra-deepwater develop-7 ments. 8 (3) ULTRA-DEEPWATER ARCHITECTURE.—The 9 Research Organization shall award a grant to one or 10 more consortia described in section 2446(d)(1)(D)11 for the purpose of developing and demonstrating the 12 next generation architecture for ultra-deepwater pro-13 duction of natural gas and other petroleum in fur-14 therance of the purposes stated in paragraph (2)(A)15 through (C). 16 (b) CONDITIONS FOR GRANTS.—Grants provided 17 under this section shall contain the following conditions:

(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
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.

1 (2) There shall be a repayment schedule for 2 Federal dollars provided for demonstration projects 3 under the grant in the event of a successful commer-4 cialization of the demonstrated technology. Such re-5 payment schedule shall provide that the payments 6 are made to the Secretary with the express intent 7 that these payments not impede the adoption of the 8 demonstrated technology in the marketplace. In the 9 event that such impedance occurs due to market 10 forces or other factors, the Research Organization 11 shall renegotiate the grant agreement so that the ac-12 ceptance of the technology in the marketplace is en-13 abled.

14 (3) Applications for grants for demonstration
15 projects shall clearly state the intended commercial
16 applications of the technology demonstrated.

17 (4) The total amount of funds made available
18 under a grant provided under subsection (a)(3) shall
19 not exceed 50 percent of the total cost of the activi20 ties 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

4 (6) An appropriate amount of funds provided
5 under a grant shall be used for the broad dissemina6 tion of technologies developed under the grant to in7 terested institutions of higher education, industry,
8 and appropriate Federal and State technology enti9 ties to ensure the greatest possible benefits for the
10 public and use of government resources.

11 (7) Demonstrations of ultra-deepwater tech12 nologies for which funds are provided under a grant
13 may be conducted in ultra-deepwater or deepwater
14 locations.

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

17 (1) 15 percent shall be for grants under sub-18 section (a)(1).

19 (2) 15 percent shall be for grants under sub-20 section (a)(2).

21 (3) 60 percent shall be for grants under sub-22 section (a)(3).

23 (4) 10 percent shall be for carrying out section
24 2444.

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1 SEC. 2448. PLAN AND FUNDING.

2 (a) TRANSMITTAL TO SECRETARY.—The Research
3 Organization shall transmit to the Secretary an annual
4 plan proposing projects and funding of activities under
5 each paragraph of section 2447(a).

6 (b) REVIEW.—The Secretary shall have 1 month to 7 review the annual plan, and shall approve the plan, if it 8 is consistent with this subtitle. If the Secretary approves 9 the plan, the Secretary shall provide funding as proposed 10 in the plan.

11 (c) DISAPPROVAL.—If the Secretary does not approve the plan, the Secretary shall notify the Research Organiza-12 13 tion of the reasons for disapproval and shall withhold funding until a new plan is submitted which the Secretary 14 approves. Within 1 month after notifying the Research Or-15 ganization of a disapproval, the Secretary shall notify the 16 appropriate congressional committees of the disapproval. 17 18 **SEC. 2449. AUDIT.**

19 The Secretary shall retain an independent, commer-20 cial auditor to determine the extent to which the funds 21 authorized by this subtitle have been expended in a man-22 ner consistent with the purposes of this subtitle. The audi-23 tor shall transmit a report annually to the Secretary, who 24shall transmit the report to the appropriate congressional 25 committees, along with a plan to remedy any deficiencies cited in the report. 26

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1 SEC. 2450. FUND.

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

8 (b) FUNDING SOURCES.—

9 (1) LOANS FROM TREASURY.—There are authorized to be appropriated to the Secretary 10 11 \$900,000,000 for the period encompassing fiscal 12 years 2002 through 2009. Such amounts shall be 13 deposited by the Secretary in the Fund, and shall be 14 considered loans from the Treasury. Income received 15 by the United States in connection with any ultra-16 deepwater oil and gas leases shall be deposited in 17 the Treasury and considered as repayment for the 18 loans under this paragraph.

19 (2) ADDITIONAL APPROPRIATIONS.—There are
20 authorized to be appropriated to the Secretary such
21 sums as may be necessary for the fiscal years 2002
22 through 2009, to be deposited in the Fund.

(3) OIL AND GAS LEASE INCOME.—To the extent provided in advance in appropriations Acts, not
more than 7.5 percent of the income of the United
States from Federal oil and gas leases may be deHR 4 PCS

posited in the Fund for fiscal years 2002 through
 2009.

3 SEC. 2451. SUNSET.

4 No funds are authorized to be appropriated for car5 rying out this subtitle after fiscal year 2009. The Research
6 Organization shall be terminated when it has expended all
7 funds made available pursuant to this subtitle.

Subtitle D—Fuel Cells

9 SEC. 2461. FUEL CELLS.

8

(a) IN GENERAL.—The Secretary shall conduct a
program of research, development, demonstration, and
commercial application on fuel cells. The program shall
address—

- 14 (1) Advanced Research;
- 15 (2) Systems Development;
- 16 (3) Vision 21-Hybrids; and
- 17 (4) Innovative Concepts.

18 (b) MANUFACTURING PRODUCTION AND PROC-ESSES.—In addition to the program under subsection (a), 19 20 the Secretary, in consultation other Federal agencies, as 21 appropriate, shall establish a program for the demonstra-22 tion of fuel cell technologies, including fuel cell proton ex-23 change membrane technology, for commercial, residential, 24 and transportation applications. The program shall spe-25 cifically focus on promoting the application of and improved manufacturing production and processes for fuel
 cell technologies.

3 (c) AUTHORIZATION OF APPROPRIATIONS.—Within
4 the amounts authorized to be appropriated under section
5 2481(a), there are authorized to be appropriated to the
6 Secretary for the purpose of carrying out subsection (b),
7 \$28,000,000 for each of fiscal years 2002 through 2004.

8 Subtitle E—Department of Energy

9 **Authorization of Appropriations**

10 SEC. 2481. AUTHORIZATION OF APPROPRIATIONS.

11 (a) OPERATION AND MAINTENANCE.—There are au-12 thorized to be appropriated to the Secretary for operation 13 and maintenance for subtitle B and subtitle D, and for Fossil Energy Research and Development Headquarters 14 15 Program Direction, Field Program Direction, Plant and Capital Equipment, Cooperative Research and Develop-16 17 ment, Import/Export Authorization, and Advanced Metallurgical Processes \$282,000,000 for fiscal year 2002, 18 19 \$293,000,000 for fiscal year 2003, and \$305,000,000 for 20 fiscal year 2004, to remain available until expended.

(b) LIMITS ON USE OF FUNDS.—None of the funds
authorized to be appropriated in subsection (a) may be
used for—

24 (1) Gas Hydrates.

1 (2) Fossil Energy Environmental Restoration; 2 or (3) research, development, demonstration, and 3 4 commercial application on coal and related tech-5 nologies, including activities under subtitle A. TITLE V—SCIENCE 6 Subtitle A—Fusion Energy 7 **Sciences** 8 9 SEC. 2501. SHORT TITLE. 10 This subtitle may be cited as the "Fusion Energy" 11 Sciences Act of 2001". 12 SEC. 2502. FINDINGS. The Congress finds that— 13 14 (1) economic prosperity is closely linked to an 15 affordable and ample energy supply; 16 (2) environmental quality is closely linked to en-17 ergy production and use; 18 (3) population, worldwide economic develop-19 ment, energy consumption, and stress on the envi-20 ronment are all expected to increase substantially in 21 the coming decades; 22 (4) the few energy options with the potential to 23 meet economic and environmental needs for the 24 long-term future should be pursued as part of a bal-25 anced national energy plan;

(5) fusion energy is an attractive long-term energy source because of the virtually inexhaustible supply of fuel, and the promise of minimal adverse environmental impact and inherent safety;

5 (6) the National Research Council, the Presi-6 dent's Committee of Advisers on Science and Tech-7 nology, and the Secretary of Energy Advisory Board 8 have each recently reviewed the Fusion Energy 9 Sciences Program and each strongly supports the 10 fundamental science and creative innovation of the 11 program, and has confirmed that progress toward 12 the goal of producing practical fusion energy has 13 been excellent, although much scientific and engi-14 neering work remains to be done;

(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

24 (9) the Fusion Energy Sciences Program budg-25 et is inadequate to support the necessary science and

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innovation for the present generation of experiments,
 and cannot accommodate the cost of a burning plas ma experiment constructed by the United States, or
 even the cost of key participation by the United
 States in an international effort.

6 SEC. 2503. PLAN FOR FUSION EXPERIMENT.

7 (a) PLAN FOR UNITED STATES FUSION EXPERI-8 MENT.—The Secretary, on the basis of full consultation 9 with the Fusion Energy Sciences Advisory Committee and 10 the Secretary of Energy Advisory Board, as appropriate, shall develop a plan for United States construction of a 11 magnetic fusion burning plasma experiment for the pur-12 13 pose of accelerating scientific understanding of fusion plasmas. The Secretary shall request a review of the plan 14 15 by the National Academy of Sciences, and shall transmit the plan and the review to the Congress by July 1, 2004. 16 17 (b) REQUIREMENTS OF PLAN.—The plan described 18 in subsection (a) shall—

19 (1) address key burning plasma physics issues;20 and

(2) include specific information on the scientific
capabilities of the proposed experiment, the relevance of these capabilities to the goal of practical
fusion energy, and the overall design of the experi-

ment including its estimated cost and potential con struction sites.

3 (c) UNITED STATES PARTICIPATION IN AN INTER-4 NATIONAL EXPERIMENT.—In addition to the plan de-5 scribed in subsection (a), the Secretary, on the basis of full consultation with the Fusion Energy Sciences Advi-6 7 sory Committee and the Secretary of Energy Advisory 8 Board, as appropriate, may also develop a plan for United 9 States participation in an international burning plasma 10 experiment for the same purpose, whose construction is found by the Secretary to be highly likely and where 11 United States participation is cost effective relative to the 12 13 cost and scientific benefits of a domestic experiment described in subsection (a). If the Secretary elects to develop 14 15 a plan under this subsection, he shall include the information described in subsection (b), and an estimate of the 16 17 cost of United States participation in such an international experiment. The Secretary shall request a review 18 by the National Academies of Sciences and Engineering 19 20 of a plan developed under this subsection, and shall trans-21 mit the plan and the review to the Congress not later than 22 July 1, 2004.

23 (d) AUTHORIZATION OF RESEARCH AND DEVELOP24 MENT.—The Secretary, through the Fusion Energy
25 Sciences Program, may conduct any research and develop-

ment necessary to fully develop the plans described in this
 section.

3 SEC. 2504. PLAN FOR FUSION ENERGY SCIENCES PRO-4 GRAM.

5 Not later than 6 months after the date of the enact-6 ment of this Act, the Secretary, in full consultation with 7 FESAC, shall develop and transmit to the Congress a plan 8 for the purpose of ensuring a strong scientific base for 9 the Fusion Energy Sciences Program and to enable the 10 experiments described in section 2503. Such plan shall in-11 clude as its objectives—

- (1) to ensure that existing fusion research facilities and equipment are more fully utilized with
 appropriate measurements and control tools;
- 15 (2) to ensure a strengthened fusion science the-16 ory and computational base;
- 17 (3) to ensure that the selection of and funding
 18 for new magnetic and inertial fusion research facili19 ties is based on scientific innovation and cost effec20 tiveness;

(4) to improve the communication of scientific
results and methods between the fusion science community and the wider scientific community;

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

periodic external reviews of fusion energy sciences.

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1 SEC. 2505. AUTHORIZATION OF APPROPRIATIONS.

2 There are authorized to be appropriated to the Sec-3 retary for the development and review, but not for implementation, of the plans described in this subtitle and for 4 5 activities of the Fusion Energy Sciences Program \$320,000,000 for fiscal year 2002 and \$335,000,000 for 6 7 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-8 9 tablish several new centers of excellence, selected through a competitive peer-review process and devoted to exploring 10 the frontiers of fusion science. 11

Subtitle B—Spallation Neutron Source

14 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.

19 SEC. 2522. AUTHORIZATION OF APPROPRIATIONS.

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

- 23 (1) \$276,300,000 for fiscal year 2002;
- 24 (2) \$210,571,000 for fiscal year 2003;
- 25 (3) \$124,600,000 for fiscal year 2004;
- (4) \$79,800,000 for fiscal year 2005; and

(5) \$41,100,000 for fiscal year 2006 for com pletion of construction.

3 (b) AUTHORIZATION OF OTHER PROJECT FUND-4 ING.—There are authorized to be appropriated to the Sec-5 retary for other project costs (including research and development necessary to complete the project, preoperations 6 7 costs, and capital equipment not related to construction) 8 of the Spallation Neutron Source \$15,353,000 for fiscal 9 year 2002 and \$103,279,000 for the period encompassing 10 fiscal years 2003 through 2006, to remain available until expended through September 30, 2006. 11

12 SEC. 2523. REPORT.

13 The Secretary shall report on the Spallation Neutron 14 Source as part of the Department's annual budget submis-15 sion, including a description of the achievement of mile-16 stones, a comparison of actual costs to estimated costs, 17 and any changes in estimated project costs or schedule. 18 SEC. 2524. LIMITATIONS.

19 The total amount obligated by the Department, in20 cluding prior year appropriations, for the Spallation Neu21 tron Source may not exceed—

- 22 (1) \$1,192,700,000 for costs of construction;
- (2)
- 24 (3) \$1,411,700,000 for total project cost.

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

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1	sistent with the mission of the Office of
2	Science; and
3	(2) the term "user facility" means—
4	(A) an Office of Science facility at a non-
5	military energy laboratory that provides special
6	scientific and research capabilities, including
7	technical expertise and support as appropriate,
8	to serve the research needs of the Nation's uni-
9	versities, industry, private laboratories, Federal
10	laboratories, and others, including research in-
11	stitutions or individuals from other nations
12	where reciprocal accommodations are provided
13	to United States research institutions and indi-
14	viduals or where the Secretary considers such
15	accommodation to be in the national interest;
16	and
17	(B) any other Office of Science funded fa-
18	cility designated by the Secretary as a user fa-
19	cility.
20	SEC. 2542. FACILITY AND INFRASTRUCTURE SUPPORT FOR
21	NONMILITARY ENERGY LABORATORIES.
22	(a) FACILITY POLICY.—The Secretary shall develop
23	and implement a least-cost nonmilitary energy laboratory

 $24 \ \ {\rm facility \ and \ infrastructure \ strategy \ for} {\rm -\!\!-\!\!-}$

1 (1) maintaining existing facilities and infra-2 structure, as needed; 3 (2) closing unneeded facilities; 4 (3) making facility modifications; and 5 (4) building new facilities. 6 (b) PLAN.—The Secretary shall prepare a com-7 prehensive 10-year plan for conducting future facility 8 maintenance, making repairs, modifications, and new ad-9 ditions, and constructing new facilities at each nonmilitary 10 energy laboratory. Such plan shall provide for facilities work in accordance with the following priorities: 11 12 (1) Providing for the safety and health of em-13 ployees, visitors, and the general public with regard 14 to correcting existing structural, mechanical, elec-15 trical, and environmental deficiencies. 16 (2) Providing for the repair and rehabilitation 17 of existing facilities to keep them in use and prevent 18 deterioration, if feasible. 19 (3) Providing engineering design and construc-20 tion services for those facilities that require modi-21 fication or additions in order to meet the needs of 22 new or expanded programs. 23 (c) REPORT.— 24 (1) TRANSMITTAL.—Within 1 year after the 25 date of the enactment of this Act, the Secretary

1	shall prepare and transmit to the appropriate con-
2	gressional committees a report containing the plan
3	prepared under subsection (b).
4	(2) CONTENTS.—For each nonmilitary energy
5	laboratory, such report shall contain—
6	(A) the current priority list of proposed fa-
7	cilities and infrastructure projects, including
8	cost and schedule requirements;
9	(B) a current ten-year plan that dem-
10	onstrates the reconfiguration of its facilities and
11	infrastructure to meet its missions and to ad-
12	dress its long-term operational costs and return
13	on investment;
14	(C) the total current budget for all facili-
15	ties and infrastructure funding; and
16	(D) the current status of each facilities
17	and infrastructure project compared to the
18	original baseline cost, schedule, and scope.
19	(3) Additional elements.—The report shall
20	also—
21	(A) include a plan for new facilities and fa-
22	cility modifications at each nonmilitary energy
23	laboratory that will be required to meet the De-
24	partment's changing missions of the twenty-
25	first century, including schedules and estimates

1 for implementation, and including a section out-2 lining long-term funding requirements con-3 sistent with anticipated budgets and annual au-4 thorization of appropriations; (B) address the coordination of moderniza-5 6 tion and consolidation of facilities among the 7 nonmilitary energy laboratories in order to meet 8 changing mission requirements; and 9 (C) provide for annual reports to the ap-10 propriate congressional committees on accom-

plishments, conformance to schedules, commit-ments, and expenditures.

13 SEC. 2543. USER FACILITIES.

(a) NOTICE REQUIREMENT.—When the Department 14 15 makes a user facility available to universities and other potential users, or seeks input from universities and other 16 potential users regarding significant characteristics or 17 18 equipment in a user facility or a proposed user facility, the Department shall ensure broad public notice of such 19 availability or such need for input to universities and other 20 21 potential users.

(b) COMPETITION REQUIREMENT.—When the Department considers the participation of a university or
other potential user in the establishment or operation of

a user facility, the Department shall employ full and open
 competition in selecting such a participant.

3 (c) PROHIBITION.—The Department may not redes4 ignate a user facility, as defined by section 2541(b) as
5 something other than a user facility for avoid the require6 ments of subsections (a) and (b).

7 Subtitle D—Advisory Panel on 8 Office of Science

9 SEC. 2561. ESTABLISHMENT.

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

14 (1) address concerns about the current status
15 and the future of scientific research supported by
16 the Office;

(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 Federal agencies and the private sector; and

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

1 SEC. 2562. REPORT.

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2	Within 6 months after the date of the enactment of
3	this Act, the Advisory Panel shall transmit its findings
4	and recommendations in a report to the Director of the
5	Office of Science and Technology Policy and the Sec-
6	retary. The Director and the Secretary shall jointly—
7	(1) consider each of the Panel's findings and
8	recommendations, and comment on each as they
9	consider appropriate; and
10	(2) transmit the Panel's report and the com-
11	ments of the Director and the Secretary on the re-
12	port to the appropriate congressional committees
13	within 9 months after the date of the enactment of
14	this Act.
11	
15	Subtitle E—Department of Energy
15	Subtitle E—Department of Energy
15 16	Subtitle E—Department of Energy Authorization of Appropriations
15 16 17	Subtitle E—Department of Energy Authorization of Appropriations SEC. 2581. AUTHORIZATION OF APPROPRIATIONS.
15 16 17 18	Subtitle E—Department of Energy Authorization of Appropriations SEC. 2581. AUTHORIZATION OF APPROPRIATIONS. (a) OPERATION AND MAINTENANCE.—Including the
15 16 17 18 19	Subtitle E—Department of Energy Authorization of Appropriations SEC. 2581. AUTHORIZATION OF APPROPRIATIONS. (a) OPERATION AND MAINTENANCE.—Including the amounts authorized to be appropriated for fiscal year
15 16 17 18 19 20	Subtitle E—Department of Energy Authorization of Appropriations 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
15 16 17 18 19 20 21	Subtitle E—Department of Energy Authorization of Appropriations 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,
 15 16 17 18 19 20 21 22 	Subtitle E—Department of Energy Authorization of Appropriations 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, there are authorized to be appropriated to the Secretary
 15 16 17 18 19 20 21 22 23 	Subtitle E—Department of Energy Authorization of Appropriations 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, there are authorized to be appropriated to the Secretary for the Office of Science (also including subtitle C, High
 15 16 17 18 19 20 21 22 23 24 	Subtitle E—Department of Energy Authorization of Appropriations 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, there are authorized to be appropriated to the Secretary for the Office of Science (also including subtitle C, High Energy Physics, Nuclear Physics, Biological and Environ-

1 puting Research, Energy Research Analysis, Multiprogram Energy Laboratories-Facilities Support, Facilities 2 3 and Infrastructure, Safeguards and Security, and Pro-4 gram Direction) operation and maintenance 5 \$3,299,558,000 for fiscal year 2002, to remain available 6 until expended.

7 (b) RESEARCH REGARDING PRECIOUS METAL CA-8 TALYSIS.—Within the amounts authorized to be appro-9 priated to the Secretary under subsection (a), \$5,000,000 10 for fiscal year 2002 may be used to carry out research 11 in the use of precious metals (excluding platinum, palla-12 dium, and rhodium) in catalysis, either directly though na-13 tional laboratories, or through the award of grants, coop-14 erative agreements, or contracts with public or nonprofit 15 entities.

16 (c) CONSTRUCTION.—In addition to the amounts au-17 thorized to be appropriated under section 2522(a) for construction of the Spallation Neutron Source, there are au-18 19 thorized to be appropriated to the Secretary for Science— 20 (1)\$19,400,000 fiscal for vear 2002,21 \$14,800,000 for fiscal year 2003, and \$8,900,000 22 for fiscal year 2004 for completion of constuction of 23 Project 98–G–304, Neutrinos at the Main Injector, 24 Fermi National Accelerator Laboratory;

1	(2) \$11,405,000 for fiscal year 2002 for com-
2	pletion of construction of Project 01-E-300, Labora-
3	tory for Comparative and Functional Genomics, Oak
4	Ridge National Laboratory;
5	(3) \$4,000,000 for fiscal year 2002, \$8,000,000
6	for fiscal year 2003, and \$2,000,000 for fiscal year
7	2004 for completion of construction of Project 02-
8	SC-002, Project Engineering Design (PED), Var-
9	ious Locations;
10	(4) $$3,183,000$ for fiscal year 2002 for comple-
11	tion of construction of Project 02-SC-002, Multipro-
12	gram Energy Laboratories Infrastructure Project
13	Engineering Design (PED), Various Locations; and
14	(5) \$18,633,000 for fiscal year 2002 and
15	\$13,029,000 for fiscal year 2003 for completion of
16	construction of Project MEL-001, Multiprogram En-
17	ergy Laboratories, Infrastructure, Various Loca-
18	tions.
19	(d) LIMITS ON USE OF FUNDS.—None of the funds
20	authorized to be appropriated in subsection (c) may be
21	used for construction at any national security laboratory
22	as defined in section $3281(1)$ of the National Defense Au-
23	thorization Act for Fiscal Year 2000 (50 U.S.C. 2471(1))
24	or at any nuclear weapons production facility as defined

in section 3281(2) of the National Defense Authorization 1 2 Act for Fiscal Year 2000 (50 U.S.C. 2471(2)). TITLE VI—MISCELLANEOUS 3 Subtitle A—General Provisions for 4 the Department of Energy 5 SEC. 2601. RESEARCH, DEVELOPMENT, DEMONSTRATION, 6 7 AND COMMERCIAL APPLICATION OF ENERGY 8 TECHNOLOGY PROGRAMS, PROJECTS, AND 9 **ACTIVITIES.**

10 (a) AUTHORIZED ACTIVITIES.—Except as otherwise provided in this division, research, development, dem-11 commercial 12 onstration, and application programs, 13 projects, and activities for which appropriations are authorized under this division may be carried out under the 14 15 procedures of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.), 16 the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.), 17 or any other Act under which the Secretary is authorized 18 to carry out such programs, projects, and activities, but 19 only to the extent the Secretary is authorized to carry out 20 21 such activities under each such Act.

(b) AUTHORIZED AGREEMENTS.—Except as otherwise provided in this division, in carrying out research,
development, demonstration, and commercial application
programs, projects, and activities for which appropriations

are authorized under this division, the Secretary may use,
 to the extent authorized under applicable provisions of
 law, contracts, cooperative agreements, cooperative re search and development agreements under the Stevenson Wydler Technology Innovation Act of 1980 (15 U.S.C.
 3701 et seq.), grants, joint ventures, and any other form
 of agreement available to the Secretary.

8 (c) DEFINITION.—For purposes of this section, the 9 term "joint venture" has the meaning given that term 10 under section 2 of the National Cooperative Research and 11 Production Act of 1993 (15 U.S.C. 4301), except that 12 such term may apply under this section to research, devel-13 opment, demonstration, and commercial application of en-14 ergy technology joint ventures.

15 (d) PROTECTION INFORMATION.—Section OF 12(c)(7) of the Stevenson-Wydler Technology Innovation 16 Act of 1980 (15 U.S.C. 3710a(c)(7)), relating to the pro-17 tection of information, shall apply to research, develop-18 ment, demonstration, and commercial application of en-19 ergy technology programs, projects, and activities for 20 21 which appropriations are authorized under this division.

(e) INVENTIONS.—An invention conceived and developed 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).

3 (f) OUTREACH.—The Secretary shall ensure that
4 each program authorized by this division includes an out5 reach component to provide information, as appropriate,
6 to manufacturers, consumers, engineers, architects, build7 ers, energy service companies, universities, facility plan8 ners and managers, State and local governments, and
9 other entities.

10 (g) GUIDELINES AND PROCEDURES.—The Secretary 11 shall provide guidelines and procedures for the transition, 12 where appropriate, of energy technologies from research 13 through development and demonstration to commercial 14 application of energy technology. Nothing in this section 15 shall preclude the Secretary from—

16 (1) entering into a contract, cooperative agree-17 ment, cooperative research and development agree-18 ment under the Stevenson-Wydler Technology Inno-19 vation Act of 1980 (15 U.S.C. 3701 et seq.), grant, 20 joint venture, or any other form of agreement avail-21 able to the Secretary under this section that relates 22 to research, development, demonstration, and com-23 mercial application of energy technology; or

24 (2) extending a contract, cooperative agree25 ment, cooperative research and development agree-

ment under the Stevenson-Wydler Technology Inno vation Act of 1980, grant, joint venture, or any
 other form of agreement available to the Secretary
 that relates to research, development, and dem onstration to cover commercial application of energy
 technology.

7 (h) APPLICATION OF SECTION.—This section shall 8 not apply to any contract, cooperative agreement, coopera-9 tive research and development agreement under the Ste-10 venson-Wydler Technology Innovation Act of 1980 (15 11 U.S.C. 3701 et seq.), grant, joint venture, or any other 12 form of agreement available to the Secretary that is in 13 effect as of the date of the enactment of this Act.

14 SEC. 2602. LIMITS ON USE OF FUNDS.

15 (a) MANAGEMENT AND OPERATING CONTRACTS.—

16 (1)Competitive PROCEDURE **REQUIRE-**17 MENT.—None of the funds authorized to be appro-18 priated to the Secretary by this division may be used 19 to award a management and operating contract for 20 a federally owned or operated nonmilitary energy 21 laboratory of the Department unless such contract is 22 awarded using competitive procedures or the Sec-23 retary grants, on a case-by-case basis, a waiver to 24 allow for such a deviation. The Secretary may not 25 delegate the authority to grant such a waiver.

1 (2)2CONGRESSIONAL NOTICE.—At least 2 months before a contract award, amendment, or 3 modification for which the Secretary intends to 4 grant such a waiver, the Secretary shall submit to 5 the appropriate congressional committees a report 6 notifying the committees of the waiver and setting 7 forth the reasons for the waiver.

(b) PRODUCTION OR PROVISION OF ARTICLES OR 8 9 SERVICES.—None of the funds authorized to be appro-10 priated to the Secretary by this division may be used to produce or provide articles or services for the purpose of 11 12 selling the articles or services to a person outside the Fed-13 eral Government, unless the Secretary determines that comparable articles or services are not available from a 14 15 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.

21 SEC. 2603. COST SHARING.

(a) RESEARCH AND DEVELOPMENT.—Except as otherwise provided in this division, for research and development programs carried out under this division, the Secretary shall require a commitment from non-Federal

sources of at least 20 percent of the cost of the project.
 The Secretary may reduce or eliminate the non-Federal
 requirement under this subsection if the Secretary deter mines that the research and development is of a basic or
 fundamental nature.

6 (b) DEMONSTRATION AND COMMERCIAL APPLICA-7 TION.—Except as otherwise provided in this division, the 8 Secretary shall require at least 50 percent of the costs di-9 rectly and specifically related to any demonstration or 10 commercial application project under this division to be provided from non-Federal sources. The Secretary may re-11 12 duce the non-Federal requirement under this subsection if the Secretary determines that the reduction is necessary 13 and appropriate considering the technological risks in-14 15 volved in the project and is necessary to meet the objectives of this division. 16

(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.

21 SEC. 2604. LIMITATION ON DEMONSTRATION AND COMMER22 CIAL APPLICATION OF ENERGY TECH23 NOLOGY.

Except as otherwise provided in this division, the Sec-retary shall provide funding for scientific or energy dem-

onstration and commercial application of energy tech nology programs, projects, or activities only for tech nologies or processes that can be reasonably expected to
 yield new, measurable benefits to the cost, efficiency, or
 performance of the technology or process.

6 SEC. 2605. REPROGRAMMING.

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

11	(1) the Secretary has transmitted to the appro-
12	priate congressional committees a report described
13	in subsection (b) and a period of 30 days has
14	elapsed after such committees receive the report;

15 (2) amounts used for the program, project, or16 activity do not exceed—

17 (A) 105 percent of the amount authorized18 for the program, project, or activity; or

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

21 whichever is less; and

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

1 (b) REPORT.—(1) The report referred to in sub-2 section (a) is a report containing a full and complete state-3 ment of the action proposed to be taken and the facts and 4 circumstances relied upon in support of the proposed ac-5 tion.

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

10 (c) LIMITATIONS.—(1) In no event may the total 11 amount of funds obligated by the Secretary pursuant to 12 this division exceed the total amount authorized to be ap-13 propriated to the Secretary by this division.

14 (2) Funds appropriated to the Secretary pursuant to15 this division may not be used for an item for which Con-16 gress has declined to authorize funds.

Subtitle B—Other Miscellaneous Provisions

19 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 development, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity of the Department.

1 SEC. 2612. LIMITS ON GENERAL PLANT PROJECTS.

2 If, at any time during the construction of a civilian 3 environmental research and development, scientific or energy research, development, or demonstration, or commer-4 5 cial application of energy technology project of the Department for which no specific funding level is provided by 6 7 law, the estimated cost (including any revision thereof) of 8 the project exceeds \$5,000,000, the Secretary may not 9 continue such construction unless the Secretary has fur-10 nished a complete report to the appropriate congressional committees explaining the project and the reasons for the 11 12 estimate or revision.

13 SEC. 2613. LIMITS ON CONSTRUCTION PROJECTS.

14 (a) LIMITATION.—Except as provided in subsection (b), construction on a civilian environmental research and 15 16 development, scientific or energy research, development, or demonstration, or commercial application of energy tech-17 18 nology project of the Department for which funding has 19 been specifically provided by law may not be started, and 20 additional obligations may not be incurred in connection 21 with the project above the authorized funding amount, 22 whenever the current estimated cost of the construction 23 project exceeds by more than 10 percent the higher of— 24 (1) the amount authorized for the project, if the 25 entire project has been funded by the Congress; or

(2) the amount of the total estimated cost for 1 2 the project as shown in the most recent budget jus-3 tification data submitted to Congress. 4 (b) NOTICE.—An action described in subsection (a) may be taken if— 5 6 (1) the Secretary has submitted to the appro-7 priate congressional committees a report on the pro-8 posed actions and the circumstances making such 9 actions necessary; and 10 (2) a period of 30 days has elapsed after the 11 date on which the report is received by the commit-12 tees. 13 (c) EXCLUSION.—In the computation of the 30-day period described in subsection (b)(2), there shall be ex-14 15 cluded any day on which either House of Congress is not in session because of an adjournment of more than 3 days 16 to a day certain. 17 18 (d) EXCEPTION.—Subsections (a) and (b) shall not 19 apply to any construction project that has a current esti-20 mated cost of less than \$5,000,000. 21 SEC. 2614. AUTHORITY FOR CONCEPTUAL AND CONSTRUC-22 TION DESIGN.

(a) REQUIREMENT FOR CONCEPTUAL DESIGN.—(1)
Subject to paragraph (2) and except as provided in paragraph (3), before submitting to Congress a request for

funds for a construction project that is in support of a
 civilian environmental research and development, scientific
 or energy research, development, or demonstration, or
 commercial application of energy technology program,
 project, or activity of the Department, the Secretary shall
 complete a conceptual design for that project.

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

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

15 (b) AUTHORITY FOR CONSTRUCTION DESIGN.—(1) The Secretary may carry out construction design (includ-16 ing architectural and engineering services) in connection 17 with any proposed construction project that is in support 18 19 of a civilian environmental research and development, sci-20 entific or energy research, development, and demonstra-21 tion, or commercial application of energy technology pro-22 gram, project, or activity of the Department if the total 23 estimated cost for such design does not exceed \$250,000. 24 (2) If the total estimated cost for construction design

25 in connection with any construction project described in

paragraph (1) exceeds \$250,000, funds for such design
 must be specifically authorized by law.

3 SEC. 2615. NATIONAL ENERGY POLICY DEVELOPMENT 4 GROUP MANDATED REPORTS.

5 (a) THE SECRETARY'S REVIEW OF ENERGY EFFI-CIENCY RENEWABLE ENERGY, AND ALTERNATIVE EN-6 7 ERGY RESEARCH AND DEVELOPMENT.—Upon completion 8 of the Secretary's review of current funding and historic 9 performance of the Department's energy efficiency, renew-10 able energy, and alternative energy research and development programs in response to the recommendations of the 11 May 16, 2001, Report of the National Energy Policy De-12 13 velopment Group, the Secretary shall transmit a report 14 containing the results of such review to the appropriate 15 congressional committees.

16 (b) REVIEW AND RECOMMENDATIONS ON USING THE 17 NATION'S ENERGY RESOURCES MORE EFFICIENTLY.-Upon completion of the Office of Science and Technology 18 Policy and the President's Council of Advisors on Science 19 20 and Technology reviewing and making recommendations 21 on using the Nation's energy resources more efficiently, 22 in response to the recommendation of the May 16, 2001, 23 Report of the National Energy Policy Development Group, 24 the Director of the Office of Science and Technology Pol-25 icy shall transmit a report containing the results of such

review and recommendations to the appropriate congres sional committees.

3 SEC. 2616. PERIODIC REVIEWS AND ASSESSMENTS.

4 The Secretary shall enter into appropriate arrange-5 ments with the National Academies of Sciences and Engineering to ensure that there be periodic reviews and as-6 7 sessments of the programs authorized by this division, as 8 well as the measurable cost and performance-based goals 9 for such programs as established under section 2004, and 10 the progress on meeting such goals. Such reviews and as-11 sessments shall be conducted at least every 5 years, or 12 more often as the Secretary considers necessary, and the 13 Secretary shall transmit to the appropriate congressional committees reports containing the results of such reviews 14 15 and assessments.

16

DIVISION C

17 SEC. 3001. SHORT TITLE.

18 (a) SHORT TITLE.—This division may be cited as the19 "Energy Tax Policy Act of 2001".

(b) AMENDMENT OF 1986 CODE.—Except as otherwise expressly provided, whenever in this division an
amendment or repeal is expressed in terms of an amendment to, or repeal of, a section or other provision, the reference shall be considered to be made to a section or other
provision of the Internal Revenue Code of 1986.

1 TITLE I—CONSERVATION 2 SEC. 3101. CREDIT FOR RESIDENTIAL SOLAR ENERGY 3 PROPERTY.

4 (a) IN GENERAL.—Subpart A of part IV of sub5 chapter A of chapter 1 (relating to nonrefundable personal
6 credits) is amended by inserting after section 25B the fol7 lowing new section:

8 "SEC. 25C. RESIDENTIAL SOLAR ENERGY PROPERTY.

9 "(a) ALLOWANCE OF CREDIT.—In the case of an in-10 dividual, there shall be allowed as a credit against the tax 11 imposed by this chapter for the taxable year an amount 12 equal to the sum of—

13 "(1) 15 percent of the qualified photovoltaic
14 property expenditures made by the taxpayer during
15 such year, and

16 "(2) 15 percent of the qualified solar water
17 heating property expenditures made by the taxpayer
18 during the taxable year.

19 "(b) LIMITATIONS.—

20 "(1) MAXIMUM CREDIT.—The credit allowed
21 under subsection (a) shall not exceed—

22 "(A) \$2,000 for each system of property
23 described in subsection (c)(1), and

24 "(B) \$2,000 for each system of property
25 described in subsection (c)(2).

1	"(2) SAFETY CERTIFICATIONS.—No credit shall
2	be allowed under this section for an item of property
3	unless—
4	"(A) in the case of solar water heating
5	equipment, such equipment is certified for per-
6	formance and safety by the non-profit Solar
7	Rating Certification Corporation or a com-
8	parable entity endorsed by the government of
9	the State in which such property is installed,
10	and
11	"(B) in the case of a photovoltaic system,
12	such system meets appropriate fire and electric
13	code requirements.
14	"(3) LIMITATION BASED ON AMOUNT OF
15	TAX.—The credit allowed under subsection (a) for
16	the taxable year shall not exceed the excess of—
17	"(A) the sum of the regular tax liability
18	(as defined in section 26(b)) plus the tax im-
19	posed by section 55, over
20	"(B) the sum of the credits allowable
21	under this subpart (other than this section and
22	sections 23, 25D, and 25E) and section 27 for
23	the taxable year.
24	"(c) DEFINITIONS.—For purposes of this section—

1 "(1) QUALIFIED SOLAR WATER HEATING PROP-2 ERTY EXPENDITURE.—The term 'qualified solar 3 water heating property expenditure' means an ex-4 penditure for property to heat water for use in a 5 dwelling unit located in the United States and used 6 as a residence if at least half of the energy used by 7 such property for such purpose is derived from the 8 sun.

9 "(2) QUALIFIED PHOTOVOLTAIC PROPERTY EX-10 PENDITURE.—The term 'qualified photovoltaic prop-11 erty expenditure' means an expenditure for property 12 that uses solar energy to generate electricity for use 13 in a dwelling unit.

14 "(3) SOLAR PANELS.—No expenditure relating
15 to a solar panel or other property installed as a roof
16 (or portion thereof) shall fail to be treated as prop17 erty described in paragraph (1) or (2) solely because
18 it constitutes a structural component of the struc19 ture on which it is installed.

20 "(4) LABOR COSTS.—Expenditures for labor
21 costs properly allocable to the onsite preparation, as22 sembly, or original installation of the property de23 scribed in paragraph (1) or (2) and for piping or
24 wiring to interconnect such property to the dwelling

unit shall be taken into account for purposes of this
 section.

3 "(5) SWIMMING POOLS, ETC., USED AS STOR4 AGE MEDIUM.—Expenditures which are properly al5 locable to a swimming pool, hot tub, or any other
6 energy storage medium which has a function other
7 than the function of such storage shall not be taken
8 into account for purposes of this section.

9 "(d) Special Rules.—

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

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

"(B) There shall be allowable with respect
to such expenditures to each of such individuals, a credit under subsection (a) for the taxable year in which such calendar year ends in

1	an amount which bears the same ratio to the
2	amount determined under subparagraph (A) as
3	the amount of such expenditures made by such
4	individual during such calendar year bears to
5	the aggregate of such expenditures made by all
6	of such individuals during such calendar year.
7	"(2) TENANT-STOCKHOLDER IN COOPERATIVE
8	HOUSING CORPORATION.—In the case of an indi-
9	vidual who is a tenant-stockholder (as defined in sec-
10	tion 216) in a cooperative housing corporation (as
11	defined in such section), such individual shall be
12	treated as having made his tenant-stockholder's pro-
13	portionate share (as defined in section $216(b)(3)$) of
14	any expenditures of such corporation.
15	"(3) Condominiums.—
16	"(A) IN GENERAL.—In the case of an indi-
17	vidual who is a member of a condominium man-
18	agement association with respect to a condo-
19	minium which he owns, such individual shall be
20	treated as having made his proportionate share
21	of any expenditures of such association.
22	"(B) Condominium management asso-
23	CIATION.—For purposes of this paragraph, the
24	term 'condominium management association'
25	means an organization which meets the require-

1	ments of paragraph (1) of section $528(c)$ (other
2	than subparagraph (E) thereof) with respect to
3	a condominium project substantially all of the
4	units of which are used as residences.
5	"(4) Allocation in certain cases.—If less
6	than 80 percent of the use of an item is for nonbusi-
7	ness purposes, only that portion of the expenditures
8	for such item which is properly allocable to use for
9	nonbusiness purposes shall be taken into account.
10	"(5) When expenditure made; amount of
11	EXPENDITURE.—
12	"(A) IN GENERAL.—Except as provided in
13	subparagraph (B), an expenditure with respect
14	to an item shall be treated as made when the
15	original installation of the item is completed.
16	"(B) EXPENDITURES PART OF BUILDING
17	CONSTRUCTION.—In the case of an expenditure
18	in connection with the construction or recon-
19	struction of a structure, such expenditure shall
20	be treated as made when the original use of the
21	constructed or reconstructed structure by the
22	taxpayer begins.
23	"(C) Amount.—The amount of any ex-
24	penditure shall be the cost thereof.

"(6) PROPERTY FINANCED BY SUBSIDIZED ENERGY FINANCING.—For purposes of determining the
amount of expenditures made by any individual with
respect to any dwelling unit, there shall not be taken
in to account expenditures which are made from
subsidized energy financing (as defined in section
48(a)(4)(A)).

8 "(e) BASIS ADJUSTMENTS.—For purposes of this 9 subtitle, if a credit is allowed under this section for any 10 expenditure with respect to any property, the increase in 11 the basis of such property which would (but for this sub-12 section) result from such expenditure shall be reduced by 13 the amount of the credit so allowed.

