# Calendar No. 87

108TH CONGRESS 1ST SESSION

# S. 1005

# [Report No. 108-43]

To enhance the energy security of the United States, and for other purposes.

## IN THE SENATE OF THE UNITED STATES

May 6, 2003

Mr. Domenici, from the Committee on Energy and Natural Resources, reported the following original bill; which was read twice and placed on the calendar

# A BILL

To enhance the energy security of the United States, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE.
- 4 This Act may be cited as "The Energy Policy Act
- 5 of 2003".
- 6 SEC. 2. TABLE OF CONTENTS.
- 7 The table of contents for this Act is as follows:
  - Sec. 1. Short title.
  - Sec. 2. Table of contents.

#### TITLE I—OIL AND GAS

#### Subtitle A—Production Incentives

- Sec. 101. Permanent authority to operate the strategic petroleum reserve and other energy programs.
- Sec. 102. Study on inventory of petroleum and natural gas storage.
- Sec. 103. Program on oil and gas royalties in kind.
- Sec. 104. Marginal property production incentives.
- Sec. 105. Comprehensive inventory of OCS oil and natural gas resources.
- Sec. 106. Royalty relief for deep water production.
- Sec. 107. Alaska offshore royalty suspension.
- Sec. 108. Orphaned, abandoned, or idled wells on federal lands.
- Sec. 109. Incentives for natural gas production from deep wells in the shallow waters of the Gulf of Mexico.
- Sec. 110. Alternate energy-related uses on the outer continental shelf.
- Sec. 111. Coastal impact assistance.
- Sec. 112. National energy resource database.
- Sec. 113. Oil and gas lease acreage limitation.
- Sec. 114. Assessment of dependence of State of Hawaii on oil.

#### Subtitle B—Access to Federal Lands

- Sec. 121. Office of Federal Energy Permit Coordination.
- Sec. 122. Pilot project to improve Federal permit coordination.
- Sec. 123. Federal onshore leasing programs for oil and gas.
- Sec. 124. Estimates of oil and gas resources underlying onshore Federal lands.
- Sec. 125. Split-estate Federal oil and gas leasing and development practices.
- Sec. 126. Coordination of Federal agencies to establish priority energy transmission rights-of-way.

#### Subtitle C—Alaska Natural Gas Pipeline

- Sec. 131. Short title.
- Sec. 132. Definitions.
- Sec. 133. Issuance of Certificate of Public Convenience and Necessity.
- Sec. 134. Environmental reviews.
- Sec. 135. Pipeline expansion.
- Sec. 136. Federal coordinator.
- Sec. 137. Judicial review.
- Sec. 138. State jurisdiction over in-state delivery of natural gas.
- Sec. 139. Study of alternative means of construction.
- Sec. 140. Clarification of ANGTA status and authorities.
- Sec. 141. Sense of Congress.
- Sec. 142. Participation of small business concerns.
- Sec. 143. Alaska Pipeline Construction Training Program.
- Sec. 144. Loan guarantee.
- Sec. 145. Sense of Congress on natural gas demand.

#### TITLE II—COAL

#### Subtitle A—Clean Coal Power Initiative

- Sec. 201. Authorization of appropriations.
- Sec. 202. Project criteria.
- Sec. 203. Reports.
- Sec. 204. Clean coal centers of excellence.

## Subtitle B—Federal Coal Leases

- Sec. 211. Repeal of the 160-acre limitation for coal leases.
- Sec. 212. Mining plans.
- Sec. 213. Payment of advance royalties under coal leases.
- Sec. 214. Elimination of deadline for submission of coal lease operation and reclamation plan.
- Sec. 215. Application of amendments.

#### Subtitle C—Powder River Basin

Sec. 221. Resolution of Federal resource development conflicts in the Powder River Basin.

#### TITLE III—INDIAN ENERGY

- Sec. 301. Short title.
- Sec. 302. Office of Indian Energy Policy and Programs.
- Sec. 303. Indian energy.

#### "TITLE XXVI—INDIAN ENERGY.

- "Sec. 2601. Definitions.
- "Sec. 2602. Indian Tribal energy resource development.
- "Sec. 2603. Indian Tribal energy resource regulation.
- "Sec. 2604. Leases, business agreements, and rights-of-way involving energy development or transmission.
- "Sec. 2605. Federal power marketing administrations.
- "Sec. 2606. Indian mineral development review.
- "Sec. 2607. Wind and hydropower feasibility study.
- Sec. 304. Four Corners transmission line project.
- Sec. 305. Energy efficiency in federally assisted housing.
- Sec. 306. Consultation with Indian Tribes.

#### TITLE IV—NUCLEAR

#### Subtitle A—Price-Anderson Amendments

- Sec. 401. Short title.
- Sec. 402. Extension of indemnification authority.
- Sec. 403. Maximum assessment.
- Sec. 404. Department of Energy Liability Limit.
- Sec. 405. Incidents outside the United States.
- Sec. 406. Reports.
- Sec. 407. Inflation adjustment.
- Sec. 408. Treatment of modular reactors.
- Sec. 409. Applicability.
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#### Subtitle B—Deployment of Commercial Nuclear Plants

- Sec. 421. Short title.
- Sec. 422. Definitions.
- Sec. 423. Responsibilities of the Secretary of Energy.
- Sec. 424. Limitations.
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Subtitle C—Advanced Reactor Hydrogen Co-Generation Project

- Sec. 431. Project establishment.
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- Sec. 434. Project requirements.
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#### Subtitle D—Miscellaneous Matters

- Sec. 441. Uranium sales and transfers.
- Sec. 442. Decommissioning Pilot Program.

## TITLE V—RENEWABLE ENERGY

#### Subtitle A—General Provisions

- Sec. 501. Assessment of renewable energy resources.
- Sec. 502. Renewable energy production incentive.
- Sec. 503. Renewable energy on Federal lands.
- Sec. 504. Federal purchase requirement.
- Sec. 505. Insular area renewable and energy efficient plans.

#### Subtitle B—Hydroelectric Relicensing

Sec. 511. Alternative conditions and fishways.

#### Subtitle C—Geothermal Energy

- Sec. 521. Competitive lease sale requirements.
- Sec. 522. Geothermal leasing and permitting on Federal lands.
- Sec. 523. Leasing and permitting on Federal lands withdrawn for military purposes.
- Sec. 524. Reinstatement of leases terminated for failure to pay rent.
- Sec. 525. Royalty reduction and relief.
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#### Subtitle D—Biomass Energy

- Sec. 531. Definitions.
- Sec. 532. Biomass Commercial Utilization Grant Program.
- Sec. 533. Improved Biomass Utilization Grant Program.
- Sec. 534. Report.

#### TITLE VI—ENERGY EFFICIENCY

#### Subtitle A—Federal Programs

- Sec. 601. Energy management requirements.
- Sec. 602. Energy use measurement and accountability.
- Sec. 603. Federal building performance standards.
- Sec. 604. Energy savings performance contracts.
- Sec. 605. Procurement of energy efficient products.
- Sec. 606. Congressional building efficiency.
- Sec. 607. Increased Federal use of recovered mineral components in federally funded projects involving procurement of cement or concrete.
- Sec. 608. Utility energy service contracts.
- Sec. 609. Study of energy efficiency standards.

#### Subtitle B—State and Local Programs

- Sec. 611. Low Income Community Energy Efficiency Pilot Program.
- Sec. 612. Energy efficient public buildings.
- Sec. 613. Energy efficient appliance rebate programs.

#### Subtitle C—Consumer Products

- Sec. 621. Energy conservation standards for additional products.
- Sec. 622. Energy labeling.
- Sec. 623. Energy Star Program.
- Sec. 624. HVAC Maintenance Consumer Education Program.

#### Subtitle D—Public Housing

- Sec. 631. Capacity Building for energy-efficient, affordable housing.
- Sec. 632. Increase of CDBG public services cap for energy conservation and efficiency activities.
- Sec. 633. FHA mortgage insurance incentives for energy efficient housing.
- Sec. 634. Public Housing Capital Fund.
- Sec. 635. Grants for energy-conserving improvements for assisted housing.
- Sec. 636. North American Development Bank.
- Sec. 637. Energy-efficient appliances.
- Sec. 638. Energy efficiency standards.
- Sec. 639. Energy strategy for HUD.

#### TITLE VII—TRANSPORTATION FUELS

#### Subtitle A—Alternative Fuel Programs

- Sec. 701. Use of alternative fuels by dual-fueled vehicles.
- Sec. 702. Fuel use credits.
- Sec. 703. Neighborhood electric vehicles.
- Sec. 704. Credits for medium and heavy duty dedicated vehicles.
- Sec. 705. Alternative fuel infrastructure.
- Sec. 706. Incremental cost allocation.
- Sec. 707. Review of alternative fuel programs.
- Sec. 708. High occupancy vehicle exception.
- Sec. 709. Alternate compliance and flexibility.

#### Subtitle B—Automobile Fuel Economy

- Sec. 711. Automobile fuel economy standards.
- Sec. 712. Dual-fueled automobiles.
- Sec. 713. Federal fleet fuel economy.
- Sec. 714. Railroad efficiency.
- Sec. 715. Reduction of engine idling in heavy-use vehicles.

#### TITLE VIII—HYDROGEN

#### Subtitle A—Basic Research Programs

- Sec. 801. Short title.
- Sec. 802. Matsunaga Act amendment.
- Sec. 803. Hydrogen transportation and fuel initiative.
- Sec. 804. Interagency Task Force and Coordination Plan.
- Sec. 805. Review by the National Academies.

#### Subtitle B—Demonstration Programs

- Sec. 811. Definitions.
- Sec. 812. Hydrogen Vehicle Demonstration Program.
- Sec. 813. Stationary Fuel Cell Demonstration Program.
- Sec. 814. Hydrogen demonstration programs in National Parks.
- Sec. 815. International Demonstration Program.
- Sec. 816. Tribal stationary hybrid power demonstration.
- Sec. 817. Distributed Generation Pilot Program.

#### Subtitle C—Federal Programs

- Sec. 821. Public education and training.
- Sec. 822. Hydrogen transition strategic planning.
- Sec. 823. Minimum Federal fleet requirement.
- Sec. 824. Stationary fuel cell purchase requirement.
- Sec. 825. Department of Energy Strategy.

#### TITLE IX—RESEARCH AND DEVELOPMENT

- Sec. 901. Short title.
- Sec. 902. Goals.
- Sec. 903. Definitions.

#### Subtitle A—Energy Efficiency

- Sec. 911. Energy efficiency.
- Sec. 912. Next generation lighting initiative.
- Sec. 913. National building performance initiative.
- Sec. 914. Secondary Electric Vehicle Battery Use Program.
- Sec. 915. Energy efficiency science initiative.

#### Subtitle B—Distributed Energy and Electric Energy Systems

- Sec. 921. Distributed energy and electric energy systems.
- Sec. 922. Hybrid distributed power systems.
- Sec. 923. High Power Density Industry Program.
- Sec. 924. Micro-cogeneration energy technology.
- Sec. 925. Distributed Energy Technology Demonstration Program.
- Sec. 926. Office of Electric Transmission and Distribution.
- Sec. 927. Electric transmission and distribution programs.

#### Subtitle C—Renewable Energy

- Sec. 931. Renewable energy.
- Sec. 932. Bioenergy programs.
- Sec. 933. Biodiesel Engine Testing Program.
- Sec. 934. Concentrating Solar Power Research Program.
- Sec. 935. Miscellaneous projects.

#### Subtitle D—Nuclear Energy

- Sec. 941. Nuclear energy.
- Sec. 942. Nuclear energy research programs.
- Sec. 943. Advanced fuel cycle initiative.
- Sec. 944. University nuclear science and engineering support.
- Sec. 945. Security of nuclear facilities.
- Sec. 946. Alternatives to industrial radioactive sources.

#### Subtitle E—Fossil Energy

- Sec. 951. Fossil energy.
- Sec. 952. Oil and gas research programs.
- Sec. 953. Research and development for coal mining technologies.
- Sec. 954. Coal and Related Technologies Program.
- Sec. 955. Complex well technology testing facility.