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

18 (b) Conforming Amendments.—

(1) Subsection (a) of section 1016 is amended
by striking "and" at the end of paragraph (27), by
striking the period at the end of paragraph (28) and
inserting ", and", and by adding at the end the following new paragraph:

1	"(29) to the extent provided in section $25C(e)$,
2	in the case of amounts with respect to which a credit
3	has been allowed under section 25C.".
4	(2) The table of sections for subpart A of part
5	IV of subchapter A of chapter 1 is amended by in-
6	serting after the item relating to section 25B the fol-
7	lowing new item:
	"Sec. 25C. Residential solar energy property.".
8	(c) EFFECTIVE DATE.—The amendments made by
9	this section shall apply to taxable years ending after De-
10	cember 31, 2001.
11	SEC. 3102. EXTENSION AND EXPANSION OF CREDIT FOR
12	ELECTRICITY PRODUCED FROM RENEWABLE
13	RESOURCES.
13 14	RESOURCES. (a) EXTENSION OF CREDIT FOR WIND AND CLOSED-
14	(a) Extension of Credit for Wind and Closed-
14 15	(a) EXTENSION OF CREDIT FOR WIND AND CLOSED- LOOP BIOMASS FACILITIES.—Subparagraphs (A) and (B)
14 15 16	(a) EXTENSION OF CREDIT FOR WIND AND CLOSED- LOOP BIOMASS FACILITIES.—Subparagraphs (A) and (B) of section 45(c)(3) are each amended by striking "2002"
14 15 16 17	(a) EXTENSION OF CREDIT FOR WIND AND CLOSED- LOOP BIOMASS FACILITIES.—Subparagraphs (A) and (B) of section 45(c)(3) are each amended by striking "2002" and inserting "2007".
14 15 16 17 18	 (a) EXTENSION OF CREDIT FOR WIND AND CLOSED-LOOP BIOMASS FACILITIES.—Subparagraphs (A) and (B) of section 45(c)(3) are each amended by striking "2002" and inserting "2007". (b) EXPANSION OF CREDIT FOR OPEN-LOOP BIOMASS
14 15 16 17 18 19	 (a) EXTENSION OF CREDIT FOR WIND AND CLOSED-LOOP BIOMASS FACILITIES.—Subparagraphs (A) and (B) of section 45(c)(3) are each amended by striking "2002" and inserting "2007". (b) EXPANSION OF CREDIT FOR OPEN-LOOP BIOMASS AND LANDFILL GAS FACILITIES.—Paragraph (3) of sec-
14 15 16 17 18 19 20	 (a) EXTENSION OF CREDIT FOR WIND AND CLOSED-LOOP BIOMASS FACILITIES.—Subparagraphs (A) and (B) of section 45(c)(3) are each amended by striking "2002" and inserting "2007". (b) EXPANSION OF CREDIT FOR OPEN-LOOP BIOMASS AND LANDFILL GAS FACILITIES.—Paragraph (3) of section 45(c) is amended by adding at the end the following
14 15 16 17 18 19 20 21	 (a) EXTENSION OF CREDIT FOR WIND AND CLOSED-LOOP BIOMASS FACILITIES.—Subparagraphs (A) and (B) of section 45(c)(3) are each amended by striking "2002" and inserting "2007". (b) EXPANSION OF CREDIT FOR OPEN-LOOP BIOMASS AND LANDFILL GAS FACILITIES.—Paragraph (3) of section 45(c) is amended by adding at the end the following new subparagraphs:
 14 15 16 17 18 19 20 21 22 	 (a) EXTENSION OF CREDIT FOR WIND AND CLOSED-LOOP BIOMASS FACILITIES.—Subparagraphs (A) and (B) of section 45(c)(3) are each amended by striking "2002" and inserting "2007". (b) EXPANSION OF CREDIT FOR OPEN-LOOP BIOMASS AND LANDFILL GAS FACILITIES.—Paragraph (3) of section 45(c) is amended by adding at the end the following new subparagraphs: "(D) OPEN-LOOP BIOMASS FACILITIES.—

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which is originally placed in service before January 1, 2007. "(E) LANDFILL GAS FACILITIES.—In the

4 case of a facility producing electricity from gas
5 derived from the biodegradation of municipal
6 solid waste, the term 'qualified facility' means
7 any facility owned by the taxpayer which is
8 originally placed in service before January 1,
9 2007.".

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

13 "(5) OPEN-LOOP BIOMASS.—The term 'open14 loop biomass' means any solid, nonhazardous, cel15 lulosic waste material which is segregated from other
16 waste materials and which is derived from—

17 "(A) any of the following forest-related re18 sources: mill residues, precommercial thinnings,
19 slash, and brush, but not including old-growth
20 timber,

21 "(B) solid wood waste materials, including
22 waste pallets, crates, dunnage, manufacturing
23 and construction wood wastes (other than pres24 sure-treated, chemically-treated, or painted
25 wood wastes), and landscape or right-of-way

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1	tree trimmings, but not including municipal
2	solid waste (garbage), gas derived from the bio-
3	degradation of solid waste, or paper that is
4	commonly recycled, or
5	"(C) agriculture sources, including orchard
6	tree crops, vineyard, grain, legumes, sugar, and
7	other crop by-products or residues.
8	Such term shall not include closed-loop biomass.
9	"(6) REDUCED CREDIT FOR CERTAIN
10	PREEFFECTIVE DATE FACILITIES.—In the case of
11	any facility described in subparagraph (D) or (E) of
12	paragraph (3) which is placed in service before the
13	date of the enactment of this subparagraph—
14	"(A) subsection $(a)(1)$ shall be applied by
15	substituting '1.0 cents' for '1.5 cents', and
16	"(B) the 5-year period beginning on the
16 17	
	"(B) the 5-year period beginning on the
17	"(B) the 5-year period beginning on the date of the enactment of this paragraph shall
17 18	"(B) the 5-year period beginning on the date of the enactment of this paragraph shall be substituted in lieu of the 10-year period in
17 18 19	"(B) the 5-year period beginning on the date of the enactment of this paragraph shall be substituted in lieu of the 10-year period in subsection $(a)(2)(A)(ii)$.
17 18 19 20	 "(B) the 5-year period beginning on the date of the enactment of this paragraph shall be substituted in lieu of the 10-year period in subsection (a)(2)(A)(ii). "(7) LIMIT ON REDUCTIONS FOR GRANTS, ETC.,
17 18 19 20 21	 "(B) the 5-year period beginning on the date of the enactment of this paragraph shall be substituted in lieu of the 10-year period in subsection (a)(2)(A)(ii). "(7) LIMIT ON REDUCTIONS FOR GRANTS, ETC., FOR OPEN-LOOP BIOMASS FACILITIES.—If the
17 18 19 20 21 22	 "(B) the 5-year period beginning on the date of the enactment of this paragraph shall be substituted in lieu of the 10-year period in subsection (a)(2)(A)(ii). "(7) LIMIT ON REDUCTIONS FOR GRANTS, ETC., FOR OPEN-LOOP BIOMASS FACILITIES.—If the amount of the credit determined under subsection

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1	section (b), the fraction under such paragraph shall
2	in no event be greater than $\frac{4}{5}$.
3	"(8) COORDINATION WITH SECTION 29.—The
4	term 'qualified facility' shall not include any facility
5	the production from which is allowed as a credit
6	under section 29 for the taxable year or any prior
7	taxable year.".
8	(d) EFFECTIVE DATE.—The amendments made by
9	this section shall apply to electricity sold after the date
10	of the enactment of this Act.
11	SEC. 3103. CREDIT FOR QUALIFIED STATIONARY FUEL
12	CELL POWERPLANTS.
13	(a) BUSINESS PROPERTY.—
13 14	(a) BUSINESS PROPERTY.—(1) IN GENERAL.—Subparagraph (A) of section
14	(1) IN GENERAL.—Subparagraph (A) of section
14 15	(1) IN GENERAL.—Subparagraph (A) of section 48(a)(3) (defining energy property) is amended by
14 15 16	(1) IN GENERAL.—Subparagraph (A) of section 48(a)(3) (defining energy property) is amended by striking "or" at the end of clause (i), by adding
14 15 16 17	(1) IN GENERAL.—Subparagraph (A) of section 48(a)(3) (defining energy property) is amended by striking "or" at the end of clause (i), by adding "or" at the end of clause (ii), and by inserting after
14 15 16 17 18	(1) IN GENERAL.—Subparagraph (A) of section 48(a)(3) (defining energy property) is amended by striking "or" at the end of clause (i), by adding "or" at the end of clause (ii), and by inserting after clause (ii) the following new clause:
14 15 16 17 18 19	 (1) IN GENERAL.—Subparagraph (A) of section 48(a)(3) (defining energy property) is amended by striking "or" at the end of clause (i), by adding "or" at the end of clause (ii), and by inserting after clause (ii) the following new clause: "(iii) equipment which is part of a
14 15 16 17 18 19 20	 (1) IN GENERAL.—Subparagraph (A) of section 48(a)(3) (defining energy property) is amended by striking "or" at the end of clause (i), by adding "or" at the end of clause (ii), and by inserting after clause (ii) the following new clause: "(iii) equipment which is part of a qualified stationary fuel cell powerplant,".
14 15 16 17 18 19 20 21	 (1) IN GENERAL.—Subparagraph (A) of section 48(a)(3) (defining energy property) is amended by striking "or" at the end of clause (i), by adding "or" at the end of clause (ii), and by inserting after clause (ii) the following new clause: "(iii) equipment which is part of a qualified stationary fuel cell powerplant,". (2) QUALIFIED STATIONARY FUEL CELL POW-
 14 15 16 17 18 19 20 21 22 	 (1) IN GENERAL.—Subparagraph (A) of section 48(a)(3) (defining energy property) is amended by striking "or" at the end of clause (i), by adding "or" at the end of clause (ii), and by inserting after clause (ii) the following new clause: "(iii) equipment which is part of a qualified stationary fuel cell powerplant,". (2) QUALIFIED STATIONARY FUEL CELL POW-ERPLANT.—Subsection (a) of section 48 is amended
 14 15 16 17 18 19 20 21 22 23 	 (1) IN GENERAL.—Subparagraph (A) of section 48(a)(3) (defining energy property) is amended by striking "or" at the end of clause (i), by adding "or" at the end of clause (ii), and by inserting after clause (ii) the following new clause: "(iii) equipment which is part of a qualified stationary fuel cell powerplant,". (2) QUALIFIED STATIONARY FUEL CELL POW-ERPLANT.—Subsection (a) of section 48 is amended by redesignating paragraphs (4) and (5) as para-

1	"(4) Qualified stationary fuel cell pow-
2	ERPLANT.—For purposes of this subsection—
3	"(A) IN GENERAL.—The term 'qualified
4	stationary fuel cell powerplant' means a sta-
5	tionary fuel cell power plant that has an elec-
6	tricity-only generation efficiency greater than
7	30 percent.
8	"(B) LIMITATION.—In the case of quali-
9	fied stationary fuel cell powerplant placed in
10	service during the taxable year, the credit under
11	subsection (a) for such year may not exceed
12	\$1,000 for each kilowatt of capacity.
13	"(C) STATIONARY FUEL CELL POWER
14	PLANT.—The term 'stationary fuel cell power
15	plant' means an integrated system comprised of
16	a fuel cell stack assembly and associated bal-
17	ance of plant components that converts a fuel
18	into electricity using electrochemical means.
19	"(D) TERMINATION.—Such term shall not
20	include any property placed in service after De-
21	cember 31, 2006.".
22	(3) EFFECTIVE DATE.—The amendments made
23	by this subsection shall apply to property placed in
24	service after December 31, 2001, under rules similar
25	to the rules of section 48(m) of the Internal Revenue

Code of 1986 (as in effect on the day before the
 date of the enactment of the Revenue Reconciliation
 Act of 1990).

4 (b) NONBUSINESS PROPERTY.—

5 (1) IN GENERAL.—Subpart A of part IV of sub6 chapter A of chapter 1 (relating to nonrefundable
7 personal credits) is amended by inserting after sec8 tion 25C the following new section:

9 "SEC. 25D. NONBUSINESS QUALIFIED STATIONARY FUEL 10 CELL POWERPLANT.

11 "(a) IN GENERAL.—In the case of an individual, 12 there shall be allowed as a credit against the tax imposed 13 by this chapter for the taxable year an amount equal to 14 10 percent of the qualified stationary fuel cell powerplant 15 expenditures which are paid or incurred during such year.

16 "(b) LIMITATIONS.—

17 "(1) IN GENERAL.—The credit allowed under
18 subsection (a) for the taxable year and all prior tax19 able years shall not exceed \$1,000 for each kilowatt
20 of capacity.

21 "(2) LIMITATION BASED ON AMOUNT OF
22 TAX.—The credit allowed under subsection (a) for
23 the taxable year shall not exceed the excess of—

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1	"(A) the sum of the regular tax liability
2	(as defined in section 26(b)) plus the tax im-
3	posed by section 55, over
4	"(B) the sum of the credits allowable
5	under this subpart (other than this section and
6	sections 23 and 25E) and section 27 for the
7	taxable year.
8	"(c) Qualified Stationary Fuel Cell Power-
9	PLANT EXPENDITURES.—For purposes of this section, the
10	term 'qualified stationary fuel cell powerplant expendi-
11	tures' means expenditures by the taxpayer for any quali-
12	fied stationary fuel cell powerplant (as defined in section
13	48(a)(4))—
14	((1) which meets the requirements of subpara-
15	graphs (B) and (D) of section $48(a)(3)$, and
16	((2) which is installed on or in connection with
17	a dwelling unit—
18	"(A) which is located in the United States,
19	and
20	"(B) which is used by the taxpayer as a
21	residence.
22	Such term includes expenditures for labor costs properly
23	allocable to the onsite preparation, assembly, or original
24	installation of the property.

1	"(d) Special Rules.—For purposes of this section,
2	rules similar to the rules of section 25C(d) shall apply.
3	"(e) BASIS ADJUSTMENTS.—For purposes of this
4	subtitle, if a credit is allowed under this section for any
5	expenditure with respect to any property, the increase in
6	the basis of such property which would (but for this sub-
7	section) result from such expenditure shall be reduced by
8	the amount of the credit so allowed.
9	"(f) TERMINATION.—This section shall not apply to
10	any expenditure made after December 31, 2006.".
11	(2) Conforming Amendments.—
12	(A) Subsection (a) of section 1016 is
13	amended by striking "and" at the end of para-
14	graph (28), by striking the period at the end of
15	paragraph (29) and inserting ", and", and by
16	adding at the end the following new paragraph:
17	((30) to the extent provided in section $25D(e)$,
18	in the case of amounts with respect to which a credit
19	has been allowed under section 25D.".
20	(B) The table of sections for subpart A of
21	part IV of subchapter A of chapter 1 is amend-
22	ed by inserting after the item relating to section
23	25C the following new item:
	"Sec. 25D. Nonbusiness qualified stationary fuel cell power- plant.".

1 (3) EFFECTIVE DATE.—The amendments made 2 by this subsection shall apply to expenditures paid 3 or incurred after December 31, 2001. 4 SEC. 3104. ALTERNATIVE MOTOR VEHICLE CREDIT. 5 (a) IN GENERAL.—Subpart B of part IV of subchapter A of chapter 1 (relating to foreign tax credit, etc.) 6 7 is amended by adding at the end the following: 8 "SEC. 30B. ALTERNATIVE MOTOR VEHICLE CREDIT. 9 "(a) ALLOWANCE OF CREDIT.—There shall be al-10 lowed as a credit against the tax imposed by this chapter for the taxable year an amount equal to the sum of— 11 "(1) the new qualified fuel cell motor vehicle 12 13 credit determined under subsection (b), 14 "(2) the new qualified hybrid motor vehicle 15 credit determined under subsection (c), "(3) the new qualified alternative fuel motor ve-16 17 hicle credit determined under subsection (d), and 18 "(4) the advanced lean burn technology motor 19 vehicle credit determined under subsection (e). "(b) New Qualified Fuel Cell Motor Vehicle 20 21 CREDIT.— 22 "(1) IN GENERAL.—For purposes of subsection 23 (a), the new qualified fuel cell motor vehicle credit 24 determined under this subsection with respect to a

1	new qualified fuel cell motor vehicle placed in service
2	by the taxpayer during the taxable year is—
3	"(A) \$4,000, if such vehicle has a gross ve-
4	hicle weight rating of not more than 8,500
5	pounds,
6	"(B) \$10,000, if such vehicle has a gross
7	vehicle weight rating of more than 8,500
8	pounds but not more than 14,000 pounds,
9	"(C) $$20,000$, if such vehicle has a gross
10	vehicle weight rating of more than 14,000
11	pounds but not more than 26,000 pounds, and
12	((D) \$40,000, if such vehicle has a gross
13	vehicle weight rating of more than 26,000
14	pounds.
15	"(2) Increase for fuel efficiency.—
16	"(A) IN GENERAL.—The amount deter-
17	mined under paragraph $(1)(A)$ with respect to
18	a new qualified fuel cell motor vehicle which is
19	a passenger automobile or light truck shall be
20	increased by—
21	"(i) \$1,000, if such vehicle achieves at
22	least 150 percent but less than 175 per-
23	cent of the 2000 model year city fuel econ-
24	omy,

1	"(ii) \$1,500, if such vehicle achieves
2	at least 175 percent but less than 200 per-
3	cent of the 2000 model year city fuel econ-
4	omy,
5	"(iii) \$2,000, if such vehicle achieves
6	at least 200 percent but less than 225 per-
7	cent of the 2000 model year city fuel econ-
8	omy,
9	"(iv) $$2,500$, if such vehicle achieves
10	at least 225 percent but less than 250 per-
11	cent of the 2000 model year city fuel econ-
12	omy,
13	"(v) \$3,000, if such vehicle achieves
14	at least 250 percent but less than 275 per-
15	cent of the 2000 model year city fuel econ-
16	omy,
17	"(vi) \$3,500, if such vehicle achieves
18	at least 275 percent but less than 300 per-
19	cent of the 2000 model year city fuel econ-
20	omy, and
21	"(vii) \$4,000, if such vehicle achieves
22	at least 300 percent of the 2000 model
23	year city fuel economy.
24	"(B) 2000 model year city fuel econ-
25	OMY.—For purposes of subparagraph (A), the

- 2000 model year city fuel economy with respect 1 2 to a vehicle shall be determined in accordance 3 with the following tables:
- 4 "(i) In the case of a passenger auto
 - mobile:

"If	vehicle	inertia	weight	The 2000		year	city fuel
	class is:			econo	omy is:		
	1,500 or 1	1,750 lbs					$43.7 \mathrm{mpg}$
	2,000 lbs						38.3 mpg
	2,250 lbs						$34.1 \mathrm{mpg}$
							$30.7 \mathrm{mpg}$
							27.9 mpg
							25.6 mpg
	3,500 lbs						22.0 mpg
	4,000 lbs						19.3 mpg
							17.2 mpg
	5,000 lbs						$15.5 \mathrm{mpg}$
	5,500 lbs						$14.1 \mathrm{mpg}$
	6,000 lbs						12.9 mpg
							11.9 mpg
	7,000 or 8	8,500 lbs					11.1 mpg.

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"(ii) In the case of a light truck:

"If			weight	The 2000 1		year	city	fuel
	class is:			econom	1y 1s:			
	1,500 or 1	1,750 lbs					37.6	mpg
	2,000 lbs						33.7	mpg
	2,250 lbs						30.6	mpg
							28.0	mpg
				•••••			25.9	mpg
							24.1	
							21.3	
							19.0	
							17.3	~ ~
							15.8	~ ~
							14.6	
							13.6	
	6.500 lbs							mpg
								mpg.
	1,000 01 0				••••••		12.0	mp8.
		"(C)	VEHICL	E INERTIA	WEIGI	НТ С		S.—
	Ţ	For nurne	uses of	subnaraora	anh (F	() +	he t	erm

. . .

8 For purposes of subparagraph (B), the term 'vehicle inertia weight class' has the same 9 meaning as when defined in regulations pre-10

1	scribed by the Administrator of the Environ-
2	mental Protection Agency for purposes of the
3	administration of title II of the Clean Air Act
4	(42 U.S.C. 7521 et seq.).
5	"(3) New qualified fuel cell motor vehi-
6	CLE.—For purposes of this subsection, the term
7	'new qualified fuel cell motor vehicle' means a motor
8	vehicle—
9	"(A) which is propelled by power derived
10	from one or more cells which convert chemical
11	energy directly into electricity by combining ox-
12	ygen with hydrogen fuel which is stored on
13	board the vehicle in any form and may or may
14	not require reformation prior to use,
15	"(B) which, in the case of a passenger
16	automobile or light truck—
17	"(i) for 2002 and later model vehicles,
18	has received a certificate of conformity
19	under the Clean Air Act and meets or ex-
20	ceeds the equivalent qualifying California
21	low emission vehicle standard under sec-
22	tion $243(e)(2)$ of the Clean Air Act for
23	that make and model year, and
24	"(ii) for 2004 and later model vehi-
25	cles, has received a certificate that such ve-

1	hicle meets or exceeds the Tier II emission
2	level established in regulations prescribed
3	by the Administrator of the Environmental
4	Protection Agency under section 202(i) of
5	the Clean Air Act for that make and model
6	year vehicle,
7	"(C) the original use of which commences
8	with the taxpayer,
9	"(D) which is acquired for use or lease by
10	the taxpayer and not for resale, and
11	"(E) which is made by a manufacturer.
12	"(c) New Qualified Hybrid Motor Vehicle
13	Credit.—
14	"(1) IN GENERAL.—For purposes of subsection
15	(a), the new qualified hybrid motor vehicle credit de-
16	termined under this subsection with respect to a new
17	qualified hybrid motor vehicle placed in service by
18	the taxpayer during the taxable year is the credit
19	amount determined under paragraph (2).
20	"(2) Credit Amount.—
21	"(A) IN GENERAL.—The credit amount de-
22	termined under this paragraph shall be deter-
23	mined in accordance with the following tables:
24	"(i) In the case of a new qualified hy-
25	brid motor vehicle which is a passenger

1		automobile or light truck and which pro-				
2	vides the following percentage of the max-					
3		imum available power:				
	"If	percentage of the max- 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.				
4		"(ii) In the case of a new qualified hy-				
5		brid motor vehicle which is a heavy duty				
6		hybrid motor vehicle and which provides				
7		the following percentage of the maximum				
8		available power:				
9		"(I) If such vehicle has a gross				
10		vehicle weight rating of not more than				
11		14,000 pounds:				
	"If	percentage of the max- imum available power is:The credit amount is:At least 20 percent but less than 30 percent\$1,500At least 30 percent but less than 40 percent\$1,750At least 40 percent but less than 50 percent\$2,000At least 50 percent but less than 60 percent\$2,250At least 60 percent\$2,500.				
12		"(II) If such vehicle has a gross				
13		vehicle weight rating of more than				
14		14,000 but not more than 26,000				
15		pounds:				
	"If	percentage of the max- imum available power is:The credit amount is:At least 20 percent but less than 30 percent\$4,000At least 30 percent but less than 40 percent\$4,500At least 40 percent but less than 50 percent\$5,000At least 50 percent but less than 60 percent\$5,500At least 60 percent\$6,000				

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1	"(III) If such vehicle has a gross
2	vehicle weight rating of more than
3	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\$6,000At least 30 percent but less than 40 percent\$7,000At least 40 percent but less than 50 percent\$8,000At least 50 percent but less than 60 percent\$9,000At least 60 percent\$10,000.
4	"(B) INCREASE FOR FUEL EFFICIENCY.—
5	"(i) Amount.—The amount deter-
6	mined under subparagraph (A)(i) with re-
7	spect to a passenger automobile or light
8	truck shall be increased by—
9	"(I) \$1,000, if such vehicle
10	achieves at least 125 percent but less
11	than 150 percent of the 2000 model
12	year city fuel economy,
13	"(II) \$1,500, if such vehicle
14	achieves at least 150 percent but less
15	than 175 percent of the 2000 model
16	year city fuel economy,
17	"(III) \$2,000, if such vehicle
18	achieves at least 175 percent but less
19	than 200 percent of the 2000 model
20	year city fuel economy,
21	"(IV) \$2,500, if such vehicle
22	achieves at least 200 percent but less

1	than 225 percent of the 2000 model
2	year city fuel economy,
3	"(V) \$3,000, if such vehicle
4	achieves at least 225 percent but less
5	than 250 percent of the 2000 model
6	year city fuel economy, and
7	"(VI) \$3,500, if such vehicle
8	achieves at least 250 percent of the
9	2000 model year city fuel economy.
10	"(ii) 2000 model year city fuel
11	ECONOMY.—For purposes of clause (i), the
12	2000 model year city fuel economy with re-
13	spect to a vehicle shall be determined using
14	the tables provided in subsection $(b)(2)(B)$
15	with respect to such vehicle.
16	"(iii) Option to use like vehi-
17	CLE.—For purposes of clause (i), at the
18	option of the vehicle manufacturer, the in-
19	crease for fuel efficiency may be calculated
20	by comparing the new qualified hybrid
21	motor vehicle to a 'like vehicle'.
22	"(C) INCREASE FOR ACCELERATED EMIS-
23	SIONS PERFORMANCE.—The amount deter-
24	mined under subparagraph (A)(ii) with respect
25	to an applicable heavy duty hybrid motor vehi-

1	cle shall be increased by the increase credit	
2	amount determined in accordance with the fol-	
3	lowing tables:	
4	"(i) In the case of a vehicle which has	
5	a gross vehicle weight rating of not more	
6	than 14,000 pounds:	
	"If the model year is: The increase credit amount is: 2002\$3,500	
	2002	
	2004	
	2005	
	2006	
7	"(ii) In the case of a vehicle which	
8	has a gross vehicle weight rating of more	
9	than 14,000 pounds but not more than	
10	26,000 pounds:	
	/ *	
	/ *	
	"If the model year is: The increase credit amount is:	
	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500	
	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250	
	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500	
11	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250	
11 12	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250 2006 \$4,000.	
	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250 2006 \$4,000. "(iii) In the case of a vehicle which	
12	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250 2006 \$4,000. "(iii) In the case of a vehicle which has a gross vehicle weight rating of more	
12	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250 2006 \$4,000. "(iii) In the case of a vehicle which has a gross vehicle weight rating of more than 26,000 pounds:	
12	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250 2006 \$4,000. "(iii) In the case of a vehicle which has a gross vehicle weight rating of more than 26,000 pounds: "If the model year is: The increase credit amount is: 2002 \$14,000 2003 \$12,000	
12	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250 2006 \$4,000. "(iii) In the case of a vehicle which has a gross vehicle weight rating of more than 26,000 pounds: "If the model year is: The increase credit amount is: 2002 \$14,000 2003 \$12,000 2004 \$10,000	
12	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250 2006 \$4,000. "(iii) In the case of a vehicle which has a gross vehicle weight rating of more than 26,000 pounds: "If the model year is: The increase credit amount is: 2002 \$14,000 2003 \$12,000 2004 \$10,000 2005 \$8,000	
12	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250 2006 \$4,000. "(iii) In the case of a vehicle which has a gross vehicle weight rating of more than 26,000 pounds: "If the model year is: The increase credit amount is: 2002 \$14,000 2003 \$12,000 2004 \$10,000	
12	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250 2006 \$4,000. "(iii) In the case of a vehicle which has a gross vehicle weight rating of more than 26,000 pounds: "If the model year is: The increase credit amount is: 2002 \$14,000 2003 \$12,000 2004 \$10,000 2005 \$8,000	
12 13	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250 2006 \$4,000. "(iii) In the case of a vehicle which has a gross vehicle weight rating of more than 26,000 pounds: "If the model year is: The increase credit amount is: 2002 \$14,000 2003 \$12,000 2004 \$10,000 2005 \$8,000 2006 \$6,000.	
12 13 14	"If the model year is: The increase credit amount is: 2002 \$9,000 2003 \$7,750 2004 \$6,500 2005 \$5,250 2006 \$4,000. "(iii) In the case of a vehicle which has a gross vehicle weight rating of more than 26,000 pounds: "If the model year is: The increase credit amount is: 2002 \$14,000 2003 \$12,000 2004 \$8000 2005 \$8000 2006 \$8000 2007 \$8000 2008 \$10,000 2009 \$8000 2000 \$8000 2001 \$10,000 2002 \$8000 2005 \$8000 2006 \$8000 2006 \$6,000.	

1	spect to a passenger automobile or light
2	truck shall be increased by—
3	"(I) $$250$, if such vehicle
4	achieves a lifetime fuel savings of at
5	least 1,500 gallons of gasoline, and
6	"(II) \$500, if such vehicle
7	achieves a lifetime fuel savings of at
8	least 2,500 gallons of gasoline.
9	"(ii) LIFETIME FUEL SAVINGS FOR
10	LIKE VEHICLE.—For purposes of clause
11	(i), at the option of the vehicle manufac-
12	turer, the lifetime fuel savings fuel may be
13	calculated by comparing the new qualified
14	hybrid motor vehicle to a 'like vehicle'.
15	"(E) DEFINITIONS.—
16	"(i) Applicable heavy duty hy-
17	BRID MOTOR VEHICLE.—For purposes of
18	subparagraph (C), the term 'applicable
19	heavy duty hybrid motor vehicle' means a
20	heavy duty hybrid motor vehicle which is
21	powered by an internal combustion or heat
22	engine which is certified as meeting the
23	emission standards set in the regulations
24	prescribed by the Administrator of the En-
25	vironmental Protection Agency for 2007

1 and later model year diesel heavy duty en-2 gines or 2008 and later model year 3 ottocycle heavy duty engines, as applicable. 4 "(ii) Heavy duty hybrid motor ve-HICLE.—For purposes of this paragraph, 5 the term 'heavy duty hybrid motor vehicle' 6 7 means a new qualified hybrid motor vehicle 8 which has a gross vehicle weight rating of 9 more than 10,000 pounds and draws pro-10 pulsion energy from both of the following 11 onboard sources of stored energy: "(I) An internal combustion or 12 heat engine using consumable fuel 13 14 which, for 2002 and later model vehi-15 cles, has received a certificate of con-16 formity under the Clean Air Act and 17 meets or exceeds a level of not greater 18 than 3.0 grams per brake horsepower-19 hour of oxides of nitrogen and 0.01

late matter.

per brake horsepower-hour of particu-

24 "(iii) Maximum available power.—

20

21

1	"(I) Passenger automobile
2	OR LIGHT TRUCK.—For purposes of
3	subparagraph (A)(i), the term 'max-
4	imum available power' means the
5	maximum power available from the
6	battery or other electrical storage de-
7	vice, during a standard 10 second
8	pulse power test, divided by the sum
9	of the battery or other electrical stor-
10	age device and the SAE net power of
11	the heat engine.
12	"(II) HEAVY DUTY HYBRID
13	MOTOR VEHICLE.—For purposes of
14	subparagraph (A)(ii), the term 'max-
15	imum available power' means the
16	maximum power available from the
17	battery or other electrical storage de-
18	vice, during a standard 10 second
19	pulse power test, divided by the vehi-
20	cle's total traction power. The term
21	'total traction power' means the sum
22	of the electric motor peak power and
23	the heat engine peak power of the ve-
24	hicle, except that if the electric motor
25	is the sole means by which the vehicle

1	can be driven, the total traction power
2	is the peak electric motor power.
3	"(iv) Like vehicle.—For purposes
4	of subparagraph (B)(iii), the term 'like ve-
5	hicle' for a new qualified hybrid motor ve-
6	hicle derived from a conventional produc-
7	tion vehicle produced in the same model
8	year means a model that is equivalent in
9	the following areas:
10	"(I) Body style (2-door or 4-
11	door).
12	"(II) Transmission (automatic or
13	manual).
14	"(III) Acceleration performance
15	$(\pm 0.05 \text{ seconds}).$
16	"(IV) Drivetrain (2-wheel drive
17	or 4-wheel drive).
18	"(V) Certification by the Admin-
19	istrator of the Environmental Protec-
20	tion Agency.
21	"(v) LIFETIME FUEL SAVINGS.—For
22	purposes of subsection $(c)(2)(D)$, the term
23	'lifetime fuel savings' shall be calculated by
24	dividing 120,000 by the difference between
25	the 2000 model year city fuel economy for

1	the vehicle inertia weight class and the city
2	fuel economy for the new qualified hybrid
3	motor vehicle.
4	"(3) New qualified hybrid motor vehi-
5	CLE.—For purposes of this subsection, the term
6	'new qualified hybrid motor vehicle' means a motor
7	vehicle—
8	"(A) which draws propulsion energy from
9	onboard sources of stored energy which are
10	both—
11	"(i) an internal combustion or heat
12	engine using combustible fuel, and
13	"(ii) a rechargeable energy storage
14	system,
15	"(B) which, in the case of a passenger
16	automobile or light truck, for 2002 and later
17	model vehicles, has received a certificate of con-
18	formity under the Clean Air Act and meets or
19	exceeds the equivalent qualifying California low
20	emission vehicle standard under section
21	243(e)(2) of the Clean Air Act for that make
22	and model year,
23	"(C) the original use of which commences
24	with the taxpayer,

1	"(D) which is acquired for use or lease by
2	the taxpayer and not for resale, and
3	"(E) which is made by a manufacturer.
4	"(d) New Qualified Alternative Fuel Motor
5	Vehicle Credit.—
6	"(1) Allowance of credit.—Except as pro-
7	vided in paragraph (5), the credit determined under
8	this subsection is an amount equal to the applicable
9	percentage of the incremental cost of any new quali-
10	fied alternative fuel motor vehicle placed in service
11	by the taxpayer during the taxable year.
12	"(2) Applicable percentage.—For purposes
13	of paragraph (1), the applicable percentage with re-
14	spect to any new qualified alternative fuel motor ve-
15	hicle is—
16	"(A) 50 percent, plus
17	"(B) 30 percent, if such vehicle—
18	"(i) has received a certificate of con-
19	formity under the Clean Air Act and meets
20	or exceeds the most stringent standard
21	available for certification under the Clean
22	Air Act for that make and model year vehi-
23	cle (other than a zero emission standard),
24	or

	210
1	"(ii) has received an order from an
2	applicable State certifying the vehicle for
3	sale or lease in California and meets or ex-
4	ceeds the most stringent standard available
5	for certification under the State laws of
6	California (enacted in accordance with a
7	waiver granted under section 209(b) of the
8	Clean Air Act) for that make and model
9	year vehicle (other than a zero emission
10	standard).
11	"(3) INCREMENTAL COST.—For purposes of
12	this subsection, the incremental cost of any new
13	qualified alternative fuel motor vehicle is equal to
14	the amount of the excess of the manufacturer's sug-
15	gested retail price for such vehicle over such price
16	for a gasoline or diesel fuel motor vehicle of the
17	same model, to the extent such amount does not
18	exceed—
19	"(A) \$5,000, if such vehicle has a gross ve-
20	hicle weight rating of not more than 8,500
21	pounds,
22	"(B) \$10,000, if such vehicle has a gross
23	vehicle weight rating of more than 8,500
24	pounds but not more than 14,000 pounds,

1	"(C) $$25,000$, if such vehicle has a gross
2	vehicle weight rating of more than 14,000
3	pounds but not more than 26,000 pounds, and
4	((D) \$40,000, if such vehicle has a gross
5	vehicle weight rating of more than 26,000
6	pounds.
7	"(4) QUALIFIED ALTERNATIVE FUEL MOTOR
8	VEHICLE DEFINED.—For purposes of this
9	subsection—
10	"(A) IN GENERAL.—The term 'qualified
11	alternative fuel motor vehicle' means any motor
12	vehicle—
13	"(i) which is only capable of operating
14	on an alternative fuel,
15	"(ii) the original use of which com-
16	mences with the taxpayer,
17	"(iii) which is acquired by the tax-
18	payer for use or lease, but not for resale,
19	and
20	"(iv) which is made by a manufac-
21	turer.
22	"(B) ALTERNATIVE FUEL.—The term 'al-
23	ternative fuel' means compressed natural gas,
24	liquefied natural gas, liquefied petroleum gas,

1	hydrogen, and any liquid at least 85 percent of
2	the volume of which consists of methanol.
3	"(5) Credit for mixed-fuel vehicles.—
4	"(A) IN GENERAL.—In the case of a
5	mixed-fuel vehicle placed in service by the tax-
6	payer during the taxable year, the credit deter-
7	mined under this subsection is an amount equal
8	to—
9	"(i) in the case of a 75/25 mixed-fuel
10	vehicle, 70 percent of the credit which
11	would have been allowed under this sub-
12	section if such vehicle was a qualified alter-
13	native fuel motor vehicle, and
14	"(ii) in the case of a 95/5 mixed-fuel
15	vehicle, 95 percent of the credit which
16	would have been allowed under this sub-
17	section if such vehicle was a qualified alter-
18	native fuel motor vehicle.
19	"(B) MIXED-FUEL VEHICLE.—For pur-
20	poses of this subsection, the term 'mixed-fuel
21	vehicle' means any motor vehicle described in
22	subparagraph (C) or (D) of paragraph (3),
23	which—
24	"(i) is certified by the manufacturer
25	as being able to perform efficiently in nor-

1	mal operation on a combination of an al-
2	ternative fuel and a petroleum-based fuel,
3	"(ii) either—
4	"(I) has received a certificate of
5	conformity under the Clean Air Act,
6	or
7	"(II) has received an order from
8	an applicable State certifying the vehi-
9	cle for sale or lease in California and
10	meets or exceeds the low emission ve-
11	hicle standard under section 88.105–
12	94 of title 40, Code of Federal Regu-
13	lations, for that make and model year
14	vehicle,
15	"(iii) the original use of which com-
16	mences with the taxpayer,
17	"(iv) which is acquired by the tax-
18	payer for use or lease, but not for resale,
19	and
20	"(v) which is made by a manufac-
21	turer.
22	"(C) 75/25 MIXED-FUEL VEHICLE.—For
23	purposes of this subsection, the term $'75/25$
24	mixed-fuel vehicle' means a mixed-fuel vehicle
25	which operates using at least 75 percent alter-

1	native fuel and not more than 25 percent petro-
2	leum-based fuel.
3	"(D) 95/5 MIXED-FUEL VEHICLE.—For
4	purposes of this subsection, the term $95/5$
5	mixed-fuel vehicle' means a mixed-fuel vehicle
6	which operates using at least 95 percent alter-
7	native fuel and not more than 5 percent petro-
8	leum-based fuel.
9	"(e) Advanced Lean Burn Technology Motor
10	Vehicle Credit.—
11	"(1) IN GENERAL.—For purposes of subsection
12	(a), the advanced lean burn technology motor vehicle
13	credit determined under this subsection with respect
14	to a new qualified advanced lean burn technology
15	motor vehicle placed in service by the taxpayer dur-
16	ing the taxable year is the credit amount determined
17	under paragraph (2).
18	"(2) Credit Amount.—
19	"(A) INCREASE FOR FUEL EFFICIENCY.—
20	The credit amount determined under this para-
21	graph shall be—
22	"(i) \$1,000, if such vehicle achieves at
23	least 125 percent but less than 150 per-
24	cent of the 2000 model year city fuel econ-
25	omy,

1	"(ii) \$1,500, if such vehicle achieves
2	at least 150 percent but less than 175 per-
3	cent of the 2000 model year city fuel econ-
4	omy,
5	"(iii) \$2,000, if such vehicle achieves
6	at least 175 percent but less than 200 per-
7	cent of the 2000 model year city fuel econ-
8	omy,
9	"(iv) $$2,500$, if such vehicle achieves
10	at least 200 percent but less than 225 per-
11	cent of the 2000 model year city fuel econ-
12	omy,
13	"(v) \$3,000, if such vehicle achieves
14	at least 225 percent but less than 250 per-
15	cent of the 2000 model year city fuel econ-
16	omy, and
17	"(vi) \$3,500, if such vehicle achieves
18	at least 250 percent of the 2000 model
19	year city fuel economy.
20	For purposes of clause (i), the 2000 model year
21	city fuel economy with respect to a vehicle shall
22	be determined using the tables provided in sub-
23	section $(b)(2)(B)$ with respect to such vehicle.
24	"(B) CONSERVATION CREDIT.—The
25	amount determined under subparagraph (A)

1	with respect to an advanced lean burn tech-
2	nology motor vehicle shall be increased by—
3	"(i) \$250, if such vehicle achieves a
4	lifetime fuel savings of at least 1,500 gal-
5	lons of gasoline, and
6	"(ii) \$500, if such vehicle achieves a
7	lifetime fuel savings of at least 2,500 gal-
8	lons of gasoline.
9	"(C) Option to use like vehicle.—At
10	the option of the vehicle manufacturer, the in-
11	crease for fuel efficiency and conservation credit
12	may be calculated by comparing the new ad-
13	vanced lean-burn technology motor vehicle to a
14	like vehicle.
15	"(3) Definitions.—For purposes of this sub-
16	section.—
17	"(A) Advanced lean burn technology
18	MOTOR VEHICLE.—The term 'advanced lean
19	burn technology motor vehicle' means a motor
20	vehicle with an internal combustion engine
21	that—
22	"(i) is designed to operate primarily
23	using more air than is necessary for com-
24	plete combustion of the fuel,
25	"(ii) incorporates direct injection,

"(iii) achieves at least 125 percent of
 the 2000 model year city fuel economy,
 and

4	"(iv) for 2004 and later model vehi-
5	cles, has received a certificate that such ve-
6	hicle meets or exceeds the Bin 5, Tier 2
7	emission levels (for passenger vehicles) or
8	Bin 8, Tier 2 emission levels (for light
9	trucks) established in regulations pre-
10	scribed by the Administrator of the Envi-
11	ronmental Protection Agency under section
12	202(i) of the Clean Air Act for that make
13	and model year vehicle.
14	"(B) LIKE VEHICLE.—The term 'like vehi-

15 cle' for an advanced lean burn technology motor
16 vehicle derived from a conventional production
17 vehicle produced in the same model year means
18 a model that is equivalent in the following
19 areas:

20 "(i) Body style (2-door or 4-door),
21 "(ii) Transmission (automatic or man22 ual),

23 "(iii) Acceleration performance (±
24 0.05 seconds).

	200
1	"(iv) Drivetrain (2-wheel drive or 4-
2	wheel drive).
3	"(v) Certification by the Adminis-
4	trator of the Environmental Protection
5	Agency.
6	"(C) LIFETIME FUEL SAVINGS.—The term
7	'lifetime fuel savings' shall be calculated by di-
8	viding 120,000 by the difference between the
9	2000 model year city fuel economy for the vehi-
10	cle inertia weight class and the city fuel econ-
11	omy for the new qualified hybrid motor vehicle.
12	"(f) Limitation Based on Amount of Tax.—The
13	credit allowed under subsection (a) for the taxable year
14	shall not exceed the excess of—
15	((1) the sum of the regular tax liability (as de-
16	fined in section 26(b)) plus the tax imposed by sec-
17	tion 55, over
18	((2) the sum of the credits allowable under sub-
19	part A and sections 27, 29, and 30A for the taxable
20	year.
21	"(g) Other Definitions and Special Rules.—
22	For purposes of this section—
23	"(1) Consumable fuel.—The term
24	'consumable fuel' means any solid, liquid, or gaseous

1	matter which releases energy when consumed by an
2	auxiliary power unit.
3	"(2) MOTOR VEHICLE.—The term 'motor vehi-
4	cle' has the meaning given such term by section
5	30(c)(2).
6	"(3) 2000 model year city fuel econ-
7	OMY.—The 2000 model year city fuel economy with
8	respect to any vehicle shall be measured under rules
9	similar to the rules under section 4064(c).
10	"(4) Other terms.—The terms 'automobile',
11	'passenger automobile', 'light truck', and 'manufac-
12	turer' have the meanings given such terms in regula-
13	tions prescribed by the Administrator of the Envi-
14	ronmental Protection Agency for purposes of the ad-
15	ministration of title II of the Clean Air Act (42 $$
16	U.S.C. 7521 et seq.).
17	"(5) Reduction in basis.—For purposes of
18	this subtitle, the basis of any property for which a
19	credit is allowable under subsection (a) shall be re-
20	duced by the amount of such credit so allowed.
21	"(6) NO DOUBLE BENEFIT.—The amount of
22	any deduction or credit allowable under this chapter
23	(other than the credit allowable under this sec-
~ /	

24 tion)—

1	"(A) for any incremental cost taken into
2	account in computing the amount of the credit
3	determined under subsection (d) shall be re-
4	duced by the amount of such credit attributable
5	to such cost, and
6	"(B) with respect to a vehicle described
7	under subsection (b) or (c), shall be reduced by
8	the amount of credit allowed under subsection
9	(a) for such vehicle for the taxable year.
10	"(7) PROPERTY USED BY TAX-EXEMPT ENTI-
11	TIES.—In the case of a credit amount which is al-
12	lowable with respect to a motor vehicle which is ac-
13	quired by an entity exempt from tax under this
14	chapter, the person which sells or leases such vehicle
15	to the entity shall be treated as the taxpayer with
16	respect to the vehicle for purposes of this section
17	and the credit shall be allowed to such person, but
18	only if the person clearly discloses to the entity in
19	any sale or lease document the specific amount of
20	any credit otherwise allowable to the entity under
21	this section and reduces the sale or lease price of
22	such vehicle by an equivalent amount of such credit.
23	"(8) RECAPTURE.—The Secretary shall, by reg-
24	ulations, provide for recapturing the benefit of any
25	credit allowable under subsection (a) with respect to

such credit (including recapture in the case of a
lease period of less than the economic life of a vehicle).

(9)5 PROPERTY USED OUTSIDE UNITED 6 STATES, ETC., NOT QUALIFIED.—No credit shall be 7 allowed under subsection (a) with respect to any 8 property referred to in section 50(b) or with respect 9 to the portion of the cost of any property taken into account under section 179. 10

"(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.

15 "(11) CARRYFORWARD ALLOWED.—

"(A) IN GENERAL.—If the credit amount 16 17 allowable under subsection (a) for a taxable 18 year exceeds the amount of the limitation under 19 subsection (f) for such taxable year (referred to 20 as the 'unused credit year' in this paragraph), 21 such excess shall be allowed as a credit 22 carryforward for each of the 20 taxable years 23 following the unused credit year.

1	"(B) RULES.—Rules similar to the rules of
2	section 39 shall apply with respect to the credit
3	carryforward under subparagraph (A).
4	((12) Interaction with air quality and
5	motor vehicle safety standards.—Unless oth-
6	erwise provided in this section, a motor vehicle shall
7	not be considered eligible for a credit under this sec-
8	tion unless such vehicle is in compliance with—
9	"(A) the applicable provisions of the Clean
10	Air Act for the applicable make and model year
11	of the vehicle (or applicable air quality provi-
12	sions of State law in the case of a State which
13	has adopted such provision under a waiver
14	under section 209(b) of the Clean Air Act), and
15	"(B) the motor vehicle safety provisions of
16	sections 30101 through 30169 of title 49,
17	United States Code.
18	"(h) REGULATIONS.—
19	"(1) IN GENERAL.—The Secretary shall pro-
20	mulgate such regulations as necessary to carry out
21	the provisions of this section.
22	"(2) Administrator of environmental
23	PROTECTION AGENCY.—The Administrator of the
24	Environmental Protection Agency, in coordination
25	with the Secretary of Transportation and the Sec-

1	retary of the Treasury, shall prescribe such regula-
2	tions as necessary to determine whether a motor ve-
3	hicle meets the requirements to be eligible for a
4	credit under this section.
5	"(i) TERMINATION.—This section shall not apply to
6	any property placed in service after—
7	((1) in the case of a new qualified fuel cell
8	motor vehicle (as described in subsection (b)), De-
9	cember 31, 2011, and
10	"(2) in the case of any other property, Decem-
11	ber 31, 2007.".
12	(b) Conforming Amendments.—
13	(1) Section 1016(a) is amended by striking
14	"and" at the end of paragraph (29), by striking the
15	period at the end of paragraph (30) and inserting ",
16	and", and by adding at the end the following:
17	"(31) to the extent provided in section
18	30B(g)(5).".
19	(2) Section $6501(m)$ is amended by inserting
20	"30B(g)(10)," after "30(d)(4),".
21	(3) The table of sections for subpart B of part
22	IV of subchapter A of chapter 1 is amended by in-
23	serting after the item relating to section 30A the fol-
24	lowing:

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

(c) 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. 3105. EXTENSION OF DEDUCTION FOR CERTAIN RE-6 FUELING PROPERTY.

7 (a) IN GENERAL.—Section 179A(f) (relating to ter8 mination) is amended by striking "2004" and inserting
9 "2007".

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

12 (1) in clause (i), by striking "2002" and insert13 ing "2005",

14 (2) in clause (ii), by striking "2003" and in-15 serting "2006", and

16 (3) in clause (iii), by striking "2004" and in-17 serting "2007".

18 SEC. 3106. MODIFICATION OF CREDIT FOR QUALIFIED

ELECTRIC VEHICLES.

20 (a) Amount of Credit.—

(1) IN GENERAL.—Section 30(a) (relating to allowance of credit) is amended by striking "10 percent of".

19

1	(2) LIMITATION OF CREDIT ACCORDING TO
2	TYPE OF VEHICLE.—Section 30(b) (relating to limi-
3	tations) is amended—
4	(A) by striking paragraphs (1) and (2) and
5	inserting the following:
6	"(1) Limitation according to type of ve-
7	HICLE.—The amount of the credit allowed under
8	subsection (a) for any vehicle shall not exceed the
9	greatest of the following amounts applicable to such
10	vehicle:
11	"(A) In the case of a vehicle which con-
12	forms to the Motor Vehicle Safety Standard
13	500 prescribed by the Secretary of Transpor-
14	tation, the lesser of—
15	"(i) 10 percent of the manufacturer's
16	suggested retail price of the vehicle, or
17	''(ii) \$4,000.
18	"(B) In the case of a vehicle not described
19	in subparagraph (A) with a gross vehicle weight
20	rating not exceeding 8,500 pounds—
21	"(i) \$4,000, or
22	"(ii) \$5,000, if such vehicle is—
23	"(I) capable of a driving range of
24	at least 70 miles on a single charge of
25	the vehicle's rechargeable batteries

1	and measured pursuant to the urban
2	dynamometer schedules under appen-
3	dix I to part 86 of title 40, Code of
4	Federal Regulations, or
5	"(II) capable of a payload capac-
6	ity of at least 1,000 pounds.
7	"(C) In the case of a vehicle with a gross
8	vehicle weight rating exceeding 8,500 pounds
9	but not exceeding 14,000 pounds, \$10,000.
10	"(D) In the case of a vehicle with a gross
11	vehicle weight rating exceeding 14,000 pounds
12	but not exceeding 26,000 pounds, \$20,000.
13	"(E) In the case of a vehicle with a gross
14	vehicle weight rating exceeding 26,000 pounds,
15	\$40,000.", and
16	(B) by redesignating paragraph (3) as
17	paragraph (2).
18	(3) Conforming Amendments.—
19	(A) Section $53(d)(1)(B)(iii)$ is amended by
20	striking "section $30(b)(3)(B)$ " and inserting
21	"section 30(b)(2)(B)".
22	(B) Section $55(c)(2)$ is amended by strik-
23	ing " $(30(b)(3))$ " and inserting " $(30(b)(2))$ ".
24	(b) QUALIFIED BATTERY ELECTRIC VEHICLE.—

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

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1	subchapter A of chapter 1 is amended by in-
2	serting "battery" after "qualified".
3	(E) Section $179A(c)(3)$ is amended by in-
4	serting "battery" before "electric".
5	(F) The heading of paragraph (3) of sec-
6	tion 179A(c) is amended by inserting "BAT-
7	TERY" before "ELECTRIC".
8	(c) Additional Special Rules.—Section 30(d)
9	(relating to special rules) is amended by adding at the end
10	the following:
11	"(5) NO DOUBLE BENEFIT.—The amount of
12	any deduction or credit allowable under this chapter
13	for any cost taken into account in computing the
14	amount of the credit determined under subsection
15	(a) shall be reduced by the amount of such credit at-
16	tributable to such cost.
17	"(6) PROPERTY USED BY TAX-EXEMPT ENTI-
18	TIES.—In the case of a credit amount which is al-
19	lowable with respect to a vehicle which is acquired
20	by an entity exempt from tax under this chapter, the
21	person which sells or leases such vehicle to the entity
22	shall be treated as the taxpayer with respect to the
23	vehicle for purposes of this section and the credit
24	shall be allowed to such person, but only if the per-
25	son clearly discloses to the entity in any sale or lease

1	contract the specific amount of any credit otherwise
2	allowable to the entity under this section and re-
3	duces the sale or lease price of such vehicle by an
4	equivalent amount of such credit.
5	"(7) CARRYFORWARD ALLOWED.—
6	"(A) IN GENERAL.—If the credit amount
7	allowable under subsection (a) for a taxable
8	year exceeds the amount of the limitation under
9	subsection $(b)(3)$ for such taxable year, such ex-
10	cess shall be allowed as a credit carryforward
11	for each of the 20 taxable years following such
12	taxable year.
13	"(B) RULES.—Rules similar to the rules of
14	section 39 shall apply with respect to the credit
15	carryforward under subparagraph (A).".
16	(d) EXTENSION.—Section 30(e) (relating to termi-
17	nation) is amended by striking "2004" and inserting
18	<i>"2007"</i> .
19	(e) EFFECTIVE DATE.—The amendments made by
20	this section shall apply to property placed in service after
21	December 31, 2001, in taxable years ending after such
22	date.

3 (a) IN GENERAL.—Subpart D of part IV of sub4 chapter A of chapter 1 (relating to business-related cred5 its) is amended by adding at the end the following new
6 section:

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

8 "(a) GENERAL RULE.—For purposes of section 38, 9 the energy efficient appliance credit determined under this 10 section for the taxable year is an amount equal to the ap-11 plicable amount determined under subsection (b) with re-12 spect to the eligible production of qualified energy efficient 13 appliances produced by the taxpayer during the calendar 14 year ending with or within the taxable year.

15 "(b) APPLICABLE AMOUNT; ELIGIBLE PRODUC-16 TION.—For purposes of subsection (a)—

17 "(1) APPLICABLE AMOUNT.—The applicable18 amount is—

"(A) \$50 in the case of an energy efficient
clothes washer described in subsection (d)(2)(A)
or an energy efficient refrigerator described in
subsection (d)(3)(B)(i), and

23 "(B) \$100 in the case of any other energy
24 efficient clothes washer or energy efficient re25 frigerator.

26 "(2) ELIGIBLE PRODUCTION.—

1	"(A) IN GENERAL.—The eligible produc-
2	tion of each category of qualified energy effi-
3	cient appliances is the excess of—
4	"(i) the number of appliances in such
5	category which are produced by the tax-
6	payer during such calendar year, over
7	"(ii) the average number of appliances
8	in such category which were produced by
9	the taxpayer during calendar years 1998,
10	1999, and 2000.
11	"(B) CATEGORIES.—For purposes of sub-
12	paragraph (A), the categories are—
13	"(i) energy efficient clothes washers
14	described in subsection $(d)(2)(A)$,
15	"(ii) energy efficient clothes washers
16	described in subsection $(d)(2)(B)$,
17	"(iii) energy efficient refrigerators de-
18	scribed in subsection $(d)(3)(B)(i)$, and
19	"(iv) energy efficient refrigerators de-
20	scribed in subsection (d)(3)(B)(ii).
21	"(C) Special rule for 2001 produc-
22	TION.—For purposes of determining eligible
23	production for calendar year 2001—
24	"(i) only production after the date of
25	the enactment of this section shall be

 2 (A)(i), and 3 "(ii) the amount taken into account 4 under subparagraph (A)(ii) shall be an 5 amount which bears the same ratio to the 6 amount which would (but for this subpara- 7 graph) be taken into account under sub- 8 paragraph (A)(ii) as— 9 "(I) the number of days in cal- 10 endar year 2001 after the date of the 11 enactment of this section, bears to 12 "(II) 365. 13 "(c) LIMITATION ON MAXIMUM CREDIT.— 14 "(1) IN GENERAL.—The maximum amount of 15 credit allowed under subsection (a) with respect to 16 a taxpayer for all taxable years shall be—
 under subparagraph (A)(ii) shall be an amount which bears the same ratio to the amount which would (but for this subparagraph) be taken into account under subparagraph) be taken into account under subparagraph (A)(ii) as— "(I) the number of days in calendar year 2001 after the date of the ender year 2001 after the date of the enactment of this section, bears to "(II) 365. "(c) LIMITATION ON MAXIMUM CREDIT.— "(1) IN GENERAL.—The maximum amount of credit allowed under subsection (a) with respect to a taxpayer for all taxable years shall be—
5amount which bears the same ratio to the6amount which would (but for this subpara-7graph) be taken into account under sub-8paragraph (A)(ii) as—9"(I) the number of days in cal-10endar year 2001 after the date of the11endar year 2001 after the date of the12"(II) 365.13"(c) LIMITATION ON MAXIMUM CREDIT.—14"(1) IN GENERAL.—The maximum amount of15credit allowed under subsection (a) with respect to16a taxpayer for all taxable years shall be—
 amount which would (but for this subpara- graph) be taken into account under sub- paragraph (A)(ii) as— "(I) the number of days in cal- endar year 2001 after the date of the enactment of this section, bears to "(II) 365. "(c) LIMITATION ON MAXIMUM CREDIT.— "(1) IN GENERAL.—The maximum amount of credit allowed under subsection (a) with respect to a taxpayer for all taxable years shall be—
 graph) be taken into account under sub- paragraph (A)(ii) as— "(I) the number of days in cal- endar year 2001 after the date of the enactment of this section, bears to "(II) 365. "(c) LIMITATION ON MAXIMUM CREDIT.— "(1) IN GENERAL.—The maximum amount of credit allowed under subsection (a) with respect to a taxpayer for all taxable years shall be—
 8 paragraph (A)(ii) as— 9 "(I) the number of days in cal- 10 endar year 2001 after the date of the 11 enactment of this section, bears to 12 "(II) 365. 13 "(c) LIMITATION ON MAXIMUM CREDIT.— 14 "(1) IN GENERAL.—The maximum amount of 15 credit allowed under subsection (a) with respect to 16 a taxpayer for all taxable years shall be—
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 endar year 2001 after the date of the enactment of this section, bears to "(II) 365. "(c) LIMITATION ON MAXIMUM CREDIT.— "(1) IN GENERAL.—The maximum amount of credit allowed under subsection (a) with respect to a taxpayer for all taxable years shall be—
 enactment of this section, bears to "(II) 365. "(c) LIMITATION ON MAXIMUM CREDIT.— "(1) IN GENERAL.—The maximum amount of credit allowed under subsection (a) with respect to a taxpayer for all taxable years shall be—
 12 "(II) 365. 13 "(c) LIMITATION ON MAXIMUM CREDIT.— 14 "(1) IN GENERAL.—The maximum amount of 15 credit allowed under subsection (a) with respect to 16 a taxpayer for all taxable years shall be—
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 14 "(1) IN GENERAL.—The maximum amount of 15 credit allowed under subsection (a) with respect to 16 a taxpayer for all taxable years shall be—
15 credit allowed under subsection (a) with respect to16 a taxpayer for all taxable years shall be—
16 a taxpayer for all taxable years shall be—
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17 "(A) \$30,000,000 with respect to the cred-
18 it determined under subsection (b)(1)(A), and
19 "(B) \$30,000,000 with respect to the cred-
20 it determined under subsection (b)(1)(B).
21 "(2) Limitation based on gross re-
22 CEIPTS.—The credit allowed under subsection (a)
23 with respect to a taxpayer for the taxable year shall
24 not exceed an amount equal to 2 percent of the aver-
age annual gross receipts of the taxpayer for the 3

1	taxable years preceding the taxable year in which
2	the credit is determined.
3	"(3) GROSS RECEIPTS.—For purposes of this
4	subsection, the rules of paragraphs (2) and (3) of
5	section 448(c) shall apply.
6	"(d) Qualified Energy Efficient Appliance.—
7	For purposes of this section:
8	"(1) IN GENERAL.—The term 'qualified energy
9	efficient appliance' means—
10	"(A) an energy efficient clothes washer, or
11	"(B) an energy efficient refrigerator.
12	"(2) Energy efficient clothes washer.—
13	The term 'energy efficient clothes washer' means a
14	residential clothes washer, including a residential
15	style coin operated washer, which is manufactured
16	with—
17	"(A) a 1.26 MEF or greater, or
18	"(B) a 1.42 MEF (1.5 MEF for washers
19	produced after 2004) or greater.
20	"(3) Energy efficient refrigerator.—The
21	term 'energy efficient refrigerator' means an auto-
22	matic defrost refrigerator-freezer which—
23	"(A) has an internal volume of at least
24	16.5 cubic feet, and
25	"(B) consumes—

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1	"(i) 10 percent less kw/hr/yr than the
2	energy conservation standards promulgated
3	by the Department of Energy for refrig-
4	erators produced during 2001, and
5	"(ii) 15 percent less kw/hr/yr than
6	such energy conservation standards for re-
7	frigerators produced after 2001.
8	"(4) MEF.—The term 'MEF' means Modified
9	Energy Factor (as determined by the Secretary of
10	Energy).
11	"(e) Special Rules.—
12	"(1) IN GENERAL.—Rules similar to the rules
13	of subsections (c), (d), and (e) of section 52 shall
14	apply for purposes of this section.
15	"(2) Aggregation rules.—All persons treat-
16	ed as a single employer under subsection (a) or (b)
17	of section 52 or subsection (m) or (o) of section 414
18	shall be treated as 1 person for purposes of sub-
19	section (a).
20	"(f) VERIFICATION.—The taxpayer shall submit such
21	information or certification as the Secretary, in consulta-
22	tion with the Secretary of Energy, determines necessary
23	to claim the credit amount under subsection (a).
24	"(g) TERMINATION.—This section shall not apply—

"(1) with respect to energy efficient refrig-1 2 erators described in subsection (d)(3)(B)(i) produced 3 after 2004, and "(2) with respect to all other qualified energy 4 5 efficient appliances produced after 2006.". 6 (b) LIMITATION ON CARRYBACK.—Section 39(d) (re-7 lating to transition rules) is amended by adding at the 8 end the following new paragraph: 9 "(11) NO CARRYBACK OF ENERGY EFFICIENT 10 APPLIANCE CREDIT BEFORE EFFECTIVE DATE.-No 11 portion of the unused business credit for any taxable 12 year which is attributable to the energy efficient ap-13 pliance credit determined under section 45G may be 14 carried to a taxable year ending before the date of 15 the enactment of section 45G.". 16 (c) CONFORMING AMENDMENT.—Section 38(b) (relating to general business credit) is amended by striking 17 "plus" at the end of paragraph (14), by striking the period 18 at the end of paragraph (15) and inserting ", plus", and 19 20 by adding at the end the following new paragraph: "(16) the energy efficient appliance credit de-21 22 termined under section 45G(a).". 23 (d) CLERICAL AMENDMENT.—The table of sections 24 for subpart D of part IV of subchapter A of chapter 1

is amended by inserting after the item relating to section
 45F the following new item:

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

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

6 SEC. 3108. CREDIT FOR ENERGY EFFICIENCY IMPROVE7 MENTS TO EXISTING HOMES.

8 (a) IN GENERAL.—Subpart A of part IV of sub-9 chapter A of chapter 1 (relating to nonrefundable personal 10 credits) is amended by inserting after section 25D the fol-11 lowing new section:

12 "SEC. 25E. ENERGY EFFICIENCY IMPROVEMENTS TO EXIST-13 ING HOMES.

14 "(a) ALLOWANCE OF CREDIT.—In the case of an in-15 dividual, there shall be allowed as a credit against the tax 16 imposed by this chapter for the taxable year an amount 17 equal to 20 percent of the amount paid or incurred by 18 the taxpayer for qualified energy efficiency improvements 19 installed during such taxable year.

20 "(b) LIMITATIONS.—

21 "(1) MAXIMUM CREDIT.—The credit allowed by
22 this section with respect to a dwelling shall not ex23 ceed \$2,000.

24 "(2) PRIOR CREDIT AMOUNTS FOR TAXPAYER
25 ON SAME DWELLING TAKEN INTO ACCOUNT.—If a
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1	credit was allowed to the taxpayer under subsection
2	(a) with respect to a dwelling in 1 or more prior tax-
3	able years, the amount of the credit otherwise allow-
4	able for the taxable year with respect to that dwell-
5	ing shall not exceed the amount of \$2,000 reduced
6	by the sum of the credits allowed under subsection
7	(a) to the taxpayer with respect to the dwelling for
8	all prior taxable years.
9	"(3) LIMITATION BASED ON AMOUNT OF
10	TAX.—The credit allowed under subsection (a) for
11	the taxable year shall not exceed the excess of—
12	"(A) the sum of the regular tax liability
13	(as defined in section 26(b)) plus the tax im-
14	posed by section 55, over
15	"(B) the sum of the credits allowable
16	under this subpart (other than this section and
17	section 23) and section 27 for the taxable year.
18	"(c) Carryforward of Unused Credit.—If the
19	credit allowable under subsection (a) exceeds the limita-
20	tion imposed by subsection (b)(3) for such taxable year,
21	such excess shall be carried to the succeeding taxable year
22	and added to the credit allowable under subsection (a) for
23	such succeeding taxable year.
24	"(d) Qualified Energy Efficiency Improve-

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1	energy efficiency improvements' means any energy effi-
2	cient building envelope component which meets the pre-
3	scriptive criteria for such component established by the
4	1998 International Energy Conservation Code, if—
5	((1) such component is installed in or on a
6	dwelling—
7	"(A) located in the United States, and
8	"(B) owned and used by the taxpayer as
9	the taxpayer's principal residence (within the
10	meaning of section 121),
11	((2) the original use of such component com-
12	mences with the taxpayer, and
13	"(3) such component reasonably can be ex-
14	pected to remain in use for at least 5 years.
15	If the aggregate cost of such components with respect to
16	any dwelling exceeds \$1,000, such components shall be
17	treated as qualified energy efficiency improvements only
18	if such components are also certified in accordance with
19	subsection (e) as meeting such criteria.
20	"(e) Certification.—The certification described in
21	subsection (d) shall be—
22	((1)) determined on the basis of the technical
23	specifications or applicable ratings (including prod-
24	uct labeling requirements) for the measurement of
25	energy efficiency, based upon energy use or building

envelope component performance, for the energy effi cient building envelope component,

3 "(2) provided by a local building regulatory au-4 thority, a utility, a manufactured home production 5 inspection primary inspection agency (IPIA), or an 6 accredited home energy rating system provider who is accredited by or otherwise authorized to use ap-7 8 proved energy performance measurement methods by 9 the Home Energy Ratings Systems Council or the 10 National Association of State Energy Officials, and 11 "(3) made in writing in a manner that specifies 12 in readily verifiable fashion the energy efficient 13 building envelope components installed and their re-14 spective energy efficiency levels.

15 "(f) DEFINITIONS AND SPECIAL RULES.—

"(1) TENANT-STOCKHOLDER IN COOPERATIVE 16 17 HOUSING CORPORATION.—In the case of an indi-18 vidual who is a tenant-stockholder (as defined in sec-19 tion 216) in a cooperative housing corporation (as 20 defined in such section), such individual shall be 21 treated as having paid his tenant-stockholder's pro-22 portionate share (as defined in section 216(b)(3)) of 23 the cost of qualified energy efficiency improvements 24 made by such corporation.

25 "(2) CONDOMINIUMS.—

"(A) IN GENERAL.—In the case of an individual who is a member of a condominium management association with respect to a condominium which he owns, such individual shall be
treated as having paid his proportionate share
of the cost of qualified energy efficiency improvements made by 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 15 units of which are used as residences.

"(3) Building Envelope component.—The 16 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.

"(4) MANUFACTURED HOMES INCLUDED.—For
 purposes of this section, the term 'dwelling' includes
 a manufactured home which conforms to Federal
 Manufactured Home Construction and Safety Stand ards (24 CFR 3280).

6 "(g) BASIS ADJUSTMENT.—For purposes of this sub-7 title, if a credit is allowed under this section for any ex-8 penditure with respect to any property, the increase in the 9 basis of such property which would (but for this sub-10 section) result from such expenditure shall be reduced by 11 the amount of the credit so allowed.

12 "(h) APPLICATION OF SECTION.—This section shall
13 apply to qualified energy efficiency improvements installed
14 after December 31, 2001 and before January 1, 2007.".
15 (b) CONFORMING AMENDMENTS.—

16 (1) Subsection (a) of section 1016 is amended
17 by striking "and" at the end of paragraph (30), by
18 striking the period at the end of paragraph (31) and
19 inserting ", and", and by adding at the end the fol20 lowing new paragraph:

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

24 (2) The table of sections for subpart A of part
25 IV of subchapter A of chapter 1 is amended by in-

serting after the item relating to section 25D the
 following new item:

"Sec. 25E. Energy efficiency improvements to existing homes.".

3 (c) EFFECTIVE DATE.—The amendments made by
4 this section shall apply to taxable years ending after De5 cember 31, 2001.

6 SEC. 3109. BUSINESS CREDIT FOR CONSTRUCTION OF NEW 7 ENERGY EFFICIENT HOME.

8 (a) IN GENERAL.—Subpart D of part IV of sub-9 chapter A of chapter 1 (relating to business related cred-10 its) is amended by inserting after section 45G the fol-11 lowing new section:

12 "SEC. 45H. NEW ENERGY EFFICIENT HOME CREDIT.

13 "(a) IN GENERAL.—For purposes of section 38, in 14 the case of an eligible contractor, the credit determined 15 under this section for the taxable year is an amount equal 16 to the aggregate adjusted bases of all energy efficient 17 property installed in a qualified new energy efficient home 18 during construction of such home.

- 19 "(b) LIMITATIONS.—
- 20 "(1) MAXIMUM CREDIT.—

21 "(A) IN GENERAL.—The credit allowed by
22 this section with respect to a dwelling shall not
23 exceed \$2,000.

24"(B) PRIOR CREDIT AMOUNTS ON SAME25DWELLING TAKEN INTO ACCOUNT.—If a credit

1	was allowed under subsection (a) with respect
2	to a dwelling in 1 or more prior taxable years,
3	the amount of the credit otherwise allowable for
4	the taxable year with respect to that dwelling
5	shall not exceed the amount of \$2,000 reduced
6	by the sum of the credits allowed under sub-
7	section (a) with respect to the dwelling for all
8	prior taxable years.
9	"(2) COORDINATION WITH REHABILITATION
10	AND ENERGY CREDITS.—For purposes of this
11	section—
12	"(A) the basis of any property referred to
13	in subsection (a) shall be reduced by that por-
14	tion of the basis of any property which is attrib-
15	utable to qualified rehabilitation expenditures
16	(as defined in section $47(c)(2)$) or to the energy
17	percentage of energy property (as determined
18	under section 48(a)), and
19	"(B) expenditures taken into account
20	under either section 47 or $48(a)$ shall not be
21	taken into account under this section.
22	"(c) DEFINITIONS.—For purposes of this section—
23	"(1) ELIGIBLE CONTRACTOR.—The term 'eligi-
24	ble contractor' means the person who constructed
25	the new energy efficient home, or in the case of a

1	manufactured home which conforms to Federal
2	Manufactured Home Construction and Safety Stand-
3	ards (24 CFR 3280), the manufactured home pro-
4	ducer of such home.
5	"(2) Energy efficient property.—The
6	term 'energy efficient property' means any energy
7	efficient building envelope component, and any en-
8	ergy efficient heating or cooling appliance.
9	"(3) QUALIFIED NEW ENERGY EFFICIENT
10	HOME.—The term 'qualified new energy efficient
11	home' means a dwelling—
12	"(A) located in the United States,
13	"(B) the construction of which is substan-
14	tially completed after December 31, 2001,
15	"(C) the original use of which is as a prin-
16	cipal residence (within the meaning of section
17	121) which commences with the person who ac-
18	quires such dwelling from the eligible con-
19	tractor, and
20	"(D) which is certified to have a level of
21	annual heating and cooling energy consumption
22	that is at least 30 percent below the annual
23	level of heating and cooling energy consumption
24	of a comparable dwelling constructed in accord-

1	ance with the standards of the 1998 Inter-
2	national Energy Conservation Code.
3	"(4) CONSTRUCTION.—The term 'construction'
4	includes reconstruction and rehabilitation.
5	"(5) Acquire.—The term 'acquire' includes
6	purchase and, in the case of reconstruction and re-
7	habilitation, such term includes a binding written
8	contract for such reconstruction or rehabilitation.
9	"(6) Building envelope component.—The
10	term 'building envelope component' means insulation
11	material or system which is specifically and pri-
12	marily designed to reduce the heat loss or gain of a
13	dwelling when installed in or on such dwelling, exte-
14	rior windows (including skylights) and doors, and
15	metal roofs with appropriate pigmented coatings
16	which are specifically and primarily designed to re-
17	duce the heat gain of a dwelling when installed in
18	or on such dwelling.
19	"(7) MANUFACTURED HOME INCLUDED.—The
20	term 'dwelling' includes a manufactured home con-
21	forming to Federal Manufactured Home Construc-
22	tion and Safety Standards (24 CFR 3280).
23	"(d) CERTIFICATION.—

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1	"(1) Method.—A certification described in
2	subsection $(c)(3)(D)$ shall be determined on the
3	basis of one of the following methods:
4	"(A) The technical specifications or appli-
5	cable ratings (including product labeling re-
6	quirements) for the measurement of energy effi-
7	ciency for the energy efficient building envelope
8	component or energy efficient heating or cooling
9	appliance, based upon energy use or building
10	envelope component performance.
11	"(B) An energy performance measurement
12	method that utilizes computer software ap-
13	proved by organizations designated by the Sec-
14	retary.
15	"(2) Provider.—Such certification shall be
16	provided by—
17	"(A) in the case of a method described in
18	paragraph (1)(A), a local building regulatory
19	authority, a utility, a manufactured home pro-
20	duction inspection primary inspection agency
21	(IPIA), or an accredited home energy rating
22	systems provider who is accredited by, or other-
23	wise authorized to use, approved energy per-
24	formance measurement methods by the Home

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

tions under this subsection for energy performance measurement methods, the Secretary shall
prescribe procedures for calculating annual energy costs for heating and cooling and cost savings and for the reporting of the results. Such
regulations shall—

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

ants and home energy raters specified by the 1 2 National Association of State Energy Officials. 3 "(e) BASIS ADJUSTMENT.—For purposes of this sub-4 title, if a credit is allowed under this section for any ex-5 penditure with respect to any property, the increase in the basis of such property which would (but for this sub-6 7 section) result from such expenditure shall be reduced by 8 the amount of the credit so allowed.

9 "(f) APPLICATION OF SECTION.—Subsection (a) shall
10 apply to dwellings purchased during the period beginning
11 on January 1, 2002, and ending on December 31, 2006.".

12 (b) CREDIT MADE PART OF GENERAL BUSINESS 13 CREDIT.—Subsection (b) of section 38 (relating to current 14 year business credit) is amended by striking "plus" at the 15 end of paragraph (15), by striking the period at the end 16 of paragraph (16) and inserting ", plus", and by adding 17 at the end thereof the following new paragraph:

18 "(17) the new energy efficient home credit de-19 termined under section 45H.".

20 (c) DENIAL OF DOUBLE BENEFIT.—Section 280C
21 (relating to certain expenses for which credits are allow22 able) is amended by adding at the end thereof the fol23 lowing new subsection:

24 "(d) NEW ENERGY EFFICIENT HOME EXPENSES.—
25 No deduction shall be allowed for that portion of expenses

for a new energy efficient home otherwise allowable as a
 deduction for the taxable year which is equal to the
 amount of the credit determined for such taxable year
 under section 45H.".

5 (d) LIMITATION ON CARRYBACK.—Subsection (d) of
6 section 39 is amended by adding at the end the following
7 new paragraph:

8 "(12) NO CARRYBACK OF NEW ENERGY EFFI-9 CIENT HOME CREDIT BEFORE EFFECTIVE DATE.-10 No portion of the unused business credit for any 11 taxable year which is attributable to the credit deter-12 mined under section 45H may be carried back to 13 any taxable year ending before January 1, 2002.". 14 (e) DEDUCTION FOR CERTAIN UNUSED BUSINESS 15 CREDITS.—Subsection (c) of section 196 is amended by striking "and" at the end of paragraph (9), by striking 16 the period at the end of paragraph (10) and inserting ", 17 and", and by adding after paragraph (10) the following 18 19 new paragraph:

20 "(11) the new energy efficient home credit de-21 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.".

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

4 SEC. 3110. ALLOWANCE OF DEDUCTION FOR ENERGY EFFI-

CIENT COMMERCIAL BUILDING PROPERTY.

6 (a) IN GENERAL.—Part VI of subchapter B of chap7 ter 1 (relating to itemized deductions for individuals and
8 corporations) is amended by inserting after section 179A
9 the following new section:

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

CIAL BUILDING PROPERTY.

11

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"(a) Allowance of Deduction.—

13 "(1) IN GENERAL.—There shall be allowed as a
14 deduction an amount equal to energy efficient com15 mercial building property expenditures made by a
16 taxpayer for the taxable year.

17 "(2) MAXIMUM AMOUNT OF DEDUCTION.—The
18 amount of energy efficient commercial building prop19 erty expenditures taken into account under para20 graph (1) shall not exceed an amount equal to the
21 product of—

22 "(A) \$2.25, and

23 "(B) the square footage of the building
24 with respect to which the expenditures are
25 made.

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

5 "(b) ENERGY EFFICIENT COMMERCIAL BUILDING 6 PROPERTY EXPENDITURES.—For purposes of this sec-7 tion, the term 'energy efficient commercial building prop-8 erty expenditures' means an amount paid or incurred for 9 energy efficient commercial building property installed on 10 or in connection with new construction or reconstruction 11 of property—

12 "(1) for which depreciation is allowable under13 section 167,

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

17 Such property includes all residential rental property, in18 cluding low-rise multifamily structures and single family
19 housing property which is not within the scope of Stand20 ard 90.1–1999 (described in subsection (c)). Such term
21 includes expenditures for labor costs properly allocable to
22 the onsite preparation, assembly, or original installation
23 of the property.

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

"(1) IN GENERAL.—The term 'energy efficient 1 2 commercial building property' means any property 3 which reduces total annual energy and power costs 4 with respect to the lighting, heating, cooling, ventila-5 tion, and hot water supply systems of the building 6 by 50 percent or more in comparison to a reference 7 building which meets the requirements of Standard 8 90.1–1999 of the American Society of Heating, Re-9 frigerating, and Air Conditioning Engineers and the 10 Illuminating Engineering Society of North America 11 using methods of calculation under paragraph (2) 12 and certified by qualified professionals as provided 13 under subsection (f).

14 "(2) Methods of Calculation.—The Sec-15 retary, in consultation with the Secretary of Energy, 16 shall promulgate regulations which describe in detail 17 methods for calculating and verifying energy and 18 power consumption and cost, taking into consider-19 ation the provisions of the 1998 California Nonresi-20 dential ACM Manual. These procedures shall meet 21 the following requirements:

"(A) In calculating tradeoffs and energy
performance, the regulations shall prescribe the
costs per unit of energy and power, such as kilowatt hour, kilowatt, gallon of fuel oil, and

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1	cubic foot or Btu of natural gas, which may be
2	dependent on time of usage.
3	"(B) The calculational methodology shall
4	require that compliance be demonstrated for a
5	whole building. If some systems of the building,
6	such as lighting, are designed later than other
7	systems of the building, the method shall pro-
8	vide that either—
9	"(i) the expenses taken into account
10	under subsection (a) shall not occur until
11	the date designs for all energy-using sys-
12	tems of the building are completed,
13	"(ii) the energy performance of all
14	systems and components not yet designed
15	shall be assumed to comply minimally with
16	the requirements of such Standard 90.1–
17	1999, or
18	"(iii) the expenses taken into account
19	under subsection (a) shall be a fraction of
20	such expenses based on the performance of
21	less than all energy-using systems in ac-
22	cordance with subparagraph (C).
23	"(C) The expenditures in connection with
24	the design of subsystems in the building, such
25	as the envelope, the heating, ventilation, air

1	conditioning and water heating system, and the
2	lighting system shall be allocated to the appro-
3	priate building subsystem based on system-spe-
4	cific energy cost savings targets in regulations
5	promulgated by the Secretary of Energy which
6	are equivalent, using the calculation method-
7	ology, to the whole building requirement of 50
8	percent savings.
9	"(D) The calculational methods under this
10	subparagraph need not comply fully with sec-
11	tion 11 of such Standard 90.1–1999.
12	"(E) The calculational methods shall be
13	fuel neutral, such that the same energy effi-
14	ciency features shall qualify a building for the
15	deduction under this subsection regardless of
16	whether the heating source is a gas or oil fur-
17	nace or an electric heat pump.
18	"(F) The calculational methods shall pro-
19	vide appropriate calculated energy savings for
20	design methods and technologies not otherwise
21	credited in either such Standard 90.1–1999 or
22	in the 1998 California Nonresidential ACM
23	Manual, including the following:
24	"(i) Natural ventilation.
25	"(ii) Evaporative cooling.

1	"(iii) Automatic lighting controls such
2	as occupancy sensors, photocells, and time-
3	clocks.
4	"(iv) Daylighting.
5	"(v) Designs utilizing semi-condi-
6	tioned spaces that maintain adequate com-
7	fort conditions without air conditioning or
8	without heating.
9	"(vi) Improved fan system efficiency,
10	including reductions in static pressure.
11	"(vii) Advanced unloading mecha-
12	nisms for mechanical cooling, such as mul-
13	tiple or variable speed compressors.
14	"(viii) The calculational methods may
15	take into account the extent of commis-
16	sioning in the building, and allow the tax-
17	payer to take into account measured per-
18	formance that exceeds typical performance.
19	"(3) Computer software.—
20	"(A) IN GENERAL.—Any calculation under
21	this subsection shall be prepared by qualified
22	computer software.
23	"(B) Qualified computer software.—
24	For purposes of this paragraph, the term
25	'qualified computer software' means software—

1	"(i) for which the software designer
2	has certified that the software meets all
3	procedures and detailed methods for calcu-
4	lating energy and power consumption and
5	costs as required by the Secretary,
6	"(ii) which provides such forms as re-
7	quired to be filed by the Secretary in con-
8	nection with energy efficiency of property
9	and the deduction allowed under this sec-
10	tion, and
11	"(iii) which provides a notice form
12	which summarizes the energy efficiency
13	features of the building and its projected
14	annual energy costs.
15	"(d) Allocation of Deduction for Public
16	PROPERTY.—In the case of energy efficient commercial
17	building property installed on or in public property, the
18	Secretary shall promulgate a regulation to allow the allo-
19	cation of the deduction to the person primarily responsible
20	for designing the property in lieu of the public entity which
21	is the owner of such property. Such person shall be treated
22	as the taxpayer for purposes of this section.
23	"(e) NOTICE TO OWNER.—The qualified individual
24	shall provide an explanation to the owner of the building

25 regarding the energy efficiency features of the building

and its projected annual energy costs as provided in the
 notice under subsection (c)(3)(B)(iii).

3 "(f) CERTIFICATION.—The Secretary, in consultation
4 with the Secretary of Energy, shall establish requirements
5 for certification and compliance procedures similar to the
6 procedures under section 45H(d).

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

11 "(h) TERMINATION.—This section shall not apply to12 property placed in service after December 31, 2006.".

13 (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).".

20 (2) Section 1245(a) is amended by inserting
21 "179B," after "179A," both places it appears in
22 paragraphs (2)(C) and (3)(C).

23 (3) Section 1250(b)(3) is amended by inserting
24 before the period at the end of the first sentence "or
25 by section 179B".

1	(4) Section $263(a)(1)$ is amended by striking
2	"or" at the end of subparagraph (G), by striking the
3	period at the end of subparagraph (H) and inserting
4	", or", and by inserting after subparagraph (H) the
5	following new subparagraph:
6	"(I) expenditures for which a deduction is
7	allowed under section 179B.".
8	(5) Section $312(k)(3)(B)$ is amended by strik-
9	ing "or 179A" each place it appears in the heading
10	and text and inserting ", 179A, or 179B".
11	(c) Clerical Amendment.—The table of sections
12	for part VI of subchapter B of chapter 1 is amended by
13	adding after section 179A the following new item:
	"Sec. 179B. Deduction for energy efficient commercial building property.".
14	(d) EFFECTIVE DATE.—The amendments made by
15	this section shall apply to taxable years beginning after
16	December 31, 2001.
17	SEC. 3111. ALLOWANCE OF DEDUCTION FOR QUALIFIED EN-
18	ERGY MANAGEMENT DEVICES AND RETRO-
19	FITTED QUALIFIED METERS.
20	(a) IN GENERAL.—Part VI of subchapter B of chap-
21	ter 1 (relating to itemized deductions for individuals and
22	corporations) is amended by inserting after section 179B
23	the following new section:

1 "SEC. 179C. DEDUCTION FOR QUALIFIED ENERGY MANAGE-

MENT DEVICES AND RETROFITTED METERS.

2

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

9 "(b) MAXIMUM DEDUCTION.—The deduction allowed
10 by this section with respect to each qualified energy man11 agement device shall not exceed \$30.

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

"(1) which is acquired and used by the taxpayer to enable consumers to manage their purchase
or use of electricity or natural gas in response to energy price and usage signals, and

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

"(d) PROPERTY USED OUTSIDE THE UNITED
STATES NOT QUALIFIED.—No deduction shall be allowed
under subsection (a) with respect to property which is
used predominantly outside the United States or with re-

spect to the portion of the cost of any property taken into
 account under section 179.

3 "(e) Basis Reduction.—

4 "(1) IN GENERAL.—For purposes of this title,
5 the basis of any property shall be reduced by the
6 amount of the deduction with respect to such prop7 erty which is allowed by subsection (a).