#### Subtitle F—Science

- Sec. 961. Science.
- Sec. 962. United States participation in ITER.
- Sec. 963. Spallation neutron source.
- Sec. 964. Support for science and energy facilities and infrastructure.
- Sec. 965. Catalysis Research Program.
- Sec. 966. Nanoscale science and engineering research.
- Sec. 967. Advanced scientific computing for energy missions.
- Sec. 968. Genomes to Life Program.
- Sec. 969. Fission and Fusion Energy Materials Research Program.
- Sec. 970. Energy-Water Supply Technologies Program.

#### Subtitle G—Energy and Environment

- Sec. 971. United States-Mexico energy technology cooperation.
- Sec. 972. Coal technology loan.

#### Subtitle H-Management

- Sec. 981. Availability of funds.
- Sec. 982. Cost sharing.
- Sec. 983. Merit review of proposals.
- Sec. 984. External technical review of departmental programs.
- Sec. 985. Improved coordination of technology transfer activities.
- Sec. 986. Technology Infrastructure Program.
- Sec. 987. Small business advocacy and assistance.
- Sec. 988. Mobility of scientific and technical personnel.
- Sec. 989. National Academy of Sciences report.
- Sec. 990. Outreach.
- Sec. 991. Competitive award of management contracts.
- Sec. 992. Reprogramming.
- Sec. 993. Construction with other laws.
- Sec. 994. Improved coordination and management of civilian science and technology programs.
- Sec. 995. Educational programs in science and mathematics.
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- Sec. 997. Report on research and development program evaluation methodologies.

#### TITLE X—PERSONNEL AND TRAINING

- Sec. 1001. Workforce trends and traineeship grants.
- Sec. 1002. Research fellowships in energy research.
- Sec. 1003. Training guidelines for electric energy industry personnel.
- Sec. 1004. National Center on Energy Management and Building Technologies.
- Sec. 1005. Improved access to energy-related scientific and technical careers.
- Sec. 1006. National Power Plant Operations Technology and Education Center.
- Sec. 1007. Federal mine inspectors.

#### TITLE XI—ELECTRICITY

Sec. 1101. Definitions.

## Subtitle A—Reliability

Sec. 1111. Electric reliability standards.

#### Subtitle B—Regional Markets

- Sec. 1121. Implementation date for proposed rulemaking for standard market design.
- Sec. 1122. Sense of the Congress on regional transmission organizations.
- Sec. 1123. Federal utility participation in regional transmission organizations.
- Sec. 1124. Regional consideration of competitive wholesale markets.

# Subtitle C—Improving Transmission Access and Protecting Service Obligations

- Sec. 1131. Service obligation security and parity.
- Sec. 1132. Open non-discriminatory access.
- Sec. 1133. Transmission infrastructure investment.

#### Subtitle D—Amendments to the Public Utility Regulatory Policies Act of 1978

- Sec. 1141. Net metering.
- Sec. 1142. Smart metering.
- Sec. 1143. Adoption of additional standards.
- Sec. 1144. Technical assistance.
- Sec. 1145. Cogeneration and small power production purchase and sale requirements.
- Sec. 1146. Recovery of costs.

#### Subtitle E—Provisions Regarding the Public Utility Holding Company Act of 1935

- Sec. 1151. Definitions.
- Sec. 1152. Repeal of the Public Utility Holding Company Act of 1935.
- Sec. 1153. Federal access to books and records.
- Sec. 1154. State access to books and records.
- Sec. 1155. Exemption authority.
- Sec. 1156. Affiliate transactions.
- Sec. 1157. Applicability.
- Sec. 1158. Effect on other regulations.
- Sec. 1159. Enforcement.
- Sec. 1160. Savings provisions.
- Sec. 1161. Implementation.
- Sec. 1162. Transfer of resources.
- Sec. 1163. Effective date.
- Sec. 1164. Conforming amendment to the Federal Power Act.

## Subtitle F—Market Transparency, Anti-Manipulation and Enforcement

- Sec. 1171. Market transparency rules.
- Sec. 1172. Market manipulation.
- Sec. 1173. Enforcement.
- Sec. 1174. Refund effective date.

#### Subtitle G—Consumer Protections

Sec. 1181. Consumer privacy.

Sec. 1182. Unfair trade practices.

Sec. 1183. Definitions.

Subtitle H—Technical Amendments

Sec. 1191. Technical Amendments.

# TITLE I—OIL AND GAS Subtitle A—Production Incentives

- 3 SEC. 101. PERMANENT AUTHORITY TO OPERATE THE STRA-
- 4 TEGIC PETROLEUM RESERVE AND OTHER
- 5 **ENERGY PROGRAMS.**
- 6 (a) Amendment to Title I of the Energy Pol-
- 7 ICY AND CONSERVATION ACT.—Title I of the Energy Pol-
- 8 icy and Conservation Act (42 U.S.C. 6211 et seq.) is
- 9 amended—
- 10 (1) by striking section 166 (42 U.S.C. 6246)
- and inserting—
- 12 "AUTHORIZATION OF APPROPRIATIONS
- "Sec. 166. There are authorized to be appropriated
- 14 to the Secretary such sums as may be necessary to carry
- 15 out this part and part D, to remain available until ex-
- 16 pended.";
- 17 (2) by striking section 186 (42 U.S.C.
- 18 6250(e); and
- 19 (3) by striking part E (42 U.S.C. 6251); relat-
- ing to the expiration of title I of the Act).

- 1 (b) AMENDMENT TO TITLE II OF THE ENERGY POL-2 ICY AND CONSERVATION ACT.—Title II of the Energy
- 3 Policy and Conservation Act (42 U.S.C. 6271 et seq.) is
- 4 amended—
- 5 (1) by striking section 256(h) (42 U.S.C.
- 6 6276(h)) and inserting—
- 7 "(g) AUTHORIZATION OF APPROPRIATIONS.—There
- 8 are authorized to be appropriated to the Secretary such
- 9 sums as may be necessary to carry out this part, to remain
- 10 available until expended.";
- 11 (2) by inserting before section 273 (42 U.S.C.
- 12 6283) the following:
- 13 "PART C—SUMMER FILL AND FUEL BUDGETING
- Programs";
- 15 (3) by striking section 273(e) (42 U.S.C.
- 16 6283(e)); relating to the expiration of summer fill
- and fuel budgeting programs); and
- 18 (4) by striking part D (42 U.S.C. 6285); relat-
- ing to the expiration of title II of the Act).
- 20 (c) Technical Amendments.—The table of con-
- 21 tents for the Energy Policy and Conservation Act is
- 22 amended—
- 23 (1) by amending the items relating to part D
- of title I to read as follows:

"PART D—NORTHEAST HOME HEATING OIL RESERVE

<sup>&</sup>quot;Sec. 181. Establishment.

- "Sec. 182. Authority.
- "Sec. 183. Conditions for release; plan.
- "Sec. 184. Northeast Home Heating Oil Reserve Account.
- "Sec. 185. Exemptions.";
- 1 (2) by amending the items relating to part C of
- 2 title II to read as follows:

"PART C—SUMMER FILL AND FUEL BUDGETING PROGRAMS

"Sec. 273. Summer fill and fuel budgeting programs.";

- 3 and
- 4 (3) by striking the items relating to part D of
- 5 title II.
- 6 (d) Northeast Home Heating Oil.—Section
- 7 183(b)(1) of the Energy Policy and Conservation Act (42
- 8 U.S.C. 6250(b)(1)) is amended by striking all after "in-
- 9 creases" through to "mid-October through March" and in-
- 10 serting "by more than 60 percent over its 5-year rolling
- 11 average for the months of mid-October through March
- 12 (considered as a heating season average)".
- 13 SEC. 102. STUDY ON INVENTORY OF PETROLEUM AND NAT-
- 14 URAL GAS STORAGE.
- 15 (a) Definition.—For purposes of this section "pe-
- 16 troleum" means crude oil, motor gasoline, jet fuel, dis-
- 17 tillates and propane.
- 18 (b) Study.—The Secretary of Energy shall conduct
- 19 a study on petroleum and natural gas storage capacity and
- 20 operational inventory levels, nationwide and by major geo-
- 21 graphical regions.
- (c) Contents.—The study shall address—

- (1) historical normal ranges for petroleum and
   natural gas inventory levels;
- (2) historical and projected storage capacity
   trends;
  - (3) estimated operation inventory levels below which outages, delivery slowdown, rationing, interruptions in service or other indicators of shortage begin to appear;
- 9 (4) explanations for inventory levels dropping 10 below normal ranges; and
- 11 (5) the ability of industry to meet U.S. demand 12 for petroleum and natural gas without shortages or 13 price spikes, when inventory levels are below normal 14 ranges.
- 15 (d) Report to Congress.—Not later than one year 16 from enactment of this Act, the Secretary of Energy shall 17 submit a report to Congress on the results of the study, 18 including findings and any recommendations for pre-19 venting future supply shortages.

#### 20 SEC. 103. PROGRAM ON OIL AND GAS ROYALTIES IN KIND.

21 (a) APPLICABILITY OF SECTION.—Notwithstanding 22 any other provision of law, the provisions of this section 23 shall apply to all royalties-in-kind accepted by the Sec-24 retary (referred to in this section as "Secretary") under 25 any Federal oil or gas lease or permit under section 36

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- of the Mineral Leasing Act (30 U.S.C. 192), section 27 of the Outer Continental Shelf Lands Act (43 U.S.C. 3 1353), or any other mineral leasing law beginning on the 4 date of the enactment of this Act through September 30, 5 2013. 6 (b) TERMS AND CONDITIONS.—All royalty accruing to the United States under any Federal oil or gas lease 8 or permit under the Mineral Leasing Act (30 U.S.C. 181 et seq.) or the Outer Continental Shelf Lands Act (43 10 U.S.C. 1331 et seq.) shall, on the demand of the Secretary, be paid in oil or gas. If the Secretary makes such 11 a demand, the following provisions apply to such payment: 12 13 (1) Delivery by, or on behalf of, the lessee of 14 the royalty amount and quality due under the lease 15 satisfies the lessee's royalty obligation for the 16 amount delivered, except that transportation and 17 processing reimbursements paid to, or deductions 18 claimed by, the lessee shall be subject to review and 19 audit. 20 (2) Royalty production shall be placed in mar-21 ketable condition by the lessee at no cost to the 22 United States.
- 23 (3) The Secretary may—
- 24 (A) sell or otherwise dispose of any royalty 25 production taken in kind (other than oil or gas

1	transferred under section 27(a)(3) of the Outer
2	Continental Shelf Lands Act (43 U.S.C.
3	1353(a)(3)) for not less than the market price;
4	and
5	(B) transport or process (or both) any roy-
6	alty production taken in kind.
7	(4) The Secretary may, notwithstanding section
8	3302 of title 31, United States Code, retain and use
9	a portion of the revenues from the sale of oil and
10	gas royalties taken in kind that otherwise would be
11	deposited to miscellaneous receipts, without regard
12	to fiscal year limitation, or may use royalty produc-
13	tion, to pay the cost of—
14	(A) transporting the royalty production;
15	(B) processing the royalty production;
16	(C) disposing of the royalty production; or
17	(D) any combination of transporting, proc-
18	essing, and disposing of the royalty production.
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	(6) Notwithstanding the provisions of para-
24	graph 5, the Secretary may use a portion of the rev-
25	enues from the sale of oil royalties taken in kind.

- 1 without fiscal year limitation, to pay transportation
- 2 costs, salaries, and other administrative costs di-
- 3 rectly related to filling the Strategic Petroleum Re-
- 4 serve.
- 5 (c) Reimbursement of Cost.—If the lessee, pursu-
- 6 ant to an agreement with the United States or as provided
- 7 in the lease, processes the royalty gas or delivers the roy-
- 8 alty oil or gas at a point not on or adjacent to the lease
- 9 area, the Secretary shall—
- 10 (1) reimburse the lessee for the reasonable costs
- of transportation (not including gathering) from the
- lease to the point of delivery or for processing costs;
- 13 or
- 14 (2) allow the lessee to deduct such transpor-
- tation or processing costs in reporting and paying
- 16 royalties in value for other Federal oil and gas
- 17 leases.
- 18 (d) Benefit to the United States Required.—
- 19 The Secretary may receive oil or gas royalties in kind only
- 20 if the Secretary determines that receiving such royalties
- 21 provides benefits to the United States greater than or
- 22 equal to those likely to have been received had royalties
- 23 been taken in value.
- 24 (e) Report to Congress.—

1	(1) No later than September 30, 2005, the Sec-
2	retary shall provide a report to Congress that ad-
3	dresses—
4	(A) actions taken to develop businesses
5	processes and automated systems to fully sup-
6	port the royalty-in-kind capability to be used in
7	tandem with the royalty-in-value approach in
8	managing Federal oil and gas revenue; and
9	(B) future royalty-in-kind businesses oper-
10	ation plans and objectives.
11	(2) For each of the fiscal years 2004 through
12	2013 in which the United States takes oil or gas
13	royalties in kind from production in any State or
14	from the Outer Continental Shelf, excluding royal-
15	ties taken in kind and sold to refineries under sub-
16	sections (h), the Secretary shall provide a report to
17	Congress describing—
18	(A) the methodology or methodologies used
19	by the Secretary to determine compliance with
20	subsection (d), including performance standard
21	for comparing amounts received by the United
22	States derived from such royalties in kind to
23	amount likely to have been received had royal-

ties been taken in value;

- (B) an explanation of the evaluation that led the Secretary to take royalties in kind from a lease or group of leases, including the expected revenue effect of taking royalties in kind;
  - (C) actual amounts received by the United States derived from taking royalties in kind and cost and savings incurred by the United States associated with taking royalties in kind, including but not limited to administrative savings and any new or increased administrative costs; and
  - (D) an evaluation of other relevant public benefits or detriments associated with taking royalties in kind.

# (f) Deduction of Expenses.—

(1) Before making payments under section 35 of the Mineral Leasing Act (30 U.S.C. 191) or section 8(g) of the Outer Continental Shelf Lands Act (43 U.S.C. 1337(g)) of revenues derived from the sale of royalty production taken in kind from a lease, the Secretary of the Interior shall deduct amounts paid or deducted under subsections (b)(4) and (c), and shall deposit such amounts to miscellaneous receipts.

- 1 (2) If the Secretary allows the lessee to deduct 2 transportation or processing costs under subsection 3 (c), the Secretary may not reduce any payments to 4 recipients of revenues derived from any other Fed-5 eral oil and gas lease as a consequence of that de-6 duction.
- 7 (g) Consultation With States.—The Secretary 8 shall consult—
  - (1) with a State before conducting a royalty inkind program under this section 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) 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 likely to have been received had royalties been taken in value.

# 20 (h) Provisions for Small Refineries.—

(1) If the Secretary determines that sufficient supplies of crude oil are not available in the open market to refineries not having their own source of supply for crude oil, the Secretary may grant preference to such refineries in the sale of any royalty

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- oil accruing or reserved to the United States under
- 2 Federal oil and gas leases issued under any mineral
- 3 leasing law, for processing or use in such refineries
- 4 at private sale at not less than the market price.
- 5 (2) In disposing of oil under this subsection, the
- 6 Secretary may prorate such oil among such refin-
- 7 eries in the area in which the oil is produced.
- 8 (i) Disposition to Federal Agencies.—
- 9 (1) Any royalty oil or gas taken by the Sec-
- retary in kind from onshore oil and gas leases may
- be sold at not less than market price to any depart-
- ment or agency of the United States.
- 13 (2) Any royalty oil or gas taken in kind from
- 14 Federal oil and gas leases on the outer Continental
- 15 Shelf may be disposed of only under section 27 of
- the Outer Continental Shelf Lands Act (43 U.S.C.
- 17 1353).
- 18 (j) Preference for Federal Low-Income En-
- 19 ERGY ASSISTANCE PROGRAMS.—In disposing of royalty oil
- 20 or gas taken in kind under this section, the Secretary may
- 21 grant a preference to any person, including any State or
- 22 Federal agency, for the purpose of providing additional re-
- 23 sources to any Federal low-income energy assistance pro-
- 24 gram.

# 1 SEC. 104. MARGINAL PROPERTY PRODUCTION INCENTIVES.

2	(a) Marginal Property Defined.—Until such
3	time as the Secretary of the Interior issues rules under
4	subsection (e) that prescribe a different definition, for pur-
5	poses of this section, the term "marginal property" means
6	an onshore unit, communitization agreement, or lease not
7	within a unit or communitization agreement that produces
8	on average the combined equivalent of less than 15 barrels
9	of oil per well per day or 90 million British thermal units
10	of gas per well per day calculated based on the average
11	over the three most recent production months, including
12	only those wells that produce more than half the days in
13	the three most recent production months.
14	(b) Conditions for Reduction of Royalty
15	RATE.—Until such time as the Secretary of the Interior
16	promulgates rules under subsection (e) that prescribe dif-
17	ferent thresholds or standards, the Secretary shall reduce
18	the royalty rate on—
19	(1) oil production from marginal properties as
20	prescribed in subsection (c) when the spot price of
21	West Texas Intermediate crude oil at Cushing, Okla-
22	homa, is, on average, less than \$15 per barrel for 90
23	consecutive trading days; and
24	(2) gas production from marginal properties as
25	prescribed in subsection (c) when the spot price of
26	natural gas delivered at Henry Hub, Louisiana, is,

1	on average, less than \$2.00 per million British ther-
2	mal units for 90 consecutive trading days.
3	(c) REDUCED ROYALTY RATE.—
4	(1) When a marginal property meets the condi-
5	tions specified in subsection (b), the royalty rate
6	shall be the lesser of—
7	(A) 5 percent; or
8	(B) the applicable rate under any other
9	statutory or regulatory royalty relief provision
10	that applies to the affected production.
11	(2) The reduced royalty rate under this sub-
12	section shall be effective on the first day of the pro-
13	duction month following the date on which the appli-
14	cable price standard prescribed in subsection (b) is
15	met.
16	(d) TERMINATION OF REDUCED ROYALTY RATE.—
17	A royalty rate prescribed in subsection $(d)(1)(A)$ shall ter-
18	minate—
19	(1) on oil production from a marginal property,
20	on the first day of the production month following
21	the date on which—
22	(A) the spot price of West Texas Inter-
23	mediate crude oil at Cushing, Oklahoma, on av-
24	erage, exceeds \$15 per barrel for 90 consecutive
25	trading days, or

1	(B) the property no longer qualifies as a
2	marginal property under subsection (a); and
3	(2) on gas production from a marginal prop-
4	erty, on the first day of the production month fol-
5	lowing the date on which—
6	(A) the spot price of natural gas delivered
7	at Henry Hub, Louisiana, on average, exceeds
8	\$2.00 per million British thermal units for 90
9	consecutive trading days, or
10	(B) the property no longer qualifies as a
11	marginal property under subsection (a).
12	(e) Rules Prescribing Different Relief.—
13	(1) The Secretary of the Interior, after con-
14	sultation with the Secretary of Energy, may by rule
15	prescribe different parameters, standards, and re-
16	quirements for, and a different degree or extent of,
17	royalty relief for marginal properties in lieu of those
18	prescribed in subsections (a) through (d).
19	(2) The Secretary of the Interior, after con-
20	sultation with the Secretary of Energy, and within
21	1 year after the date of enactment of this Act, shall,
22	by rule,—
23	(A) prescribe standards and requirements
24	for, and the extent of royalty relief for, mar-

1	ginal properties for oil and gas leases on the
2	outer Continental Shelf; and
3	(B) define what constitutes a marginal
4	property on the outer Continental Shelf for pur-
5	poses of this section.
6	(3) In promulgating rules under this subsection,
7	the Secretary of the Interior may consider—
8	(A) oil and gas prices and market trends;
9	(B) production costs;
10	(C) abandonment costs;
11	(D) Federal and State tax provisions and
12	their effects on production economics;
13	(E) other royalty relief programs; and
14	(F) other relevant matters.
15	(f) Savings Provision.—Nothing in this section
16	shall prevent a lessee from receiving royalty relief or a roy-
17	alty reduction pursuant to any other law or regulation that
18	provides more relief than the amounts provided by this
19	section.
20	SEC. 105. COMPREHENSIVE INVENTORY OF OCS OIL AND
21	NATURAL GAS RESOURCES.
22	(a) In General.—The Secretary of the Interior shall
23	conduct an inventory and analysis of oil and natural gas
24	resources beneath all of the waters of the United States

- 1 Outer Continental Shelf ("OCS"). The inventory and 2 analysis shall—
- (1) use available data on oil and gas resources
  in areas offshore of Mexico and Canada that will
  provide information on trends of oil and gas accumulation in areas of the OCS;
  - (2) use any available technology, except drilling, but including 3-D seismic technology to obtain accurate resources estimates;
  - (3) analyze how resource estimates in OCS areas have changed over time in regards to gathering geological and geophysical data, initial exploration, or full field development, including areas such as the deepwater and subsalt areas in the Gulf of Mexico;
  - (4) estimate the effect that understated oil and gas resource inventories have on domestic energy investments; and
  - (5) identify and explain how legislative, regulatory, and administrative programs or processes restrict or impede the development of identified resources and the extent that they affect domestic supply, such as moratoria, lease terms and conditions, operational stipulations and requirements, approval delays by the federal government and coastal states,

- and local zoning restrictions for onshore processing
- 2 facilities and pipeline landings.
- 3 (b) Reports.—The Secretary of Interior shall sub-
- 4 mit a report to the Congress on the inventory of estimates
- 5 and the analysis of restrictions or impediments, together
- 6 with any recommendations, within six months of the date
- 7 of enactment of the section. The report shall be publicly
- 8 available and updated at least every five years.

#### 9 SEC. 106. ROYALTY RELIEF FOR DEEP WATER PRODUC-

- 10 **TION.**
- 11 (a) In General.—For all tracts located in water
- 12 depths of greater than 400 meters in the Western and
- 13 Central Planning Area of the Gulf of Mexico, including
- 14 that portion of the Eastern Planning Area of the Gulf of
- 15 Mexico encompassing whole lease blocks lying west of 87
- 16 degrees, 30 minutes West longitude, any oil or gas lease
- 17 sale under the Outer Continental Shelf Lands Act (43
- 18 U.S.C. 1331 et seq.) occurring within 5 years after the
- 19 date of the enactment of this Act shall use the bidding
- 20 system authorized in section 8(a)(1)(H) of the Outer Con-
- 21 tinental Shelf Lands Act (43 U.S.C. 1337(a)(1)(H)), ex-
- 22 cept that the suspension of royalties shall be set at a vol-
- 23 ume of not less than—
- 24 (1) 5 million barrels of oil equivalent for each
- lease in water depths of 400 to 800 meters;