8 "(2) ORDINARY INCOME RECAPTURE.—For 9 purposes of section 1245, the amount of the deduc-10 tion allowable under subsection (a) with respect to 11 any property that is of a character subject to the al-12 lowance for depreciation shall be treated as a deduc-13 tion allowed for depreciation under section 167.". 14 (b) CONFORMING AMENDMENTS.—

(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:

20 "(J) expenditures for which a deduction is21 allowed under section 179C.".

(2) Section 312(k)(3)(B) is amended by striking "or 179B" each place it appears in the heading
and text and inserting ", 179B, or 179C".

1	(3) Section 1016(a) is amended by striking
2	"and" at the end of paragraph (32), by striking the
3	period at the end of paragraph (33) and inserting ",
4	and", and by inserting after paragraph (33) the fol-
5	lowing new paragraph:
б	"(34) to the extent provided in section
7	179C(e)(1).".
8	(4) Section $1245(a)$ is amended by inserting
9	"179C," after "179B," both places it appears in
10	paragraphs $(2)(C)$ and $(3)(C)$.
11	(5) The table of contents for subpart B of part
12	IV of subchapter A of chapter 1 is amended by in-
13	serting after the item relating to section 179B the
14	following new item:
	"Sec. 179C. Deduction for qualified energy management devices and retrofitted meters.".
15	(c) EFFECTIVE DATE.—The amendments made by
16	this section shall apply to qualified energy management
17	devices placed in service after the date of the enactment
18	of this Act.
19	SEC. 3112. THREE-YEAR APPLICABLE RECOVERY PERIOD
20	
	FOR DEPRECIATION OF QUALIFIED ENERGY
21	FOR DEPRECIATION OF QUALIFIED ENERGY MANAGEMENT DEVICES.
21 22	
	MANAGEMENT DEVICES.

the period at the end of clause (iii) and inserting ", and", 1 2 and by adding at the end the following new clause: 3 "(iv) any qualified energy manage-4 ment device.". 5 (b) DEFINITION OF QUALIFIED ENERGY MANAGE-MENT DEVICE.—Section 168(i) (relating to definitions 6 7 and special rules) is amended by inserting at the end the 8 following new paragraph: "(15) QUALIFIED ENERGY MANAGEMENT DE-9 10 VICE.—The term 'qualified energy management de-11 vice' means any qualified energy management device 12 as defined in section 179C(c) which is placed in 13 service by a taxpayer who is a supplier of electric en-14 ergy or natural gas or a provider of electric energy or natural gas services.". 15 16 (c) EFFECTIVE DATE.—The amendments made by

17 this section shall apply to property placed in service after18 the date of the enactment of this Act.

19sec. 3113. Energy credit for combined heat and20power system property.

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

"(iv) combined heat and power system property,". (b) COMBINED HEAT AND POWER SYSTEM PROP-ERTY.—Subsection (a) of section 48 is amended by redesignating paragraphs (5) and (6) as paragraphs (6) and (7), respectively, and by inserting after paragraph (4) the following new paragraph: "(5) Combined heat and power system PROPERTY.—For purposes of this subsection—

"(A) COMBINED HEAT AND POWER SYS-10 11 TEM PROPERTY.—The term 'combined heat and power system property' means property com-12 13 prising a system—

14 "(i) which uses the same energy 15 source for the simultaneous or sequential 16 generation of electrical power, mechanical 17 shaft power, or both, in combination with 18 the generation of steam or other forms of 19 useful thermal energy (including heating 20 and cooling applications),

"(ii) which has an electrical capacity 21 22 of more than 50 kilowatts or a mechanical 23 energy capacity of more than 67 horse-24 power or an equivalent combination of elec-25 trical and mechanical energy capacities,

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1	"(iii) which produces—
2	"(I) at least 20 percent of its
3	total useful energy in the form of
4	thermal energy, and
5	"(II) at least 20 percent of its
6	total useful energy in the form of elec-
7	trical or mechanical power (or com-
8	bination thereof),
9	"(iv) the energy efficiency percentage
10	of which exceeds 60 percent (70 percent in
11	the case of a system with an electrical ca-
12	pacity in excess of 50 megawatts or a me-
13	chanical energy capacity in excess of
14	67,000 horsepower, or an equivalent com-
15	bination of electrical and mechanical en-
16	ergy capacities), and
17	"(v) which is placed in service after
18	December 31, 2001, and before January 1,
19	2007.
20	"(B) Special rules.—
21	"(i) Energy efficiency percent-
22	AGE.—For purposes of subparagraph
23	(A)(iv), the energy efficiency percentage of
24	a system is the fraction—

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1	"(I) the numerator of which is
2	the total useful electrical, thermal,
3	and mechanical power produced by
4	the system at normal operating rates,
5	and
6	"(II) the denominator of which is
7	the lower heating value of the primary
8	fuel source for the system.
9	"(ii) Determinations made on btu
10	BASIS.—The energy efficiency percentage
11	and the percentages under subparagraph
12	(A)(iii) shall be determined on a Btu basis.
13	"(iii) INPUT AND OUTPUT PROPERTY
14	NOT INCLUDED.—The term 'combined heat
15	and power system property' does not in-
16	clude property used to transport the en-
17	ergy source to the facility or to distribute
18	energy produced by the facility.
19	"(iv) Public utility property.—
20	"(I) Accounting rule for
21	PUBLIC UTILITY PROPERTY.—If the
22	combined heat and power system
23	property is public utility property (as
24	defined in section $168(i)(1)$, the tax-
25	payer may only claim the credit under

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1	the subsection if, with respect to such
2	property, the taxpayer uses a normal-
3	ization method of accounting.
4	"(II) CERTAIN EXCEPTION NOT
5	TO APPLY.—The matter in paragraph
6	(3) which follows subparagraph (D)
7	shall not apply to combined heat and
8	power system property.
9	"(C) EXTENSION OF DEPRECIATION RE-
10	COVERY PERIOD.—If a taxpayer is allowed cred-
11	it under this section for combined heat and
12	power system property and such property would
13	(but for this subparagraph) have a class life of
14	15 years or less under section 168, such prop-
15	erty shall be treated as having a 22-year class
16	life for purposes of section 168.".
17	(c) NO CARRYBACK OF ENERGY CREDIT BEFORE
18	EFFECTIVE DATE.—Subsection (d) of section 39 is
19	amended by adding at the end the following new para-
20	graph:
21	"(13) No carryback of energy credit be-
22	FORE EFFECTIVE DATE.—No portion of the unused
23	business credit for any taxable year which is attrib-
24	utable to the energy credit with respect to property

1	described in section $48(a)(5)$ may be carried back to
	described in section $48(a)(5)$ may be carried back to
2	a taxable year ending before January 1, 2002.".
3	(d) EFFECTIVE DATE.—The amendments made by
4	this section shall apply to property placed in service after
5	December 31, 2001.
6	SEC. 3114. NEW NONREFUNDABLE PERSONAL CREDITS AL-
7	LOWED AGAINST REGULAR AND MINIMUM
8	TAXES.
9	(a) IN GENERAL.—Paragraph (1) of section 26(a) is
10	amended by striking "and 25B" and inserting "25B, 25C,
11	25D, and 25E".
12	(b) Conforming Amendments.—
13	(1) Section $24(b)(3)(B)$ is amended by striking
14	"and 25B" and inserting ", 25B, 25C, 25D, and
15	25E".
16	(2) Section $25(e)(1)(C)$ is amended by inserting
17	"25C, 25D, and 25E" after "25B,".
18	(3) Section $25B(g)(2)$ is amended by striking
19	"section 23" and inserting "sections 23, 25C, 25D,
20	and 25E".
21	(4) Section 904(h) is amended by striking "and
22	25B" and inserting "25B, 25C, 25D, and 25E".
23	(5) Section 1400C(d) is amended by striking
24	"and $25B$ " and inserting " $25B$, $25C$, $25D$, and
25	25E''.

1	(c) EFFECTIVE DATE.—The amendments made by
2	this section shall apply to taxable years beginning after
3	December 31, 2001.
4	SEC. 3115. PHASEOUT OF 4.3-CENT MOTOR FUEL EXCISE
5	TAXES ON RAILROADS AND INLAND WATER-
6	WAY TRANSPORTATION WHICH REMAIN IN
7	GENERAL FUND.
8	(a) TAXES ON TRAINS.—
9	(1) IN GENERAL.—Clause (ii) of section
10	4041(a)(1)(C) is amended by striking subclauses (I),
11	(II), and (III) and inserting the following new sub-
12	clauses:
13	"(I) 3.3 cents per gallon after
14	September 30, 2001, and before Jan-
15	uary 1, 2005,
16	"(II) 2.3 cents per gallon after
17	December 31, 2004, and before Janu-
18	ary 1, 2007,
19	"(III) 1.3 cents per gallon after
20	December 31, 2006, and before Janu-
21	ary 1, 2009,
22	"(IV) 0.3 cent per gallon after
23	December 31, 2008, and before Janu-
24	ary 1, 2010, and

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1	((V) 0 after December 31,
2	2009.".
3	(2) Conforming Amendments.—
4	(A) Subsection (d) of section 4041 is
5	amended by redesignating paragraph (3) as
6	paragraph (4) and by inserting after paragraph
7	(2) the following new paragraph:
8	"(3) DIESEL FUEL USED IN TRAINS.—In the
9	case of any sale for use (or use) after September 30,
10	2010, there is hereby imposed a tax of 0.1 cent per
11	gallon on any liquid other than gasoline (as defined
12	in section 4083)—
13	"(A) sold by any person to an owner, les-
14	see, or other operator of a diesel-powered train
15	for use as a fuel in such train, or
16	"(B) used by any person as a fuel in a die-
17	sel-powered train unless there was a taxable
18	sale of such fuel under subparagraph (A).
19	No tax shall be imposed by this paragraph on the
20	sale or use of any liquid if tax was imposed on such
21	liquid under section 4081.".
22	(B) Subsection (f) of section 4082 is
23	amended by striking "section $4041(a)(1)$ " and
24	inserting "subsections $(a)(1)$ and $(d)(3)$ of sec-
25	tion 4041".

1	(C) Subparagraph (B) of section
2	6421(f)(3) is amended to read as follows:
3	"(B) so much of the rate specified in sec-
4	tion $4081(a)(2)(A)$ as does not exceed the rate
5	applicable under section 4041(a)(1)(C)(ii).".
6	(D) Subparagraph (B) of section
7	6427(1)(3) is amended to read as follows:
8	"(B) so much of the rate specified in sec-
9	tion $4081(a)(2)(A)$ as does not exceed the rate
10	applicable under section 4041(a)(1)(C)(ii).".
11	(b) FUEL USED ON INLAND WATERWAYS.—Subpara-
12	graph (C) of section 4042(b)(2) is amended to read as
13	follows:
15	
13	"(C) The deficit reduction rate is—
14	"(C) The deficit reduction rate is—
14 15	"(C) The deficit reduction rate is— "(i) 3.3 cents per gallon after Sep-
14 15 16	"(C) The deficit reduction rate is— "(i) 3.3 cents per gallon after Sep- tember 30, 2001, and before January 1,
14 15 16 17	"(C) The deficit reduction rate is— "(i) 3.3 cents per gallon after Sep- tember 30, 2001, and before January 1, 2005,
14 15 16 17 18	 "(C) The deficit reduction rate is— "(i) 3.3 cents per gallon after September 30, 2001, and before January 1, 2005, "(ii) 2.3 cents per gallon after Decem-
14 15 16 17 18 19	 "(C) The deficit reduction rate is— "(i) 3.3 cents per gallon after September 30, 2001, and before January 1, 2005, "(ii) 2.3 cents per gallon after December 31, 2004, and before January 1, 2007,
 14 15 16 17 18 19 20 	 "(C) The deficit reduction rate is— "(i) 3.3 cents per gallon after September 30, 2001, and before January 1, 2005, "(ii) 2.3 cents per gallon after December 31, 2004, and before January 1, 2007, "(iii) 1.3 cents per gallon after De-
 14 15 16 17 18 19 20 21 	 "(C) The deficit reduction rate is— "(i) 3.3 cents per gallon after September 30, 2001, and before January 1, 2005, "(ii) 2.3 cents per gallon after December 31, 2004, and before January 1, 2007, "(iii) 1.3 cents per gallon after December 31, 2006, and before January 1,
 14 15 16 17 18 19 20 21 22 	 "(C) The deficit reduction rate is— "(i) 3.3 cents per gallon after September 30, 2001, and before January 1, 2005, "(ii) 2.3 cents per gallon after December 31, 2004, and before January 1, 2007, "(iii) 1.3 cents per gallon after December 31, 2006, and before January 1, 2009,

"(v) 0 after December 31, 2009.".
 (c) EFFECTIVE DATE.—The amendments made by
 this section shall take effect on October 1, 2001.

4 SEC. 3116. REDUCED MOTOR FUEL EXCISE TAX ON CER-5 TAIN MIXTURES OF DIESEL FUEL.

6 (a) IN GENERAL.—Clause (iii) of section
7 4081(a)(2)(A) is amended by inserting before the period
8 "(19.7 cents per gallon in the case of a diesel-water fuel
9 emulsion at least 14 percent of which is water)".

10 (b) Refunds for Tax-Paid Purchases.—

(1) IN GENERAL.—Section 6427 is amended by
redesignating subsections (m) through (p) as subsections (n) through (q), respectively, and by inserting after subsection (l) the following new subsection:
"(m) DIESEL FUEL USED TO PRODUCE EMULSION.—

17 "(1) IN GENERAL.—Except as provided in sub-18 section (k), if any diesel fuel on which tax was im-19 posed by section 4081 at the regular tax rate is used 20 by any person in producing an emulsion described in 21 section 4081(a)(2)(A) which is sold or used in such 22 person's trade or business, the Secretary shall pay 23 (without interest) to such person an amount equal to 24 the excess of the regular tax rate over the incentive 25 tax rate with respect to such fuel.

1	"(2) DEFINITIONS.—For purposes of paragraph
2	(1)—
3	"(A) REGULAR TAX RATE.—The term 'reg-
4	ular tax rate' means the aggregate rate of tax
5	imposed by section 4081 determined without re-
6	gard to the parenthetical in section
7	4081(a)(2)(A).
8	"(B) INCENTIVE TAX RATE.—The term
9	'incentive tax rate' means the aggregate rate of
10	tax imposed by section 4081 determined with
11	regard to the parenthetical in section
12	4081(a)(2)(A).".
13	(c) EFFECTIVE DATE.—The amendments made by
14	this section shall take effect on October 1, 2001.
15	SEC. 3117. CREDIT FOR INVESTMENT IN QUALIFYING AD-
16	VANCED CLEAN COAL TECHNOLOGY.
17	(a) Allowance of Qualifying Advanced Clean
18	COAL TECHNOLOGY FACILITY CREDIT.—Section 46 (re-
19	lating to amount of credit) is amended by striking "and"
20	at the end of paragraph (2), by striking the period at the
21	end of paragraph (3) and inserting ", and", and by adding
22	at the end the following:
23	((4) the qualifying advanced clean coal tech-
24	nology facility credit.".

(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:

6 "SEC. 48A. QUALIFYING ADVANCED CLEAN COAL TECH7 NOLOGY FACILITY CREDIT.

8 "(a) IN GENERAL.—For purposes of section 46, the 9 qualifying advanced clean coal technology facility credit 10 for any taxable year is an amount equal to 10 percent 11 of the qualified investment in a qualifying advanced clean 12 coal technology facility for such taxable year.

13 "(b) QUALIFYING ADVANCED CLEAN COAL TECH-14 NOLOGY FACILITY.—

15 "(1) IN GENERAL.—For purposes of subsection
16 (a), the term 'qualifying advanced clean coal tech17 nology facility' means a facility of the taxpayer
18 which—

19 "(A)(i)(I) original use of which commences
20 with the taxpayer, or

21 "(II) is a retrofitted or repowered conven22 tional technology facility, the retrofitting or
23 repowering of which is completed by the tax24 payer (but only with respect to that portion of

1	the basis which is properly attributable to such
2	retrofitting or repowering), or
3	"(ii) is acquired through purchase (as de-
4	fined by section $179(d)(2)$,
5	"(B) is depreciable under section 167,
6	"(C) has a useful life of not less than 4
7	years,
8	"(D) is located in the United States, and
9	"(E) uses qualifying advanced clean coal
10	technology.
11	"(2) Special rule for sale-leasebacks.—
12	For purposes of subparagraph (A) of paragraph (1),
13	in the case of a facility which—
14	"(A) is originally placed in service by a
15	person, and
16	"(B) is sold and leased back by such per-
17	son, or is leased to such person, within 3
18	months after the date such facility was origi-
19	nally placed in service, for a period of not less
20	than 12 years,
21	such facility shall be treated as originally placed in
22	service not earlier than the date on which such prop-
23	erty is used under the leaseback (or lease) referred
24	to in subparagraph (B). The preceding sentence
25	shall not apply to any property if the lessee and les-

1	sor of such property make an election under this
2	sentence. Such an election, once made, may be re-
3	voked only with the consent of the Secretary.
4	"(c) Qualifying Advanced Clean Coal Tech-
5	NOLOGY.—For purposes of this section—
6	"(1) IN GENERAL.—The term 'qualifying ad-
7	vanced clean coal technology' means, with respect to
8	clean coal technology—
9	"(A) which has—
10	"(i) multiple applications, with a com-
11	bined capacity of not more than 5,000
12	megawatts (4,000 megawatts before 2009),
13	of advanced pulverized coal or atmospheric
14	fluidized bed combustion technology—
15	"(I) installed as a new, retrofit,
16	or repowering application,
17	"(II) operated between 2000 and
18	2012, and
19	"(III) having a design net heat
20	rate of not more than 9,500 Btu per
21	kilowatt hour when the design coal
22	has a heat content of more than 9,000
23	Btu per pound, or a design net heat
24	rate of not more than 9,900 Btu per
25	kilowatt hour when the design coal

1	has a heat content of 9,000 Btu per
2	pound or less,
3	"(ii) multiple applications, with a
4	combined capacity of not more than 1,000
5	megawatts (500 megawatts before 2009
6	and 750 megawatts before 2013), of pres-
7	surized fluidized bed combustion
8	technology-
9	"(I) installed as a new, retrofit,
10	or repowering application,
11	((II) operated between 2000 and
12	2016, and
13	"(III) having a design net heat
14	rate of not more than 8,400 Btu per
15	kilowatt hour when the design coal
16	has a heat content of more than 9,000
17	Btu per pound, or a design net heat
18	rate of not more than 9,900 Btu's per
19	kilowatt hour when the design coal
20	has a heat content of 9,000 Btu per
21	pound or less, and
22	"(iii) multiple applications, with a
23	combined capacity of not more than 2,000
24	megawatts $(1,000 \text{ megawatts before } 2009$
25	and 1,500 megawatts before 2013), of in-

- 1 tegrated gasification combined cycle tech-2 nology, with or without fuel or chemical co-3 production— "(I) installed as a new, retrofit, 4 5 or repowering application, 6 "(II) operated between 2000 and 7 2016. 8 "(III) having a design net heat 9 rate of not more than 8,550 Btu per 10 kilowatt hour when the design coal 11 has a heat content of more than 9,000 12 Btu per pound, or a design net heat 13 rate of not more than 9,900 Btu per 14 kilowatt hour when the design coal 15 has a heat content of 9,000 Btu per 16 pound or less, and 17 "(IV) having a net thermal effi-18 ciency on any fuel or chemical co-pro-19 duction of not less than 39 percent 20 (higher heating value), or "(iv) multiple applications, with a 21 22 combined capacity of not more than 2,000 23 megawatts (1,000 megawatts before 2009
- 25 nology for the production of electricity—

and 1,500 megawatts before 2013) of tech-

"(I) installed as a new, retrofit, 1 2 or repowering application, 3 "(II) operated between 2000 and 4 2016, and "(III) having a carbon emission 5 6 rate which is not more than 85 per-7 cent of conventional technology, and "(B) which reduces the discharge into the 8 9 atmosphere of 1 or more of the following pollut-10 ants to not more than— "(i) 5 percent of the potential com-11 12 bustion concentration sulfur dioxide emis-13 sions for a coal with a potential combus-14 tion concentration sulfur emission of 1.2 15 lb/million btu of heat input or greater, "(ii) 15 percent of the potential com-16 17 bustion concentration sulfur dioxide emis-18 sions for a coal with a potential combus-19 tion concentration sulfur emission of less 20 than 1.2 lb/million btu of heat input, "(iii) nitrogen oxide emissions of 0.1 21 22 lb per million btu of heat input from other 23 than cyclone-fired boilers,

1	"(iv) 15 percent of the uncontrolled
2	nitrogen oxide emissions from cyclone-fired
3	boilers,
4	"(v) particulate emissions of 0.02 lb
5	per million btu of heat input, and
6	"(vi) the emission levels specified in
7	the new source performance standards of
8	the Clean Air Act (42 U.S.C. 7411) in ef-
9	fect at the time of retrofitting, repowering,
10	or replacement of the qualifying clean coal
11	technology unit for the category of source
12	if such level is lower than the levels speci-
13	fied in clause (i), (ii), (iii), (iv), or (v).
14	"(2) EXCEPTIONS.—Such term shall not in-
15	clude any projects receiving or scheduled to receive
16	funding under the Clean Coal Technology Program,
17	or the Power Plant Improvement administered by
18	the Secretary of the Department of Energy.
19	"(d) CLEAN COAL TECHNOLOGY.—For purposes of
20	this section, the term 'clean coal technology' means ad-
21	vanced technology which uses coal to produce 75 percent
22	or more of its thermal output as electricity including ad-
23	vanced pulverized coal or atmospheric fluidized bed com-
24	bustion, pressurized fluidized bed combustion, integrated
25	gasification combined cycle with or without fuel or chem-

ical co-production, and any other technology for the pro duction of electricity which exceeds the performance of
 conventional technology.

4 "(e) CONVENTIONAL TECHNOLOGY.—The term 'con5 ventional technology' means—

6 "(1) coal-fired combustion technology with a de-7 sign net heat rate of not less than 9,500 Btu per kil-8 owatt hour (HHV) and a carbon equivalents emis-9 sion rate of not more than 0.54 pounds of carbon 10 per kilowatt hour when the design coal has a heat 11 content of more than 9,000 Btu per pound,

12 "(2) coal-fired combustion technology with a de-13 sign net heat rate of not less than 10,500 Btu per 14 kilowatt hour (HHV) and a carbon equivalents emis-15 sion rate of not more than 0.60 pounds of carbon 16 per kilowatt hour when the design coal has a heat 17 content of 9,000 Btu per pound or less, or

18 "(3) natural gas-fired combustion technology
19 with a design net heat rate of not less than 7,500
20 Btu per kilowatt hour (HHV) and a carbon equiva21 lents emission rate of not more than 0.24 pounds of
22 carbon per kilowatt hour.

23 "(f) DESIGN NET HEAT RATE.—The design net heat
24 rate shall be based on the design annual heat input to
25 and the design annual net electrical output from the quali-

1	fying advanced clean coal technology (determined without
2	regard to such technology's co-generation of steam).
3	"(g) Selection Criteria.—Selection criteria for
4	qualifying advanced clean coal technology facilities—
5	"(1) shall be established by the Secretary of
6	Energy as part of a competitive solicitation,
7	"(2) shall include primary criteria of minimum
8	design net heat rate, maximum design thermal effi-
9	ciency, environmental performance, and lowest cost
10	to the government, and
11	"(3) shall include supplemental criteria as de-
12	termined appropriate by the Secretary of Energy.
13	"(h) Qualified Investment.—For purposes of
14	subsection (a), the term 'qualified investment' means, with
15	respect to any taxable year, the basis of a qualifying ad-
16	vanced clean coal technology facility placed in service by
17	the taxpayer during such taxable year.
18	"(i) Qualified Progress Expenditures.—
19	"(1) Increase in qualified investment.—
20	In the case of a taxpayer who has made an election
21	under paragraph (5), the amount of the qualified in-
22	vestment of such taxpayer for the taxable year (de-
23	termined under subsection (c) without regard to this
24	section) shall be increased by an amount equal to
25	the aggregate of each qualified progress expenditure

for the taxable year with respect to progress expend iture property.

3 "(2) PROGRESS EXPENDITURE PROPERTY DE-4 FINED.—For purposes of this subsection, the term 5 'progress expenditure property' means any property 6 being constructed by or for the taxpayer and which it is reasonable to believe will qualify as a qualifying 7 8 advanced clean coal technology facility which is 9 being constructed by or for the taxpayer when it is 10 placed in service.

11 "(3) QUALIFIED PROGRESS EXPENDITURES DE12 FINED.—For purposes of this subsection—

"(A) SELF-CONSTRUCTED PROPERTY.—In
the case of any self-constructed property, the
term 'qualified progress expenditures' means
the amount which, for purposes of this subpart,
is properly chargeable (during such taxable
year) to capital account with respect to such
property.

20 "(B) NONSELF-CONSTRUCTED PROP21 ERTY.—In the case of nonself-constructed prop22 erty, the term 'qualified progress expenditures'
23 means the amount paid during the taxable year
24 to another person for the construction of such
25 property.

"(4) OTHER DEFINITIONS.—For purposes of
 this subsection—

3 "(A) SELF-CONSTRUCTED PROPERTY.—
4 The term 'self-constructed property' means
5 property for which it is reasonable to believe
6 that more than half of the construction expendi7 tures will be made directly by the taxpayer.

8 "(B) NONSELF-CONSTRUCTED PROP9 ERTY.—The term 'nonself-constructed property'
10 means property which is not self-constructed
11 property.

12 "(C) CONSTRUCTION, ETC.—The term
13 "construction' includes reconstruction and erec14 tion, and the term 'constructed' includes recon15 structed and erected.

"(D) ONLY CONSTRUCTION OF QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY
FACILITY TO BE TAKEN INTO ACCOUNT.—Construction 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.

23 "(5) ELECTION.—An election under this sub24 section may be made at such time and in such man25 ner as the Secretary may by regulations prescribe.

Such an election shall apply to the taxable year for
 which made and to all subsequent taxable years.
 Such an election, once made, may not be revoked except with the consent of the Secretary.

5 "(j) COORDINATION WITH OTHER CREDITS.—This 6 section shall not apply to any property with respect to 7 which the rehabilitation credit under section 47 or the en-8 ergy credit under section 48 is allowed unless the taxpayer 9 elects to waive the application of such credit to such prop-10 erty.

11 "(k) TERMINATION.—This section shall not apply
12 with respect to any qualified investment made after De13 cember 31, 2011.

14 "(I) NATIONAL LIMITATION.—

15 "(1) IN GENERAL.—Notwithstanding any other 16 provision of this section, the term 'qualifying ad-17 vanced clean coal technology facility' shall include 18 such a facility only to the extent that such facility 19 is allocated a portion of the national megawatt limi-20 tation under this subsection.

21 "(2) NATIONAL MEGAWATT LIMITATION.—The
22 national megawatt limitation under this subsection
23 is 7,500 megawatts.

24 "(3) ALLOCATION OF LIMITATION.—The na-25 tional megawatt limitation shall be allocated by the

Secretary under rules prescribed by the Secretary.
 Not later than 6 months after the date of the enact ment of this subsection, the Secretary shall prescribe
 such regulations as may be necessary or appropriate
 to carry out the purposes of this section, including
 regulations—

"(A) to limit which facility qualifies as 7 8 'qualified advanced clean coal technology' in 9 subsection (c) to particular facilities, a portion 10 of particular facilities, or a portion of the pro-11 duction from particular facilities, so that when 12 all such facilities (or portions thereof) are 13 placed in service over the ten year period in sec-14 tion (k), the combination of facilities approved 15 for tax credits (and/or portions of facilities ap-16 proved for tax credits) will not exceed a com-17 bined capacity of 7,500 megawatts;

18 "(B) to provide a certification process in
19 consultation with the Secretary of Energy
20 under subsection (g) that will approve and allo21 cate the 7,500 megawatts of available tax cred22 its authority—

23 "(i) to encourage that facilities with24 the highest thermal efficiencies and envi-

1	ronmental performance be placed in service
2	as soon as possible;
3	"(ii) to allocate credits to taxpayers
4	that have a definite and credible plan for
5	placing into commercial operation a quali-
6	fying advanced clean coal technology facil-
7	ity, including—
8	"(I) a site,
9	$((\Pi) \text{contractual} \text{commitments}$
10	for procurement and construction,
11	"(III) filings for all necessary
12	preconstruction approvals,
13	"(IV) a demonstrated record of
14	having successfully completed com-
15	parable projects on a timely basis, and
16	"(V) such other factors that the
17	Secretary shall determine are appro-
18	priate;
19	"(iii) to allocate credits to a portion of
20	a facility (or a portion of the production
21	from a facility) if the Secretary determines
22	that such an allocation should maximize
23	the amount of efficient production encour-
24	aged with the available tax credits;

1	"(C) to set progress requirements and con-
2	ditional approvals so that credits for approved
3	projects that become unlikely to meet the nec-
4	essary conditions that can be reallocated by the
5	Secretary to other projects;
6	"(D) to reallocate credits that are not allo-
7	cated to 1 technology described in clauses (i)
8	through (iv) of subsection $(c)(1)(A)$ because an
9	insufficient number of qualifying facilities re-
10	quested credits for one technology, to another
11	technology described in another subparagraph
12	of subsection (c) in order to maximize the
13	amount of energy efficient production encour-
14	aged with the available tax credits; and
15	"(E) to provide taxpayers with opportuni-
16	ties to correct administrative errors and omis-
17	sions with respect to allocations and record-
18	keeping within a reasonable period after their
19	discovery, taking into account the availability of
20	regulations and other administrative guidance
21	from the Secretary.".
22	(c) Recapture.—Section 50(a) (relating to other
23	special rules) is amended by adding at the end the fol-

24 lowing:

1	"(6) Special rules relating to qualifying
2	ADVANCED CLEAN COAL TECHNOLOGY FACILITY
3	For purposes of applying this subsection in the case
4	of any credit allowable by reason of section 48A, the
5	following shall apply:
6	"(A) GENERAL RULE.—In lieu of the
7	amount of the increase in tax under paragraph
8	(1), the increase in tax shall be an amount
9	equal to the investment tax credit allowed under
10	section 38 for all prior taxable years with re-
11	spect to a qualifying advanced clean coal tech-
12	nology facility (as defined by section $48A(b)(1)$)
13	multiplied by a fraction whose numerator is the
14	number of years remaining to fully depreciate
15	under this title the qualifying advanced clean
16	coal technology facility disposed of, and whose
17	denominator is the total number of years over
18	which such facility would otherwise have been
19	subject to depreciation. For purposes of the
20	preceding sentence, the year of disposition of
21	the qualifying advanced clean coal technology
22	facility property shall be treated as a year of re-
23	maining depreciation.
24	"(B) PROPERTY CEASES TO QUALIFY FOR
25	PROGRESS EXPENDITURES.—Rules similar to

1	the rules of paragraph (2) shall apply in the
2	case of qualified progress expenditures for a
3	qualifying advanced clean coal technology facil-
4	ity under section 48A, except that the amount
5	of the increase in tax under subparagraph (A)
6	of this paragraph shall be substituted in lieu of
7	the amount described in such paragraph (2) .
8	"(C) Application of paragraph.—This
9	paragraph shall be applied separately with re-
10	spect to the credit allowed under section 38 re-
11	garding a qualifying advanced clean coal tech-
12	nology facility.".
13	(d) TRANSITIONAL RULE.—Section 39(d) (relating to
14	transitional rules) is amended by adding at the end the
15	following:
16	"(14) No carryback of section 48A credit
17	BEFORE EFFECTIVE DATE.—No portion of the un-
18	used business credit for any taxable year which is
19	attributable to the qualifying advanced clean coal
20	technology facility credit determined under section
21	48A may be carried back to a taxable year ending
22	before January 1, 2002.".
23	(e) TECHNICAL AMENDMENTS.—

24 (1) Section 49(a)(1)(C) is amended by striking
25 "and" at the end of clause (ii), by striking the pe-

1	riod at the end of clause (iii) and inserting ", and",
2	and by adding at the end the following:
3	"(iv) the portion of the basis of any
4	qualifying advanced clean coal technology
5	facility attributable to any qualified invest-
6	ment (as defined by section 48A(c)).".
7	(2) Section $50(a)(4)$ is amended by striking
8	"and (2)" and inserting ", (2), and (6)".
9	(3) Section 50(c) is amended by adding at the
10	end the following new paragraph:
11	"(6) Special rule for qualifying ad-
12	VANCED CLEAN COAL TECHNOLOGY FACILITIES.—
13	Paragraphs (1) and (2) shall not apply to any prop-
14	erty with respect to the credit determined under sec-
15	tion 48A.".
16	(4) The table of sections for subpart E of part
17	IV of subchapter A of chapter 1 is amended by in-
18	serting after the item relating to section 48 the fol-
19	lowing:
	"Sec. 48A. Qualifying advanced clean coal technology facility credit.".
20	(f) EFFECTIVE DATE.—The amendments made by
21	this section shall apply to periods after December 31,
22	2001, under rules similar to the rules of section $48(m)$
23	of the Internal Revenue Code of 1986 (as in effect on the

day before the date of the enactment of the Revenue Rec-1 2 onciliation Act of 1990).

3 SEC. 3118. CREDIT FOR PRODUCTION FROM QUALIFYING 4 ADVANCED CLEAN COAL TECHNOLOGY.

5 (a) Credit for Production From Qualifying ADVANCED CLEAN COAL TECHNOLOGY.-Subpart D of 6 7 part IV of subchapter A of chapter 1 (relating to business 8 related credits) is amended by adding after section 45J the following: 9

10 "SEC. 45K. CREDIT FOR PRODUCTION FROM QUALIFYING 11 ADVANCED CLEAN COAL TECHNOLOGY.

12 "(a) GENERAL RULE.—For purposes of section 38, the qualifying advanced clean coal technology production 13 14 credit of any taxpayer for any taxable year is equal to— 15 "(1) the applicable amount of advanced clean 16 coal technology production credit, multiplied by 17 "(2) the sum of— 18 "(A) the kilowatt hours of electricity, plus 19 "(B) each 3,413 Btu of fuels or chemicals, 20 produced by the taxpayer during such taxable year 21 at a qualifying advanced clean coal technology facil-22 ity during the 10-year period beginning on the date 23 the facility was originally placed in service. 24 "(b) APPLICABLE AMOUNT.—For purposes of this section, the applicable amount of advanced clean coal tech-

nology production credit with respect to production from 1 a qualifying advanced clean coal technology facility shall 2 3 be determined as follows:

"(1) Where the design coal has a heat content 4 5 of more than 9,000 Btu per pound:

"(A) In the case of a facility originally 6 7 placed in service before 2009, if—

"The facility design not hast note Div/LWL (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 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.

8 "(B) In the case of a facility originally 9 placed in service after 2008 and before 2013, if— 10

"The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,770	\$.0105	\$.0090
More than 7,770 but not more than 8,125	\$.0085	\$.0068
More than 8,125 but not more than 8,350	\$.0075	.0055.

"(C) In the case of a facility originally 11 placed in service after 2012 and before 2017, 12 if— 13

"The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,380 More than 7,380 but not more than 7,720	\$.0140 \$.0120	\$.01 \$.0090.

((2) Where the design coal has a heat content 14 of not more than 9,000 Btu per pound: 15

"(A) In the case of a facility originally
 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 8,500 More than 8,500 but not more than 8,650 More than 8,650 but not more than 8,750	\$.0060 \$.0025 \$.0010	\$.0038 \$.0010 \$.0010.

3 "(B) In the case of a facility originally
4 placed in service after 2008 and before 2013,
5 if—

"The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,000	\$.0105	\$.009
More than 8,000 but not more than 8,250	\$.0085	\$.0068
More than 8,250 but not more than 8,400	\$.0075	\$.0055.

6 "(C) In the case of a facility originally 7 placed in service after 2012 and before 2017, 8 if—

"The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,800 More than 7,800 but not more than 7,950	\$.0140 \$.0120	\$.0115 \$.0090.

9 "(3) Where the clean coal technology facility is10 producing fuel or chemicals:

11 "(A) In the case of a facility originally
12 placed in service before 2009, if—

"The facility design net thermal efficiency (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 40.6 percent Less than 40.6 but not less than 40 percent Less than 40 but not less than 39 percent	\$.0060 \$.0025 \$.0010	\$.0038 \$.0010 \$.0010.

"(B) In the case of a facility originally
 placed in service after 2008 and before 2013,
 if—

"The facility design net thermal efficiency (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 43.9 percent	\$.0105	\$.009
Less than 43.9 but not less than 42 percent	\$.0085	\$.0068
Less than 42 but not less than 40.9 percent	\$.0075	\$.0055.

4 "(C) In the case of a facility originally
5 placed in service after 2012 and before 2017,
6 if—

"The facility design net thermal efficiency (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 44.2 percent Less than 44.2 but not less than 43.6 percent	\$.0140 \$.0120	\$.0115 \$.0090.

"(c) INFLATION ADJUSTMENT FACTOR.—For cal-7 endar years after 2001, each amount in paragraphs (1), 8 9 (2), and (3) shall be adjusted by multiplying such amount 10 by the inflation adjustment factor for the calendar year 11 in which the amount is applied. If any amount as in-12 creased under the preceding sentence is not a multiple of 13 0.01 cent, such amount shall be rounded to the nearest multiple of 0.01 cent. 14

15 "(d) DEFINITIONS AND SPECIAL RULES.—For pur16 poses of this section—

17 "(1) IN GENERAL.—Any term used in this sec18 tion which is also used in section 48A shall have the
19 meaning given such term in section 48A.

"(2) APPLICABLE RULES.—The rules of para graphs (3), (4), and (5) of section 45 shall apply.

3 "(3) INFLATION ADJUSTMENT FACTOR.—The 4 term 'inflation adjustment factor' means, with re-5 spect to a calendar year, a fraction the numerator 6 of which is the GDP implicit price deflator for the 7 preceding calendar year and the denominator of 8 which is the GDP implicit price deflator for the cal-9 endar year 2001.

10 "(4) GDP IMPLICIT PRICE DEFLATOR.—The 11 term 'GDP implicit price deflator' means the most 12 recent revision of the implicit price deflator for the 13 gross domestic product as computed by the Depart-14 ment of Commerce before March 15 of the calendar 15 year.".

16 (b) CREDIT TREATED AS BUSINESS CREDIT.—Sec-17 tion 38(b) is amended by striking "plus" at the end of 18 paragraph (18), by striking the period at the end of para-19 graph (19) and inserting ", plus", and by adding at the 20 end the following:

21 "(20) the qualifying advanced clean coal tech22 nology production credit determined under section
23 45K(a).".

(c) TRANSITIONAL RULE.—Section 39(d) (relating to
 transitional rules) is amended by adding after paragraph
 (14) the following:

4 "(15) NO CARRYBACK OF SECTION 45K CREDIT 5 BEFORE EFFECTIVE DATE.—No portion of the un-6 used business credit for any taxable year which is 7 attributable to the qualifying advanced clean coal 8 technology production credit determined under sec-9 tion 45K may be carried back to a taxable year end-10 ing before the date of the enactment of section 11 45K.".

12 (d) CLERICAL AMENDMENT.—The table of sections
13 for subpart D of part IV of subchapter A of chapter 1
14 is amended by adding at the end the following:

"Sec. 45K. Credit for production from qualifying advanced clean coal technology.".

(e) EFFECTIVE DATE.—The amendments made by
this section shall apply to production after the date of the
enactment of this Act.

18 **TITLE II—RELIABILITY**

19 SEC. 3201. NATURAL GAS GATHERING LINES TREATED AS 7-

20 YEAR PROPERTY.

(a) IN GENERAL.—Subparagraph (C) of section
168(e)(3) (relating to classification of certain property) is
amended by striking "and" at the end of clause (i), by

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1	redesignating clause (ii) as clause (iii), and by inserting
2	after clause (i) the following new clause:
3	"(ii) any natural gas gathering line,
4	and".
5	(b) NATURAL GAS GATHERING LINE.—Subsection (i)
6	of section 168 is amended by adding after paragraph (15)
7	the following new paragraph:
8	"(16) NATURAL GAS GATHERING LINE.—The
9	term 'natural gas gathering line' means—
10	"(A) the pipe, equipment, and appur-
11	tenances determined to be a gathering line by
12	the Federal Energy Regulatory Commission, or
13	"(B) the pipe, equipment, and appur-
14	tenances used to deliver natural gas from the
15	wellhead or a commonpoint to the point at
16	which such gas first reaches—
17	"(i) a gas processing plant,
18	"(ii) an interconnection with a trans-
19	mission pipeline certificated by the Federal
20	Energy Regulatory Commission as an
21	interstate transmission pipeline,
22	"(iii) an interconnection with an
23	intrastate transmission pipeline, or

1	"(iv) a direct interconnection with a
2	local distribution company, a gas storage
3	facility, or an industrial consumer.".
4	(c) ALTERNATIVE SYSTEM.—The table contained in
5	section $168(g)(3)(B)$ is amended by inserting after the
6	item relating to subparagraph (C)(i) the following:
	"(C)(ii) 10".
7	"(C)(ii) 10". (d) Alternative Minimum Tax Exception.—Sub-
7 8	
	(d) Alternative Minimum Tax Exception.—Sub-
8	(d) ALTERNATIVE MINIMUM TAX EXCEPTION.—Sub- paragraph (B) of section 56(a)(1) is amended by inserting

(e) EFFECTIVE DATE.—The amendments made bythis section shall apply to property placed in service afterthe date of the enactment of this Act.

14 SEC. 3202. NATURAL GAS DISTRIBUTION LINES TREATED 15 AS 10-YEAR PROPERTY.

(a) IN GENERAL.—Subparagraph (D) of section
17 168(e)(3) (relating to classification of certain property) is
18 amended by striking "and" at the end of clause (i), by
19 striking the period at the end of clause (ii) and by insert20 ing ", and", and by adding at the end the following new
21 clause:

22 "(iii) any natural gas distribution23 line.".

4 (c) ALTERNATIVE MINIMUM TAX EXCEPTION.—Sub5 paragraph (B) of section 56(a)(1) is amended by inserting
6 before the period the following: "or in clause (iii) of section
7 168(e)(3)(D)".

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

SEC. 3203. PETROLEUM REFINING PROPERTY TREATED AS 7-YEAR PROPERTY.

(a) IN GENERAL.—Subparagraph (C) of section
14 168(e)(3) (relating to classification of certain property),
15 as amended by section 3201, is amended by striking
16 "and" at the end of clause (ii), by redesignating clause
17 (iii) as clause (iv), and by inserting after clause (ii) the
18 following new clause:

19 "(iii) any property used for the dis20 tillation, fractionation, and catalytic crack21 ing of crude petroleum into gasoline and
22 its other components, and".