1	(2) 9 million barrels of oil equivalent for each
2	lease in water depths of 800 to 1,600 meters; and
3	(3) 12 million barrels of oil equivalent for each
4	lease in water depths greater than 1,600 meters.
5	SEC. 107. ALASKA OFFSHORE ROYALTY SUSPENSION.
6	Section 8(a)(3)(B) of the Outer Continental Shelf
7	Lands Act (43 U.S.C. 1337) is amended with the fol-
8	lowing: add "and in the Planning Areas offshore Alaska"
9	after "West longitude" and before "the Secretary".
10	SEC. 108. ORPHANED, ABANDONED OR IDLED WELLS ON
11	FEDERAL LANDS.
12	(a) In General.—The Secretary of the Interior, in
1 4	(a) In ordinary of the interior, in
13	cooperation with the Secretary of Agriculture, shall estab-
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13	cooperation with the Secretary of Agriculture, shall estab-
13 14	cooperation with the Secretary of Agriculture, shall establish a program within 1 year after the date of enactment
13 14 15	cooperation with the Secretary of Agriculture, shall establish a program within 1 year after the date of enactment of this Act to remediate, reclaim, and close orphaned,
13 14 15 16	cooperation with the Secretary of Agriculture, shall establish a program within 1 year after the date of enactment of this Act to remediate, reclaim, and close orphaned, abandoned, or idled oil and gas wells located on lands ad-
13 14 15 16	cooperation with the Secretary of Agriculture, shall establish a program within 1 year after the date of enactment of this Act to remediate, reclaim, and close orphaned, abandoned, or idled oil and gas wells located on lands administered by the land management agencies within the
113 114 115 116 117	cooperation with the Secretary of Agriculture, shall establish a program within 1 year after the date of enactment of this Act to remediate, reclaim, and close orphaned, abandoned, or idled oil and gas wells located on lands administered by the land management agencies within the Department of the Interior and Agriculture. The program
13 14 15 16 17 18	cooperation with the Secretary of Agriculture, shall establish a program within 1 year after the date of enactment of this Act to remediate, reclaim, and close orphaned, abandoned, or idled oil and gas wells located on lands administered by the land management agencies within the Department of the Interior and Agriculture. The program shall—
13 14 15 16 17 18 19 20	cooperation with the Secretary of Agriculture, shall establish a program within 1 year after the date of enactment of this Act to remediate, reclaim, and close orphaned, abandoned, or idled oil and gas wells located on lands administered by the land management agencies within the Department of the Interior and Agriculture. The program shall—  (1) include a means of ranking orphaned, aban-
13 14 15 16 17 18 19 20 21	cooperation with the Secretary of Agriculture, shall establish a program within 1 year after the date of enactment of this Act to remediate, reclaim, and close orphaned, abandoned, or idled oil and gas wells located on lands administered by the land management agencies within the Department of the Interior and Agriculture. The program shall—  (1) include a means of ranking orphaned, abandoned, or idled well sites for priority in remediation,

- 1 (2) provide for identification and recovery of 2 the costs of remediation, reclamation and closure 3 from persons or other entities currently providing a 4 bond or other financial assurance required under 5 State or Federal law for an oil or gas well that is 6 orphaned, abandoned or idled; and
- 7 (3) provide for recovery from the persons or en-8 tities identified under paragraph (2), or their sure-9 ties or guarantors, of the costs of remediation, rec-10 lamation, and closure of such wells.
- 11 (b) COOPERATION AND CONSULTATIONS.—In car12 rying out this program, the Secretary of the Interior shall
  13 work cooperatively with the Secretary of Agriculture and
  14 the States within which the Federal lands are located and
  15 consult with the Secretary of Energy and the Interstate
  16 Oil and Gas Compact Commission.
- 17 (c) Plan.—Within 1 year after the date of enactment 18 of the section, the Secretary of the Interior, in cooperation 19 with the Secretary of Agriculture, shall prepare a plan for 20 carrying out the program established under subsection (a) 21 and transmit copies of the plan to the Congress.
- 22 (d) Technical Assistance Program for Non-23 Federal Lands.—
- 24 (1) The Secretary of Energy shall establish a 25 program to provide technical assistance to the var-

ious oil and gas producing States to facilitate State efforts over a 10-year period to ensure a practical and economical remedy for environmental problems caused by orphaned or abandoned oil and gas exploration or production well sites on State or private lands.

(2) The Secretary shall work with the States, through the Interstate Oil and Gas Compact Commission, to assist the States in quantifying and mitigating environmental risks of onshore orphaned abandoned oil or gas wells on State and private lands.

# (3) The program shall include—

- (A) mechanisms to facilitate identification, if possible, of the persons or other entities currently providing a bond or other form of financial assurance required under State or Federal law for an oil or gas well that is orphaned or abandoned;
- (B) criteria for ranking orphaned or abandoned well sites based on factors such as public health and safety, potential environmental harm, and other land use priorities; and

1	(C) information and training programs on
2	best practices for remediation of different types
3	of sites.
4	(e) Definition.—For purposes of this section, a well
5	is idled if it has been non-operational for 7 years and there
6	is no anticipated beneficial use of the well.
7	(f) AUTHORIZATION.—To carry out this section there
8	is authorized to be appropriated to the Secretary of the
9	Interior \$25,000,000 for each of the fiscal years 2004
10	through 2008. Of the amounts authorized, \$5,000,000 is
11	authorized for activities under subsection (d).
12	SEC. 109. INCENTIVES FOR NATURAL GAS PRODUCTION
12	DECT TOO INCENTIVED TOO MITCHIE GIRD TWO DOCTOR
	FROM DEEP WELLS IN THE SHALLOW WA-
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13	FROM DEEP WELLS IN THE SHALLOW WA-
13 14	FROM DEEP WELLS IN THE SHALLOW WATERS OF THE GULF OF MEXICO.
13 14 15 16	FROM DEEP WELLS IN THE SHALLOW WATERS OF THE GULF OF MEXICO.  (a) ROYALTY INCENTIVE REGULATIONS.—Not later
13 14 15 16	FROM DEEP WELLS IN THE SHALLOW WATERS OF THE GULF OF MEXICO.  (a) ROYALTY INCENTIVE REGULATIONS.—Not later than 90 days after enactment, the Secretary of the Inte-
13 14 15 16	FROM DEEP WELLS IN THE SHALLOW WATERS OF THE GULF OF MEXICO.  (a) ROYALTY INCENTIVE REGULATIONS.—Not later than 90 days after enactment, the Secretary of the Interior shall promulgate final regulations providing royalty
13 14 15 16 17	FROM DEEP WELLS IN THE SHALLOW WATERS OF THE GULF OF MEXICO.  (a) ROYALTY INCENTIVE REGULATIONS.—Not later than 90 days after enactment, the Secretary of the Interior shall promulgate final regulations providing royalty incentives for natural gas produced from deep wells, as
13 14 15 16 17 18	FROM DEEP WELLS IN THE SHALLOW WATERS OF THE GULF OF MEXICO.  (a) ROYALTY INCENTIVE REGULATIONS.—Not later than 90 days after enactment, the Secretary of the Interior shall promulgate final regulations providing royalty incentives for natural gas produced from deep wells, as defined by the Secretary, on oil and gas leases issued
13 14 15 16 17 18 19 20	FROM DEEP WELLS IN THE SHALLOW WATERS OF THE GULF OF MEXICO.  (a) ROYALTY INCENTIVE REGULATIONS.—Not later than 90 days after enactment, the Secretary of the Interior shall promulgate final regulations providing royalty incentives for natural gas produced from deep wells, as defined by the Secretary, on oil and gas leases issued under the Outer Continental Shelf Lands Act (43 U.S.C.
13 14 15 16 17 18 19 20 21	FROM DEEP WELLS IN THE SHALLOW WATERS OF THE GULF OF MEXICO.  (a) ROYALTY INCENTIVE REGULATIONS.—Not later than 90 days after enactment, the Secretary of the Interior shall promulgate final regulations providing royalty incentives for natural gas produced from deep wells, as defined by the Secretary, on oil and gas leases issued under the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.) and issued prior to January 1, 2001, in shal-

(b) ROYALTY INCENTIVE REGULATIONS FOR ULTRA
 DEEP GAS WELLS.—

(1) No later than 90 days after the date of enactment of this Act, in addition to any other regulations that may provide royalty incentives for natural gas produced from deep wells on oil and gas leases issued pursuant to the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.), the Secretary of the Interior shall promulgate new regulations granting royalty relief suspension volumes of not less than 35 billion cubic feet with respect to the production of natural gas from 'ultra deep wells' on leases issued prior to January 1, 2001, in shallow waters less than 200 meters deep located in the Gulf of Mexico wholly west of 87 degrees, 30 minutes West longitude. For purposes of this subsection, the term 'ultra deep wells' means wells drilled with a perforated interval, the top of which is at least 20,000 feet true vertical depth below the datum at mean sea level.

(2) The Secretary shall not grant the royalty incentives outlined in this subsection if the average annual NYNEX natural gas price exceeds for one full calendar year the threshold price of \$5 per million Btu, adjusted from the year 2000 for inflation.

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1	(3) This subsection shall have no force or effect
2	after the end of the 5-year period beginning on the
3	date of the enactment of this Act.
4	SEC. 110. ALTERNATE ENERGY-RELATED USES ON THE
5	OUTER CONTINENTAL SHELF.
6	(a) Amendment to Outer Continental Shelf
7	Lands Act.—Section 8 of the Outer Continental Shelf
8	Lands Act (43 U.S.C. 1337) is amended by adding at the
9	end the following new subsection:
10	"(p) Easements or Rights-of-Way for Energy
11	AND RELATED PURPOSES.—
12	"(1) The Secretary may grant an easement or
13	right-of-way on the outer Continental Shelf for ac-
14	tivities not otherwise authorized in this Act, the
15	Deepwater Port Act of 1974 (33 U.S.C. 1501 et
16	seq.), or the Ocean Thermal Energy Conversion Act
17	of 1980 (42 U.S.C. 9101 et seq.), or other applica-
18	ble law when such activities—
19	"(A) support exploration, development, or
20	production of oil or natural gas, except that
21	such easements or rights-of-way shall not be
22	granted in areas where oil and gas preleasing,
23	leasing and related activities are prohibited by
24	a Congressional moratorium or a withdrawal
25	pursuant to section 12 of this Act;

1	"(B) support transportation of oil or nat-
2	ural gas;
3	"(C) produce or support production, trans-
4	portation, or transmission of energy from
5	sources other than oil and gas; or
6	"(D) use facilities currently or previously
7	used for activities authorized under this Act.
8	"(2) The Secretary shall promulgate regulations
9	to ensure that activities authorized under this sub-
10	section are conducted in a manner that provides for
11	safety, protection of the environment, conservation
12	of the natural resources of the outer Continental
13	Shelf, appropriate coordination with other Federal
14	agencies, and a fair return to the Federal govern-
15	ment for any easement or right-of-way granted
16	under this subsection. Such regulations shall estab-
17	lish procedures for—
18	"(A) public notice and comment on pro-
19	posals to be permitted pursuant to this sub-
20	section;
21	"(B) consultation and review by State and
22	local governments that may be impacted by ac-
23	tivities to be permitted pursuant to this sub-
24	section;

"(C) consideration of the coastal zone
management program being developed or administered by an affected coastal State pursuant to section 305 or section 306 of the Coastal
Zone Management Act of 1972 (16 U.S.C.
1454, 1455); and

- "(D) consultation with the Secretary of Defense and other appropriate agencies prior to the issuance of an easement or right-of-way under this subsection concerning issues related to national security and navigational obstruction.
- "(3) The Secretary shall require the holder of an easement or right-of-way granted under this subsection to furnish a surety bond or other form of security, as prescribed by the Secretary, and to comply with such other requirements as the Secretary may deem necessary to protect the interests of the United States.
- "(4) This subsection shall not apply to any area within the exterior boundaries of any unit of the National Park System, National Wildlife Refuge System, or National Marine Sanctuary System, or any National Monument.

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- 1 "(5) Nothing in this subsection shall be con-2 strued to amend or repeal, expressly by implication, 3 the applicability of any other law, including but not limited to, the Coastal Zone Management Act (16 5 U.S.C. 1455 et seq.) or the National Environmental 6 Policy Act of 1969 (42 U.S.C. 4321 et seq.).". 7 (b) Conforming Amendment.—The text of the 8 heading for section 8 of the Outer Continental Shelf Lands Act is amended to read as follows: "Leases, Ease-MENTS, AND RIGHTS-OF-WAY ON THE OUTER CONTI-10 11 NENTAL SHELF.". 12 SEC. 111. COASTAL IMPACT ASSISTANCE. 13 The Outer Continental Shelf Lands Act (43 U.S.C. 14 1331 et seg.) is amended by adding at the end: 15 "SEC. 32 COASTAL IMPACT ASSISTANCE FAIRNESS PRO-16 GRAM. "(a) DEFINITIONS.—When used in this section: 17 18 "(1) The term 'coastal political subdivision' 19 means a county, parish, or any equivalent subdivi-20 sion of a Producing Coastal State in all or part of 21 which subdivision lies within the coastal zone (as de-
- fined in section 304(1) of the Coastal Zone Management Act (16 U.S.C. 1453(1))) and within a distance of 200 miles from the geographic center of any
- tance of 200 miles from the geographic center of any
- 25 leased tract.

- "(2) The term 'coastal population' means the population of all political subdivisions, as determined by the most recent official data of the Census Bureau, contained in whole or in part within the designated coastal boundary of a State as defined in a State's coastal zone management program under the Coastal Zone Management Act (16 U.S.C. 1451 et seq.).
  - "(3) The term 'Coastal State' has the same meaning as provided by subsection 304(4) of the Coastal Zone Management Act (16 U.S.C. 1453(4)).
  - "(4) The term 'coastline' has the same meaning as the term 'coast line' as defined in subsection 2(c) of the Submerged Lands Act (43 U.S.C. 1301(c)).
  - "(5) The term 'distance' means the minimum great circle distance, measured in statute miles.
  - "(6) The term 'leased tract' means a tract maintained under section 6 or leased under section 8 for the purpose of drilling for, developing, and producing oil and natural gas resources.
  - "(7) The term 'Producing Coastal State' means a Coastal State with a coastal seaward boundary within 200 miles from the geographic center of a leased tract other than a leased tract within any area of the Outer Continental Shelf where a morato-

rium on new leasing was in effect as of January 1, 2 2002 unless the lease was issued prior to the estab-

3 lishment of the moratorium and was in production

4 on January 1, 2002.

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"(8) The term 'qualified Outer Continental Shelf revenues' means all amounts received by the United States from each leased tract or portion of a leased tract lying seaward of the zone defined and governed by section 8(g) of this Act, or lying within such zone but to which section 8(g) does not apply, the geographic center of which lies within a distance of 200 miles from any part of the coastline of any Producing Coastal State, including bonus bids, rents, royalties (including payments for royalties taken in kind and sold), net profit share payments, and related late payment interest. Such term shall only apply to leases issued after January 1, 2003, and revenues from existing leases that occurs after January 1, 2003. Such term does not include any revenues from a leased tract or portion of a leased tract that is included within any area of the Outer Continental Shelf where a moratorium on new leasing was in effect as of January 1, 2002, unless the lease was issued prior to the establishment of the

- 1 moratorium and was in production on January 1,
- 2 2002.
- 3 "(9) The term 'Secretary' means the Secretary
- 4 of the Interior.
- 5 "(b) AUTHORIZATION.—For fiscal years 2004
- 6 through 2009, an amount equal to not more than 12.5
- 7 percent of qualified Outer Continental Shelf revenues is
- 8 authorized to be appropriated for the purposes of this sec-
- 9 tion.
- 10 "(c) Impact Assistance Payments to States and
- 11 POLITICAL SUBDIVISIONS.—The Secretary shall make
- 12 payments from the amounts available under this section
- 13 to Producing Coastal States with an approved Coastal Im-
- 14 pact Assistance Plan, and to coastal political subdivisions
- 15 as follows:
- 16 "(1) Of the amounts appropriated, the alloca-
- tion for each Producing Coastal State shall be cal-
- culated based on the ratio of qualified Outer Conti-
- 19 nental Shelf revenues generated off the coastline of
- the Producing Coastal State to the qualified Outer
- 21 Continental Shelf revenues generated off the coast-
- 22 lines of all Producing Coastal States for each fiscal
- year. Where there is more than one Producing
- Coastal State within 200 miles of a leased tract, the
- amount of each Producing Coastal State's allocation

for such leased tract shall be inversely proportional to the distance between the nearest point on the coastline of such State and the geographic center of each leased tract or portion of the leased tract (to the nearest whole mile) that is within 200 miles of that coastline, as determined by the Secretary.

- "(2) Thirty-five percent of each Producing Coastal State's allocable share as determined under paragraph (1) shall be paid directly to the coastal political subdivisions by the Secretary based on the following formula:
  - "(A) Twenty-five percent shall be allocated based on the ratio of such coastal political subdivision's coastal population to the coastal population of all coastal political subdivisions in the Producing Coastal State.
  - "(B) Twenty-five percent shall be allocated based on the ratio of such coastal political subdivision's coastline miles to the coastline miles of a coastal political subdivision in the Producing Coastal State except that for those coastal political subdivisions in the State of Louisiana without a coastline, the coastline for purposes of this element of the formula shall be

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the average length of the coastline of the remaining coastal subdivisions in the State.

"(C) Fifty percent shall be allocated based on the relative distance of such coastal political subdivision from any leased tract used to calculate the Producing Coastal State's allocation using ratios that are inversely proportional to the distance between the point in the coastal political subdivision closest to the geographic center of each leased tract or portion, as determined by the Secretary, except that in the State of Alaska, the funds for this element of the formula shall be divided equally among the two closest coastal political subdivisions. For purposes of the calculations under this subparagraph, a leased tract or portion of a leased tract shall be excluded if the leased tract or portion is located in a geographic area where a moratorium on new leasing was in effect on January 1, 2002, unless the lease was issued prior to the establishment of the moratorium and was in production on January 1, 2002.

"(3) Any amount allocated to a Producing Coastal State or coastal political subdivision but not disbursed because of a failure to have an approved

Coastal Impact Assistance Plan under this section shall be allocated equally by the Secretary among all other Producing Coastal States in a manner consistent with this subsection except that the Secretary shall hold in escrow such amount until the final resolution of any appeal regarding the disapproval of a plan submitted under this section. The Secretary may waive the provisions of this paragraph and hold a Producing Coastal State's allocable share in escrow if the Secretary determines that such State is making a good faith effort to develop and submit, or update, a Coastal Impact Assistance Plan.

"(4) For purposes of this subsection, calculations of payments for fiscal years 2004 through 2006 shall be made using qualified Outer Continental Shelf revenues received in fiscal year 2003, and calculations of payments for fiscal years 2007 through 2009 shall be made using qualified Outer Continental Shelf revenues received in fiscal year 2006.

# "(d) Coastal Impact Assistance Plan.—

"(1) The Governor of each Producing Coastal State shall prepare, and submit to the Secretary, a Coastal Impact Assistance Plan. The Governor shall solicit local input and shall provide for public partici-

1 pation in the development of the plan. The plan 2 shall be submitted to the Secretary by July 1, 2004. 3 Amounts received by Producing Coastal States and coastal political subdivisions may be used only for 5 the purposes specified in the Producing Coastal 6 State's Coastal Impact Assistance Plan. 7 "(2) The Secretary shall approve a plan under 8 paragraph (1) prior to disbursement of amounts 9 under this section. The Secretary shall approve the 10 plan if the Secretary determines that the plan is 11 consistent with the uses set forth in subsection (f) 12 of this section and if the plan contains— 13 "(A) the name of the State agency that 14 will have the authority to represent and act for 15 the State in dealing with the Secretary for pur-16 poses of this section; "(B) a program for the implementation of 17 18 the plan which describes how the amounts pro-19 vided under this section will be used; "(C) a contact for each political subdivi-20 21 sion and description of how coastal political 22 subdivisions will use amounts provided under this section, including a certification by the 23 24 Governor that such uses are consistent with the

requirements of this section;

1	"(D) certification by the Governor that
2	ample opportunity has been accorded for public
3	participation in the development and revision of
4	the plan; and
5	"(E) measures for taking into account
6	other relevant Federal resources and programs.
7	"(3) The Secretary shall approve or disapprove
8	each plan or amendment within 90 days of its sub-
9	mission.
10	"(4) Any amendment to the plan shall be pre-
11	pared in accordance with the requirements of this
12	subsection and shall be submitted to the Secretary
13	for approval or disapproval.
14	"(e) Authorized Uses.—Producing Coastal States
15	and coastal political subdivisions shall use amounts pro-
16	vided under this section, including any such amounts de-
17	posited in a State or coastal political subdivision adminis-
18	tered trust fund dedicated to uses consistent with this sub-
19	section, in compliance with Federal and State law and only
20	for one or more of the following purposes—
21	"(1) projects and activities for the conservation,
22	protection or restoration of coastal areas including
23	wetlands;
24	"(2) mitigating damage to fish, wildlife or nat-
25	ural resources:

- 1 "(3) planning assistance and administrative 2 costs of complying with the provisions of this sec-3 tion;
- "(4) implementation of Federally approved marine, coastal, or comprehensive conservation management plans; and
- 7 "(5) mitigating impacts of Outer Continental 8 Shelf activities through funding onshore infrastruc-9 ture and public service needs.
- 10 (f) COMPLIANCE WITH AUTHORIZED USES.—If the
- 11 Secretary determines that any expenditure made by a Pro-
- 12 ducing Coastal State or coastal political subdivision is not
- 13 consistent with the uses authorized in subsection (e) of
- 14 this section, the Secretary shall not disburse any further
- 15 amounts under this section to that Producing Coastal
- 16 State or coastal political subdivision until the amounts
- 17 used for the inconsistent expenditure have been repaid or
- 18 obligated for authorized uses.

#### 19 SEC. 112. NATIONAL ENERGY RESOURCE DATABASE.

- 20 (a) Short Title.—This section may be cited as the
- 21 "National Energy Data Preservation Program Act of
- 22 2003".
- 23 (b) Program.—The Secretary of the Interior (in this
- 24 section, referred to as "Secretary") shall carry out a Na-

- 1 tional Energy Data Preservation Program in accordance
- 2 with this section—

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- 3 (1) to archive geologic, geophysical, and engi-4 neering data and samples related to energy re-5 sources including oil, gas, coal, and geothermal re-6 sources;
- 7 (2) to provide a national catalog of such archi-8 val material; and
- 9 (3) to provide technical assistance related to the archival material.

#### (c) Energy Data Archive System.—

- (1) The Secretary shall establish, as a component of the program, an energy data archive system, which shall provide for the storage, preservation, and archiving of subsurface, and in limited cases surface, geological, geophysical and engineering data and samples. The Secretary, in consultation with the Association of American State Geologists and interested members of the public, shall develop guidelines relating to the energy data archive system, including the types of data and samples to be preserved.
- (2) The system shall be comprised of State agencies and agencies within the Department of the Interior that maintain geological and geophysical data and samples regarding energy resources and

- that are designated by the Secretary in accordance with this subsection. The program shall provide for the storage of data and samples through data repositories operated by such agencies.
  - (3) The Secretary may not designate a State agency as a component of the energy data archive system unless it is the agency that acts as the geological survey in the State.
  - (4) The energy data archive system shall provide for the archiving of relevant subsurface data and samples obtained during energy exploration and production operations on Federal lands—
    - (A) in the most appropriate repository designated under paragraph (2), with preference being given to archiving data in the State in which the data was collected; and
    - (B) consistent with all applicable law and requirements relating to confidentiality and proprietary data.
  - (5)(A) Subject to the availability of appropriations, the Secretary shall provide financial assistance to a State agency that is designated under paragraph (2) for providing facilities to archive energy material.

(B) The Secretary, in consultation with the Association of American State Geologists and interested members of the public, shall establish procedures for providing assistance under this paragraph. The procedures shall be designed to ensure that such assistance primarily supports the expansion of data and material archives and the collection and preservation of new data and samples.

## (d) National Catalog.—

- (1) As soon as practicable after the date of the enactment of this section, the Secretary shall develop and maintain, as a component of the program, a national catalog that identifies—
  - (A) energy data and samples available in the energy data archive system established under subsection (c);
  - (B) the repository for particular material in such system; and
    - (C) the means of accessing the material.
- (2) The Secretary shall make the national catalog accessible to the public on the site of the Survey on the World Wide Web, consistent with all applicable requirements related to confidentiality and proprietary data.

1 (3) The Secretary may carry out the require-2 ments of this subsection by contract or agreement 3 with appropriate persons.

## (e) Technical Assistance.—

- (1) Subject to the availability of appropriations, as a component of the Program, the Secretary shall provide financial assistance to any State agency designated under subsection (c)(2) to provide technical assistance to enhance unders tanding, interpretation, and use of materials archived in the energy data archive system established under subsection (c).
- (2) The Secretary, in consultation with the Association of American State Geologists and interested members of the public, shall develop a process, which shall involve the participation of representatives of relevant Federal and State agencies, for the approval of financial assistance to State agencies under this subsection.