(b) ALTERNATIVE SYSTEM.—The table contained in
section 168(g)(3)(B), as amended by section 3201, is

1	amended by inserting after the item relating to subpara-
2	graph (C)(ii) the following:
	"(C)(iii) 10".
3	(c) Alternative Minimum Tax Exception.—Sub-
4	paragraph (B) of section $56(a)(1)$, as amended by section
5	3201, is amended by inserting "or (iii)" after "clause
6	(ii)".
7	(d) EFFECTIVE DATE.—The amendment made by
8	this section shall apply to property placed in service after
9	the date of the enactment of this Act.
10	SEC. 3204. EXPENSING OF CAPITAL COSTS INCURRED IN
11	COMPLYING WITH ENVIRONMENTAL PROTEC-
10	TION AGENCY SULFUR REGULATIONS.
12	HON AGENCI SOLF OR REGULATIONS.
12 13	(a) IN GENERAL.—Section 179(b) (relating to elec-
13	(a) IN GENERAL.—Section 179(b) (relating to elec-
13 14 15	(a) IN GENERAL.—Section 179(b) (relating to elec- tion to expense certain depreciable business assets) is
13 14 15	(a) IN GENERAL.—Section 179(b) (relating to elec- tion to expense certain depreciable business assets) is amended by adding at the end the following new para-
13 14 15 16	(a) IN GENERAL.—Section 179(b) (relating to elec- tion to expense certain depreciable business assets) is amended by adding at the end the following new para- graph:
 13 14 15 16 17 	 (a) IN GENERAL.—Section 179(b) (relating to election to expense certain depreciable business assets) is amended by adding at the end the following new paragraph: "(5) LIMITATION FOR SMALL BUSINESS REFIN-
 13 14 15 16 17 18 	 (a) IN GENERAL.—Section 179(b) (relating to election to expense certain depreciable business assets) is amended by adding at the end the following new paragraph: "(5) LIMITATION FOR SMALL BUSINESS REFINERS.—
 13 14 15 16 17 18 19 	 (a) IN GENERAL.—Section 179(b) (relating to election to expense certain depreciable business assets) is amended by adding at the end the following new paragraph: "(5) LIMITATION FOR SMALL BUSINESS REFINERS.— "(A) IN GENERAL.—In the case of a small
 13 14 15 16 17 18 19 20 	 (a) IN GENERAL.—Section 179(b) (relating to election to expense certain depreciable business assets) is amended by adding at the end the following new paragraph: "(5) LIMITATION FOR SMALL BUSINESS REFINERS.— "(A) IN GENERAL.—In the case of a small business refiner electing to expense qualified
 13 14 15 16 17 18 19 20 21 	 (a) IN GENERAL.—Section 179(b) (relating to election to expense certain depreciable business assets) is amended by adding at the end the following new paragraph: "(5) LIMITATION FOR SMALL BUSINESS REFINERS.— "(A) IN GENERAL.—In the case of a small business refiner electing to expense qualified costs, in lieu of the dollar limitations in para-
 13 14 15 16 17 18 19 20 21 22 	 (a) IN GENERAL.—Section 179(b) (relating to election to expense certain depreciable business assets) is amended by adding at the end the following new paragraph: "(5) LIMITATION FOR SMALL BUSINESS REFINERS.— "(A) IN GENERAL.—In the case of a small business refiner electing to expense qualified costs, in lieu of the dollar limitations in paragraph (1), the limitation on the aggregate costs
 13 14 15 16 17 18 19 20 21 22 23 	 (a) IN GENERAL.—Section 179(b) (relating to election to expense certain depreciable business assets) is amended by adding at the end the following new paragraph: "(5) LIMITATION FOR SMALL BUSINESS REFINERS.— "(A) IN GENERAL.—In the case of a small business refiner electing to expense qualified costs, in lieu of the dollar limitations in paragraph (1), the limitation on the aggregate costs which may be taken into account under sub-

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1	"(B) QUALIFIED COSTS.—For purposes of
2	this paragraph, the term 'qualified costs' means
3	costs paid or incurred by a small business re-
4	finer for the purpose of complying with the
5	Highway Diesel Fuel Sulfur Control Require-
6	ments of the Environmental Protection Agency.
7	"(C) Small business refiner.—For
8	purposes of this paragraph, the term 'small
9	business refiner' means, with respect to any
10	taxable year, a refiner which, within the refin-
11	ing operations of the business, employs not
12	more than 1,500 employees on business days
13	during such taxable year performing services in
14	the refining operations of such businesses and
15	has an average total capacity of 155,000 bar-
16	rels per day or less.".
17	(b) EFFECTIVE DATE.—The amendment made by
18	this section shall apply to expenses paid or incurred after
19	the date of the enactment of this Act.
20	SEC. 3205. ENVIRONMENTAL TAX CREDIT.
21	(a) IN GENERAL.—Subpart D of part IV of sub-
22	chapter A of chapter 1 (relating to business-related cred-
23	its) is amended by adding at the end the following new
24	section:

1 "SEC. 45I. ENVIRONMENTAL TAX CREDIT.

2 "(a) IN GENERAL.—For purposes of section 38, the
3 amount of the environmental tax credit determined under
4 this section with respect to any small business refiner for
5 any taxable year is an amount equal to 5 cents for every
6 gallon of 15 parts per million or less sulfur diesel produced
7 at a facility by such small business refiner.

8 "(b) MAXIMUM CREDIT.—For any small business re-9 finer, the aggregate amount allowable as a credit under 10 subsection (a) for any taxable year with respect to any 11 facility shall not exceed 25 percent of the qualified capital 12 costs incurred by such small business refiner with respect 13 to such facility not taken into account in determining the 14 credit under subsection (a) for any preceding taxable year.

15 "(c) DEFINITIONS.—For purposes of this section— 16 "(1) SMALL BUSINESS REFINER.—The term 'small business refiner' means, with respect to any 17 18 taxable year, a refiner which, within the refining op-19 erations of the business, employs not more than 20 1,500 employees on business days during such tax-21 able year performing services in the refining oper-22 ations of such businesses and has an average total 23 capacity of 155,000 barrels per day or less.

24 "(2) QUALIFIED CAPITAL COSTS.—The term
25 'qualified capital costs' means, with respect to any
26 facility, those costs paid or incurred during the ap-

1 plicable period for compliance with the applicable 2 EPA regulations with respect to such facility, includ-3 ing expenditures for the construction of new process 4 operation units or the dismantling and reconstruc-5 tion of existing process units to be used in the pro-6 duction of 15 parts per million or less sulfur diesel 7 fuel, associated adjacent or offsite equipment (in-8 cluding tankage, catalyst, and power supply), engi-9 neering, construction period interest, and sitework.

10 "(3) APPLICABLE EPA REGULATIONS.—The
11 term 'applicable EPA regulations' means the High12 way Diesel Fuel Sulfur Control Requirements of the
13 Environmental Protection Agency.

14 "(4) APPLICABLE PERIOD.—The term 'applica-15 ble period' means, with respect to any facility, the 16 period beginning on the day after the date of the en-17 actment of this section and ending with the date 18 which is 1 year after the date on which the taxpayer 19 must comply with the applicable EPA regulations 20 with respect to such facility.

21 "(d) REDUCTION IN BASIS.—For purposes of this
22 subtitle, if a credit is determined under this section with
23 respect to any property by reason of qualified capital
24 costs, the basis of such property shall be reduced by the
25 amount of the credit so determined.

1 "(e) CERTIFICATION.—

"(1) REQUIRED.—Not later than the date 2 3 which is 30 months after the first day of the first 4 taxable year in which the environmental tax credit is 5 allowed with respect to a facility, the small business 6 refiner must obtain certification from the Secretary, 7 in consultation with the Administrator of the Envi-8 ronmental Protection Agency, that the taxpayer's 9 qualified capital costs with respect to such facility 10 will result in compliance with the applicable EPA 11 regulations.

12 "(2) CONTENTS OF APPLICATION.—An applica-13 tion for certification shall include relevant informa-14 tion regarding unit capacities and operating charac-15 teristics sufficient for the Secretary, in consultation 16 with the Administrator of the Environmental Protec-17 tion Agency, to determine that such qualified capital 18 costs are necessary for compliance with the applica-19 ble EPA regulations.

20 "(3) REVIEW PERIOD.—Any application shall
21 be reviewed and notice of certification, if applicable,
22 shall be made within 60 days of receipt of such application.

24 "(4) RECAPTURE.—Notwithstanding subsection
25 (f), failure to obtain certification under paragraph

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1	(1) constitutes a recapture event under subsection
2	(f) with an applicable percentage of 100 percent.
3	"(f) Recapture of Environmental Tax Cred-
4	ΙТ.—
5	"(1) IN GENERAL.—Except as provided in sub-
6	section (e), if, as of the close of any taxable year,
7	there is a recapture event with respect to any facility
8	of the small business refiner, then the tax of such
9	refiner under this chapter for such taxable year shall
10	be increased by an amount equal to the product of—
11	"(A) the applicable recapture percentage,
12	and
13	"(B) the aggregate decrease in the credits
14	allowed under section 38 for all prior taxable
15	years which would have resulted if the qualified
16	capital costs of the taxpayer described in sub-
17	section $(c)(2)$ with respect to such facility had
18	been zero.
19	"(2) Applicable recapture percentage.—
20	"(A) IN GENERAL.—For purposes of this
21	subsection, the applicable recapture percentage
22	shall be determined from the following table:
	"If the recapture event occurs in: The applicable recapture Year 1 100 Year 2 80
	Voor V

Year 2

Year 3

Year 4

80

60

40

Year 5	20
Years 6 and thereafter	0.

1	"(B) YEARS.—For purposes of subpara-
2	graph (A), year 1 shall begin on the first day
3	of the taxable year in which the qualified cap-
4	ital costs with respect to a facility described in
5	subsection $(c)(2)$ are paid or incurred by the
6	taxpayer.
7	"(3) Recapture event defined.—For pur-
8	poses of this subsection, the term 'recapture event'
9	means—
10	"(A) FAILURE TO COMPLY.—The failure
11	by the small business refiner to meet the appli-
12	cable EPA regulations within the applicable pe-
13	riod with respect to the facility.
14	"(B) CESSATION OF OPERATION.—The
15	cessation of the operation of the facility as a fa-
16	cility which produces 15 parts per million or
17	less sulfur diesel after the applicable period.
18	"(C) CHANGE IN OWNERSHIP.—
19	"(i) IN GENERAL.—Except as pro-
20	vided in clause (ii), the disposition of a
21	small business refiner's interest in the fa-
22	cility with respect to which the credit de-
23	scribed in subsection (a) was allowable.

1	"(ii) Agreement to assume recap-
2	TURE LIABILITY.—Clause (i) shall not
3	apply if the person acquiring such interest
4	in the facility agrees in writing to assume
5	the recapture liability of the person dis-
б	posing of such interest in effect imme-
7	diately before such disposition. In the
8	event of such an assumption, the person
9	acquiring the interest in the facility shall
10	be treated as the taxpayer for purposes of
11	assessing any recapture liability (computed
12	as if there had been no change in owner-
13	ship).
14	"(4) Special Rules.—
15	"(A) TAX BENEFIT RULE.—The tax for
16	the taxable year shall be increased under para-
17	graph (1) only with respect to credits allowed
18	by reason of this section which were used to re-
19	duce tax liability. In the case of credits not so

by reason of this section which were used to reduce tax liability. In the case of credits not so used to reduce tax liability, the carryforwards and carrybacks under section 39 shall be appropriately adjusted.

23 "(B) NO CREDITS AGAINST TAX.—Any in24 crease in tax under this subsection shall not be
25 treated as a tax imposed by this chapter for

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1 purposes of determining the amount of any 2 credit under this chapter or for purposes of section 55. 3 "(C) NO RECAPTURE BY REASON OF CAS-4 5 UALTY LOSS.—The increase in tax under this 6 subsection shall not apply to a cessation of op-7 eration of the facility by reason of a casualty 8 loss to the extent such loss is restored by recon-9 struction or replacement within a reasonable pe-10 riod established by the Secretary. 11 "(g) CONTROLLED GROUPS.—For purposes of this 12 section, all persons treated as a single employer under sub-13 section (b), (c), (m), or (o) of section 414 shall be treated 14 as a single employer.". 15 (b) CREDIT MADE PART OF GENERAL BUSINESS CREDIT.—Subsection (b) of section 38 (relating to general 16 business credit) is amended by striking "plus" at the end 17 18 of paragraph (16), by striking the period at the end of paragraph (17) and inserting ", plus", and by adding at 19 20 the end the following new paragraph: "(18) in the case of a small business refiner, 21 22 the environmental tax credit determined under sec-23 tion 45I(a).".

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

1 able) is amended by adding after subsection (d) the fol-2 lowing new subsection:

3 "(e) ENVIRONMENTAL TAX CREDIT.—No deduction
4 shall be allowed for that portion of the expenses otherwise
5 allowable as a deduction for the taxable year which is
6 equal to the amount of the credit determined for the tax7 able year under section 45I(a).".

8 (d) BASIS ADJUSTMENT.—Section 1016(a) (relating 9 to adjustments to basis) is amended by striking "and" at 10 the end of paragraph (33), by striking the period at the 11 end of paragraph (34) and inserting ", and", and by add-12 ing at the end the following new paragraph:

"(35) in the case of a facility with respect to
which a credit was allowed under section 45I, to the
extent provided in section 45I(d).".

16 (e) CLERICAL AMENDMENT.—The table of sections
17 for subpart D of part IV of subchapter A of chapter 1
18 is amended by adding at the end the following new item: "Sec. 45I. Environmental tax credit.".

(f) EFFECTIVE DATE.—The amendments made bythis section shall apply to expenses paid or incurred afterthe date of the enactment of this Act.

1SEC. 3206. DETERMINATION OF SMALL REFINER EXCEP-2TION TO OIL DEPLETION DEDUCTION.

3 (a) IN GENERAL.—Paragraph (4) of section 613A(d)
4 (relating to certain refiners excluded) is amended to read
5 as follows:

6 "(4) CERTAIN REFINERS EXCLUDED.—If the 7 taxpayer or a related person engages in the refining 8 of crude oil, subsection (c) shall not apply to the 9 taxpayer for a taxable year if the average daily refin-10 ery runs of the taxpayer and the related person for 11 the taxable year exceed 75,000 barrels. For purposes 12 of this paragraph, the average daily refinery runs for 13 any taxable year shall be determined by dividing the 14 aggregate refinery runs for the taxable year by the 15 number of days in the taxable year.".

16 (b) EFFECTIVE DATE.—The amendment made by
17 this section shall apply to taxable years beginning after
18 December 31, 2001.

19sec. 3207. TAX-EXEMPT BOND FINANCING OF CERTAIN20ELECTRIC FACILITIES.

(a) IN GENERAL.—Subpart A of part IV of subchapter B of chapter 1 (relating to tax exemption requirements for State and local bonds) is amended by inserting
after section 141 the following new section:

1	"SEC. 141A. TREATMENT OF GOVERNMENT-OWNED ELEC-
2	TRIC OUTPUT FACILITIES.
3	"(a) Exceptions From Private Business Use
4	Limitations Where Open Access Requirements
5	Мет.—
6	"(1) GENERAL RULE.—For purposes of this
7	part, the term 'private business use' shall not
8	include—
9	"(A) any permitted open access activity by
10	a governmental unit with respect to an electric
11	output facility owned by such unit, or
12	"(B) any permitted sale of electricity by a
13	governmental unit which is generated at an ex-
14	isting generation facility owned by such unit.
15	"(2) Permitted open access activity.—For
16	purposes of this section—
17	"(A) IN GENERAL.—The term 'permitted
18	open access activity' means any activity meeting
19	the open access requirements of any of the fol-
20	lowing clauses with respect to such electric out-
21	put facility:
22	"(i) TRANSMISSION AND ANCILLARY
23	FACILITY.—In the case of a transmission
24	facility or a facility providing ancillary
25	services, the provision of transmission serv-
26	ice and ancillary services meets the open

1	access requirements of this clause only if
2	such services are provided on a non-
3	discriminatory open access basis—
4	"(I) pursuant to an open access
5	transmission tariff filed with and ap-
6	proved by FERC, including an accept-
7	able reciprocity tariff, or
8	"(II) under a regional trans-
9	mission organization agreement ap-
10	proved by FERC.
11	"(ii) DISTRIBUTION FACILITIES.—In
12	the case of a distribution facility, the deliv-
13	ery of electric energy meets the open ac-
14	cess requirements of this clause only if
15	such delivery is made on a nondiscrim-
16	inatory open access basis.
17	"(iii) GENERATION FACILITIES.—In
18	the case of a generation facility, the deliv-
19	ery of electric energy generated by such fa-
20	cility meets the open access requirements
21	of this clause only if—
22	"(I) such facility is directly con-
23	nected to distribution facilities owned
24	by the governmental unit which owns
25	the generation facility, and

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1	"(II) such distribution facilities
2	meet the open access requirements of
3	clause (ii).
4	"(B) Special rules.—
5	"(i) Voluntarily filed tariffs.—
6	Subparagraph (A)(i)(I) shall apply in the
7	case of a voluntarily filed tariff only if the
8	governmental unit files a report with
9	FERC within 90 days after the date of the
10	enactment of this section relating to
11	whether or not such governmental unit will
12	join a regional transmission organization.
13	"(ii) Control of transmission fa-
14	CILITIES BY REGIONAL TRANSMISSION OR-
15	GANIZATION.—A governmental unit shall
16	be treated as meeting the open access re-
17	quirements of subparagraph (A)(i) if a re-
18	gional transmission organization controls
19	the transmission facilities.
20	"(iii) ERCOT UTILITY.—References
21	to FERC in subparagraph (A) shall be
22	treated as references to the Public Utility

23 Commission of Texas with respect to any24 ERCOT utility (as defined in section

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1	212(k)(2)(B) of the Federal Power Act (16
2	U.S.C. 824k(k)(2)(B))).
3	"(3) PERMITTED SALE.—For purposes of this
4	subsection—
5	"(A) IN GENERAL.—The term 'permitted
6	sale' means—
7	"(i) any sale of electricity to an on-
8	system purchaser if the seller meets the
9	open access requirements of paragraph (2)
10	with respect to all distribution and trans-
11	mission facilities (if any) owned by such
12	seller, and
13	"(ii) subject to subparagraphs (B)
14	and (C), any sale of electricity to a whole-
15	sale native load purchaser, and any load
16	loss sale, if—
17	"(I) the seller meets the open ac-
18	cess requirements of paragraph (2)
19	with respect to all transmission facili-
20	ties (if any) owned by such seller, or
21	"(II) in any case in which the
22	seller does not own any transmission
23	facilities, all persons providing trans-
24	mission services to the seller's whole-
25	sale native load purchasers meet the

1	open access requirements of para-
2	graph (2) with respect to all trans-
3	mission facilities owned by such per-
4	sons.
5	"(B) LIMITATION ON SALES TO WHOLE-
6	SALE NATIVE LOAD PURCHASERS.—A sale to a
7	wholesale native load purchaser shall be treated
8	as a permitted sale only to the extent that—
9	"(i) such purchaser resells the elec-
10	tricity directly at retail to persons within
11	the purchaser's distribution area, or
12	"(ii) such electricity is resold by such
13	purchaser through one or more wholesale
14	purchasers (each of whom as of June 30,
15	2000, was a party to a requirements con-
16	tract or a firm power contract described in
17	paragraph $(5)(B)(ii))$ to retail purchasers
18	in the ultimate wholesale purchaser's dis-
19	tribution area.
20	"(C) LOAD LOSS SALES.—
21	"(i) IN GENERAL.—The term 'load
22	loss sale' means any sale at wholesale to
23	the extent that—
24	"(I) the aggregate sales at whole-
25	sale during the recovery period does

1	not exceed the load loss mitigation
2	sales limit for such period, and
3	"(II) the aggregate sales at
4	wholesale during the first calendar
5	year after the recovery period does not
6	exceed the excess carried under clause
7	(iv) to such year.
8	"(ii) LOAD LOSS MITIGATION SALES
9	LIMIT.—For purposes of clause (i), the
10	load loss mitigation sales limit for the re-
11	covery period is the sum of the annual load
12	losses for each year of such period.
13	"(iii) ANNUAL LOAD LOSS.—A govern-
14	mental unit's annual load loss for each
15	year of the recovery period is the amount
16	(if any) by which—
17	"(I) the megawatt hours of elec-
18	tric energy sold during such year to
19	wholesale native load purchasers
20	which do not constitute private busi-
21	ness use are less than
22	"(III) the megawatt hours of
23	electric energy sold during the base
24	year to wholesale native load pur-

1	chasers which do not constitute pri-
2	vate business use.
3	The annual load loss for any year shall not
4	exceed the portion of the amount deter-
5	mined under the preceding sentence which
6	is attributable to open access requirements.
7	"(iv) CARRYOVERS.—If the limitation
8	under clause (i) for the recovery period ex-
9	ceeds the aggregate sales during such pe-
10	riod which are taken into account under
11	clause (i), such excess (but not more than
12	10 percent of such limitation) may be car-
13	ried over to the first calendar year fol-
14	lowing the recovery period.
15	"(v) Recovery period.—The recov-
16	ery period is the 7-year period beginning
17	with the start-up year.
18	"(vi) Start-up year.—The start-up
19	year is the calendar year which includes
20	the date of the enactment of this section
21	or, if later, at the election of the govern-
22	mental unit—
23	"(I) the first year that the gov-
24	ernmental unit offers nondiscrim-
25	inatory open transmission access, or

1	"(II) the first year in which at
2	least 10 percent of the governmental
3	unit's wholesale customers' aggregate
4	retail native load is open to retail
5	competition.
6	"(4) ON-SYSTEM PURCHASER.—For purposes of
7	this section, the term 'on-system purchaser' means
8	any person whose electric equipment is directly con-
9	nected with any transmission or distribution facility
10	owned by the governmental unit owning the existing
11	generation facility if—
12	"(A) such person—
13	"(i) purchases electric energy from
14	such governmental unit at retail, and
15	"(ii)(I) was within such unit's dis-
16	tribution area at the close of the base year
17	or
18	"(II) is a person as to whom the gov-
19	ernmental unit has a statutory service obli-
20	gation, or
21	"(B) is a wholesale native load purchaser
22	from such governmental unit.
23	"(5) Wholesale native load purchaser.—
24	For purposes of this section—

1	"(A) IN GENERAL.—The term 'wholesale
2	native load purchaser' means a wholesale pur-
3	chaser as to whom the governmental unit had—
4	"(i) a statutory service obligation at
5	wholesale at the close of the base year, or
6	"(ii) an obligation at the close of the
7	base year under a requirements or firm
8	sales contract if, as of June 30, 2000, such
9	contract had been in effect for (or had an
10	initial term of) at least 10 years.
11	"(B) PERMITTED SALES UNDER EXISTING
12	CONTRACTS.—A private business use sale dur-
13	ing any year to a wholesale native load pur-
14	chaser (other than a person to whom the gov-
15	ernmental unit had a statutory service obliga-
16	tion) under a contract shall be treated as a per-
17	mitted sale by reason of being a load loss sale
18	only to the extent that the private business use
19	sales under the contract during such year ex-
20	ceed the lesser of—
21	"(i) the private business use sales
22	under the contract during the base year, or
23	"(ii) the maximum private business
24	use sales which would (but for this section)

1	be permitted without causing the bonds to
2	be private activity bonds.
3	This subparagraph shall only apply to the ex-
4	tent that the sale is allocable to bonds issued
5	before the date of the enactment of this section
6	(or bonds issued to refund such bonds).
7	"(6) Special rules.—
8	"(A) TIME OF SALE RULE.—For purposes
9	of paragraphs $(3)(C)(iii)$ and $(5)(B)$, the deter-
10	mination of whether a sale after the date of the
11	enactment of this section is a private business
12	use shall be made with regard to this section.
13	"(B) JOINT ACTION AGENCIES.—To the
14	extent provided in regulations, a joint action
15	agency, or a member of (or a wholesale native
16	load purchaser from) a joint action agency,
17	which is entitled to make a sale described in
18	subparagraph (A) or (B) in a year, may trans-
19	fer the entitlement to make that sale to the
20	member (or purchaser), or the joint action
21	agency, respectively.
22	"(b) Certain Bonds for Transmission and Dis-
23	TRIBUTION FACILITIES NOT TAX EXEMPT.—
24	"(1) IN GENERAL.—Section 103 shall not apply
25	to any bond issued on or after the date of the enact-

1	ment of this section if any portion of the proceeds
2	of the issue of which such bond is a part is used (di-
3	rectly or indirectly) to finance—
4	"(A) any electric transmission facility, or
5	"(B) any start-up electric utility distribu-
6	tion facility.
7	"(2) Exceptions relating to transmission
8	FACILITIES.—Paragraph (1)(A) shall not apply to
9	any bond issued to finance—
10	"(A) any repair of a transmission facility
11	in service on the date of the enactment of this
12	section, so long as the repair does not—
13	"(i) increase the voltage level of such
14	facility over its level at the close of the
15	base year, or
16	"(ii) increase the thermal load limit of
17	such facility by more than 3 percent over
18	such limit at the close of the base year,
19	"(B) any qualifying upgrade of an electric
20	transmission facility in service on the date of
21	the enactment of this section, or
22	"(C) any transmission facility necessary to
23	comply with an obligation under a shared or re-
24	ciprocal transmission agreement in effect on
25	such date.

1	(3)	EXCEPTION FOR LO	OCAL ELECT	RIC TI	RANS-
2	MISSION	FACILITY.—For	purposes	of	this
3	subsection	1—			

4 "(A) IN GENERAL.—In the case of a gov-5 ernmental unit which owns distribution facili-6 ties, paragraph (1)(A) shall not apply to any 7 bond issued to finance an electric transmission 8 facility owned by such governmental unit and 9 located within such governmental unit's dis-10 tribution area, but only to the extent such facil-11 ity is, or will be, necessary to supply electricity 12 to serve the retail native load, or wholesale na-13 tive load, of such governmental unit or of 1 or 14 more other governmental units owning distribu-15 tion facilities which are directly connected to 16 such electric transmission facility.

17 "(B) RETAIL LOAD.—The term 'retail
18 load' means, with respect to a governmental
19 unit, the electric load of end-users in the dis20 tribution area of the governmental unit.

21 "(C) WHOLESALE NATIVE LOAD.—The
22 term 'wholesale native load' means—

23 "(i) the retail load of such unit's24 wholesale native load purchasers (or of an

ultimate wholesale purchaser described in
subsection $(a)(3)(B)(ii))$, and
"(ii) the electric load of purchasers
(not described in clause (i)) under whole-
sale requirements contracts which—
"(I) do not constitute private
business use (determined without re-
gard to this section), and
"(II) were in effect in the base
year.
"(D) NECESSARY TO SERVE LOAD.—For
purposes of determining whether a transmission
facility is, or will be, necessary to supply elec-
tricity to retail native load or wholesale native
load—
"(i) the governmental unit's available
transmission rights shall be taken into ac-
count,
"(ii) electric reliability standards or
requirements of national or regional reli-
ability organizations, regional transmission
organizations and the Electric Reliability
Council of Texas shall be taken into ac-
count, and

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1	"(iii) transmission, siting and con-
2	struction decisions of regional transmission
3	organizations and State and Federal regu-
4	latory and siting agencies, after a pro-
5	ceeding that provides for public input,
6	shall be presumptive evidence regarding
7	whether transmission facilities are nec-
8	essary to serve native load.
9	"(E) QUALIFYING UPGRADE.—The term
10	'qualifying upgrade' means an improvement or
11	addition to transmission facilities of the govern-
12	mental unit in service on the date of the enact-
13	ment of this section which—
14	"(i) is ordered or approved by a re-
15	gional transmission organization or by a
16	State regulatory or siting agency, after a
17	proceeding that provides for public input,
18	and
19	"(ii) is, or will be, necessary to supply
20	electricity to serve the retail native load, or
21	wholesale native load, of such govern-
22	mental unit or of one or more govern-
23	mental units owning distribution facilities
24	which are directly connected to such trans-
25	mission facility.

1	"(4) Start-up electric utility distribu-
2	TION FACILITY DEFINED.—For purposes of this sub-
3	section, the term 'start-up electric utility distribution
4	facility' means any distribution facility to provide
5	electric service for sale to the public if such facility
6	is placed in service—
7	"(A) by a governmental unit that did not
8	operate an electric utility on the date of the en-
9	actment of this section, and
10	"(B) during the first 10 years after the
11	date such governmental unit begins operating
12	an electric utility.
13	A governmental unit is treated as having operated
14	an electric utility on the date of the enactment of
15	this section if it operates electric output facilities
16	which were (on such date) operated by another gov-
17	ernmental unit to provide electric service for sale to
18	the public.
19	"(5) Exception for refunding bonds.—
20	"(A) IN GENERAL.—Paragraph (1) shall
21	not apply to any eligible refunding bond.
22	"(B) ELIGIBLE REFUNDING BOND.—For
23	purposes of subparagraph (A), the term 'eligible
24	refunding bond' means any bond (or series of
25	bonds) issued to refund any bond issued before

1	the date of the enactment of this section if the
2	average maturity date of the issue of which the
3	refunding bond is a part is not later than the
4	average maturity date of the bonds to be re-
5	funded by such issue.
6	"(c) Definitions; Special Rules.—For purposes
7	of this section—
8	"(1) BASE YEAR.—The term 'base year'
9	means—
10	"(A) the calendar year preceding the start-
11	up year, or
12	"(B) at the election of the governmental
13	unit, the second or third calendar years pre-
14	ceding the start-up year.
15	"(2) DISTRIBUTION AREA.—The term 'distribu-
16	tion area' means the area in which a governmental
17	unit owns distribution facilities.
18	"(3) ELECTRIC OUTPUT FACILITY.—The term
19	'electric output facility' means an output facility
20	that is an electric generation, transmission, or dis-
21	tribution facility.
22	"(4) DISTRIBUTION FACILITY.—The term 'dis-
23	tribution facility' means an electric output facility
24	that is not a generation or transmission facility.

1	"(5) TRANSMISSION FACILITY.—The term
2	'transmission facility' means an electric output facil-
3	ity (other than a generation facility) that operates at
4	an electric voltage of 69 kV or greater. To the ex-
5	tent provided in regulations, such term includes any
6	output facility that FERC determines is a trans-
7	mission facility under standards applied by FERC
8	under the Federal Power Act (as in effect on the
9	date of the enactment of this section).
10	"(6) EXISTING GENERATION FACILITY.—
11	"(A) IN GENERAL.—The term 'existing
12	generation facility' means any electric genera-
13	tion facility if—
14	"(i) such facility is originally placed in
15	service on or before the date of the enact-
16	ment of this Act and is owned by any gov-
17	ernmental unit on such date, or
18	"(ii) such facility is originally placed
19	in service after such date if the construc-
20	tion of the facility commenced before June
21	1, 2000, and such facility is owned by any
22	governmental unit when it is placed in
23	service.
24	"(B) DENIAL OF TREATMENT TO EXPAN-
25	SIONS.—Such term shall not include any facility

1	to the extent the generating capacity of such fa-
2	cility as of any date is 3 percent above the
3	greater of its nameplate or rated capacity as of
4	the date of the enactment of this section (or, in
5	the case of a facility described in subparagraph
6	(A)(ii), the date that the facility is placed in
7	service).
8	"(7) REGIONAL TRANSMISSION ORGANIZA-
9	TION.—The term 'regional transmission organiza-
10	tion' includes an independent system operator.
11	"(8) FERC.—The term 'FERC' means the
12	Federal Energy Regulatory Commission.
13	"(9) Government-owned facility.—An elec-
14	tric transmission facility shall be treated as owned
15	by a governmental unit as of any date to the extent
16	that—
17	"(A) such unit acquired (before the base
18	year) long-term firm transmission capacity (as
19	determined under regulations) of such facility
20	for the purposes of serving customers to which
21	such unit had at the close of the base year—
22	"(i) a statutory service obligation, or
23	"(ii) an obligation under a require-
24	ments contract, and

"(B) such unit holds such capacity as of
 such date.

"(10) STATUTORY SERVICE OBLIGATION.—The
term 'statutory service obligation' means an obligation under State or Federal law (exclusive of an obligation arising solely under a contract entered into
with a person) to provide electric distribution services or electric sales services, as provided in such
law.

10 "(11) CONTRACT MODIFICATIONS.—A material
11 modification of a contract shall be treated as a new
12 contract.

13 "(d) ELECTION TO TERMINATE TAX-EXEMPT BOND
14 FINANCING FOR CERTAIN ELECTRIC OUTPUT FACILI15 TIES.—

16 "(1) IN GENERAL.—At the election of a govern-17 mental unit, section 103(a) shall not apply to any 18 bond issued by or on behalf of such unit after the 19 date of such election if any portion of the proceeds 20 of the issue of which such bond is a part are used 21 to provide any electric output facilities. Such an 22 election, once made, shall be irrevocable.

23 "(2) OTHER EFFECTS OF ELECTION.—During
24 the period that the election under paragraph (1) is

1	in effect with respect to a governmental unit, the
2	term 'private activity bond' shall not include—
3	"(A) any bond issued by such unit before
4	the date of the enactment of this section to pro-
5	vide an electric output facility if, as of the date
6	of the election, such bond was not a private ac-
7	tivity bond, and
8	"(B) any bond to which paragraph (1)
9	does not apply by reason of paragraph (3).
10	"(3) Exceptions for certain property.—
11	"(A) IN GENERAL.—Paragraph (1) shall
12	not apply to any bond issued to provide prop-
13	erty owned by a governmental unit if such prop-
14	erty is—
15	"(i) any qualifying transmission facil-
16	ity,
17	"(ii) any qualifying distribution facil-
18	ity,
19	"(iii) any facility necessary to meet
20	Federal or State environmental require-
21	ments applicable to an existing generation
22	facility owned by the governmental unit as
23	of the date of the election,
24	"(iv) any property to repair any exist-
25	ing generation facility owned by the gov-

1	ernmental unit as of the date of the elec-
2	tion,
3	"(v) any qualified facility (as defined
4	in section $45(c)(3)$ producing electricity
5	from any qualified energy resource (as de-
6	fined in section $45(c)(1)$, and
7	"(vi) any energy property (as defined
8	in section $48(a)(3)$ placed in service dur-
9	ing a period that the energy percentage
10	under section 48(a) is greater than zero.
11	"(B) LIMITATION ON USE BY NONGOVERN-
12	MENTAL PERSONS.—Subparagraph (A) shall
13	not apply to any property constructed, acquired
14	or financed for a principal purpose of providing
15	the facility (or the output thereof) to non-
16	governmental persons.
17	"(4) DEFINITIONS.—For purposes of this
18	subsection—
19	"(A) QUALIFYING DISTRIBUTION FACIL-
20	ITY.—The term 'qualifying distribution facility'
21	means a distribution facility meeting the open
22	access requirements of subsection $(a)(2)(A)(ii)$.
23	"(B) QUALIFYING TRANSMISSION FACIL-
24	ITY.—The term 'qualifying transmission facil-
25	ity' means a local transmission facility (as de-

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1	fined in subsection $(b)(3)$ meeting the open ac-
2	cess requirements of subsection $(a)(2)(A)(i)$.
3	"(5) Effect of election.—
4	"(A) IN GENERAL.—An election under
5	paragraph (1) shall be binding on any successor
б	in interest to, or any related party with respect
7	to, the electing governmental unit. For purposes
8	of this paragraph, a governmental unit shall be
9	treated as related to another governmental unit
10	if it is a member of the same controlled group
11	(as determined under regulations).
12	"(B) TREATMENT OF ELECTING GOVERN-
13	MENTAL UNIT.—A governmental unit which
14	makes an election under paragraph (1) shall be
15	treated for purposes of section 141 as a
16	person—
17	"(i) which is not a governmental unit,
18	and
19	"(ii) which is engaged in a trade or
20	business,
21	with respect to its purchase of electricity gen-
22	erated by an electric output facility placed in
23	service after the date of such election if such
24	purchase is under a contract executed after
25	such date.".

(b) WAIVER OF CERTAIN LIMITATIONS NOT TO
 APPLY TO DISTRIBUTION FACILITIES.—Section 141(d)(5)
 is amended by inserting "(except in the case of an electric
 output facility that is a distribution facility)" after "this
 subsection".

6 (c) CLERICAL AMENDMENT.—The table of sections
7 for subpart A of part IV of subchapter B of chapter 1
8 is amended by inserting after the item relating to section
9 141 the following new item:

"Sec. 141A. Treatment of government-owned electric output facilities.".

10 (d) Effective Date.—

(1) IN GENERAL.—The amendments made by
this section shall take effect on the date of the enactment of this Act, except that a governmental unit
may elect to have section 141A(a)(1) of the Internal
Revenue Code of 1986, as added by subsection (a),
take effect on April 14, 1996.

17 (2)BINDING CONTRACTS.—The amendment 18 made by subsection (b) (relating to waiver of certain 19 limitations not to apply to distribution facilities) 20 shall not apply to facilities acquired pursuant to a 21 contract which was entered into before the date of 22 the enactment of this Act and which was binding on 23 such date and at all times thereafter before such ac-24 quisition.

1	(3) Comparable treatment to bonds
2	UNDER 1954 CODE RULES.—References in the
3	amendments made by this Act to sections of the In-
4	ternal Revenue Code of 1986 shall be deemed to in-
5	clude references to comparable sections of the Inter-
6	nal Revenue Code of 1954.
7	SEC. 3208. SALES OR DISPOSITIONS TO IMPLEMENT FED-
8	ERAL ENERGY REGULATORY COMMISSION
9	OR STATE ELECTRIC RESTRUCTURING POL-
10	ICY.
11	(a) IN GENERAL.—Section 1033 (relating to involun-
12	tary conversions) is amended by redesignating subsection
13	(k) as subsection (l) and by inserting after subsection (j)
14	the following new subsection:
15	"(k) Sales or Dispositions To Implement Fed-
16	ERAL ENERGY REGULATORY COMMISSION OR STATE
17	ELECTRIC RESTRUCTURING POLICY.—
18	"(1) IN GENERAL.—For purposes of this sub-
19	
20	title, if a taxpayer elects the application of this sub-
20	title, if a taxpayer elects the application of this sub- section to a qualifying electric transmission
20 21	
	section to a qualifying electric transmission
21	section to a qualifying electric transmission transaction—

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1	"(B) exempt utility property shall be treat-
2	ed as property which is similar or related in
3	service or use to the property disposed of in
4	such transaction.
5	"(2) EXTENSION OF REPLACEMENT PERIOD.—
6	In the case of any involuntary conversion described
7	in paragraph (1), subsection $(a)(2)(B)$ shall be ap-
8	plied by substituting '4 years' for '2 years' in clause
9	(i) thereof.
10	"(3) QUALIFYING ELECTRIC TRANSMISSION
11	TRANSACTION.—For purposes of this subsection, the
12	term 'qualifying electric transmission transaction'
13	means any sale or other disposition before January
14	1, 2009, of—
15	"(A) property used in the trade or business
16	of providing electric transmission services, or
17	"(B) any stock or partnership interest in a
18	corporation or partnership, as the case may be,
19	whose principal trade or business consists of
20	providing electric transmission services,
21	but only if such sale or disposition is to an inde-
22	pendent transmission company.
23	"(4) INDEPENDENT TRANSMISSION COM-
24	PANY.—For purposes of this subsection, the term
25	'independent transmission company' means—

1	"(A) a regional transmission organization
2	approved by the Federal Energy Regulatory
3	Commission,
4	"(B) a person—
5	"(i) who the Federal Energy Regu-
6	latory Commission determines in its au-
7	thorization of the transaction under section
8	203 of the Federal Power Act (16 U.S.C.
9	823b) is not a market participant within
10	the meaning of such Commission's rules
11	applicable to regional transmission organi-
12	zations, and
13	"(ii) whose transmission facilities to
14	which the election under this subsection
15	applies are under the operational control of
16	a Federal Energy Regulatory Commission-
17	approved regional transmission organiza-
18	tion before the close of the period specified
19	in such authorization, but not later than
20	the close of the period applicable under
21	subsection $(a)(2)(B)$ as extended under
22	paragraph (2), or
23	"(C) in the case of facilities subject to the
24	exclusive jurisdiction of the Public Utility Com-
25	mission of Texas, a person which is approved by

1	that Commission as consistent with Texas State
2	law regarding an independent transmission or-
3	ganization.
4	"(5) EXEMPT UTILITY PROPERTY.—For pur-
5	poses of this subsection—
6	"(A) IN GENERAL.—The term 'exempt
7	utility property' means property used in the
8	trade or business of—
9	"(i) generating, transmitting, distrib-
10	uting, or selling electricity, or
11	"(ii) producing, transmitting, distrib-
12	uting, or selling natural gas.
13	"(B) NONRECOGNITION OF GAIN BY REA-
14	SON OF ACQUISITION OF STOCK.—Acquisition of
15	control of a corporation shall be taken into ac-
16	count under this section with respect to a quali-
17	fying electric transmission transaction only if
18	the principal trade or business of such corpora-
19	tion is a trade or business referred to in sub-
20	paragraph (A).
21	"(6) Special rule for consolidated
22	GROUPS.—In the case of a corporation which is a
23	member of an affiliated group filing a consolidated
24	return, such corporation shall be treated as satis-
25	fying the purchase requirement of subsection $(a)(2)$

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.

5 "(7) ELECTION.—An election under paragraph
6 (1), once made, shall be irrevocable.".

7 (b) EXCEPTION FROM GAIN RECOGNITION UNDER
8 SECTION 1245.—Subsection (b) of section 1245 is amend9 ed by adding at the end the following new paragraph:

10 "(9) DISPOSITIONS TO IMPLEMENT FEDERAL 11 ENERGY REGULATORY COMMISSION OR STATE ELEC-12 TRIC RESTRUCTURING POLICY.—At the election of 13 the taxpayer, the amount of gain which would (but 14 for this paragraph) be recognized under this section 15 on any qualified electric transmission transaction (as 16 defined in section 1033(k)) for which an election 17 under section 1033 is made shall be reduced by the 18 aggregate reduction in the basis of section 1245 19 property held by the taxpayer or, if insufficient, by 20 a member of an affiliated group which includes the 21 taxpayer at any time during the taxable year in 22 which such transaction occurred. The manner and 23 amount of such reduction shall be determined under 24 regulations prescribed by the Secretary.".