#### (f) Costs.—

- (1) The Federal share of the cost of an activity carried out with assistance under subsections (c) or(e) shall be no more than 50 percent of the total cost of that activity.
- 24 (2) The Secretary—

1 (A) may accept private contributions of
2 property and services for technical assistance
3 and archive activities conducted under this sec4 tion; and
5 (B) may apply the value of such contribu6 tions to the non-Federal share of the costs of
7 such technical assistance and archive activities.

# (g) Reports.—

- (1) Within one year after the date of the enactment of this Act, the Secretary shall submit an initial report to the Congress setting forth a plan for the implementation of the program.
- (2) Not later than 90 days after the end of the first fiscal year beginning after the submission of the report under paragraph (1) and after the end of each fiscal year thereafter, the Secretary shall submit a report to the Congress describing the status of the program and evaluating progress achieved during the preceding fiscal year in developing and carrying out the program.
- (3) The Secretary shall consult with the Association of American State Geologists and interested members of the public in preparing the reports required by this subsection.
- 25 (h) Definitions.—As used in this section, the term:

- 1 (1) "Association of American State Geologists"
  2 means the organization of the chief executives of the
  3 State geological surveys.
- 4 (2) "Secretary" means the Secretary of the In-5 terior acting through the Director of the United 6 States Geological Survey.
- 7 (3) "Program" means the National Energy 8 Data Preservation Program carried out under this 9 section.
- 10 (4) "Survey" means the United States Geologi-11 cal Survey.
- 12 (i) Maintenance of State Effort.—It is the in-
- 13 tent of the Congress that the States not use this section
- 14 as an opportunity to reduce State resources applied to the
- 15 activities that are the subject of the program.
- 16 (j) AUTHORIZATION OF APPROPRIATIONS.—There is
- 17 authorized to be appropriated to the Secretary
- 18 \$30,000,000 for each of fiscal years 2003 through 2007
- 19 for carrying out this section.
- 20 SEC. 113. OIL AND GAS LEASE ACREAGE LIMITATION.
- 21 Section 27(d)(1) of the Mineral Leasing Act (30
- 22 U.S.C. 184(d)(1)) is amended by inserting after "acreage
- 23 held in special tar sands area" the following: "as well as
- 24 acreage under any lease any portion of which has been
- 25 committed to a federally approved unit or cooperative plan

1	or communitization agreement, or for which royalty, in-
2	cluding compensatory royalty or royalty-in-kind, was paid
3	in the preceding calendar year,".
4	SEC. 114. ASSESSMENT OF DEPENDENCE OF STATE OF HA-
5	WAII ON OIL.
6	(a) Assessment.—The Secretary of Energy shall as-
7	sess the economic implication of the dependence of the
8	State of Hawaii on oil as the principal source of energy
9	for the State, including—
10	(1) the short- and long-term prospects for crude
11	oil supply disruption and price volatility and poten-
12	tial impacts on the economy of Hawaii;
13	(2) the economic relationship between oil-fired
14	generation of electricity from residual fuel and re-
15	fined petroleum products consumed for ground, ma-
16	rine, and air transportation;
17	(3) the technical and economic feasibility of in-
18	creasing the contribution of renewable energy re-
19	sources for generation of electricity, on an island-by-
20	island basis, including—
21	(A) siting and facility configuration;
22	(B) environmental, operational, and safety
23	considerations;
24	(C) the availability of technology:

1	(D) effects on the utility system including
2	reliability;
3	(E) infrastructure and transport require-
4	ments;
5	(F) community support; and
6	(G) other factors affecting the economic
7	impact of such an increase and any effect on
8	the economic relationship described in para-
9	graph (2);
10	(4) the technical and economic feasibility of
11	using liquefied natural gas to displace residual fuel
12	oil for electric generation, including neighbor island
13	opportunities, and the effect of such displacement on
14	the economic relationship described in paragraph (2)
15	including—
16	(A) the availability of supply;
17	(B) siting and facility configuration for on-
18	shore and offshore liquefied natural gas receiv-
19	ing terminals;
20	(C) the factors described in subparagraphs
21	(B) through (F) of paragraph (3); and
22	(D) other economic factors;
23	(5) the technical and economic feasibility of
24	using renewable energy sources (including hydrogen)
25	for ground, marine, and air transportation energy

- 1 applications to displace the use of refined petroleum
- 2 products, on an island-by-island basis, and the eco-
- 3 nomic impact of such displacement on the relation-
- 4 ship described in (2); and
- 5 (6) an island-by-island approach to—
- 6 (A) the development of hydrogen from re-7 newable resources; and
- 8 (B) the application of hydrogen to the en-9 ergy needs of Hawaii.
- 10 (b) Contracting Authority.—The Secretary of
- 11 Energy may carry out the assessment under subsection
- 12 (a) directly or, in whole or in part, through one or more
- 13 contracts with qualified public or private entities.
- 14 (c) Report.—Not later than 300 days after the date
- 15 of enactment of this Act, the Secretary of Energy shall
- 16 prepare, in consultation with agencies of the State of Ha-
- 17 waii and other stakeholders, as appropriate, and submit
- 18 to Congress, as report detailing the findings, conclusions,
- 19 and recommendations resulting from the assessment.
- 20 (d) APPROPRIATION.—They are authorized to be ap-
- 21 propriated such sums as are necessary to carry out this
- 22 section.

# **Subtitle B—Access to Federal**

1	Subtitio B Moods to I cuciui
2	Lands
3	SEC. 121. OFFICE OF FEDERAL ENERGY PERMIT COORDI-
4	NATION.
5	(a) Establishment.—The President shall establish
6	the Office of Federal Energy Permit Coordination (in this
7	section, referred to as "Office") within the Executive Of-
8	fice of the President in the same manner and mission as
9	the White House Energy Projects Task Force established
10	by Executive Order 13212.
11	(b) STAFFING.—The Office shall be staffed by func-
12	tional experts from relevant federal agencies and depart-
13	ments on a nonreimbursable basis to carry out the mission
14	of this office.
15	(c) Reporting.—The Office shall provide an annual
16	report to Congress, detailing the activities put in place to
17	coordinate and expedite Federal decisions on energy
18	projects. The report shall list accomplishments in improv-
19	ing the federal decision making process and shall include
20	any additional recommendations or systemic changes
21	needed to establish a more effective and efficient federal
22	permitting process.

#### SEC. 122. PILOT PROJECT TO IMPROVE FEDERAL PERMIT

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	COORDINATION.
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- 3 (a) Creation of Pilot Project.—The Secretary
- 4 of the Interior (in this section, referred to as "Secretary")
- 5 shall establish a Federal Permit Streamlining Pilot
- 6 Project. The Secretary shall enter into a Memorandum of
- 7 Understanding with the Secretary of Agriculture, Admin-
- 8 istrator of the Environmental Protection Agency, and the
- 9 Chief of the Corps of Engineers within 90 days after en-
- 10 actment of this Act. The Secretary may also request that
- 11 the Governors of Wyoming, Montana, Colorado, and New
- 12 Mexico be signatories to the Memorandum of Under-
- 13 standing.
- 14 (b) Designation of Qualified Staff.—Once the
- 15 Pilot Project has been established by the Secretary, all
- 16 Federal signatory parties shall assign an employee on a
- 17 nonreimbursable basis to each of the field offices identified
- 18 in section (c), who has expertise in the regulatory issues
- 19 pertaining to their office, including, as applicable, par-
- 20 ticular expertise in Endangered Species Act section 7 con-
- 21 sultations and the preparation of Biological Opinions,
- 22 Clean Water Act 404 permits, Clean Air Act regulatory
- 23 matters, planning under the National Forest Management
- 24 Act, and the preparation of analyses under the National
- 25 Environmental Policy Act. Assigned staff shall report to
- 26 the Bureau of Land Management (BLM) Field Managers

- 1 in the offices to which they are assigned, and shall be re-
- 2 sponsible for all issues related to the jurisdiction of their
- 3 home office or agency, and participate as part of the team
- 4 of employees working on proposed energy projects, plan-
- 5 ning, and environmental analyses.
- 6 (c) Field Offices.—The following BLM field of-
- 7 fices shall serve as the Federal Permit Streamlining Pilot
- 8 Project offices:
- 9 (1) Rawlins, Wyoming;
- 10 (2) Buffalo, Wyoming;
- 11 (3) Miles City, Montana;
- 12 (4) Farmington, New Mexico;
- 13 (5) Carlsbad, New Mexico; and
- 14 (6) Glenwood Springs, Colorado.
- 15 (d) Reports.—The Secretary shall submit a report
- 16 to the Congress 3 years following the date of enactment
- 17 of this section, outlining the results of the pilot project
- 18 to date and including a recommendation to the President
- 19 as to whether the pilot project should be implemented na-
- 20 tionwide.
- 21 (e) Additional Personnel.—The Secretary shall
- 22 assign to each of the BLM field offices listed in subsection
- 23 (c) such additional personnel as is necessary to ensure the
- 24 effective implementation of—
- 25 (1) the pilot project; and

- 1 (2) other programs administered by such of-2 fices, including inspection and enforcement related 3 to energy development on Federal lands, pursuant to the multiple use mandate of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et 5 6 seq.). 7 (f) Savings Provision.—Nothing in this section 8 shall affect the operation of any Federal or State law or any delegation of authority made by a Secretary or head 10 of an agency whose employees are participating in the program provided for by this section. 11 12 (g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as may be necessary to implement this section. 14 15 SEC. 123. FEDERAL ONSHORE LEASING PROGRAMS FOR 16 OIL AND GAS.
- 17 (a) Timely Action on Leases and Permits.—To
- ensure timely action on oil and gas leases and applications 18
- 19 for permits to drill on lands otherwise available for leasing,
- the Secretary of the Interior shall— 20
- 21 (1) ensure expeditious compliance with the re-
- 22 quirements of section 102(2)(C) of the National En-
- 23 vironmental Policy Act of 1969 (42)U.S.C.
- 24 4332(2)(C));

1	(2) improve consultation and coordination with
2	the States; and
3	(3) improve the collection, storage, and retrieval
4	of information related to such leasing activities.
5	(b) Improved Enforcement.—The Secretary shall
6	improve inspection and enforcement of oil and gas activi-
7	ties, including enforcement of terms and conditions in per-
8	mits to drill.
9	(c) Authorization of Appropriations.—For each
10	of the fiscal years 2004 through 2007, in addition to
11	amounts otherwise authorized to be appropriated for the
12	purpose of carrying out section 17 of the Mineral Leasing
13	Act (30 U.S.C. 226), there are authorized to be appro-
14	priated to the Secretary of the Interior—
15	(1) \$40,000,000 for the purpose of carrying out
16	paragraphs (1) through (3) of subsection (a); and
17	(2) \$20,000,000 for the purpose of carrying out
18	subsection (b).
19	SEC. 124. ESTIMATES OF OIL AND GAS RESOURCES UNDER-
20	LYING ONSHORE FEDERAL LANDS.
21	Section 604 of the Energy Act of 2000 (42 U.S.C.
22	6217) is amended by striking "(a) In General" and all
23	thereafter and inserting—
24	"(a) In General.—The Secretary of the Interior, in
25	consultation with the Secretaries of Agriculture and En-

1	ergy, shall conduct an inventory of all onshore Federal
2	lands and take measures necessary to update and revise
3	this inventory. The inventory shall identify for all Federal
4	lands—
5	"(1) the United States Geological Survey esti-
6	mates of the oil and gas resources underlying these
7	lands;
8	"(2) the extent and nature of any restrictions
9	or impediments to the exploration, production and
10	transportation of such resources, including—
11	"(A) existing land withdrawals and the un-
12	derlying purpose for each withdrawal;
13	"(B) restrictions or impediments affecting
14	timeliness of granting leases;
15	"(C) post-lease restrictions or impediments
16	such as conditions of approval, applications for
17	permits to drill, applicable environmental per-
18	mits;
19	"(D) permits or restrictions associated
20	with transporting the resources; and
21	"(E) identification of the authority for
22	each restriction or impediment together with
23	the impact on additional processing or review
24	time and potential remedies; and

1	"(3) the estimates of oil and gas resources not
2	available for exploration and production by virtue of
3	the restrictions identified above.
4	"(b) Reports.—The Secretary shall provide a
5	progress report to the Congress by October 1, 2006 and
6	shall complete the inventory by October 1, 2010.
7	"(c) Authorization of Appropriations.—There
8	are authorized to be appropriated such sums as may be
9	necessary to implement this section.".
10	SEC. 125. SPLIT-ESTATE FEDERAL OIL AND GAS LEASING
11	AND DEVELOPMENT PRACTICES.
12	(a) Review.—In consultation with affected private
13	surface owners, oil and gas industry and other interested
14	parties, the Secretary of the Interior shall undertake a re-
15	view of the current policies and practices with respect to
16	management of Federal subsurface oil and gas develop-
17	ment activities and their effects on the privately owned
18	surface. This review shall include—
19	(1) a comparison of the rights and responsibil-
20	ities under existing mineral and land law for the
21	owner of a Federal mineral lease, the private surface
22	owners and the Department;
23	(2) a comparison of the surface owner consent
24	provisions in section 714 of the Surface Mining Con-
25	trol and Reclamation Act (30 U.S.C. 1304) con-

- cerning surface mining of Federal coal deposits and the surface owner consent provisions for oil and gas development, including coalbed methane production; and
- (3) recommendations for administrative or legislative action necessary to facilitate reasonable access for Federal oil and gas activities while addressing surface owner concerns and minimizing impacts to private surface.
- 10 (b) Report.—The Secretary of the Interior shall re-11 port the results of such review to the Congress no later 12 than 180 days after enactment of this section.
- 13 SEC. 126. COORDINATION OF FEDERAL AGENCIES TO ES14 TABLISH PRIORITY ENERGY TRANSMISSION
- 15 RIGHTS-OF-WAY.
- 16 (a) Definitions.—For purposes of this section:
- 17 (1) The term "utility corridor" means any lin-18 ear strip of land across Federal lands of approved 19 width, but limited by technological, environmental, 20 and topographical factors for use by a utility facility.
- 21 (2) The term "Federal authorization" means 22 any authorization required under Federal law in 23 order to site a utility facility, including but not lim-24 ited to such permits, special use authorizations, cer-

1	tifications, opinions, or other approvals as may be
2	required, issued by a Federal agency.
3	(3) The term "Federal lands" means all lands
4	owned by the United States, except—
5	(A) lands in the National Park System;
6	(B) lands held in trust for an Indian or In-
7	dian tribe; and
8	(C) lands on the Outer Continental Shelf.
9	(4) The term "Secretary" means the Secretary
10	of Energy.
11	(5) The term "utility facility" means any pri-
12	vately, publicly, or cooperatively owned line, facility,
13	or system (A) for the transportation of oil and nat-
14	ural gas, synthetic liquid or gaseous fuels, any re-
15	fined product produced therefrom, or for transpor-
16	tation of products in support of production, or for
17	storage and terminal facilities in connection there-
18	with; or (B) for the generation, transmission and
19	distribution of electric energy.
20	(b) Utility Corridors.—
21	(1) No later than 24 months after the date of
22	enactment of this section, the Secretary of the Inte-
23	rior, with respect to public lands, and the Secretary

of Agriculture, with respect to National Forest Sys-

- tem lands, in consultation with the Secretary,
  shall—
- (A) designate utility corridors pursuant to section 503 of the Federal Land Policy and Management Act (43 U.S.C. 1763) in the eleven contiguous Western States, as identified in section 103(o) of such Act (43 U.S.C. 1702(o)); and
  - (B) incorporate the utility corridors designated under paragraph (A) into the relevant departmental and agency land use and resource management plans or their equivalent.
  - (2) The Secretary shall coordinate with the affected Federal agencies to jointly identify potential utility corridors on Federal lands in the other States and jointly develop a schedule for the designation, environmental review and incorporation of such utility corridors into relevant departmental and agency land use and resource management plans or their equivalent.
- 21 (c) Federal Permit Coordination.—The Sec-22 retary, in consultation with the Secretary of the Interior, 23 the Secretary of Agriculture, and the Secretary of De-24 fense, shall develop a memorandum of understanding 25 ("MOU") for the purpose of coordinating all applicable

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- 1 Federal authorizations and environmental reviews related
- 2 to a proposed or existing utility facility. To the maximum
- 3 extent practicable under applicable law, the Secretary
- 4 shall coordinate the process developed in the MOU with
- 5 any Indian tribes, multi-State entities, and State agencies
- 6 that are responsible for conducting any separate permit-
- 7 ting and environmental reviews of the affected utility facil-
- 8 ity to ensure timely review and permit decisions. The
- 9 MOU shall provide for—
- 10 (1) the coordination among affected Federal
- agencies to ensure that the necessary Federal au-
- thorizations are conducted concurrently with applica-
- ble State siting processes and are considered within
- a specific time frame to be identified in the MOU;
- 15 (2) an agreement among the affected Federal
- agencies to prepare a single environmental review
- document to be used as the basis for all Federal au-
- thorization decisions; and
- 19 (3) a process to expedite applications to con-
- struct or modify utility facilities within utility cor-
- 21 ridors.

# Subtitle C—Alaska Natural Gas Pipeline Sec. 131. Short Title.

- This subtitle may be cited as the "Alaska Natural
- 5 Gas Pipeline Act".

#### 6 SEC. 132. DEFINITIONS.

- 7 In this subtitle, the following definitions apply:
- 8 (1) The term "Alaska natural gas" means nat-9 ural gas derived from the area of the State of Alas-10 ka lying north of 64 degrees North latitude.
- 11 (2) The term "Alaska natural gas transpor-12 tation project" means any natural gas pipeline sys-13 tem that carries Alaska natural gas to the border 14 between Alaska and Canada (including related facili-15 ties subject to the jurisdiction of the Commission) 16 that is authorized under either—
- 17 (A) the Alaska Natural Gas Transpor-18 tation Act of 1976 (15 U.S.C. 719 et seq.); or 19 (B) section 133.
  - (3) The term "Alaska natural gas transportation system" means the Alaska natural gas transportation project authorized under the Alaska Natural Gas Transportation Act of 1976 and designated and described in section 2 of the President's decision.

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1	(4) The term "Commission" means the Federal
2	Energy Regulatory Commission.
3	(5) The term "President's decision" means the
4	decision and report to Congress on the Alaska nat-
5	ural gas transportation system issued by the Presi-
6	dent on September 22, 1977, pursuant to section 7
7	of the Alaska Natural Gas Transportation Act of
8	1976 (15 U.S.C. 719(e) and approved by Public
9	Law 95–158 (91 Stat. 1268).
10	SEC. 133. ISSUANCE OF CERTIFICATE OF PUBLIC CONVEN-
11	IENCE AND NECESSITY.
12	(a) Authority of the Commission.—Notwith-
13	standing the provisions of the Alaska Natural Gas Trans-
14	portation Act of 1976 (15 U.S.C. 719 et seq.), the Com-
15	mission may, pursuant to section 7(e) of the Natural Gas
16	Act (15 U.S.C. 717f(c)), consider and act on an applica-
17	tion for the issuance of a certificate of public convenience
18	and necessity authorizing the construction and operation
19	of an Alaska natural gas transportation project other than
20	the Alaska natural gas transportation system.
21	(b) Issuance of Certificate.—
22	(1) The Commission shall issue a certificate of
23	public convenience and necessity authorizing the
24	construction and operation of an Alaska natural gas
25	transportation project under this section if the appli-

1 cant has satisfied the requirements of section 7(e) of 2 the Natural Gas Act (15 U.S.C. 717f(e)). 3 (2) In considering an application under this section, the Commission shall presume that— (A) a public need exists to construct and 6 operate the proposed Alaska natural gas trans-7 portation project; and 8 (B) sufficient downstream capacity will 9 exist to transport the Alaska natural gas mov-10 ing through such project to markets in the con-11 tiguous United States. (c) Expedited Approval Process.—The Commis-12 sion shall issue a final order granting or denying any application for a certificate of public convenience and neces-14 15 sity under section 7(c) of the Natural Gas Act (15 U.S.C. 717f(c)) and this section not more than 60 days after the 16 issuance of the final environmental impact statement for that project pursuant to section 134. 18 19 (d) Prohibition on Certain Pipeline Route.— 20 No license, permit, lease, right-of-way, authorization, or 21 other approval required under Federal law for the construction of any pipeline to transport natural gas from lands within the Prudhoe Bay oil and gas lease area may be granted for any pipeline that follows a route that tra-25 verses—

- 1 (1) the submerged lands (as defined by the 2 Submerged Lands Act) beneath, or the adjacent
- 3 shoreline of, the Beaufort Sea; and
- 4 (2) enters Canada at any point north of 68 de-
- 5 grees North latitude.
- 6 (e) Open Season.—Except where an expansion is
- 7 ordered pursuant to section 135, initial or expansion ca-
- 8 pacity on any Alaska natural gas transportation project
- 9 shall be allocated in accordance with procedures to be es-
- 10 tablished by the Commission in regulations governing the
- 11 conduct of open seasons for such project. Such procedures
- 12 shall include the criteria for and timing of any open sea-
- 13 sons; promote competition in the exploration, development,
- 14 and production of Alaska natural gas; and, for any open
- 15 season for capacity beyond the initial capacity, provide the
- 16 opportunity for the transportation of natural gas other
- 17 than from the Prudhoe Bay and Point Thompson units.
- 18 The Commission shall issue such regulations not later
- 19 than 120 days after the date of enactment of this Act.
- 20 (f) Projects in the Contiguous United
- 21 States.—Applications for additional or expanded pipeline
- 22 facilities that may be required to transport Alaska natural
- 23 gas from Canada to markets in the contiguous United
- 24 States may be made pursuant to the Natural Gas Act.
- 25 To the extent such pipeline facilities include the expansion

- 1 of any facility constructed pursuant to the Alaska Natural
- 2 Gas Transportation Act of 1976, the provisions of that
- 3 Act shall continue to apply.
- 4 (g) STUDY OF IN-STATE NEEDS.—The holder of the
- 5 certificate of public convenience and necessity issued,
- 6 modified, or amended by the Commission for an Alaska
- 7 natural gas transportation project shall demonstrate that
- 8 it has conducted a study of Alaska in-State needs, includ-
- 9 ing tie-in points along the Alaska natural gas transpor-
- 10 tation project for in-State access.
- 11 (h) Alaska Royalty Gas.—The Commission, upon
- 12 the request of the State of Alaska and after a hearing,
- 13 may provide for reasonable access to the Alaska natural
- 14 gas transportation project for the State of Alaska or its
- 15 designee for the transportation of the State's royalty gas
- 16 for local consumption needs within the State; except that
- 17 the rates of existing shippers of subscribed capacity on
- 18 such project shall not be increased as a result of such ac-
- 19 cess.
- 20 (i) Regulations.—The Commission may issue regu-
- 21 lations to carry out the provisions of this section.
- 22 SEC. 134. ENVIRONMENTAL REVIEWS.
- (a) Compliance With NEPA.—The issuance of a
- 24 certificate of public convenience and necessity authorizing
- 25 the construction and operation of any Alaska natural gas

- 1 transportation project under section 133 shall be treated
- 2 as a major Federal action significantly affecting the qual-
- 3 ity of the human environment within the meaning of sec-
- 4 tion 102(2)(c) of the National Environmental Policy Act
- 5 of 1969 (42 U.S.C. 4332(2)(c)).
- 6 (b) Designation of Lead Agency.—The Commis-
- 7 sion shall be the lead agency for purposes of complying
- 8 with the National Environmental Policy Act of 1969, and
- 9 shall be responsible for preparing the statement required
- 10 by section 102(2)(e) of that Act (42 U.S.C. 4332(2)(e))
- 11 with respect to an Alaska natural gas transportation
- 12 project under section 133. The Commission shall prepare
- 13 a single environmental statement under this section, which
- 14 shall consolidate the environmental reviews of all Federal
- 15 agencies considering any aspect of the project.
- 16 (c) Other Agencies.—All Federal agencies consid-
- 17 ering aspects of the construction and operation of an Alas-
- 18 ka natural gas transportation project under section 133
- 19 shall cooperate with the Commission, and shall comply
- 20 with deadlines established by the Commission in the prep-
- 21 aration of the statement under this section. The statement
- 22 prepared under this section shall be used by all such agen-
- 23 cies to satisfy their responsibilities under section 102(2)(c)
- 24 of the National Environmental Policy Act of 1969 (42
- 25 U.S.C. 4332(2)(c)) with respect to such project.