1 (c) EFFECTIVE DATE.—The amendments made by 2 this section shall apply to transactions occurring after the 3 date of the enactment of this Act. 4 SEC. 3209. DISTRIBUTIONS OF STOCK TO IMPLEMENT FED-5 ERAL ENERGY REGULATORY COMMISSION 6 OR STATE ELECTRIC RESTRUCTURING POL-7 ICY. 8 (a) IN GENERAL.—Subparagraph (A) of section 9 355(e)(3) (relating to special rules relating to acquisi-10 tions) is amended by inserting after clause (iv) the following new clause: 11 12 "(v) The acquisition of stock in any 13 controlled corporation in a qualifying elec-14 tric transmission transaction (as defined in 15 section 1033(k)).". 16 (b) EFFECTIVE DATE.—The amendment made by subsection (a) shall apply to distributions after the date 17 18 of the enactment of this Act. 19 SEC. 3210. MODIFICATIONS TO SPECIAL RULES FOR NU-20 CLEAR DECOMMISSIONING COSTS. 21 (a) REPEAL OF LIMITATION ON DEPOSITS INTO 22 FUND BASED ON COST OF SERVICE; CONTRIBUTIONS 23 AFTER FUNDING PERIOD.—Subsection (b) of section 24 468A is amended to read as follows: 25 "(b) Limitation on Amounts Paid Into Fund.— "(1) IN GENERAL.—The amount which a tax payer may pay into the Fund for any taxable year
 shall not exceed the ruling amount applicable to
 such taxable year.

"(2) Contributions after funding pe-5 6 RIOD.—Notwithstanding any other provision of this 7 section, a taxpayer may pay into the Fund in any 8 taxable year after the last taxable year to which the 9 ruling amount applies. Payments may not be made 10 under the preceding sentence to the extent such pay-11 ments would cause the assets of the Fund to exceed 12 the nuclear decommissioning costs allocable to the 13 taxpayer's current or former interest in the nuclear 14 powerplant to which the Fund relates. The limita-15 tion under the preceding sentence shall be deter-16 mined by taking into account a reasonable rate of 17 inflation for the nuclear decommissioning costs and 18 a reasonable after-tax rate of return on the assets 19 of the Fund until such assets are anticipated to be 20 expended.".

(b) CLARIFICATION OF TREATMENT OF FUND
TRANSFERS.—Subsection (e) of section 468A is amended
by adding at the end the following new paragraph:

24 "(8) TREATMENT OF FUND TRANSFERS.—If, in
25 connection with the transfer of the taxpayer's inter-

1	est in a nuclear powerplant, the taxpayer transfers
2	the Fund with respect to such powerplant to the
3	transferee of such interest and the transferee elects
4	to continue the application of this section to such
5	Fund—
6	"(A) the transfer of such Fund shall not
7	cause such Fund to be disqualified from the ap-
8	plication of this section, and
9	"(B) no amount shall be treated as distrib-
10	uted from such Fund, or be includible in gross
11	income, by reason of such transfer.".
12	(c) TREATMENT OF CERTAIN DECOMMISSIONING
13	Costs.—
14	(1) IN GENERAL.—Section 468A is amended by
15	redesignating subsections (f) and (g) as subsections
16	(g) and (h), respectively, and by inserting after sub-
17	section (e) the following new subsection:
18	"(f) Transfers Into Qualified Funds.—
19	"(1) IN GENERAL.—Notwithstanding subsection
20	(b), any taxpayer maintaining a Fund to which this
21	section applies with respect to a nuclear powerplant
22	may transfer into such Fund up to an amount equal
23	to the excess of the total nuclear decommissioning
24	costs with respect to such nuclear powerplant over
25	the portion of such costs taken into account in de-

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1	termining the ruling amount in effect immediately
2	before the transfer.
3	"(2) DEDUCTION FOR AMOUNTS TRANS-
4	FERRED.—
5	"(A) IN GENERAL.—The deduction allowed
6	by subsection (a) for any transfer permitted by
7	this subsection shall be allowed ratably over the
8	remaining estimated useful life (within the
9	meaning of subsection $(d)(2)(A)$ of the nuclear
10	powerplant beginning with the taxable year dur-
11	ing which the transfer is made.
12	"(B) DENIAL OF DEDUCTION FOR PRE-
13	VIOUSLY DEDUCTED AMOUNTS.—No deduction
14	shall be allowed for any transfer under this sub-
15	section of an amount for which a deduction was
16	previously allowed or a corresponding amount
17	was not included in gross income. For purposes
18	of the preceding sentence, a ratable portion of
19	each transfer shall be treated as being from
20	previously deducted or excluded amounts to the
21	extent thereof.
22	"(C) Transfers of qualified funds.—
23	If—

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1	"(i) any transfer permitted by this
2	subsection is made to any Fund to which
3	this section applies, and
4	"(ii) such Fund is transferred there-
5	after,
6	any deduction under this subsection for taxable
7	years ending after the date that such Fund is
8	transferred shall be allowed to the transferee
9	and not to the transferor. The preceding sen-
10	tence shall not apply if the transferor is an or-
11	ganization exempt from tax imposed by this
12	chapter.
13	"(D) Special rules.—
14	"(i) GAIN OR LOSS NOT RECOG-
15	NIZED.—No gain or loss shall be recog-
16	nized on any transfer permitted by this
17	subsection.
18	"(ii) TRANSFERS OF APPRECIATED
19	PROPERTY.—If appreciated property is
20	transferred in a transfer permitted by this
21	subsection, the amount of the deduction
22	shall be the adjusted basis of such prop-
23	erty.
24	"(3) New Ruling Amount Required.—Para-
25	graph (1) shall not apply to any transfer unless the

1	taxpayer requests from the Secretary a new schedule
2	of ruling amounts in connection with such transfer.
3	"(4) NO BASIS IN QUALIFIED FUNDS.—Not-
4	withstanding any other provision of law, the tax-
5	payer's basis in any Fund to which this section ap-
6	plies shall not be increased by reason of any transfer
7	permitted by this subsection.".
8	(2) New ruling amount to take into ac-
9	COUNT TOTAL COSTS.—Subparagraph (A) of section
10	468A(d)(2) is amended to read as follows:
11	"(A) fund the total nuclear decommis-
12	sioning costs with respect to such powerplant
13	over the estimated useful life of such power-
14	plant, and".
15	(d) Deduction for Nuclear Decommissioning
16	COSTS WHEN PAID.—Paragraph (2) of section 468A(c)
17	is amended to read as follows:
18	"(2) DEDUCTION OF NUCLEAR DECOMMIS-
19	SIONING COSTS.—In addition to any deduction under
20	subsection (a), nuclear decommissioning costs paid
21	or incurred by the taxpayer during any taxable year
22	shall constitute ordinary and necessary expenses in
23	carrying on a trade or business under section 162.".

1	(e) EFFECTIVE DATE.—The amendments made by
2	this section shall apply to taxable years beginning after
3	December 31, 2001.
4	SEC. 3211. TREATMENT OF CERTAIN INCOME OF COOPERA-
5	TIVES.
6	(a) Income From Open Access and Nuclear De-
7	COMMISSIONING TRANSACTIONS.—
8	(1) IN GENERAL.—Subparagraph (C) of section
9	501(c)(12) is amended by striking "or" at the end
10	of clause (i), by striking the period at the end of
11	clause (ii) and inserting a comma, and by adding at
12	the end the following new clauses:
13	"(iii) from any open access trans-
14	action (other than income received or ac-
15	crued directly or indirectly from a mem-
16	ber), or
17	"(iv) from any nuclear decommis-
18	sioning transaction.".
19	(2) DEFINITIONS.—Paragraph (12) of section
20	501(c) is amended by adding at the end the fol-
21	lowing new subparagraph:
22	"(E) For purposes of subparagraph (C)—
23	"(i) The term 'open access trans-
24	action' means any activity which would be
25	a permitted open access activity (as de-

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1	fined in section $141A(a)(2)$) if the coopera-
2	tive were a governmental unit.
3	"(ii) The term 'nuclear decommis-
4	sioning transaction' means—
5	"(I) any transfer into a trust,
6	fund, or instrument established to pay
7	any nuclear decommissioning costs if
8	the transfer is in connection with the
9	transfer of the cooperative's interest
10	in a nuclear powerplant or nuclear
11	powerplant unit,
12	"(II) any distribution from such
13	a trust, fund, or instrument, or
14	"(III) any earnings from such a
15	trust, fund, or instrument.".
16	(b) Income From Load Loss Transactions
17	TREATED AS MEMBER INCOME.—Paragraph (12) of sec-
18	tion 501(c) is amended by adding after subparagraph (E)
19	the following new subparagraph:
20	"(F)(i) In the case of a mutual or coopera-
21	tive electric company, income received or ac-
22	crued from a load loss transaction shall be
23	treated as an amount collected from members
24	for the sole purpose of meeting losses and ex-
25	penses.

1	"(ii) For purposes of clause (i), the term
2	'load loss transaction' means any sale (whether
3	at wholesale or at retail) which would be a load
4	loss sale under rules similar to the rules of sec-
5	tion $141A(a)(3)(C)$.
6	"(iii) A company shall not fail to be treat-
7	ed as a mutual cooperative company for pur-
8	poses of this paragraph by reason of the treat-
9	ment under clause (i).
10	"(iv) A rule similar to the rule of this sub-
11	paragraph shall apply to an organization to
12	which section 1381 does not apply by reason of
13	section 1381(a)(2)(C).".
14	(c) Exception From Unrelated Business Tax-
15	ABLE INCOME.—Subsection (b) of section 512 (relating to
16	modifications) is amended by adding at the end the fol-
17	lowing new paragraph:
18	"(18) TREATMENT OF LOAD LOSS SALES OF
19	MUTUAL OR COOPERATIVE ELECTRIC COMPANIES.—
20	In the case of a mutual or cooperative electric com-
21	pany described in section $501(c)(12)$, there shall be
22	excluded income which is treated as member income
23	under subparagraph (F) thereof.".

(d) EFFECTIVE DATE.—The amendments made by
 this section shall apply to taxable years beginning after
 the date of the enactment of this Act.

4 SEC. 3212. REPEAL OF REQUIREMENT OF CERTAIN AP5 PROVED TERMINALS TO OFFER DYED DIESEL
6 FUEL AND KEROSENE FOR NONTAXABLE
7 PURPOSES.

8 Section 4101 (relating to certain approved terminals 9 of registered persons required to offer dyed diesel fuel and 10 kerosene for nontaxable purposes) is amended by striking 11 subsection (e).

12 SEC. 3213. ARBITRAGE RULES NOT TO APPLY TO PREPAY13 MENTS FOR NATURAL GAS.

(a) IN GENERAL.—Subsection (b) of section 148 (defining higher yielding investments) is amended by adding
at the end the following new paragraph:

17 "(4) EXCEPTION FOR CERTAIN PREPAYMENTS
18 TO ENSURE NATURAL GAS SUPPLY.—The term 'in19 vestment property' shall not include any prepayment
20 for the purpose of obtaining a supply of a natural
21 gas—

22 "(A) at least 85 percent of which is to be
23 used in the State in which the issuer is located,
24 and

1 "(B) which is to be used in a business of 2 one or more utilities each of which is owned and 3 operated by a State or local government, any 4 political subdivision or instrumentality thereof, 5 or any governmental unit acting for or on be-6 half of such a utility.". 7 (b) PRIVATE LOAN FINANCING TEST NOT TO APPLY 8 TO PREPAYMENTS FOR NATURAL GAS.—Paragraph (2) of 9 section 141(c) (providing exceptions to the private loan financing test) is amended by striking "or" at the end of 10 11 subparagraph (A), by striking the period at the end of subparagraph (B) and inserting ", or", and by adding at 12 13 the end the following new subparagraph: 14 "(C) arises from a transaction described in 15 section 148(b)(4).". 16 (c) EFFECTIVE DATE.—The amendments made by

17 this section shall apply to obligations issued after October
18 22, 1986; except that section 148(b)(4)(A) of the Internal
19 Revenue Code of 1986, as added by this section, shall
20 apply only to obligations issued after the date of the enact21 ment 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	<i>'</i> 1990').
22	"(C) Reference price.—For purposes of
23	this paragraph, the term 'reference price'
24	means, with respect to any calendar year—

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1	"(i) in the case of qualified crude oil
2	production, the reference price determined
3	under section $29(d)(2)(C)$, and
4	"(ii) in the case of qualified natural
5	gas production, the Secretary's estimate of
6	the annual average wellhead price per
7	1,000 cubic feet for all domestic natural
8	gas.
9	"(c) Qualified Crude Oil and Natural Gas
10	PRODUCTION.—For purposes of this section—
11	"(1) IN GENERAL.—The terms 'qualified crude
12	oil production' and 'qualified natural gas production'
13	mean domestic crude oil or natural gas which is pro-
14	duced from a qualified marginal well.
15	"(2) Limitation on amount of production
16	WHICH MAY QUALIFY.—
17	"(A) IN GENERAL.—Crude oil or natural
18	gas produced during any taxable year from any
19	well shall not be treated or qualified crude oil
20	production or qualified natural gas production
21	to the extent production from the well during
22	the taxable year exceeds 1,095 barrels or barrel
23	equivalents.
24	"(B) Proportionate reductions.—

"(i) Short taxable years.—In the
case of a short taxable year, the limitations
under this paragraph shall be proportion-
ately reduced to reflect the ratio which the
number of days in such taxable year bears
to 365.
"(ii) Wells not in production en-
TIRE YEAR.—In the case of a well which is
not capable of production during each day
of a taxable year, the limitations under
this paragraph applicable to the well shall
be proportionately reduced to reflect the
ratio which the number of days of produc-
tion bears to the total number of days in
the taxable year.
"(3) Definitions.—
"(A) QUALIFIED MARGINAL WELL.—The
term 'qualified marginal well' means a domestic
well—
"(i) the production from which during
the taxable year is treated as marginal
production under section $613A(c)(6)$, or
"(ii) which, during the taxable year—

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"(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:

((19) the marginal oil and gas well production
credit determined under section 45J(a).".
(c) CARRYBACK.—Subsection (a) of section 39 (relat-
ing to carryback and carryforward of unused credits gen-
erally) is amended by adding at the end the following:
"(3) 10-year carryback for marginal oil
AND GAS WELL PRODUCTION CREDIT.—In the case
of the marginal oil and gas well production credit—
"(A) this section shall be applied sepa-
rately from the business credit (other than the
marginal oil and gas well production credit),
"(B) paragraph (1) shall be applied by
substituting '10 taxable years' for '1 taxable
years' in subparagraph (A) thereof, and
"(C) paragraph (2) shall be applied—
"(i) by substituting '31 taxable years'
for '21 taxable years' in subparagraph (A)
thereof, and
"(ii) by substituting '30 taxable years'
for '20 taxable years' in subparagraph (A)
thereof.".
(d) COORDINATION WITH SECTION 29.—Section
29(a) is amended by striking "There" and inserting "At
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.

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1	SEC. 3305. FIVE-YEAR NET OPERATING LOSS CARRYBACK
2	FOR LOSSES ATTRIBUTABLE TO OPERATING
3	MINERAL INTERESTS OF OIL AND GAS PRO-
4	DUCERS.
5	(a) IN GENERAL.—Paragraph (1) of section 172(b)
6	(relating to years to which loss may be carried) is amended
7	by adding at the end the following new subparagraph:
8	"(H) Losses on operating mineral in-
9	TERESTS OF OIL AND GAS PRODUCERS.—In the
10	case of a taxpayer which has an eligible oil and
11	gas loss (as defined in subsection (j)) for a tax-
12	able year, such eligible oil and gas loss shall be
13	a net operating loss carryback to each of the 5
14	taxable years preceding the taxable year of such
15	loss.".
16	(b) ELIGIBLE OIL AND GAS LOSS.—Section 172 is
17	amended by redesignating subsection (j) as subsection (k)

18 and by inserting after subsection (i) the following new sub-19 section:

20 "(j) ELIGIBLE OIL AND GAS LOSS.—For purposes of
21 this section—

22 "(1) IN GENERAL.—The term 'eligible oil and
23 gas loss' means the lesser of—

24 "(A) the amount which would be the net
25 operating loss for the taxable year if only in26 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.
	AGAINST REGULAR AND MINIMUM TAX. (a) IN GENERAL.—Subsection (c) of section 38 (re-
13	
13 14	(a) IN GENERAL.—Subsection (c) of section 38 (re-
13 14 15 16	(a) IN GENERAL.—Subsection (c) of section 38 (re- lating to limitation based on amount of tax) is amended
13 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
 13 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:
 13 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
 13 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.—
 13 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-
 13 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—
 13 14 15 16 17 18 19 20 21 22 	 (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— "(i) this section and section 39 shall

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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 $45K$.".
14 15	under sections 45G, 45H, 45I, 45J, and 45K.". (b) CONFORMING AMENDMENT.—Subclause (II) of
15	(b) CONFORMING AMENDMENT.—Subclause (II) of section 38(c)(2)(A)(ii) is amended by inserting "or the
15 16	(b) CONFORMING AMENDMENT.—Subclause (II) of section $38(c)(2)(A)(ii)$ is amended by inserting "or the
15 16 17	(b) CONFORMING AMENDMENT.—Subclause (II) of section $38(c)(2)(A)(ii)$ is amended by inserting "or the specified energy credits" after "employment credit".
15 16 17 18	 (b) CONFORMING AMENDMENT.—Subclause (II) of section 38(c)(2)(A)(ii) is amended by inserting "or the specified energy credits" after "employment credit". (c) EFFECTIVE DATE.—The amendments made by
15 16 17 18 19	 (b) CONFORMING AMENDMENT.—Subclause (II) of section 38(c)(2)(A)(ii) is amended by inserting "or the specified energy credits" after "employment credit". (c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after the
 15 16 17 18 19 20 	 (b) CONFORMING AMENDMENT.—Subclause (II) of section 38(c)(2)(A)(ii) is amended by inserting "or the specified energy credits" after "employment credit". (c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after the date of the enactment of this Act.
 15 16 17 18 19 20 21 	 (b) CONFORMING AMENDMENT.—Subclause (II) of section 38(c)(2)(A)(ii) is amended by inserting "or the specified energy credits" after "employment credit". (c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after the date of the enactment of this Act. SEC. 3308. TEMPORARY REPEAL OF ALTERNATIVE MIN-
 15 16 17 18 19 20 21 22 	 (b) CONFORMING AMENDMENT.—Subclause (II) of section 38(c)(2)(A)(ii) is amended by inserting "or the specified energy credits" after "employment credit". (c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after the date of the enactment of this Act. SEC. 3308. TEMPORARY REPEAL OF ALTERNATIVE MINIMUM TAX PREFERENCE FOR INTANGIBLE

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 RES-

10Envations.

(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).".
18	DIVISION D
19	SEC. 4101. CAPACITY BUILDING FOR ENERGY-EFFICIENT,
20	AFFORDABLE HOUSING.
21	Section 4(b) of the HUD Demonstration Act of 1993
22	(42 U.S.C. 9816 note) is amended—
23	(1) in paragraph (1) , by inserting before the

semicolon at the end the following: ", including ca-pabilities regarding the provision of energy efficient,

	404
1	affordable housing and residential energy conserva-
2	tion measures"; and
3	(2) in paragraph (2) , by inserting before the
4	semicolon the following: ", including such activities
5	relating to the provision of energy efficient, afford-
6	able housing and residential energy conservation
7	measures that benefit low-income families".
8	SEC. 4102. INCREASE OF CDBG PUBLIC SERVICES CAP FOR
9	ENERGY CONSERVATION AND EFFICIENCY
10	ACTIVITIES.
11	Section $105(a)(8)$ of the Housing and Community
12	Development Act of 1974 (42 U.S.C. $5305(a)(8)$) is
13	amended—
13 14	amended— (1) by inserting "or efficiency" after "energy
14	(1) by inserting "or efficiency" after "energy
14 15	(1) by inserting "or efficiency" after "energy conservation";
14 15 16	(1) by inserting "or efficiency" after "energy conservation";(2) by striking ", and except that" and insert-
14 15 16 17	 (1) by inserting "or efficiency" after "energy conservation"; (2) by striking ", and except that" and inserting "; except that"; and
14 15 16 17 18	 (1) by inserting "or efficiency" after "energy conservation"; (2) by striking ", and except that" and inserting "; except that"; and (3) by inserting before the period at the end the
14 15 16 17 18 19	 (1) by inserting "or efficiency" after "energy conservation"; (2) by striking ", and except that" and inserting "; except that"; and (3) by inserting before the period at the end the following: "; and except that each percentage limita-
14 15 16 17 18 19 20	 (1) by inserting "or efficiency" after "energy conservation"; (2) by striking ", and except that" and inserting "; except that"; and (3) by inserting before the period at the end the following: "; and except that each percentage limitation under this paragraph on the amount of assist-
 14 15 16 17 18 19 20 21 	 (1) by inserting "or efficiency" after "energy conservation"; (2) by striking ", and except that" and inserting "; except that"; and (3) by inserting before the period at the end the following: "; and except that each percentage limitation under this paragraph on the amount of assistance provided under this title that may be used for
 14 15 16 17 18 19 20 21 22 	 (1) by inserting "or efficiency" after "energy conservation"; (2) by striking ", and except that" and inserting "; except that"; and (3) by inserting before the period at the end the following: "; and except that each percentage limitation under this paragraph on the amount of assistance provided under this title that may be used for the provision of public services is hereby increased

1SEC. 4103. FHA MORTGAGE INSURANCE INCENTIVES FOR2ENERGY EFFICIENT HOUSING.

3 (a) SINGLE FAMILY HOUSING MORTGAGE INSUR4 ANCE.—Section 203(b)(2) of the National Housing Act
5 (12 U.S.C. 1709(b)(2)) is amended, in the first undesig6 nated paragraph beginning after subparagraph (B)(iii)
7 (relating to solar energy systems)—

8 (1) by inserting "or paragraph (10)"; and

9 (2) by striking "20 percent" and inserting "3010 percent".

(b) MULTIFAMILY HOUSING MORTGAGE INSURANCE.—Section 207(c) of the National Housing Act (12
U.S.C. 1713(c)) is amended, in the second undesignated
paragraph beginning after paragraph (3) (relating to solar
energy systems and residential energy conservation measures), by striking "20 percent" and inserting "30 percent".

(c) COOPERATIVE HOUSING MORTGAGE INSURANCE.—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 CON23 SERVATION HOUSING MORTGAGE INSURANCE.—Section
24 220(d)(3)(B)(iii) of the National Housing Act (12 U.S.C.
25 1715k(d)(3)(B)(iii)) is amended by striking "20 per cen26 tum" and inserting "30 percent".

(e) LOW-INCOME MULTIFAMILY HOUSING MORT GAGE INSURANCE.—Section 221(k) of the National Hous ing Act (12 U.S.C. 1715l(k)) is amended by striking "20
 per centum" and inserting "30 percent".

5 (f) ELDERLY HOUSING MORTGAGE INSURANCE.—
6 The proviso at the end of section 213(c)(2) of the National
7 Housing Act (12 U.S.C. 1715v(c)(2)) is amended by strik8 ing "20 per centum" and inserting "30 percent".

9 (g) CONDOMINIUM HOUSING MORTGAGE INSUR10 ANCE.—Section 234(j) of the National Housing Act (12
11 U.S.C. 1715y(j)) is amended by striking "20 per centum"
12 and inserting "30 percent".

13 SEC. 4104. PUBLIC HOUSING CAPITAL FUND.

Section 9(d)(1) of the United States Housing Act of
15 1937 (42 U.S.C. 1437g(d)(1)) is amended—

16 (1) in subparagraph (I), by striking "and" at17 the end;

18 (2) in subparagraph (K), by striking the period19 at the end and inserting "; and"; and

20 (3) by adding at the end the following new sub-21 paragraph:

"(L) improvement of energy and water-use
efficiency by installing fixtures and fittings that
conform to the American Society of Mechanical
Engineers/American National Standards Insti-

1	tute standards A112.19.2-1998 and A112.18.1-
2	2000, or any revision thereto, applicable at the
3	time of installation, and by increasing energy
4	efficiency and water conservation by such other
5	means as the Secretary determines are appro-
6	priate.".
7	SEC. 4105. GRANTS FOR ENERGY-CONSERVING IMPROVE-
8	MENTS FOR ASSISTED HOUSING.
9	Section 251(b)(1) of the National Energy Conserva-
10	tion Policy Act (42 U.S.C. 8231(1)) is amended—
11	(1) by striking "financed with loans" and in-
12	serting "assisted";
13	(2) by inserting after "1959," the following:
14	"which are eligible multifamily housing projects (as
15	such term is defined in section 512 of the Multi-
16	family Assisted Housing Reform and Affordability
17	Act of 1997 (42 U.S.C. 1437f note)) and are subject
18	to a mortgage restructuring and rental assistance
19	sufficiency plans under such Act,"; and
20	(3) by inserting after the period at the end of
21	the first sentence the following new sentence: "Such
22	improvements may also include the installation of
23	energy and water conserving fixtures and fittings
24	that conform to the American Society of Mechanical
25	Engineers/American National Standards Institute

standards A112.19.2-1998 and A112.18.1-2000, or
 any revision thereto, applicable at the time of instal lation.".

4 SEC. 4106. NORTH AMERICAN DEVELOPMENT BANK.

5 Part 2 of subtitle D of title V of the North American
6 Free Trade Agreement Implementation Act (22 U.S.C.
7 290m–290m-3) is amended by adding at the end the fol8 lowing:

9 "SEC. 545. SUPPORT FOR CERTAIN ENERGY POLICIES.

10 "Consistent with the focus of the Bank's Charter on 11 environmental infrastructure projects, the Board members 12 representing the United States should use their voice and 13 vote to encourage the Bank to finance projects related to 14 clean and efficient energy, including energy conservation, 15 that prevent, control, or reduce environmental pollutants 16 or contaminants.".

17 **DIVISION E**

18 SEC. 5000. SHORT TITLE.

19 This division may be cited as the "Clean Coal Power20 Initiative Act of 2001".

21 SEC. 5001. FINDINGS.

22 Congress finds that—

(1) reliable, affordable, increasingly clean electricity will continue to power the growing United
States economy;

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

7 (3) coal, which, as of the date of the enactment
8 of this Act, accounts for more than ¹/₂ of all elec9 tricity generated in the United States, is the most
10 abundant fossil energy resource of the United
11 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
250 years at current usage rates;

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

(6) continuous improvement in efficiency and
environmental performance from electricity generating facilities would allow continued use of coal and

preserve less abundant energy resources for other
 energy uses;

3 (7) new ways to convert coal into electricity can
4 effectively eliminate health-threatening emissions
5 and improve efficiency by as much as 50 percent,
6 but initial deployment of new coal generation meth7 ods and equipment entails significant risk that gen8 erators may be unable to accept in a newly competi9 tive electricity market; and

10 (8) continued environmental improvement in 11 coal-based generation and increasing the production 12 and supply of power generation facilities with less 13 air emissions, with the ultimate goal of near-zero 14 emissions, is important and desirable.

15 SEC. 5002. DEFINITIONS.

16 In this division:

17 (1) COST AND PERFORMANCE GOALS.—The
18 term "cost and performance goals" means the cost
19 and performance goals established under section
20 5004.

21 (2) SECRETARY.—The term "Secretary" means
22 the Secretary of Energy.

23 SEC. 5003. CLEAN COAL POWER INITIATIVE.

24 (a) IN GENERAL.—The Secretary shall carry out a25 program under—

1 (1) this division; 2 (2) the Federal Nonnuclear Energy Research 3 and Development Act of 1974 (42 U.S.C. 5901 et 4 seq.); 5 (3) the Energy Reorganization Act of 1974 (42) 6 U.S.C. 5801 et seq.); and 7 (4) title XIII of the Energy Policy Act of 1992 8 (42 U.S.C. 13331 et seq.), 9 to achieve cost and performance goals established by the

10 Secretary under section 5004.

11 SEC. 5004. COST AND PERFORMANCE GOALS.

(a) REVIEW AND ASSESSMENT.—The Secretary shall
perform an assessment that establishes measurable cost
and performance goals for 2005, 2010, 2015, and 2020
for the programs authorized by this division. Such assessment shall be based on the latest scientific, economic, and
technical knowledge.

(b) CONSULTATION.—In establishing the cost and
performance goals, the Secretary shall consult with representatives of—

- 21 (1) the United States coal industry;
- 22 (2) State coal development agencies;
- 23 (3) the electric utility industry;
- 24 (4) railroads and other transportation indus25 tries;

1	(5) manufacturers of advanced coal-based
2	equipment;
3	(6) institutions of higher learning, national lab-
4	oratories, and professional and technical societies;
5	(7) organizations representing workers;
6	(8) organizations formed to—
7	(A) promote the use of coal;
8	(B) further the goals of environmental pro-
9	tection; and
10	(C) promote the production and generation
11	of coal-based power from advanced facilities;
12	and
13	(9) other appropriate Federal and State agen-
14	cies.
15	(c) TIMING.—The Secretary shall—
16	(1) not later than 120 days after the date of
17	the enactment of this Act, issue a set of draft cost
18	and performance goals for public comment; and
19	(2) not later than 180 days after the date of
20	the enactment of this Act, after taking into consider-
21	ation any public comments received, submit to the
22	Committee on Energy and Commerce and the Com-
23	mittee on Science of the House of Representatives,
24	and to the Senate, the final cost and performance
25	goals.

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1 SEC. 5005. AUTHORIZATION OF APPROPRIATIONS.

2 (a) CLEAN COAL POWER INITIATIVE.—Except as
3 provided in subsection (b), there are authorized to be ap4 propriated to the Secretary to carry out the Clean Coal
5 Power Initiative under section 5003 \$200,000,000 for
6 each of the fiscal years 2002 through 2011, to remain
7 available until expended.

8 (b) LIMIT ON USE OF FUNDS.—Notwithstanding sub-9 section (a), no funds may be used to carry out the activi-10 ties authorized by this Act after September 30, 2002, un-11 less the Secretary has transmitted to the Committee on 12 Energy and Commerce and the Committee on Science of 13 the House of Representatives, and to the Senate, the report required by this subsection and 1 month has elapsed 14 since that transmission. The report shall include, with re-15 16 spect to subsection (a), a 10-year plan containing—

(1) a detailed assessment of whether the aggregate funding levels provided under subsection (a) are
the appropriate funding levels for that program;

20 (2) a detailed description of how proposals will
21 be solicited and evaluated, including a list of all ac22 tivities expected to be undertaken;

(3) a detailed list of technical milestones for
each coal and related technology that will be pursued;

(4) recommendations for a mechanism for
 recoupment of Federal funding for successful com mercial projects; and

4 (5) a detailed description of how the program
5 will avoid problems enumerated in General Account6 ing Office reports on the Clean Coal Technology
7 Program, including problems that have resulted in
8 unspent funds and projects that failed either finan9 cially or scientifically.

(c) APPLICABILITY.—Subsection (b) shall not apply
to any project begun before September 30, 2002.

12 SEC. 5006. PROJECT CRITERIA.

(a) IN GENERAL.—The Secretary shall not provide
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.

19 (b) TECHNICAL CRITERIA FOR CLEAN COAL POWER20 INITIATIVE.—

(1) GASIFICATION.—(A) In allocating the funds
authorized under section 5005(a), the Secretary
shall ensure that at least 80 percent of the funds are
used only for projects on coal-based gasification
technologies, including gasification combined cycle,

1	gasification fuel cells, gasification coproduction and
2	hybrid gasification/combustion.
3	(B) The Secretary shall set technical milestones
4	specifying emissions levels that coal gasification
5	projects must be designed to and reasonably ex-
6	pected to achieve. The milestones shall get more re-
7	strictive through the life of the program. The mile-
8	stones shall be designed to achieve by 2020 coal gas-
9	ification projects able—
10	(i) to remove 99 percent of sulfur dioxide;
11	(ii) to emit no more than .05 lbs of NOx
12	per million BTU;
13	(iii) to achieve substantial reductions in
14	mercury emissions; and
15	(iv) to achieve a thermal efficiency of 60
16	percent (higher heating value).
17	(2) OTHER PROJECTS.—For projects not de-
18	scribed in paragraph (1), the Secretary shall set
19	technical milestones specifying emissions levels that
20	the projects must be designed to and reasonably ex-
21	pected to achieve. The milestones shall get more re-
22	strictive through the life of the program. The mile-
23	stones shall be designed to achieve by 2010 projects
24	able—
25	(A) to remove 97 percent of sulfur dioxide;

1	(B) to emit no more than .08 lbs of NOx
2	per million BTU;
3	(C) to achieve substantial reductions in
4	mercury emissions; and
5	(D) to achieve a thermal efficiency of 45
6	percent (higher heating value).
7	(c) FINANCIAL CRITERIA.—The Secretary shall not
8	provide a funding award under this division unless the re-
9	cipient has documented to the satisfaction of the Secretary
10	that—
11	(1) the award recipient is financially viable
12	without the receipt of additional Federal funding;
13	(2) the recipient will provide sufficient informa-
14	tion to the Secretary for the Secretary to ensure
15	that the award funds are spent efficiently and effec-
16	tively; and
17	(3) a market exists for the technology being
18	demonstrated or applied, as evidenced by statements
19	of interest in writing from potential purchasers of
20	the technology.
21	(d) FINANCIAL ASSISTANCE.—The Secretary shall
22	provide financial assistance to projects that meet the re-
23	quirements of subsections (a), (b), and (c) and are likely
24	to—

1	(1) achieve overall cost reductions in the utiliza-
2	tion of coal to generate useful forms of energy;
3	(2) improve the competitiveness of coal among
4	various forms of energy in order to maintain a diver-
5	sity of fuel choices in the United States to meet elec-
6	tricity generation requirements; and
7	(3) demonstrate methods and equipment that
8	are applicable to 25 percent of the electricity gener-
9	ating facilities that use coal as the primary feedstock
10	as of the date of the enactment of this Act.
11	(e) FEDERAL SHARE.—The Federal share of the cost
12	of a coal or related technology project funded by the Sec-
13	retary shall not exceed 50 percent.
14	(f) APPLICABILITY.—Neither the use of any par-
15	ticular technology, nor the achievement of any emission
16	reduction, by any facility receiving assistance under this
17	title shall be taken into account for purposes of making
18	any determination under the Clean Air Act in applying
19	the provisions of that Act to a facility not receiving assist-
20	ance under this title, including any determination con-
21	cerning new source performance standards, lowest achiev-
22	able emission rate, best available control technology, or
23	any other standard, requirement, or limitation.

1 SEC. 5007. STUDY.

2 (a) IN GENERAL.—Not later than 1 year after the 3 date of the enactment of this Act, and once every 2 years thereafter through 2016, the Secretary, in cooperation 4 5 with other appropriate Federal agencies, shall transmit to the Committee on Energy and Commerce and the Com-6 7 mittee on Science of the House of Representatives, and 8 to the Senate, a report containing the results of a study 9 to---

(1) identify efforts (and the costs and periods
of time associated with those efforts) that, by themselves or in combination with other efforts, may be
capable of achieving the cost and performance goals;
(2) develop recommendations for the Department of Energy to promote the efforts identified
under paragraph (1); and

17 (3) develop recommendations for additional au18 thorities required to achieve the cost and perform19 ance 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).

24 SEC. 5008. CLEAN COAL CENTERS OF EXCELLENCE.

As part of the program authorized in section 5003,the Secretary shall award competitive, merit-based grants

to universities for the establishment of Centers of Excel lence for Energy Systems of the Future. The Secretary
 shall provide grants to universities that can show the
 greatest potential for advancing new clean coal tech nologies.

6 **DIVISION F**

7 SEC. 6001. SHORT TITLE.

8 This division may be cited as the "Energy Security9 Act".

10 TITLE I—GENERAL PROTEC 11 TIONS FOR ENERGY SUPPLY 12 AND SECURITY

13 SEC. 6101. STUDY OF EXISTING RIGHTS-OF-WAY ON FED-

14 ERAL LANDS TO DETERMINE CAPABILITY TO
15 SUPPORT NEW PIPELINES OR OTHER TRANS16 MISSION FACILITIES.

17 (a) IN GENERAL.—Within 1 year after the date of the enactment of this Act, the head of each Federal agency 18 that has authorized a right-of-way across Federal lands 19 for transportation of energy supplies or transmission of 20 21 electricity shall review each such right-of-way and submit 22 a report to the Secretary of Energy and the Chairman 23 of the Federal Energy Regulatory Commission 24 regarding—

1	(1) whether the right-of-way can be used to
2	support new or additional capacity; and
3	(2) what modifications or other changes, if any,
4	would be necessary to accommodate such additional
5	capacity.
6	(b) Consultations and Considerations.—In per-
7	forming the review, the head of each agency shall—
8	(1) consult with agencies of State, tribal, or
9	local units of government as appropriate; and
10	(2) consider whether safety or other concerns
11	related to current uses might preclude the avail-
12	ability of a right-of-way for additional or new trans-
13	portation or transmission facilities, and set forth
14	those considerations in the report.
15	SEC. 6102. INVENTORY OF ENERGY PRODUCTION POTEN-
16	TIAL OF ALL FEDERAL PUBLIC LANDS.
17	(a) INVENTORY REQUIREMENT.—The Secretary of
18	the Interior, in consultation with the Secretary of Agri-
19	culture and the Secretary of Energy, shall conduct an in-
20	ventory of the energy production potential of all Federal
21	public lands other than national park lands and lands in
22	any wilderness area, with respect to wind, solar, coal, and
23	geothermal power production.
24	

24 (b) LIMITATIONS.—

1	(1) IN GENERAL.—The Secretary shall not in-
2	clude in the inventory under this section the matters
3	to be identified in the inventory under section 604
4	of the Energy Act of 2000 (43 U.S.C. 6217).
5	(2) WIND AND SOLAR POWER.—The inventory
6	under this section—
7	(A) with respect to wind power production
8	shall be limited to sites having a mean average
9	wind speed—
10	(i) exceeding 12.5 miles per hour at a
11	height of 33 feet; and
12	(ii) exceeding 15.7 miles per hour at
13	a height of 164 feet; and
14	(B) with respect to solar power production
15	shall be limited to areas rated as receiving 450
16	watts per square meter or greater.
17	(c) Examination of Restrictions and Impedi-
18	MENTS.—The inventory shall identify the extent and na-
19	ture of any restrictions or impediments to the development
20	of such energy production potential.
21	(d) GEOTHERMAL POWER.—The inventory shall in-
22	clude an update of the 1978 Assessment of Geothermal
23	Resources by the United States Geological Survey.
24	(e) Completion and Updating.—The Secretary—

1	(1) shall complete the inventory by not later
2	than 2 years after the date of the enactment of this
3	Act; and
4	(2) shall update the inventory regularly there-
5	after.
6	(f) REPORTS.—The Secretary shall submit to the
7	Committee on Resources of the House of Representatives
8	and to the Committee on Energy and Natural Resources
9	of the Senate and make publicly available—
10	(1) a report containing the inventory under this
11	section, by not later than 2 years after the effective
12	date of this section; and
12	
13	(2) each update of such inventory.
13 14	(2) each update of such inventory. SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BAR-
14	SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BAR-
14 15	SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BAR- RIERS TO EMERGING ENERGY TECHNOLOGY.
14 15 16	 SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BAR- RIERS TO EMERGING ENERGY TECHNOLOGY. (a) IN GENERAL.—Each Federal agency shall carry
14 15 16 17	 SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BAR- RIERS TO EMERGING ENERGY TECHNOLOGY. (a) IN GENERAL.—Each Federal agency shall carry out a review of its regulations and standards to determine
14 15 16 17 18	 SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BAR- RIERS TO EMERGING ENERGY TECHNOLOGY. (a) IN GENERAL.—Each Federal agency shall carry out a review of its regulations and standards to determine those that act as a barrier to market entry for emerging
14 15 16 17 18 19	SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BAR- RIERS TO EMERGING ENERGY TECHNOLOGY. (a) IN GENERAL.—Each Federal agency shall carry out a review of its regulations and standards to determine those that act as a barrier to market entry for emerging energy-efficient technologies, including fuel cells, combined
14 15 16 17 18 19 20	SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BAR- RIERS TO EMERGING ENERGY TECHNOLOGY. (a) IN GENERAL.—Each Federal agency shall carry out a review of its regulations and standards to determine those that act as a barrier to market entry for emerging energy-efficient technologies, including fuel cells, combined heat and power, and distributed generation (including
14 15 16 17 18 19 20 21	SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BAR- RIERS TO EMERGING ENERGY TECHNOLOGY. (a) IN GENERAL.—Each Federal agency shall carry out a review of its regulations and standards to determine those that act as a barrier to market entry for emerging energy-efficient technologies, including fuel cells, combined heat and power, and distributed generation (including small-scale renewable energy).

25 detailing all regulatory barriers to emerging energy-effi-

cient technologies, along with actions the agency intends
 to take, or has taken, to remove such barriers.

3 (c) PERIODIC REVIEW.—Each agency shall subse-4 quently review its regulations and standards in this man-5 ner no less frequently than every 5 years, and report their 6 findings to the Congress and the President. Such reviews 7 shall include a detailed analysis of all agency actions taken 8 to remove existing barriers to emerging energy tech-9 nologies.

10 SEC. 6104. INTERAGENCY AGREEMENT ON ENVIRON-11MENTAL REVIEW OF INTERSTATE NATURAL12GAS PIPELINE PROJECTS.

(a) IN GENERAL.—The Secretary of Energy, in coordination with the Federal Energy Regulatory Commission, shall establish an administrative interagency task
force to develop an interagency agreement to expedite and
facilitate the environmental review and permitting of
interstate natural gas pipeline projects.

(b) TASK FORCE MEMBERS.—The task force shall include a representative of each of the Bureau of Land Management, the United States Fish and Wildlife Service, the
Army Corps of Engineers, the Forest Service, the Environmental Protection Agency, the Advisory Council on
Historic Preservation, and such other agencies as the Sec-

retary of Energy and the Federal Energy Regulatory
 Commission consider appropriate.

3 (c) TERMS OF AGREEMENT.—The interagency agree4 ment shall require that agencies complete their review of
5 interstate pipeline projects within a specific period of time
6 after referral of the matter by the Federal Energy Regu7 latory Commission.

8 (d) SUBMITTAL OF AGREEMENT.—The Secretary of
9 Energy shall submit a final interagency agreement under
10 this section to the Congress by not later than 6 months
11 after the effective date of this section.

12 SEC. 6105. ENHANCING ENERGY EFFICIENCY IN MANAGE13 MENT OF FEDERAL LANDS.

(a) SENSE OF THE CONGRESS.—It is the sense of
Congress that Federal land managing agencies should enhance the use of energy efficient technologies in the management of natural resources.

18 (b) ENERGY EFFICIENT BUILDINGS.—To the extent 19 economically practicable, the Secretary of the Interior and the Secretary of Agriculture shall seek to incorporate en-20 21 ergy efficient technologies in public and administrative 22 buildings associated with management of the National 23 Park System, National Wildlife Refuge System, National 24 Forest System, and other public lands and resources man-25 aged by such Secretaries.

1 (c) ENERGY EFFICIENT VEHICLES.—To the extent 2 economically practicable, the Secretary of the Interior and 3 the Secretary of Agriculture shall seek to use energy effi-4 cient motor vehicles, including vehicles equipped with bio-5 diesel or hybrid engine technologies, in the management of the National Park System, National Wildlife Refuge 6 7 System, and other public lands and managed by the Secre-8 taries.

9 SEC. 6106. EFFICIENT INFRASTRUCTURE DEVELOPMENT.

(a) IN GENERAL.—The Secretary of Energy and the
Chairman of the Federal Energy Regulatory Commission
shall jointly undertake a study of the location and extent
of anticipated demand growth for natural gas consumption
in the Western States, herein defined as the area covered
by the Western System Coordinating Council.

16 (b) CONTENTS.—The study under subsection (a)17 shall include the following:

(1) A review of natural gas demand forecasts
by Western State officials, such as the California
Energy Commission and the California Public Utilities Commission, which indicate the forecasted levels
of demand for natural gas and the geographic distribution of that forecasted demand.

24 (2) A review of the locations of proposed new
25 natural gas-fired electric generation facilities cur-

rently in the approval process in the Western States,
 and their forecasted impact on natural gas demand.

3 (3) A review of the locations of existing inter4 state natural gas transmission pipelines, and inter5 state natural gas pipelines currently in the planning
6 stage or approval process, throughout the Western
7 States.

8 (4) A review of the locations and capacity of
9 intrastate natural gas pipelines in the Western
10 States.

(5) Recommendations for the coordination of
the development of the natural gas infrastructure indicated in paragraphs (1) through (4).

14 (c) REPORT.—The Secretary shall report the findings 15 and recommendations resulting from the study required by this section to the Committee on Energy and Com-16 17 merce of the House of Representatives and to the Committee on Energy and Natural Resources of the Senate 18 19 no later than 6 months after the date of the enactment 20 of this Act. The Chairman of the Federal Energy Regu-21 latory Commission shall report on how the Commission 22 will factor these results into its review of applications of 23 interstate pipelines within the Western States to the Com-24 mittee on Energy and Commerce of the House of Rep-25 resentatives and to the Committee on Energy and Natural

Resources of the Senate no later than 6 months after the
 date of the enactment of this Act.

3**TITLE II—OIL AND GAS**4**DEVELOPMENT**

5 Subtitle A—Offshore Oil and Gas

6 SEC. 6201. SHORT TITLE.

7 This subtitle may be referred to as the "Royalty Re-8 lief Extension Act of 2001".

9 SEC. 6202. LEASE SALES IN WESTERN AND CENTRAL PLAN-

10

NING AREA OF THE GULF OF MEXICO.

11 (a) IN GENERAL.—For all tracts located in water 12 depths of greater than 200 meters in the Western and 13 Central Planning Area of the Gulf of Mexico, including that portion of the Eastern Planning Area of the Gulf of 14 15 Mexico encompassing whole lease blocks lying west of 87 degrees, 30 minutes West longitude, any oil or gas lease 16 17 sale under the Outer Continental Shelf Lands Act occurring within 2 years after the date of the enactment of this 18 19 Act shall use the bidding system authorized in section 20 8(a)(1)(H) of the Outer Continental Shelf Lands Act (30) 21 U.S.C. 1337(a)(1)(H), except that the suspension of roy-22 alties shall be set at a volume of not less than the fol-23 lowing:

24 (1) 5 million barrels of oil equivalent for each
25 lease in water depths of 400 to 800 meters.

(2) 9 million barrels of oil equivalent for each
 lease in water depths of 800 to 1,600 meters.

3 (3) 12 million barrels of oil equivalent for each
4 lease in water depths greater than 1,600 meters.

5 (b) RELATIONSHIP TO EXISTING AUTHORITY.—Ex-6 cept as expressly provided in this section, nothing in this 7 section is intended to limit the authority of the Secretary 8 of the Interior under the Outer Continental Shelf Lands 9 Act (43 U.S.C. 1301 et seq.) to provide royalty suspen-10 sion.

11 SEC. 6203. SAVINGS CLAUSE.

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.

17 SEC. 6204. ANALYSIS OF GULF OF MEXICO FIELD SIZE DIS-

18 TRIBUTION, INTERNATIONAL COMPETITIVE-

19 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	(1) Conduct an analysis and review of existing
2	Gulf of Mexico oil and natural gas resource assess-
3	ments, including—
4	(A) analysis and review of assessments re-
5	cently performed by the Minerals Management
6	Service, the 1999 National Petroleum Council
7	Gas Study, the Department of Energy's Off-
8	shore Marginal Property Study, and the Ad-
9	vanced Resources International, Inc. Deepwater
10	Gulf of Mexico model; and
11	(B) evaluation and comparison of the accu-
12	racy of assumptions of the existing assessments
13	with respect to resource field size distribution,
14	hydrocarbon potential, and scenarios for leas-
15	ing, exploration, and development.
16	(2) Evaluate the lease terms and conditions of-
17	fered by the Minerals Management Service for Lease
18	Sale 178, and compare the financial incentives of-
19	fered by such terms and conditions to financial in-
20	centives offered by the terms and conditions that
21	apply under leases for other offshore areas that are
22	competing for the same limited offshore oil and gas
23	exploration and development capital, including off-
24	shore areas of West Africa and Brazil.

1 (3) Recommend what level of incentives for all 2 water depths are appropriate in order to ensure that 3 the United States optimizes the domestic supply of 4 oil and natural gas from the offshore areas of the 5 Gulf of Mexico that are not subject to current leas-6 ing moratoria. Recommendations under this para-7 graph should be made in the context of the impor-8 tance of the oil and natural gas resources of the 9 Gulf of Mexico to the future energy and economic 10 needs of the United States.

11 (b) REPORT.—Not later than 180 days after the date 12 of the enactment of this Act, the Secretary of the Interior 13 shall submit a report to the Committee on Resources in the House of Representatives and the Committee on En-14 15 ergy and Natural Resources in the Senate, summarizing the findings of the National Academy of Sciences pursuant 16 to subsection (a) and providing recommendations of the 17 18 Secretary for new policies or other actions that could help to further increase oil and natural gas production from 19 the Gulf of Mexico. 20

Subtitle B—Improvements to Federal Oil and Gas Management

3 SEC. 6221. SHORT TITLE.

4 This subtitle may be cited as the "Federal Oil and
5 Gas Lease Management Improvement Demonstration Pro6 gram Act of 2001".

7 SEC. 6222. STUDY OF IMPEDIMENTS TO EFFICIENT LEASE 8 OPERATIONS.

9 (a) IN GENERAL.—The Secretary of the Interior and 10 the Secretary of Agriculture shall jointly undertake a 11 study of the impediments to efficient oil and gas leasing 12 and operations on Federal onshore lands in order to iden-13 tify means by which unnecessary impediments to the expe-14 ditious exploration and production of oil and natural gas 15 on such lands can be removed.

16 (b) CONTENTS.—The study under subsection (a)17 shall include the following:

(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.

24 (2) A review of the approval process for appli-25 cations for permits to drill, including the timeframes

in 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 (3) A review of the approval process for surface 7 use plans of operation, including the timeframes in 8 which such applications are approved, the impact of 9 compliance with other Federal laws on such time-10 frames, any other reasons for delays in making such 11 approvals, and any recommendations for expediting 12 such approvals.

13 (4) A review of the process for administrative 14 appeal of decisions or orders of officers or employees 15 of the Bureau of Land Management with respect to 16 a Federal oil or gas lease, including the timeframes 17 in which such appeals are heard and decided, any 18 reasons for delays in hearing or deciding such ap-19 peals, and any recommendations for expediting the 20 appeals process.

(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.

3 SEC. 6223. ELIMINATION OF UNWARRANTED DENIALS AND 4 STAYS.

5 (a) IN GENERAL.—The Secretary shall ensure that
6 unwarranted denials and stays of lease issuance and un7 warranted restrictions on lease operations are eliminated
8 from the administration of oil and natural gas leasing on
9 Federal land.

(b) PREPARATION OF LEASING PLAN OR ANALYSIS.—In preparing a management plan or leasing analysis for oil or natural gas leasing on Federal lands administered by the Bureau of Land Management or the Forest
Service, the Secretary concerned shall—

(1) identify and review the restrictions on surface use and operations imposed under the laws (including regulations) of the State in which the lands
are located;

(2) consult with the appropriate State agency
regarding the reasons for the State restrictions identified under paragraph (1);

(3) identify any differences between the State
restrictions identified under paragraph (1) and any
restrictions on surface use and operations that would
apply under the lease; and

1	(4) prepare and provide upon request a written
2	explanation of such differences.
3	(c) Rejection of Offer To Lease.—
4	(1) IN GENERAL.—If the Secretary rejects an
5	offer to lease Federal lands for oil or natural gas de-
6	velopment on the ground that the land is unavailable
7	for oil and natural gas leasing, the Secretary shall
8	provide a written, detailed explanation of the reasons
9	the land is unavailable for leasing.
10	(2) Previous resource management deci-
11	SION.—If the determination of unavailability is
12	based on a previous resource management decision,
13	the explanation shall include a careful assessment of
14	whether the reasons underlying the previous decision
15	are still persuasive.
16	(3) Segregation of available land from
17	UNAVAILABLE LAND.—The Secretary may not reject
18	an offer to lease Federal land for oil and natural gas
19	development that is available for such leasing on the
20	ground that the offer includes land unavailable for
21	leasing. The Secretary shall segregate available land
22	from unavailable land, on the offeror's request fol-
23	lowing notice by the Secretary, before acting on the
24	offer to lease.

1 (d) DISAPPROVAL OR REQUIRED MODIFICATION OF 2 SURFACE USE PLANS OF OPERATIONS AND APPLICATION FOR PERMIT TO DRILL.—The Secretary shall provide a 3 4 written, detailed explanation of the reasons for dis-5 approving or requiring modifications of any surface use plan of operations or application for permit to drill with 6 7 respect to oil or natural gas development on Federal lands. 8 (e) PRESERVATION OF FEDERAL AUTHORITY.-9 Nothing in this section or in any identification, review, or 10 explanation prepared under this section shall be

11 construed—

(1) to limit the authority of the Federal Government to impose lease stipulations, restrictions, requirements, or other terms that are different than
those that apply under State law; or

16 (2) to affect the procedures that apply to judi-17 cial review of actions taken under this subsection.

18 SEC. 6224. LIMITATION ON COST RECOVERY FOR APPLICA-

19 TIONS.

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.

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3 Section 17(h) of the Mineral Leasing Act (30 U.S.C.
4 226(h)) is amended to read as follows:

5 "(h)(1) In issuing any lease on National Forest Sys-6 tem lands reserved from the public domain, the Secretary 7 of the Interior shall consult with the Secretary of Agri-8 culture in determining stipulations on surface use under 9 the lease.

10 "(2)(A) A lease on lands referred to in paragraph (1) 11 may not be issued if the Secretary of Agriculture determines, after consultation under paragraph (1) and con-12 13 sultation with the Regional Forester having administrative jurisdiction over the National Forest System Lands con-14 cerned, that the terms and conditions of the lease, includ-15 ing any prohibition on surface occupancy for lease oper-16 ations, will not be sufficient to adequately protect such 17 18 lands under the National Forest Management Act of 1976 19 (16 U.S.C. 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.

24 "(3) The Secretary of Agriculture shall include in the
25 record of decision for a determination under paragraph
26 (2)(A)—

"(A) any written statement regarding the deter mination that is prepared by a Regional Forester
 consulted by the Secretary under paragraph (2)(A)
 regarding the determination; or

5 "(B) an explanation why such a statement by6 the Regional Forester is not included.

7 Subtitle C—Miscellaneous

8 SEC. 6231. OFFSHORE SUBSALT DEVELOPMENT.

9 Section 5 of the Outer Continental Shelf Lands Act
10 of 1953 (43 U.S.C. 1334) is amended by adding at the
11 end the following:

12 "(k) SUSPENSION OF OPERATIONS FOR SUBSALT 13 EXPLORATION.—Notwithstanding any other provision of law or regulation, to prevent waste caused by the drilling 14 15 of unnecessary wells and to facilitate the discovery of additional hydrocarbon reserves, the Secretary may grant a re-16 quest for a suspension of operations under any lease to 17 allow the reprocessing and reinterpretation of geophysical 18 data to identify and define drilling objectives beneath 19 20 allocthonus salt sheets.".

21 SEC. 6232. PROGRAM ON OIL AND GAS ROYALTIES IN KIND.

(a) APPLICABILITY OF SECTION.—Notwithstanding
any other provision of law, the provisions of this section
shall apply to all royalty in kind accepted by the Secretary
of the Interior under any Federal oil or gas lease or permit

under section 36 of the Mineral Leasing Act (30 U.S.C.
 192), section 27 of the Outer Continental Shelf Lands Act
 (43 U.S.C. 1353), or any other mineral leasing law, in
 the period beginning on the date of the enactment of this
 Act through September 30, 2006.

6 (b) TERMS AND CONDITIONS.—All royalty accruing 7 to the United States under any Federal oil or gas lease 8 or permit under the Mineral Leasing Act (30 U.S.C. 181 9 et seq.) or the Outer Continental Shelf Lands Act (43 10 U.S.C. 1331 et seq.) shall, on the demand of the Secretary of the Interior, be paid in oil or gas. If the Secretary of 11 12 the Interior makes such a demand, the following provi-13 sions apply to such payment:

14 (1) Delivery by, or on behalf of, the lessee of
15 the royalty amount and quality due under the lease
16 satisfies the lessee's royalty obligation for the
17 amount delivered, except that transportation and
18 processing reimbursements paid to, or deductions
19 claimed by, the lessee shall be subject to review and
20 audit.

(2) Royalty production shall be placed in marketable condition by the lessee at no cost to the
United States.

24 (3) The Secretary of the Interior may—

	100
1	(A) sell or otherwise dispose of any royalty
2	oil or gas taken in kind (other than oil or gas
3	taken under section $27(a)(3)$ of the Outer Con-
4	tinental Shlef Lands Act (43 U.S.C.
5	1353(a)(3)) for not less than the market price;
6	and
7	(B) transport or process any oil or gas roy-
8	alty taken in kind.
9	(4) The Secretary of the Interior may, notwith-
10	standing section 3302 of title 31, United States
11	Code, retain and use a portion of the revenues from
12	the sale of oil and gas royalties taken in kind that
13	otherwise would be deposited to miscellaneous re-
14	ceipts, without regard to fiscal year limitation, or
15	may use royalty production, to pay the cost of—
16	(A) transporting the oil or gas,
17	(B) processing the gas, or
18	(C) disposing of the oil or gas.
19	(5) The Secretary may not use revenues from
20	the sale of oil and gas royalties taken in kind to pay
21	for personnel, travel, or other administrative costs of
22	the Federal Government.
23	(c) Reimbursement of Cost.—If the lessee, pursu-
24	ant to an agreement with the United States or as provided
25	in the lease, processes the royalty gas or delivers the roy-

alty oil or gas at a point not on or adjacent to the lease
 area, the Secretary of the Interior shall—

3 (1) reimburse the lessee for the reasonable costs
4 of transportation (not including gathering) from the
5 lease to the point of delivery or for processing costs;
6 or

7 (2) at the discretion of the Secretary of the In8 terior, allow the lessee to deduct such transportation
9 or processing costs in reporting and paying royalties
10 in value for other Federal oil and gas leases.

(d) BENEFIT TO THE UNITED STATES REQUIRED.—
The Secretary may receive oil or gas royalties in kind only
if the Secretary determines that receiving such royalties
provides benefits to the United States greater than or
equal to those that would be realized under a comparable
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—

24 (1) the methodology or methodologies used by25 the Secretary to determine compliance with sub-

1	section (d), including performance standards for
2	comparing amounts received by the United States
3	derived from such royalties in kind to amounts likely
4	to have been received had royalties been taken in
5	value;
6	(2) an explanation of the evaluation that led the
7	Secretary to take royalties in kind from a lease or
8	group of leases, including the expected revenue effect
9	of taking royalties in kind;
10	(3) actual amounts received by the United
11	States derived from taking royalties in kind, and
12	costs and savings incurred by the United States as-
13	sociated with taking royalties in kind; and
14	(4) an evaluation of other relevant public bene-
15	fits or detriments associated with taking royalties in
16	kind.
17	(f) Deduction of Expenses.—
18	(1) IN GENERAL.—Before making payments
19	under section 35 of the Mineral Leasing Act (30
20	U.S.C. 191) or section 8(g) of the Outer Continental
21	Shelf Lands Act (30 U.S.C. 1337(g)) of revenues
22	derived from the sale of royalty production taken in
23	kind from a lease, the Secretary of the Interior shall
24	deduct amounts paid or deducted under subsections

(b)(4) and (c), and shall deposit such amounts to
 miscellaneous receipts.

3 (2) ACCOUNTING FOR DEDUCTIONS.—If the
4 Secretary of the Interior allows the lessee to deduct
5 transportation or processing costs under subsection
6 (c), the Secretary may not reduce any payments to
7 recipients of revenues derived from any other Fed8 eral oil and gas lease as a consequence of that de9 duction.

10 (g) CONSULTATION WITH STATES.—The Secretary11 of the Interior—

(1) shall consult with a State before conducting
a royalty in kind program under this title within the
State, and may delegate management of any portion
of the Federal royalty in kind program to such State
except as otherwise prohibited by Federal law; and

(2) shall consult annually with any State from
which Federal oil or gas royalty is being taken in
kind to ensure to the maximum extent practicable
that the royalty in kind program provides revenues
to the State greater than or equal to those which
would be realized under a comparable royalty in
value program.

24 (h) Provisions for Small Refineries.—

1 (1) PREFERENCE.—If the Secretary of the In-2 terior determines that sufficient supplies of crude oil 3 are not available in the open market to refineries not 4 having their own source of supply for crude oil, the 5 Secretary may grant preference to such refineries in 6 the sale of any royalty oil accruing or reserved to the 7 United States under Federal oil and gas leases 8 issued under any mineral leasing law, for processing 9 or use in such refineries at private sale at not less 10 than the market price.

11 (2) PRORATION AMONG REFINERIES IN PRO-12 DUCTION AREA.—In disposing of oil under this sub-13 section, the Secretary of the Interior may, at the 14 discretion of the Secretary, prorate such oil among 15 such refineries in the area in which the oil is pro-16 duced.

17 (i) DISPOSITION TO FEDERAL AGENCIES.—

(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.

(2) OFFSHORE ROYALTY.—Any royalty oil or
gas taken in kind from Federal oil and gas leases on
the Outer Continental Shelf may be disposed of only

under section 27 of the Outer Continental Shelf
 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 resources to any Federal low-income energy assistance program.

10 SEC. 6233. MARGINAL WELL PRODUCTION INCENTIVES.

11 To enhance the economics of marginal oil and gas 12 production by increasing the ultimate recovery from mar-13 ginal wells when the cash price of West Texas Intermediate crude oil, as posted on the Dow Jones Commod-14 15 ities Index chart, is less than \$15 per barrel for 180 consecutive pricing days or when the price of natural gas de-16 17 livered at Henry Hub, Louisiana, is less than \$2.00 per million British thermal units for 180 consecutive days, the 18 19 Secretary shall reduce the royalty rate as production de-20 clines for-

- 21 (1) onshore oil wells producing less than 3022 barrels per day;
- 23 (2) onshore gas wells producing less than 120
 24 million British thermal units per day;

1 (3) offshore oil wells producing less than 300 2 barrels of oil per day; and (4) offshore gas wells producing less than 1,200 3 million British thermal units per day. 4 5 SEC. 6234. REIMBURSEMENT FOR COSTS OF NEPA ANAL-6 YSES, DOCUMENTATION, AND STUDIES. 7 (a) IN GENERAL.—The Mineral Leasing Act (30 8 U.S.C. 181 et seq.) is amended by inserting after section 37 the following: 9 10 "REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES, 11 DOCUMENTATION, AND STUDIES 12 "SEC. 38. (a) IN GENERAL.—The Secretary of the 13 Interior may, through royalty credits, reimburse a person who is a lessee, operator, operating rights owner, or appli-14 15 cant for an oil or gas lease under this Act for amounts 16 paid by the person for preparation by the Secretary (or a contractor or other person selected by the Secretary) of 17 18 any project-level analysis, documentation, or related study 19 required under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect to the lease. 2021 "(b) CONDITIONS.—The Secretary may provide reim-22 bursement under subsection (b) only if— 23 "(1) adequate funding to enable the Secretary 24 to timely prepare the analysis, documentation, or re-25 lated study is not appropriated; 26 "(2) the person paid the costs voluntarily; and "(3) the person maintains records of its costs
 in accordance with regulations prescribed by the
 Secretary.".

4 (b) APPLICATION.—The amendments made by this
5 section shall apply with respect to any lease entered into
6 before, on, or after the date of the enactment of this Act.
7 (c) DEADLINE FOR REGULATIONS.—The Secretary
8 shall issue regulations implementing the amendments
9 made by this section by not later than 90 days after the
10 date of the enactment of this Act.

11 SEC. 6235. ENCOURAGEMENT OF STATE AND PROVINCIAL
12 PROHIBITIONS ON OFF-SHORE DRILLING IN
13 THE GREAT LAKES.

14 (a) FINDINGS.—The Congress finds the following:

(1) The water resources of the Great Lakes
Basin are precious public natural resources, shared
and held in trust by the States of Illinois, Indiana,
Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin, and the Canadian Province of
Ontario.

(2) The environmental dangers associated with
off-shore drilling in the Great Lakes for oil and gas
outweigh the potential benefits of such drilling.

24 (3) In accordance with the Submerged Lands
25 Act (43 U.S.C. 1301 et seq.), each State that bor-

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1	ders any of the Great Lakes has authority over the
2	area between that State's coastline and the bound-
3	ary of Canada or another State.
4	(4) The States of Illinois, Michigan, New York,
5	Pennsylvania, and Wisconsin each have a statutory
6	prohibition of off-shore drilling in the Great Lakes
7	for oil and gas.
8	(5) The States of Indiana, Minnesota, and Ohio
9	do not have such a prohibition.
10	(6) The Canadian Province of Ontario does not
11	have such a prohibition, and drilling for and produc-
12	tion of gas occurs in the Canadian portion of Lake
13	Erie.
14	(b) Encouragement of State and Provincial
15	PROHIBITIONS.—The Congress encourages—
16	(1) the States of Illinois, Michigan, New York,
17	Pennsylvania, and Wisconsin to continue to prohibit
18	off-shore drilling in the Great Lakes for oil and gas;
19	(2) the States of Indiana, Minnesota, and Ohio
20	and the Canadian Province of Ontario to enact a
21	prohibition of such drilling; and
22	(3) the Canadian Province of Ontario to require
23	the cessation of any such drilling and any production
24	resulting from such drilling.

TITLE III—GEOTHERMAL ENERGY DEVELOPMENT

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3 SEC. 6301. ROYALTY REDUCTION AND RELIEF.

4 (a) ROYALTY REDUCTION.—Section 5(a) of the Geo5 thermal Steam Act of 1970 (30 U.S.C. 1004(a)) is amend6 ed by striking "not less than 10 per centum or more than
7 15 per centum" and inserting "not more than 8 per cen8 tum".

9 (b) ROYALTY RELIEF.—

10 (1) IN GENERAL.—Notwithstanding section 5 of
11 the Geothermal Steam Act of 1970 (30 U.S.C.
12 1004(a)) and any provision of any lease under that
13 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

19 (B) on qualified expansion geothermal en-20 ergy.

(2) 3-YEAR APPLICATION.—Paragraph (1) applies only to commercial production of heat or energy from a facility in the first 3 years of such production.

25 (c) DEFINITIONS.—In this section:

(1) QUALIFIED EXPANSION GEOTHERMAL EN-

1

2	ERGY.—The term "qualified expansion geothermal
3	energy"—
4	(A) subject to subparagraph (B), means
5	geothermal energy produced from a generation
6	facility for which the rated capacity is increased
7	by more than 10 percent as a result of expan-
8	sion of the facility carried out in the 5-year pe-
9	riod beginning on the date of the enactment of
10	this Act; and
11	(B) does not include the rated capacity of
12	the generation facility on the date of the enact-
13	ment of this Act.
14	(2) QUALIFIED GEOTHERMAL ENERGY
15	LEASE.—The term ''qualified geothermal energy
16	lease" means a lease under the Geothermal Steam
17	Act of 1970 (30 U.S.C. 1001 et seq.)—
18	(A) that was executed before the end of
19	the 5-year period beginning on the date of the
20	enactment of this Act; and
21	(B) under which no commercial production
22	of any form of heat or energy occurred before
23	the date of the enactment of this Act.

1	SEC. 6302. EXEMPTION FROM ROYALTIES FOR DIRECT USE
2	OF LOW TEMPERATURE GEOTHERMAL EN-
3	ERGY RESOURCES.
4	Section 5 of the Geothermal Steam Act of 1970 (30
5	U.S.C. 1004) is amended—
6	(1) in paragraph (c) by redesignating subpara-
7	graphs (1) and (2) as subparagraphs (A) and (B);
8	(2) by redesignating paragraphs (a) through (d)
9	in order as paragraphs (1) through (4);
10	(3) by inserting "(a) IN GENERAL.—" after
11	"SEC. 5."; and
12	(4) by adding at the end the following new sub-
13	section:
14	"(b) Exemption for Use of Low Temperature
15	RESOURCES.—
16	"(1) IN GENERAL.—In lieu of any royalty or
17	rental under subsection (a), a lease for qualified de-
18	velopment and direct utilization of low temperature
19	geothermal resources shall provide for payment by
20	the lessee of an annual fee of not less than \$100,
21	and not more than \$1,000, in accordance with the
22	schedule issued under paragraph (2).
23	"(2) Schedule.—The Secretary shall issue a
24	schedule of fees under this section under which a fee
25	is based on the scale of development and utilization
26	to which the fee applies.

1	"(3) DEFINITIONS.—In this subsection:
2	"(A) Low temperature geothermal
3	RESOURCES.—The term 'low temperature geo-
4	thermal resources' means geothermal steam and
5	associated geothermal resources having a tem-
6	perature of less than 195 degrees Fahrenheit.
7	"(B) QUALIFIED DEVELOPMENT AND DI-
8	RECT UTILIZATION.—The term 'qualified devel-
9	opment and direct utilization' means develop-
10	ment and utilization in which all products of
11	geothermal resources, other than any heat uti-
12	lized, are returned to the geothermal formation
13	from which they are produced.".
13 14	from which they are produced.". SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOR-
14	SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOR-
14 15	SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOR- EST SERVICE LANDS.
14 15 16	SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOR- EST SERVICE LANDS. The Geothermal Steam Act of 1970 is amended—
14 15 16 17	SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOR- EST SERVICE LANDS. The Geothermal Steam Act of 1970 is amended— (1) in section 15(b) (30 U.S.C. 1014(b))—
14 15 16 17 18	SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOR- EST SERVICE LANDS. The Geothermal Steam Act of 1970 is amended— (1) in section 15(b) (30 U.S.C. 1014(b))— (A) by inserting "(1)" after "(b)"; and
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 14 15 16 17 18 19 20 	 SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOR- EST SERVICE LANDS. The Geothermal Steam Act of 1970 is amended— (1) in section 15(b) (30 U.S.C. 1014(b))— (A) by inserting "(1)" after "(b)"; and (B) in paragraph (1) (as designated by subparagraph (A) of this paragraph) in the
 14 15 16 17 18 19 20 21 	 SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOR- EST SERVICE LANDS. The Geothermal Steam Act of 1970 is amended— (1) in section 15(b) (30 U.S.C. 1014(b))— (A) by inserting "(1)" after "(b)"; and (B) in paragraph (1) (as designated by subparagraph (A) of this paragraph) in the first sentence—
 14 15 16 17 18 19 20 21 22 	 SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOR- EST SERVICE LANDS. The Geothermal Steam Act of 1970 is amended— (1) in section 15(b) (30 U.S.C. 1014(b))— (A) by inserting "(1)" after "(b)"; and (B) in paragraph (1) (as designated by subparagraph (A) of this paragraph) in the first sentence— (i) by striking "with the consent of,

1	(ii) by striking "the head of that De-
2	partment" and inserting "the Secretary of
3	Agriculture"; and
4	(2) by adding at the end the following:
5	((2)(A) A geothermal lease for lands with drawn or
6	acquired in aid of functions of the Department of Agri-
7	culture may not be issued if the Secretary of Agriculture,
8	after the consultation required by paragraph (1) and con-
9	sultation with any Regional Forester having administra-
10	tive jurisdiction over the lands concerned, determines that
11	no terms or conditions, including a prohibition on surface
12	occupancy for lease operations, would be sufficient to ade-
13	quately protect such lands under the National Forest
14	Management Act of 1976 (16 U.S.C. 1600 et seq.).

"(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.

19 "(3) The Secretary of Agriculture shall include in the
20 record of decision for a determination under paragraph
21 (2)(A)—

"(A) any written statement regarding the determination that is prepared by a Regional Forester
consulted by the Secretary under paragraph (2)(A)
regarding the determination; or

1	"(B) an explanation why such a statement by
2	the Regional Forester is not included.
2	SEC. 6304. DEADLINE FOR DETERMINATION ON PENDING
4	
	NONCOMPETITIVE LEASE APPLICATIONS.
5	Not later than 90 days after the date of the enact-
6	ment of this Act, the Secretary of the Interior shall, with
7	respect to each application pending on the date of the en-
8	actment of this Act for a lease under the Geothermal
9	Steam Act of 1970 (30 U.S.C. 1001 et seq.), issue a final
10	determination of—
11	(1) whether or not to conduct a lease sale by
12	competitive bidding; and
13	(2) whether or not to award a lease without
14	competitive bidding.
15	SEC. 6305. OPENING OF PUBLIC LANDS UNDER MILITARY
16	
	JURISDICTION.
17	JURISDICTION. (a) IN GENERAL.—Except as otherwise provided in
17 18	
	(a) IN GENERAL.—Except as otherwise provided in
18	(a) IN GENERAL.—Except as otherwise provided in the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et
18 19	(a) IN GENERAL.—Except as otherwise provided in the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) and other provisions of Federal law applicable to de-
18 19 20	(a) IN GENERAL.—Except as otherwise provided in the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) and other provisions of Federal law applicable to de- velopment of geothermal energy resources within public
18 19 20 21	(a) IN GENERAL.—Except as otherwise provided in the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) and other provisions of Federal law applicable to de- velopment of geothermal energy resources within public lands, all public lands under the jurisdiction of a Secretary
 18 19 20 21 22 	(a) IN GENERAL.—Except as otherwise provided in the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) and other provisions of Federal law applicable to de- velopment of geothermal energy resources within public lands, all public lands under the jurisdiction of a Secretary of a military department shall be open to the operation

Act of 1970 (30 U.S.C. 1001), without the necessity for
 further action by the Secretary or the Congress.

3 (b) CONFORMING AMENDMENT.—Section 2689 of
4 title 10, United States Code, is amended by striking "in5 cluding public lands," and inserting "other than public
6 lands,".

7 (c) TREATMENT OF EXISTING LEASES.—Upon the 8 expiration of any lease in effect on the date of the enact-9 ment of this Act of public lands under the jurisdiction of 10 a military department for the development of any geo-11 thermal resource, such lease may, at the option of the 12 lessee—

(1) be treated as a lease under the Geothermal
Steam Act of 1970 (30 U.S.C. 1001 et seq.), and be
renewed in accordance with such Act; or

16 (2) be renewed in accordance with the terms of
17 the lease, if such renewal is authorized by such
18 terms.

(d) REGULATIONS.—The Secretary of the Interior,
with the advice and concurrence of the Secretary of the
military department concerned, shall prescribe such regulations to carry out this section as may be necessary. Such
regulations shall contain guidelines to assist in determining how much, if any, of the surface of any lands
opened pursuant to this section may be used for purposes

incident to geothermal energy resources development and
 utilization.

3 (e) CLOSURE FOR PURPOSES OF NATIONAL DE-4 FENSE OR SECURITY.—In the event of a national emer-5 gency or for purposes of national defense or security, the 6 Secretary of the Interior, at the request of the Secretary 7 of the military department concerned, shall close any lands 8 that have been opened to geothermal energy resources 9 leasing pursuant to this section.

10 SEC. 6306. APPLICATION OF AMENDMENTS.

The amendments made by this title apply with re-spect to any lease executed before, on, or after the dateof the enactment of this Act.

14 SEC. 6307. REVIEW AND REPORT TO CONGRESS.

15 The Secretary of the Interior shall promptly review and report to the Congress regarding the status of all mor-16 atoria on and withdrawals from leasing under the Geo-17 thermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) of 18 known geothermal resources areas (as that term is defined 19 in section 2 of that Act (30 U.S.C. 1001), specifying for 20 each such area whether the basis for such moratoria or 21 22 withdrawal still applies.

SEC. 6308. REIMBURSEMENT FOR COSTS OF NEPA ANAL YSES, DOCUMENTATION, AND STUDIES. (a) IN GENERAL.—The Geothermal Steam Act of

4 1970 (30 U.S.C. 1001 et seq.) is amended by adding at5 the end the following:

6 "REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES,

7 DOCUMENTATION, AND STUDIES

8 "SEC. 38. (a) IN GENERAL.—The Secretary of the 9 Interior may, through royalty credits, reimburse a person 10 who is a lessee, operator, operating rights owner, or applicant for a lease under this Act for amounts paid by the 11 12 person for preparation by the Secretary (or a contractor 13 or other person selected by the Secretary) of any project-14 level analysis, documentation, or related study required 15 under the National Environmental Policy Act of 1969 (42) 16 U.S.C. 4321 et seq.) with respect to the lease.

17 "(b) CONDITIONS.—The Secretary shall may provide18 reimbursement under subsection (a) only if—

19 "(1) adequate funding to enable the Secretary
20 to timely prepare the analysis, documentation, or re21 lated 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.

8 **TITLE IV—HYDROPOWER**

9 SEC. 6401. STUDY AND REPORT ON INCREASING ELECTRIC

10POWER PRODUCTION CAPABILITY OF EXIST-11ING FACILITIES.

(a) IN GENERAL.—The Secretary of the Interior shall
conduct a study of the potential for increasing electric
power production capability at existing facilities under the
administrative jurisdiction of the Secretary.

16 (b) CONTENT.—The study under this section shall in-17 clude identification and description in detail of each facil-18 ity that is capable, with or without modification, of pro-19 ducing additional hydroelectric power, including esti-20 mation of the existing potential for the facility to generate 21 hydroelectric power.

(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 the enactment of this

Act. The Secretary shall include in the report the fol lowing:

3 (1) The identifications, descriptions, and esti4 mations referred to in subsection (b).

5 (2) A description of activities the Secretary is
6 currently conducting or considering, or that could be
7 considered, to produce additional hydroelectric power
8 from each identified facility.

9 (3) A summary of action that has already been
10 taken by the Secretary to produce additional hydro11 electric power from each identified facility.

(4) The costs to install, upgrade, or modify
equipment or take other actions to produce additional hydroelectric power from each identified facility.

16 (5) The benefits that would be achieved by such
17 installation, upgrade, modification, or other action,
18 including quantified estimates of any additional en19 ergy or capacity from each facility identified under
20 subsection (b).

(6) A description of actions that are planned,
underway, or might reasonably be considered to increase hydroelectric power production by replacing
turbine runners.

1	(7) A description of actions that are planned,
2	underway, or might reasonably be considered to in-
3	crease hydroelectric power production by performing
4	generator uprates and rewinds.
5	(8) The impact of increased hydroelectric power
6	production on irrigation, fish, wildlife, Indian tribes,
7	river health, water quality, navigation, recreation,
8	fishing, and flood control.
9	(9) Any additional recommendations the Sec-
10	retary considers advisable to increase hydroelectric
11	power production from, and reduce costs and im-
12	prove efficiency at, facilities under the jurisdiction of
13	the Secretary.
13 14	the Secretary. SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM
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14	SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM
14 15	SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM POWER PLANT, CALIFORNIA.
14 15 16 17	SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM POWER PLANT, CALIFORNIA. (a) IN GENERAL.—The Secretary of the Interior may
14 15 16 17	 SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM POWER PLANT, CALIFORNIA. (a) IN GENERAL.—The Secretary of the Interior may install a powerformer at the Bureau of Reclamation Fol-
14 15 16 17 18	 SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM POWER PLANT, CALIFORNIA. (a) IN GENERAL.—The Secretary of the Interior may install a powerformer at the Bureau of Reclamation Fol- som power plant in Folsom, California, to replace a gener-
14 15 16 17 18 19	 SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM POWER PLANT, CALIFORNIA. (a) IN GENERAL.—The Secretary of the Interior may install a powerformer at the Bureau of Reclamation Fol- som power plant in Folsom, California, to replace a gener- ator and transformer that are due for replacement due
14 15 16 17 18 19 20	 SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM POWER PLANT, CALIFORNIA. (a) IN GENERAL.—The Secretary of the Interior may install a powerformer at the Bureau of Reclamation Fol- som power plant in Folsom, California, to replace a gener- ator and transformer that are due for replacement due to age.
14 15 16 17 18 19 20 21	 SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM POWER PLANT, CALIFORNIA. (a) IN GENERAL.—The Secretary of the Interior may install a powerformer at the Bureau of Reclamation Folsom power plant in Folsom, California, to replace a generator and transformer that are due for replacement due to age. (b) REIMBURSABLE COSTS.—Costs incurred by the
 14 15 16 17 18 19 20 21 22 	 SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM POWER PLANT, CALIFORNIA. (a) IN GENERAL.—The Secretary of the Interior may install a powerformer at the Bureau of Reclamation Fol- som power plant in Folsom, California, to replace a gener- ator and transformer that are due for replacement due to age. (b) REIMBURSABLE COSTS.—Costs incurred by the United States for installation of a powerformer under this

(c) LOCAL COST SHARING.—In addition to reimburs able costs under subsection (b), the Secretary shall seek
 contributions from power users toward the costs of the
 powerformer and its installation.

5 SEC. 6403. STUDY AND IMPLEMENTATION OF INCREASED 6 OPERATIONAL EFFICIENCIES IN HYDRO7 ELECTRIC POWER PROJECTS.

8 (a) IN GENERAL.—The Secretary of Interior shall 9 conduct a study of operational methods and water sched-10 uling techniques at all hydroelectric power plants under 11 the administrative jurisdiction of the Secretary that have 12 an electric power production capacity greater than 50 13 megawatts, to—

(1) determine whether such power plants and
associated river systems are operated so as to maximize energy and capacity capabilities; and

17 (2) identify measures that can be taken to im-18 prove operational flexibility at such plants to achieve19 such maximization.

(b) REPORT.—The Secretary shall submit a report on
the findings, conclusions, and recommendations of the
study under this section by not later than 18 months after
the date of the enactment of this Act, including a summary of the determinations and identifications under
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 ad ministration in—

5 (1) determining how the value of electric power
6 produced by each hydroelectric power facility that
7 produces power marketed by the administration can
8 be maximized; and

9 (2) implementing measures identified under10 subsection (a)(2).

(d) LIMITATION ON IMPLEMENTATION OF MEASURES.—Implementation under subsections (a)(2) and
(b)(2) shall be limited to those measures that can be implemented within the constraints imposed on Department
of the Interior facilities by other uses required by law.

16 SEC. 6404. SHIFT OF PROJECT LOADS TO OFF-PEAK PERI17 ODS.

18 (a) IN GENERAL.—The Secretary of the Interior19 shall—

20 (1) review electric power consumption by Bu21 reau of Reclamation facilities for water pumping
22 purposes; and

(2) make such adjustments in such pumping as
possible to minimize the amount of electric power
consumed for such pumping during periods of peak

electric power consumption, including by performing
 as much of such pumping as possible during off peak hours at night.

4 (b) CONSENT OF AFFECTED IRRIGATION CUSTOMERS 5 REQUIRED.—The Secretary may not under this section 6 make any adjustment in pumping at a facility without the 7 consent of each person that has contracted with the 8 United States for delivery of water from the facility for 9 use for irrigation and that would be affected by such ad-10 justment.

(c) EXISTING OBLIGATIONS NOT AFFECTED.—This
section shall not be construed to affect any existing obligation of the Secretary to provide electric power, water, or
other benefits from Bureau of Reclamation facilities.

15 **TITLE V—ARCTIC COASTAL**

16 PLAIN DOMESTIC ENERGY

17 SEC. 6501. SHORT TITLE.

18 This title may be cited as the "Arctic Coastal Plain19 Domestic Energy Security Act of 2001".

20 SEC. 6502. DEFINITIONS.

21 In this title:

(1) COASTAL PLAIN.—The term "Coastal
Plain" means that area identified as such in the
map entitled "Arctic National Wildlife Refuge",
dated August 1980, as referenced in section 1002(b)

1	of the Alaska National Interest Lands Conservation
2	Act of 1980 (16 U.S.C. 3142(b)(1)), comprising ap-
3	proximately 1,549,000 acres.
4	(2) Secretary.—The term "Secretary", except
5	as otherwise provided, means the Secretary of the
6	Interior or the Secretary's designee.
7	SEC. 6503. LEASING PROGRAM FOR LANDS WITHIN THE
8	COASTAL PLAIN.
9	(a) IN GENERAL.—The Secretary shall take such ac-
10	tions as are necessary—
11	(1) to establish and implement in accordance
12	with this title a competitive oil and gas leasing pro-
13	gram under the Mineral Leasing Act (30 U.S.C. 181
14	et seq.) that will result in an environmentally sound
15	program for the exploration, development, and pro-
16	duction of the oil and gas resources of the Coastal
17	Plain; and
18	(2) to administer the provisions of this title
19	through regulations, lease terms, conditions, restric-
20	tions, prohibitions, stipulations, and other provisions
21	that ensure the oil and gas exploration, development,
22	and production activities on the Coastal Plain will
23	result in no significant adverse effect on fish and
24	wildlife, their habitat, subsistence resources, and the
25	environment, and including, in furtherance of this

1 goal, by requiring the application of the best com-2 mercially available technology for oil and gas explo-3 ration, development, and production to all explo-4 ration, development, and production operations 5 under this title in a manner that ensures the receipt 6 of fair market value by the public for the mineral re-7 sources to be leased.

8 (b) REPEAL.—Section 1003 of the Alaska National
9 Interest Lands Conservation Act of 1980 (16 U.S.C.
10 3143) is repealed.

11 (c) COMPLIANCE WITH REQUIREMENTS UNDER CER-12 TAIN OTHER LAWS.—

13 (1) COMPATIBILITY.—For purposes of the Na-14 tional Wildlife Refuge System Administration Act of 15 1966, the oil and gas leasing program and activities 16 authorized by this section in the Coastal Plain are 17 deemed to be compatible with the purposes for which 18 the Arctic National Wildlife Refuge was established, 19 and that no further findings or decisions are re-20 quired to implement this determination.

(2) ADEQUACY OF THE DEPARTMENT OF THE
INTERIOR'S LEGISLATIVE ENVIRONMENTAL IMPACT
STATEMENT.—The "Final Legislative Environmental Impact Statement" (April 1987) on the
Coastal Plain prepared pursuant to section 1002 of

1	the Alaska National Interest Lands Conservation
2	Act of 1980 (16 U.S.C. 3142) and section $102(2)(C)$
3	of the National Environmental Policy Act of 1969
4	(42 U.S.C. 4332(2)(C)) is deemed to satisfy the re-
5	quirements under the National Environmental Policy
6	Act of 1969 that apply with respect to actions au-
7	thorized to be taken by the Secretary to develop and
8	promulgate the regulations for the establishment of
9	a leasing program authorized by this title before the
10	conduct of the first lease sale.
11	(3) Compliance with NEPA for other ac-
12	TIONS.—Before conducting the first lease sale under

-Before conducting the first lease sale under 12 TIONS. 13 this title, the Secretary shall prepare an environ-14 mental impact statement under the National Envi-15 ronmental Policy Act of 1969 with respect to the ac-16 tions authorized by this title that are not referred to 17 in paragraph (2). Notwithstanding any other law, 18 the Secretary is not required to identify nonleasing 19 alternative courses of action or to analyze the envi-20 ronmental effects of such courses of action. The Sec-21 retary shall only identify a preferred action for such 22 leasing and a single leasing alternative, and analyze 23 the environmental effects and potential mitigation 24 measures for those two alternatives. The identifica-25 tion of the preferred action and related analysis for

1 the first lease sale under this title shall be completed 2 within 18 months after the date of the enactment of 3 this Act. The Secretary shall only consider public 4 comments that specifically address the Secretary's 5 preferred action and that are filed within 20 days 6 after publication of an environmental analysis. Not-7 withstanding any other law, compliance with this 8 paragraph is deemed to satisfy all requirements for 9 the analysis and consideration of the environmental 10 effects of proposed leasing under this title.

(d) RELATIONSHIP TO STATE AND LOCAL AUTHOR12 ITY.—Nothing in this title shall be considered to expand
13 or limit State and local regulatory authority.

14 (e) Special Areas.—

15 (1) IN GENERAL.—The Secretary, after con-16 sultation with the State of Alaska, the city of 17 Kaktovik, and the North Slope Borough, may des-18 ignate up to a total of 45,000 acres of the Coastal 19 Plain as a Special Area if the Secretary determines 20 that the Special Area is of such unique character 21 and interest so as to require special management 22 and regulatory protection. The Secretary shall des-23 ignate as such a Special Area the Sadlerochit Spring 24 area, comprising approximately 4,000 acres as de-25 picted on the map referred to in section 6502(1).

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area's unique and diverse character including itsfish, wildlife, and subsistence resource values.

5 (3) EXCLUSION FROM LEASING OR SURFACE 6 OCCUPANCY.—The Secretary may exclude any Spe-7 cial Area from leasing. If the Secretary leases a Spe-8 cial Area, or any part thereof, for purposes of oil 9 and gas exploration, development, production, and 10 related activities, there shall be no surface occu-11 pancy of the lands comprising the Special Area.

12 (4) DIRECTIONAL DRILLING.—Notwithstanding 13 the other provisions of this subsection, the Secretary 14 may lease all or a portion of a Special Area under 15 terms that permit the use of horizontal drilling tech-16 nology from sites on leases located outside the area. 17 LIMITATION ON CLOSED AREAS.—The Sec-(f)retary's sole authority to close lands within the Coastal 18 Plain to oil and gas leasing and to exploration, develop-19 20 ment, and production is that set forth in this title.

21 (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 the enactment of this Act.

4 (2) REVISION OF REGULATIONS.—The Sec5 retary shall periodically review and, if appropriate,
6 revise the rules and regulations issued under sub7 section (a) to reflect any significant biological, envi8 ronmental, or engineering data that come to the Sec9 retary's attention.

10 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.).

(b) PROCEDURES.—The Secretary shall, by regula-tion, establish procedures for—

17 (1) receipt and consideration of sealed nomina18 tions for any area in the Coastal Plain for inclusion
19 in, or exclusion (as provided in subsection (c)) from,
20 a lease sale;

(2) the holding of lease sales after such nomina-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 the enactment of
this title; and

14 (2) conduct additional sales so long as sufficient
15 interest in development exists to warrant, in the Sec16 retary'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 12 of projects to be developed under the leases issued pursu-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;
5	(2) require the application of the best commer-
6	cially available technology for oil and gas explo-
7	ration, development, and production on all new ex-
8	ploration, development, and production operations;
9	and
10	(3) ensure that the maximum amount of sur-
11	face acreage covered by production and support fa-
12	cilities, including airstrips and any areas covered by
13	gravel berms or piers for support of pipelines, does
14	not exceed 2,000 acres on the Coastal Plain.
15	(b) SITE-SPECIFIC ASSESSMENT AND MITIGATION.—
16	The Secretary shall also require, with respect to any pro-
17	posed drilling and related activities, that—
18	(1) a site-specific analysis be made of the prob-
19	able effects, if any, that the drilling or related activi-
20	ties will have on fish and wildlife, their habitat, and
21	the environment;
22	(2) a plan be implemented to avoid, minimize,
23	and mitigate (in that order and to the extent prac-
24	ticable) any significant adverse effect identified
25	under paragraph (1); and

1 (3) the development of the plan shall occur 2 after consultation with the agency or agencies hav-3 ing jurisdiction over matters mitigated by the plan. 4 (c) REGULATIONS TO PROTECT COASTAL PLAIN 5 FISH AND WILDLIFE RESOURCES, SUBSISTENCE USERS, AND THE ENVIRONMENT.—Before implementing the leas-6 7 ing program authorized by this title, the Secretary shall 8 prepare and promulgate regulations, lease terms, condi-9 tions, restrictions, prohibitions, stipulations, and other 10 measures designed to ensure that the activities undertaken 11 on the Coastal Plain under this title are conducted in a 12 manner consistent with the purposes and environmental requirements of this title. 13

(d) COMPLIANCE WITH FEDERAL AND STATE ENVI15 RONMENTAL LAWS AND OTHER REQUIREMENTS.—The
16 proposed regulations, lease terms, conditions, restrictions,
17 prohibitions, and stipulations for the leasing program
18 under this title shall require compliance with all applicable
19 provisions of Federal and State environmental law and
20 shall also require the following:

(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.

(2) Seasonal limitations on exploration, develop-

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2	ment, and related activities, where necessary, to
3	avoid significant adverse effects during periods of
4	concentrated fish and wildlife breeding, denning,
5	nesting, spawning, and migration.
6	(3) That exploration activities, except for sur-
7	face geological studies, be limited to the period be-
8	tween approximately November 1 and May 1 each
9	year and that exploration activities shall be sup-
10	ported by ice roads, winter trails with adequate snow
11	cover, ice pads, ice airstrips, and air transport meth-
12	ods, except that such exploration activities may
13	occur at other times, if—
14	(A) the Secretary determines, after afford-
15	ing an opportunity for public comment and re-
16	view, that special circumstances exist necessi-
17	tating that exploration activities be conducted
18	at other times of the year; and
19	(B) the Secretary finds that such explo-
20	ration will have no significant adverse effect on

the fish and wildlife, their habitat, and the envi-ronment of the Coastal Plain.

(4) Design safety and construction standards
for all pipelines and any access and service roads,
that—

1	(A) minimize, to the maximum extent pos-
2	sible, adverse effects upon the passage of mi-
3	gratory species such as caribou; and
4	(B) minimize adverse effects upon the flow
5	of surface water by requiring the use of cul-
6	verts, bridges, and other structural devices.
7	(5) Prohibitions on public access and use on all
8	pipeline access and service roads.
9	(6) Stringent reclamation and rehabilitation re-
10	quirements, consistent with the standards set forth
11	in this title, requiring the removal from the Coastal
12	Plain of all oil and gas development and production
13	facilities, structures, and equipment upon completion
14	of oil and gas production operations, except that the
15	Secretary may exempt from the requirements of this
16	paragraph those facilities, structures, or equipment
17	that the Secretary determines would assist in the
18	management of the Arctic National Wildlife Refuge
19	and that are donated to the United States for that
20	purpose.
21	(7) Appropriate prohibitions or restrictions on
22	access by all modes of transportation.
23	(8) Appropriate prohibitions or restrictions on
24	sand and gravel extraction.
25	(9) Consolidation of facility siting.

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(10) Appropriate prohibitions or restrictions on
 use of explosives.

3 (11) Avoidance, to the extent practicable, of
4 springs, streams, and river system; the protection of
5 natural surface drainage patterns, wetlands, and ri6 parian habitats; and the regulation of methods or
7 techniques for developing or transporting adequate
8 supplies of water for exploratory drilling.

9 (12) Avoidance or reduction of air traffic-re-10 lated disturbance to fish and wildlife.

(13) Treatment and disposal of hazardous and
toxic wastes, solid wastes, reserve pit fluids, drilling
muds and cuttings, and domestic wastewater, including an annual waste management report, a hazardous materials tracking system, and a prohibition
on chlorinated solvents, in accordance with applicable Federal and State environmental law.

18 (14) Fuel storage and oil spill contingency plan-19 ning.

20 (15) Research, monitoring, and reporting re-21 quirements.

(16) Field crew environmental briefings.

23 (17) Avoidance of significant adverse effects
24 upon subsistence hunting, fishing, and trapping by
25 subsistence users.

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1 (18) Compliance with applicable air and water 2 quality standards. 3 (19) Appropriate seasonal and safety zone des-4 ignations around well sites, within which subsistence 5 hunting and trapping shall be limited. 6 (20) Reasonable stipulations for protection of 7 cultural and archeological resources. 8 (21) All other protective environmental stipula-9 tions, restrictions, terms, and conditions deemed 10 necessary by the Secretary. 11 (e) CONSIDERATIONS.—In preparing and promul-12 gating regulations, lease terms, conditions, restrictions, 13 prohibitions, and stipulations under this section, the Secretary shall consider the following: 14 15 (1) The stipulations and conditions that govern 16 the National Petroleum Reserve-Alaska leasing pro-17 gram, as set forth in the 1999 Northeast National 18 Petroleum Reserve-Alaska Final Integrated Activity 19 Plan/Environmental Impact Statement. 20 The environmental protection standards (2)21 that governed the initial Coastal Plain seismic explo-22 ration program under parts 37.31 to 37.33 of title 23 50, Code of Federal Regulations. 24 (3) The land use stipulations for exploratory 25 drilling on the KIC–ASRC private lands that are set

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1	forth in Appendix 2 of the August 9, 1983, agree-
2	ment between Arctic Slope Regional Corporation and
3	the United States.
4	(f) FACILITY CONSOLIDATION PLANNING.—
5	(1) IN GENERAL.—The Secretary shall, after
6	providing for public notice and comment, prepare
7	and update periodically a plan to govern, guide, and
8	direct the siting and construction of facilities for the
9	exploration, development, production, and transpor-
10	tation of Coastal Plain oil and gas resources.
11	(2) Objectives.—The plan shall have the fol-
12	lowing objectives:
13	(A) Avoiding unnecessary duplication of fa-
14	cilities and activities.
15	(B) Encouraging consolidation of common
16	facilities and activities.
17	(C) Locating or confining facilities and ac-
18	tivities to areas that will minimize impact on
19	fish and wildlife, their habitat, and the environ-
20	ment.
21	(D) Utilizing existing facilities wherever
22	practicable.
23	(E) Enhancing compatibility between wild-
24	life values and development activities.

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1	SEC. 6508. EXPEDITED JUDICIAL REVIEW.
2	(a) FILING OF COMPLAINT.—
3	(1) DEADLINE.—Subject to paragraph (2), any
4	complaint seeking judicial review of any provision of
5	this title or any action of the Secretary under this
6	title shall be filed in any appropriate district court
7	of the United States—
8	(A) except as provided in subparagraph
9	(B), within the 90-day period beginning on the
10	date of the action being challenged; or
11	(B) in the case of a complaint based solely
12	on grounds arising after such period, within 90
13	days after the complainant knew or reasonably
14	should have known of the grounds for the com-
15	plaint.
16	(2) VENUE.—Any complaint seeking judicial re-
17	view of an action of the Secretary under this title
18	may be filed only in the United States Court of Ap-
19	peals for the District of Columbia.
20	(3) LIMITATION ON SCOPE OF CERTAIN RE-
21	VIEW.—Judicial review of a Secretarial decision to
22	conduct a lease sale under this title, including the
23	environmental analysis thereof, shall be limited to
24	whether the Secretary has complied with the terms
25	of this division and shall be based upon the adminis-
26	trative record of that decision. The Secretary's iden-

1 tification of a preferred course of action to enable
2 leasing to proceed and the Secretary's analysis of
3 environmental effects under this division shall be
4 presumed to be correct unless shown otherwise by
5 clear and convincing evidence to the contrary.

6 (b) LIMITATION ON OTHER REVIEW.—Actions of the
7 Secretary with respect to which review could have been
8 obtained under this section shall not be subject to judicial
9 review in any civil or criminal proceeding for enforcement.

10 SEC. 6509. RIGHTS-OF-WAY ACROSS THE COASTAL PLAIN.

(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.

17 (b) TERMS AND CONDITIONS.—The Secretary shall include in any right-of-way or easement referred to in sub-18 19 section (a) such terms and conditions as may be necessary 20 to ensure that transportation of oil and gas does not result 21 in a significant adverse effect on the fish and wildlife, sub-22 sistence resources, their habitat, and the environment of 23 the Coastal Plain, including requirements that facilities be 24 sited or designed so as to avoid unnecessary duplication 25 of roads and pipelines.

(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 for 13 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.

 shall be deposited into the fund amounts received by the United States as revenues derived from rents, bonuses, and royalties under on leases and lease sales authorized under this title. (4) LIMITATION ON DEPOSITS.—The total amount in the fund may not exceed \$10,000,000. (5) INVESTMENT OF BALANCES.—The Sec- retary of the Treasury shall invest amounts in the fund in interest bearing government securities. (e) AUTHORIZATION OF APPROPRIATIONS.—To pro- vide financial assistance under this section there is author- ized to be appropriated to the Secretary from the Coastal Plain Local Government Impact Aid Assistance Fund \$5,000,000 for each fiscal year. SEC. 6512. REVENUE ALLOCATION. (a) FEDERAL AND STATE DISTRIBUTION.— (1) IN GENERAL.—Notwithstanding section 6504 of this Act, the Mineral Leasing Act (30 U.S.C. 181 et. seq.), or any other law, of the amount of adjusted bonus, rental, and royalty reve- ized under this title.— (A) 50 percent shall be paid to the State of Alaska; and 	1	(3) DEPOSITS.—Subject to paragraph (4), there
 bonuses, and royalties under on leases and lease sales authorized under this title. (4) LIMITATION ON DEPOSITS.—The total amount in the fund may not exceed \$10,000,000. (5) INVESTMENT OF BALANCES.—The Sec- retary of the Treasury shall invest amounts in the fund in interest bearing government securities. (e) AUTHORIZATION OF APPROPRIATIONS.—To pro- vide financial assistance under this section there is author- ized to be appropriated to the Secretary from the Coastal Plain Local Government Impact Aid Assistance Fund \$5,000,000 for each fiscal year. SEC. 6512. REVENUE ALLOCATION. (a) FEDERAL AND STATE DISTRIBUTION.— (1) IN GENERAL.—Notwithstanding section 6504 of this Act, the Mineral Leasing Act (30) U.S.C. 181 et. seq.), or any other law, of the amount of adjusted bonus, rental, and royalty revenues from oil and gas leasing and operations author- ized under this title— (A) 50 percent shall be paid to the State 	2	shall be deposited into the fund amounts received by
 sales authorized under this title. (4) LIMITATION ON DEPOSITS.—The total amount in the fund may not exceed \$10,000,000. (5) INVESTMENT OF BALANCES.—The Sec- retary of the Treasury shall invest amounts in the fund in interest bearing government securities. (e) AUTHORIZATION OF APPROPRIATIONS.—To pro- vide financial assistance under this section there is author- ized to be appropriated to the Secretary from the Coastal Plain Local Government Impact Aid Assistance Fund \$5,000,000 for each fiscal year. SEC. 6512. REVENUE ALLOCATION. (a) FEDERAL AND STATE DISTRIBUTION.— (1) IN GENERAL.—Notwithstanding section 6504 of this Act, the Mineral Leasing Act (30) U.S.C. 181 et. seq.), or any other law, of the amount of adjusted bonus, rental, and royalty reve- nues from oil and gas leasing and operations author- ized under this title— (A) 50 percent shall be paid to the State 	3	the United States as revenues derived from rents,
 6 (4) LIMITATION ON DEPOSITS.—The total amount in the fund may not exceed \$10,000,000. 8 (5) INVESTMENT OF BALANCES.—The Sec- 9 retary of the Treasury shall invest amounts in the 10 fund in interest bearing government securities. 11 (e) AUTHORIZATION OF APPROPRIATIONS.—To pro- 12 vide financial assistance under this section there is author- 13 ized to be appropriated to the Secretary from the Coastal 14 Plain Local Government Impact Aid Assistance Fund 15 \$5,000,000 for each fiscal year. 16 SEC. 6512. REVENUE ALLOCATION. 17 (a) FEDERAL AND STATE DISTRIBUTION.— 18 (1) IN GENERAL.—Notwithstanding section 19 6504 of this Act, the Mineral Leasing Act (30 U.S.C. 181 et. seq.), or any other law, of the 21 amount of adjusted bonus, rental, and royalty reve- 22 nues from oil and gas leasing and operations author- 23 ized under this title— 24 (A) 50 percent shall be paid to the State 	4	bonuses, and royalties under on leases and lease
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 8 (5) INVESTMENT OF BALANCES.—The Sec- 9 retary of the Treasury shall invest amounts in the 10 fund in interest bearing government securities. 11 (e) AUTHORIZATION OF APPROPRIATIONS.—To pro- 12 vide financial assistance under this section there is author- 13 ized to be appropriated to the Secretary from the Coastal 14 Plain Local Government Impact Aid Assistance Fund 15 \$5,000,000 for each fiscal year. 16 SEC. 6512. REVENUE ALLOCATION. 17 (a) FEDERAL AND STATE DISTRIBUTION.— 18 (1) IN GENERAL.—Notwithstanding section 19 6504 of this Act, the Mineral Leasing Act (30) 20 U.S.C. 181 et. seq.), or any other law, of the 21 amount of adjusted bonus, rental, and royalty revenues from oil and gas leasing and operations author- 23 ized under this title— 24 (A) 50 percent shall be paid to the State 	6	(4) LIMITATION ON DEPOSITS.—The total
 9 retary of the Treasury shall invest amounts in the 10 fund in interest bearing government securities. 11 (e) AUTHORIZATION OF APPROPRIATIONS.—To pro- 12 vide financial assistance under this section there is author- 13 ized to be appropriated to the Secretary from the Coastal 14 Plain Local Government Impact Aid Assistance Fund 15 \$5,000,000 for each fiscal year. 16 SEC. 6512. REVENUE ALLOCATION. 17 (a) FEDERAL AND STATE DISTRIBUTION.— 18 (1) IN GENERAL.—Notwithstanding section 19 6504 of this Act, the Mineral Leasing Act (30 20 U.S.C. 181 et. seq.), or any other law, of the 21 amount of adjusted bonus, rental, and royalty reve- 22 nues from oil and gas leasing and operations author- 23 ized under this title— 24 (A) 50 percent shall be paid to the State 	7	amount in the fund may not exceed \$10,000,000.
10fund in interest bearing government securities.11(e) AUTHORIZATION OF APPROPRIATIONS.—To pro-12vide financial assistance under this section there is author-13ized to be appropriated to the Secretary from the Coastal14Plain Local Government Impact Aid Assistance Fund15\$5,000,000 for each fiscal year.16SEC. 6512. REVENUE ALLOCATION.17(a) FEDERAL AND STATE DISTRIBUTION.—18(1) IN GENERAL.—Notwithstanding section196504 of this Act, the Mineral Leasing Act (3020U.S.C. 181 et. seq.), or any other law, of the21amount of adjusted bonus, rental, and royalty reve-22nues from oil and gas leasing and operations author-23ized under this title—24(A) 50 percent shall be paid to the State	8	(5) INVESTMENT OF BALANCES.—The Sec-
 (e) AUTHORIZATION OF APPROPRIATIONS.—To pro- vide financial assistance under this section there is author- ized to be appropriated to the Secretary from the Coastal Plain Local Government Impact Aid Assistance Fund \$5,000,000 for each fiscal year. SEC. 6512. REVENUE ALLOCATION. (a) FEDERAL AND STATE DISTRIBUTION.— (1) IN GENERAL.—Notwithstanding section 6504 of this Act, the Mineral Leasing Act (30 U.S.C. 181 et. seq.), or any other law, of the amount of adjusted bonus, rental, and royalty revenues from oil and gas leasing and operations author- ized under this title— (A) 50 percent shall be paid to the State 	9	retary of the Treasury shall invest amounts in the
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 13 ized to be appropriated to the Secretary from the Coastal 14 Plain Local Government Impact Aid Assistance Fund 15 \$5,000,000 for each fiscal year. 16 SEC. 6512. REVENUE ALLOCATION. 17 (a) FEDERAL AND STATE DISTRIBUTION.— 18 (1) IN GENERAL.—Notwithstanding section 19 6504 of this Act, the Mineral Leasing Act (30 20 U.S.C. 181 et. seq.), or any other law, of the 21 amount of adjusted bonus, rental, and royalty revenues from oil and gas leasing and operations author- 23 ized under this title— 24 (A) 50 percent shall be paid to the State 	11	(e) Authorization of Appropriations.—To pro-
 14 Plain Local Government Impact Aid Assistance Fund 15 \$5,000,000 for each fiscal year. 16 SEC. 6512. REVENUE ALLOCATION. 17 (a) FEDERAL AND STATE DISTRIBUTION.— 18 (1) IN GENERAL.—Notwithstanding section 19 6504 of this Act, the Mineral Leasing Act (30 20 U.S.C. 181 et. seq.), or any other law, of the 21 amount of adjusted bonus, rental, and royalty reve- 22 nues from oil and gas leasing and operations author- 23 ized under this title— 24 (A) 50 percent shall be paid to the State 	12	vide financial assistance under this section there is author-
 15 \$5,000,000 for each fiscal year. 16 SEC. 6512. REVENUE ALLOCATION. 17 (a) FEDERAL AND STATE DISTRIBUTION.— 18 (1) IN GENERAL.—Notwithstanding section 19 6504 of this Act, the Mineral Leasing Act (30 20 U.S.C. 181 et. seq.), or any other law, of the 21 amount of adjusted bonus, rental, and royalty reve- 22 nues from oil and gas leasing and operations author- 23 ized under this title— 24 (A) 50 percent shall be paid to the State 	13	ized to be appropriated to the Secretary from the Coastal
 16 SEC. 6512. REVENUE ALLOCATION. 17 (a) FEDERAL AND STATE DISTRIBUTION.— 18 (1) IN GENERAL.—Notwithstanding section 19 6504 of this Act, the Mineral Leasing Act (30 20 U.S.C. 181 et. seq.), or any other law, of the 21 amount of adjusted bonus, rental, and royalty reve- 22 nues from oil and gas leasing and operations author- 23 ized under this title— 24 (A) 50 percent shall be paid to the State 	14	Plain Local Government Impact Aid Assistance Fund
 (a) FEDERAL AND STATE DISTRIBUTION.— (1) IN GENERAL.—Notwithstanding section 6504 of this Act, the Mineral Leasing Act (30 U.S.C. 181 et. seq.), or any other law, of the amount of adjusted bonus, rental, and royalty reve- nues from oil and gas leasing and operations author- ized under this title— (A) 50 percent shall be paid to the State 	15	\$5,000,000 for each fiscal year.
 (1) IN GENERAL.—Notwithstanding section 6504 of this Act, the Mineral Leasing Act (30 U.S.C. 181 et. seq.), or any other law, of the amount of adjusted bonus, rental, and royalty reve- nues from oil and gas leasing and operations author- ized under this title— (A) 50 percent shall be paid to the State 	16	SEC. 6512. REVENUE ALLOCATION.
 19 6504 of this Act, the Mineral Leasing Act (30 20 U.S.C. 181 et. seq.), or any other law, of the 21 amount of adjusted bonus, rental, and royalty reve- 22 nues from oil and gas leasing and operations author- 23 ized under this title— 24 (A) 50 percent shall be paid to the State 	17	(a) Federal and State Distribution.—
 U.S.C. 181 et. seq.), or any other law, of the amount of adjusted bonus, rental, and royalty reve- nues from oil and gas leasing and operations author- ized under this title— (A) 50 percent shall be paid to the State 	18	(1) IN GENERAL.—Notwithstanding section
 amount of adjusted bonus, rental, and royalty reve- nues from oil and gas leasing and operations author- ized under this title— (A) 50 percent shall be paid to the State 	19	6504 of this Act, the Mineral Leasing Act (30
 nues from oil and gas leasing and operations author- ized under this title— (A) 50 percent shall be paid to the State 	20	U.S.C. 181 et. seq.), or any other law, of the
 23 ized under this title— 24 (A) 50 percent shall be paid to the State 	21	amount of adjusted bonus, rental, and royalty reve-
24 (A) 50 percent shall be paid to the State	22	nues from oil and gas leasing and operations author-
	23	ized under this title—
25 of Alaska; and	24	(A) 50 percent shall be paid to the State
	25	of Alaska; and

(B) the balance shall be deposited into the
 Renewable Energy Technology Investment
 Fund and the Royalties Conservation Fund as
 provided in this section.
 (2) ADJUSTMENTS.—Adjustments to bonus,
 rental, and royalty amounts from oil and gas leasing

and operations authorized under this title shall be
made as necessary for overpayments and refunds
from lease revenues received in current or subsequent periods before distribution of such revenues
pursuant to this section.

12 (3) TIMING OF PAYMENTS TO STATE.—Pay13 ments to the State of Alaska under this section shall
14 be made semiannually.

15 (b) RENEWABLE ENERGY TECHNOLOGY INVEST-16 MENT FUND.—

17 (1) ESTABLISHMENT AND AVAILABILITY.—
18 There is hereby established in the Treasury of the
19 United States a separate account which shall be
20 known as the "Renewable Energy Technology In21 vestment Fund".

(2) DEPOSITS.—Fifty percent of adjusted revenues from bonus payments for leases issued under
this title shall be deposited into the Renewable Energy Technology Investment Fund.

1 (3) USE, GENERALLY.—Subject to paragraph 2 (4), funds deposited into the Renewable Energy 3 Technology Investment Fund shall be used by the 4 Secretary of Energy to finance research grants, con-5 tracts, and cooperative agreements and expenses of 6 direct research by Federal agencies, including the 7 costs of administering and reporting on such a pro-8 gram of research, to improve and demonstrate tech-9 nology and develop basic science information for de-10 velopment and use of renewable and alternative fuels 11 including wind energy, solar energy, geothermal en-12 ergy, and energy from biomass. Such research may 13 include studies on deployment of such technology in-14 cluding research on how to lower the costs of intro-15 duction of such technology and of barriers to entry 16 into the market of such technology.

(4) USE FOR ADJUSTMENTS AND REFUNDS.—If
for any circumstances, adjustments or refunds of
bonus amounts deposited pursuant to this title become warranted, 50 percent of the amount necessary
for the sum of such adjustments and refunds may
be paid by the Secretary from the Renewable Energy
Technology Investment Fund.

24 (5) CONSULTATION AND COORDINATION.—Any
25 specific use of the Renewable Energy Technology In-

1	vestment Fund shall be determined only after the
2	Secretary of Energy consults and coordinates with
3	the heads of other appropriate Federal agencies.
4	(6) REPORTS.—Not later than 1 year after the
5	date of the enactment of this Act and on an annual
б	basis thereafter, the Secretary of Energy shall trans-
7	mit to the Committee on Science of the House of
8	Representatives and the Committee on Energy and
9	Natural Resources of the Senate a report on the use
10	of funds under this subsection and the impact of and
11	efforts to integrate such uses with other energy re-
12	search efforts.
13	(c) Royalties Conservation Fund.—
13 14	(c) Royalties Conservation Fund.— (1) Establishment and availability.—
14	(1) ESTABLISHMENT AND AVAILABILITY.—
14 15	(1) ESTABLISHMENT AND AVAILABILITY.— There is hereby established in the Treasury of the
14 15 16	(1) ESTABLISHMENT AND AVAILABILITY.— There is hereby established in the Treasury of the United States a separate account which shall be
14 15 16 17	(1) ESTABLISHMENT AND AVAILABILITY.— There is hereby established in the Treasury of the United States a separate account which shall be known as the "Royalties Conservation Fund".
14 15 16 17 18	 (1) ESTABLISHMENT AND AVAILABILITY.— There is hereby established in the Treasury of the United States a separate account which shall be known as the "Royalties Conservation Fund". (2) DEPOSITS.—Fifty percent of revenues from
14 15 16 17 18 19	 (1) ESTABLISHMENT AND AVAILABILITY.— There is hereby established in the Treasury of the United States a separate account which shall be known as the "Royalties Conservation Fund". (2) DEPOSITS.—Fifty percent of revenues from rents and royalty payments for leases issued under
14 15 16 17 18 19 20	 (1) ESTABLISHMENT AND AVAILABILITY.— There is hereby established in the Treasury of the United States a separate account which shall be known as the "Royalties Conservation Fund". (2) DEPOSITS.—Fifty percent of revenues from rents and royalty payments for leases issued under this title shall be deposited into the Royalties Con-
14 15 16 17 18 19 20 21	 (1) ESTABLISHMENT AND AVAILABILITY.— There is hereby established in the Treasury of the United States a separate account which shall be known as the "Royalties Conservation Fund". (2) DEPOSITS.—Fifty percent of revenues from rents and royalty payments for leases issued under this title shall be deposited into the Royalties Con- servation Fund.

1	(A) may be used by the Secretary of the
2	Interior and the Secretary of Agriculture to fi-
3	nance grants, contracts, cooperative agree-
4	ments, and expenses for direct activities of the
5	Department of the Interior and the Forest
6	Service to restore and otherwise conserve lands
7	and habitat and to eliminate maintenance and
8	improvements backlogs on Federal lands, in-
9	cluding the costs of administering and reporting
10	on such a program; and
11	(B) may be used by the Secretary of the
12	Interior to finance grants, contracts, coopera-
13	tive agreements, and expenses—
14	(i) to preserve historic Federal prop-
15	erties;
16	(ii) to assist States and Indian Tribes
17	in preserving their historic properties;
18	(iii) to foster the development of
19	urban parks; and
20	(iv) to conduct research to improve
21	the effectiveness and lower the costs of
22	habitat restoration.
23	(4) Use for adjustments and refunds.—If
24	for any circumstances, refunds or adjustments of
25	royalty and rental amounts deposited pursuant to

1	this title become warranted, 50 percent of the
2	amount necessary for the sum of such adjustments
3	and refunds may be paid from the Royalties Con-
4	servation Fund.
5	(d) AVAILABILITY.—Moneys covered into the ac-
6	counts established by this section—
7	(1) shall be available for expenditure only to the
8	extent appropriated therefor;
9	(2) may be appropriated without fiscal-year lim-
10	itation; and
11	(3) may be obligated or expended only as pro-
12	vided in this section.
13	TITLE VI—CONSERVATION OF
13 14	TITLE VI—CONSERVATION OF ENERGY BY THE DEPART-
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14	ENERGY BY THE DEPART-
14 15	ENERGY BY THE DEPART- MENT OF THE INTERIOR
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14 15 16 17	ENERGY BY THE DEPART- MENT OF THE INTERIOR SEC. 6601. ENERGY CONSERVATION BY THE DEPARTMENT OF THE INTERIOR.
14 15 16 17 18	ENERGYBYTHEDEPART-MENT OFTHEINTERIORSEC. 6601. ENERGY CONSERVATION BY THE DEPARTMENTOF THE INTERIOR.(a) IN GENERAL.—The Secretary of the Interior
14 15 16 17 18 19	ENERGY BY THE DEPART- MENT OF THE INTERIOR SEC. 6601. ENERGY CONSERVATION BY THE DEPARTMENT OF THE INTERIOR. (a) IN GENERAL.—The Secretary of the Interior shall—
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14 15 16 17 18 19 20 21	ENERGY BY THE DEPART- MENT OF THE INTERIOR SEC. 6601. ENERGY CONSERVATION BY THE DEPARTMENT OF THE INTERIOR. (a) IN GENERAL.—The Secretary of the Interior shall— (1) conduct a study to identify, evaluate, and recommend opportunities for conserving energy by
 14 15 16 17 18 19 20 21 22 	ENERGY BY THE DEPART- MENT OF THE INTERIOR SEC. 6601. ENERGY CONSERVATION BY THE DEPARTMENT OF THE INTERIOR. (a) IN GENERAL.—The Secretary of the Interior shall— (1) conduct a study to identify, evaluate, and recommend opportunities for conserving energy by reducing the amount of energy used by facilities of

25 the use of energy from traditional sources by encour-

1	aging use of alternative energy sources, including
2	solar power and power from fuel cells, throughout
3	such facilities and the public lands of the United
4	States.
5	(b) REPORTS.—The Secretary shall submit to the
6	Congress—
7	(1) by not later than 90 days after the date of
8	the enactment of this Act, a report containing the
9	findings, conclusions, and recommendations of the
10	study under subsection $(a)(1)$; and
11	(2) by not later than December 31 each year,
12	an annual report describing progress made in—
13	(A) conserving energy through opportuni-
14	ties recommended in the report under para-
15	graph (1) ; and
16	(B) encouraging use of alternative energy
17	sources under subsection $(a)(2)$.
18	SEC. 6602. AMENDMENT TO BUY INDIAN ACT.
19	Section 23 of the Act of June 25, 1910 (25 U.S.C.
20	47; commonly known as the "Buy Indian Act") is amend-
21	ed by inserting "energy products, and energy by-prod-
22	ucts," after "printing,".

1	TITLE VII—COAL
2	SEC. 6701. LIMITATION ON FEES WITH RESPECT TO COAL
3	LEASE APPLICATIONS AND DOCUMENTS.
4	Notwithstanding sections 304 and 504 of the Federal
5	Land Policy and Management Act of 1976 (43 U.S.C.
6	1734, 1764) and section 9701 of title 31, United States
7	Code, the Secretary shall not recover the Secretary's costs
8	with respect to applications and other documents relating
9	coal leases.
10	SEC. 6702. MINING PLANS.
11	Section $2(d)(2)$ of the Mineral Leasing Act (30
12	U.S.C. 202a(2)) is amended—
13	(1) by inserting "(A)" after "(2)"; and
14	(2) by adding at the end the following:
15	"(B) The Secretary may establish a period of more
16	than 40 years if the Secretary determines that the longer
17	period—
18	"(i) will ensure the maximum economic recovery
19	of a coal deposit; or
20	"(ii) the longer period is in the interest of the
21	orderly, efficient, or economic development of a coal
22	resources.".

SEC. 6703. PAYMENT OF ADVANCE ROYALTIES UNDER COAL LEASES.

3 (a) IN GENERAL.—Section 7(b) of the Mineral Leas4 ing Act of 1920 (30 U.S.C. 207(b)) is amended to read
5 as follows:

6 "(b)(1) Each lease shall be subjected to the condition
7 of diligent development and continued operation of the
8 mine or mines, except where operations under the lease
9 are interrupted by strikes, the elements, or casualties not
10 attributable to the lessee.

"(2)(A) The Secretary of the Interior, upon determining that the public interest will be served thereby, may
suspend the condition of continued operation upon the
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.

"(C) The aggregate number of years during the initial and any extended term of any lease for which advance
royalties may be accepted in lieu of the condition of continued operation shall not exceed 20.

"(3) The amount of any production royalty paid for
any year shall be reduced (but not below zero) by the
amount of any advance royalties paid under such lease to

the extent that such advance royalties have not been used
 to reduce production royalties for a prior year.

3 "(4) This subsection shall be applicable to any lease
4 or logical mining unit in existence on the date of the enact5 ment of this paragraph or issued or approved after such
6 date.

7 "(5) Nothing in this subsection shall be construed to
8 affect the requirement contained in the second sentence
9 of subsection (a) relating to commencement of production
10 at the end of 10 years.".

(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.

15 SEC. 6704. ELIMINATION OF DEADLINE FOR SUBMISSION
16 OF COAL LEASE OPERATION AND RECLAMA17 TION PLAN.

18 Section 7(c) of the Mineral Leasing Act (30 U.S.C.
19 207(c)) is amended by striking "and not later than three
20 years after a lease is issued,".

21 TITLE VIII—INSULAR AREAS 22 ENERGY SECURITY

23 SEC. 6801. INSULAR AREAS ENERGY SECURITY.

24 Section 604 of the Act entitled "An Act to authorize 25 appropriations for certain insular areas of the United States, and for other purposes", approved December 24,
 1980 (Public Law 96-597; 94 Stat. 3480-3481), is
 amended—

4 (1) in subsection (a)(4) by striking the period
5 and inserting a semicolon;

6 (2) by adding at the end of subsection (a) the7 following new paragraphs:

8 "(5) electric power transmission and distribu-9 tion lines in insular areas are inadequate to with-10 stand damage caused by the hurricanes and ty-11 phoons which frequently occur in insular areas and 12 such damage often costs millions of dollars to repair; 13 and

"(6) the refinement of renewable energy technologies since the publication of the 1982 Territorial
Energy Assessment prepared pursuant to subsection
(c) reveals the need to reassess the state of energy
production, consumption, infrastructure, reliance on
imported energy, and indigenous sources in regard
to the insular areas.";

21 (3) by amending subsection (e) to read as fol-22 lows:

23 "(e)(1) The Secretary of the Interior, in consultation24 with the Secretary of Energy and the chief executive offi-

cer of each insular area, shall update the plans required
 under subsection (c) by—

3 "(A) updating the contents required by sub4 section (c);

5 "(B) drafting long-term energy plans for such
6 insular areas with the objective of reducing, to the
7 extent feasible, their reliance on energy imports by
8 the year 2010 and maximizing, to the extent fea9 sible, use of indigenous energy sources; and

10 "(C) drafting long-term energy transmission 11 line plans for such insular areas with the objective 12 that the maximum percentage feasible of electric 13 power transmission and distribution lines in each in-14 sular area be protected from damage caused by hur-15 ricanes and typhoons.

16 "(2) Not later than May 31, 2003, the Secretary of
17 the Interior shall submit to Congress the updated plans
18 for each insular area required by this subsection."; and

(4) by amending subsection (g)(4) to read asfollows:

21 "(4) POWER LINE GRANTS FOR TERRI22 TORIES.—

23 "(A) IN GENERAL.—The Secretary of the
24 Interior is authorized to make grants to govern25 ments of territories of the United States to

	524
1	carry out eligible projects to protect electric
2	power transmission and distribution lines in
3	such territories from damage caused by hurri-
4	canes and typhoons.
5	"(B) ELIGIBLE PROJECTS.—The Secretary
6	may award grants under subparagraph (A) only
7	to governments of territories of the United
8	States that submit written project plans to the
9	Secretary for projects that meet the following
10	criteria:
11	"(i) The project is designed to protect
12	electric power transmission and distribu-
13	tion lines located in one or more of the ter-
14	ritories of the United States from damage
15	caused by hurricanes and typhoons.
16	"(ii) The project is likely to substan-
17	tially reduce the risk of future damage,
18	hardship, loss, or suffering.
19	"(iii) The project addresses one or
20	more problems that have been repetitive or
21	that pose a significant risk to public health
22	and safety.
23	"(iv) The project is not likely to cost
24	more than the value of the reduction in di-
25	rect damage and other negative impacts

1	that the project is designed to prevent or
2	mitigate. The cost benefit analysis required
3	by this criterion shall be computed on a
4	net present value basis.
5	"(v) The project design has taken into
6	consideration long-term changes to the
7	areas and persons it is designed to protect
8	and has manageable future maintenance
9	and modification requirements.
10	"(vi) The project plan includes an
11	analysis of a range of options to address
12	the problem it is designed to prevent or
13	mitigate and a justification for the selec-
14	tion of the project in light of that analysis.
15	"(vii) The applicant has demonstrated
16	to the Secretary that the matching funds
17	required by subparagraph (D) are avail-
18	able.
19	"(C) PRIORITY.—When making grants
20	under this paragraph, the Secretary shall give
21	priority to grants for projects which are likely
22	to—
23	"(i) have the greatest impact on re-
24	ducing future disaster losses; and

1	"(ii) best conform with plans that
2	have been approved by the Federal Govern-
3	ment or the government of the territory
4	where the project is to be carried out for
5	development or hazard mitigation for that
6	territory.
7	"(D) MATCHING REQUIREMENT.—The
8	Federal share of the cost for a project for which
9	a grant is provided under this paragraph shall
10	not exceed 75 percent of the total cost of that
11	project. The non-Federal share of the cost may
12	be provided in the form of cash or services.
13	"(E) TREATMENT OF FUNDS FOR CERTAIN
14	PURPOSES.—Grants provided under this para-
15	graph shall not be considered as income, a re-
16	source, or a duplicative program when deter-
17	mining eligibility or benefit levels for Federal
18	major disaster and emergency assistance.
19	"(F) AUTHORIZATION OF APPROPRIA-
20	TIONS.—There is authorized to be appropriated
21	to carry out this paragraph \$5,000,000 for each
22	fiscal year beginning after the date of the en-
23	actment of this paragraph.".

DIVISION G

530

2 SEC. 7101. BUY AMERICAN.

1

3 No funds authorized under this Act shall be available

4 to any person or entity that has been convicted of violating

5 the Buy American Act (41 U.S.C. 10a–10c).

Passed the House of Representatives August 2 (legislative day, August 1), 2001.

Attest:

JEFF TRANDAHL,

Clerk.

Calendar No. 145

^{107TH CONGRESS} 1ST SESSION H.R.4

AN ACT

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

SEPTEMBER 4, 2001 Read the second time and placed on the calendar