1 (d) Expedited Process.—The Commission shall issue a draft statement under this section not later than 12 months after the Commission determines the applica-3 tion to be complete and shall issue the final statement not later than 6 months after the Commission issues the draft statement, unless the Commission for good cause finds that additional time is needed. 8 SEC. 135. PIPELINE EXPANSION. 9 (a) AUTHORITY.—With respect to any Alaska natural gas transportation project, upon the request of one or 10 more persons and after giving notice and an opportunity for a hearing, the Commission may order the expansion 12 of such project if it determines that such expansion is required by the present and future public convenience and 15 necessity. 16 (b) REQUIREMENTS.—Before ordering an expansion, the Commission shall— 18 (1) approve or establish rates for the expansion 19 service that are designed to ensure the recovery, on 20 an incremental or rolled-in basis, of the cost associ-21 ated with the expansion (including a reasonable rate 22 of return on investment); 23 (2) ensure that the rates as established do not

require existing shippers on the Alaska natural gas

- transportation project to subsidize expansion ship pers;
- 3 (3) find that the proposed shipper will comply
  4 with, and the proposed expansion and the expansion
  5 of service will be undertaken and implemented based
  6 on, terms and conditions consistent with the then-ef7 fective tariff of the Alaska natural gas transpor8 tation project;
  - (4) find that the proposed facilities will not adversely affect the financial or economic viability of the Alaska natural gas transportation project;
  - (5) find that the proposed facilities will not adversely affect the overall operations of the Alaska natural gas transportation project;
  - (6) find that the proposed facilities will not diminish the contract rights of existing shippers to previously subscribed certificated capacity;
  - (7) ensure that all necessary environmental reviews have been completed; and
- 20 (8) find that adequate downstream facilities 21 exist or are expected to exist to deliver incremental 22 Alaska natural gas to market.
- 23 (c) REQUIREMENT FOR A FIRM TRANSPORTATION 24 AGREEMENT.—Any order of the Commission issued pur-25 suant to this section shall be null and void unless the per-

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- 1 son or persons requesting the order executes a firm trans-
- 2 portation agreement with the Alaska natural gas transpor-
- 3 tation project within a reasonable period of time as speci-
- 4 fied in such order.
- 5 (d) Limitation.—Nothing in this section shall be
- 6 construed to expand or otherwise affect any authorities of
- 7 the Commission with respect to any natural gas pipeline
- 8 located outside the State of Alaska.
- 9 (e) Regulations.—The Commission may issue reg-
- 10 ulations to carry out the provisions of this section.

#### 11 SEC. 136. FEDERAL COORDINATOR.

- 12 (a) Establishment.—There is established, as an
- 13 independent office in the executive branch, the Office of
- 14 the Federal Coordinator for Alaska Natural Gas Trans-
- 15 portation Projects.
- 16 (b) Federal Coordinator.—The Office shall be
- 17 headed by a Federal Coordinator for Alaska Natural Gas
- 18 Transportation Projects, who shall—
- 19 (1) be appointed by the President, by and with
- the advice and consent of the Senate;
- 21 (2) for a term equal to the period required to
- design, permit and construct the project plus one
- 23 year; and
- 24 (3) be compensated at the rate prescribed for
- level III of the Executive Schedule (5 U.S.C. 5314).

- 1 (c) Duties.—The Federal Coordinator shall be re-2 sponsible for—
- 3 (1) coordinating the expeditious discharge of all 4 activities by Federal agencies with respect to an 5 Alaska natural gas transportation project; and
- 6 (2) ensuring the compliance of Federal agencies 7 with the provisions of this subtitle.
- 8 (d) Reviews and Actions of Other Federal 9 Agencies.—
  - (1) All reviews conducted and actions taken by any Federal officer or agency relating to an Alaska natural gas transportation project authorized under this section shall be expedited, in a manner consistent with completion of the necessary reviews and approvals by the deadlines set forth in this subtitle.
  - (2) No Federal officer or agency shall have the authority to include terms and conditions that are permitted, but not required, by law on any certificate, right-of-way, permit, lease, or other authorization issued to an Alaska natural gas transportation project if the Federal Coordinator determines that the terms and conditions would prevent or impair in any significant respect the expeditious construction and operation, or an expansion, of the project.

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- 1 (3) Unless required by law, no Federal officer 2 or agency shall add to, amend, or abrogate any cer-3 tificate, right-of-way, permit, lease, or other author-4 ization issued to an Alaska natural gas transpor-5 tation project if the Federal Coordinator determines 6 that such action would prevent or impair in any sig-7 nificant respect the expeditious construction and op-8 eration of, or an expansion of, the project.
  - (4) The Federal Coordinator's authority shall not include the ability to override—
    - (A) the implementation or enforcement of regulations issued by the Commission pursuant to Section 133(e); or
    - (B) an order by the Commission to expand the project pursuant to section 135.
  - (5) Nothing in this section shall give the Federal Coordinator the authority to impose additional terms, conditions or requirements beyond those imposed by the Commission or any agency with respect to construction and operation, or an expansion of, the project.
- 22 (e) STATE COORDINATION.—The Federal Coordi-23 nator shall enter into a Joint Surveillance and Monitoring 24 Agreement, approved by the President and the Governor 25 of Alaska, with the State of Alaska similar to that in effect

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- 1 during construction of the Trans-Alaska Oil Pipeline to
- 2 monitor the construction of the Alaska natural gas trans-
- 3 portation project. The Federal Government shall have pri-
- 4 mary surveillance and monitoring responsibility where the
- 5 Alaska natural gas transportation project crosses Federal
- 6 lands and private lands, and the State government shall
- 7 have primary surveillance and monitoring responsibility
- 8 where the Alaska natural gas transportation project
- 9 crosses State lands.
- 10 (f) Transfer of Federal Inspector Functions
- 11 AND AUTHORITY.—Upon appointment of the Federal Co-
- 12 ordinator by the President, all of the functions and au-
- 13 thority of the Office of Federal Inspector of Construction
- 14 for the Alaska Natural Gas Transportation System vested
- 15 in the Secretary of Energy pursuant to section 3012(b)
- 16 of Public Law 102–486 (15 U.S.C. 719e(b)), including all
- 17 functions and authority described and enumerated in the
- 18 Reorganization Plan No. 1 of 1979 (44 Fed. Reg. 33,663),
- 19 Executive Order No. 12142 of June 21, 1979 (44 Fed.
- 20 Reg. 36,927), and section 5 of the President's decision,
- 21 shall be transferred to the Federal Coordinator.
- 22 SEC. 137. JUDICIAL REVIEW.
- 23 (a) Exclusive Jurisdiction.—Except for review by
- 24 the Supreme Court of the United States on writ of certio-
- 25 rari, the United States Court of Appeals for the District

- 1 of Columbia Circuit shall have original and exclusive juris-
- 2 diction to determine—
- 3 (1) the validity of any final order or action (in-
- 4 cluding a failure to act) of any Federal agency or of-
- 5 ficer under this subtitle;
- 6 (2) the constitutionality of any provision of this
- 7 subtitle, or any decision made or action taken under
- 8 this subtitle; or
- 9 (3) the adequacy of any environmental impact
- statement prepared under the National Environ-
- mental Policy Act of 1969 with respect to any action
- under this subtitle.
- 13 (b) Deadline for Filing Claim.—Claims arising
- 14 under this subtitle may be brought not later than 60 days
- 15 after the date of the decision or action giving rise to the
- 16 claim.
- 17 (c) Expedited Consideration.—The United
- 18 States Court of Appeals for the District of Columbia Cir-
- 19 cuit shall set any action brought under subsection (a) for
- 20 expedited consideration, taking into account the national
- 21 interest of enhancing national energy security by providing
- 22 access to the significant gas reserves in Alaska needed to
- 23 meet the anticipated demand for natural gas.
- 24 (d) AMENDMENT TO ANGTA.—Section 10(e) of the
- 25 Alaska Natural Gas Transportation Act of 1976 (15

- 1 U.S.C. 719h) is amended by inserting after paragraph (1)
- 2 the following:
- 3 "(2) The United States Court of Appeals for
- 4 the District of Columbia Circuit shall set any action
- 5 brought under this section for expedited consider-
- 6 ation, taking into account the national interest de-
- 7 scribed in section 2.".

#### 8 SEC. 138. STATE JURISDICTION OVER IN-STATE DELIVERY

- 9 OF NATURAL GAS.
- 10 (a) LOCAL DISTRIBUTION.—Any facility receiving
- 11 natural gas from the Alaska natural gas transportation
- 12 project for delivery to consumers within the State of Alas-
- 13 ka shall be deemed to be a local distribution facility within
- 14 the meaning of section 1(b) of the Natural Gas Act (15
- 15 U.S.C. 717(b)), and therefore not subject to the jurisdic-
- 16 tion of the Commission.
- 17 (b) Additional Pipelines.—Nothing in this sub-
- 18 title, except as provided in section 133(d), shall preclude
- 19 or affect a future gas pipeline that may be constructed
- 20 to deliver natural gas to Fairbanks, Anchorage,
- 21 Matanuska-Susitna Valley, or the Kenai peninsula or
- 22 Valdez or any other site in the State of Alaska for con-
- 23 sumption within or distribution outside the State of Alas-
- 24 ka.

- 1 (c) Rate Coordination.—Pursuant to the Natural
- 2 Gas Act, the Commission shall establish rates for the
- 3 transportation of natural gas on the Alaska natural gas
- 4 transportation project. In exercising such authority, the
- 5 Commission, pursuant to section 17(b) of the Natural Gas
- 6 Act (15 U.S.C. 717p(b)), shall confer with the State of
- 7 Alaska regarding rates (including rate settlements) appli-
- 8 cable to natural gas transported on and delivered from the
- 9 Alaska natural gas transportation project for use within
- 10 the State of Alaska.

#### 11 SEC. 139. STUDY OF ALTERNATIVE MEANS OF CONSTRUC-

- 12 **TION**.
- 13 (a) REQUIREMENT OF STUDY.—If no application for
- 14 the issuance of a certificate or amended certificate of pub-
- 15 lie convenience and necessity authorizing the construction
- 16 and operation of an Alaska natural gas transportation
- 17 project has been filed with the Commission not later than
- 18 18 months after the date of enactment of this Act, the
- 19 Secretary of Energy shall conduct a study of alternative
- 20 approaches to the construction and operation of the
- 21 project.
- (b) Scope of Study.—The study shall consider the
- 23 feasibility of establishing a Government corporation to
- 24 construct an Alaska natural gas transportation project,
- 25 and alternative means of providing Federal financing and

- 1 ownership (including alternative combinations of Govern-
- 2 ment and private corporate ownership) of the project.
- 3 (c) Consultation.—In conducting the study, the
- 4 Secretary of Energy shall consult with the Secretary of
- 5 the Treasury and the Secretary of the Army (acting
- 6 through the Commanding General of the Corps of Engi-
- 7 neers).
- 8 (d) Report.—If the Secretary of Energy is required
- 9 to conduct a study under subsection (a), the Secretary
- 10 shall submit a report containing the results of the study,
- 11 the Secretary's recommendations, and any proposals for
- 12 legislation to implement the Secretary's recommendations
- 13 to Congress.
- 14 SEC. 140. CLARIFICATION OF ANGTA STATUS AND AU-
- 15 THORITIES.
- 16 (a) SAVINGS CLAUSE.—Nothing in this subtitle affects
- 17 any decision, certificate, permit, right-of-way, lease, or
- 18 other authorization issued under section 9 of the Alaska
- 19 Natural Gas Transportation Act of 1976 (15 U.S.C.
- 20 719(g)) or any Presidential findings or waivers issued in
- 21 accordance with that Act.
- 22 (b) Clarification of Authority To Amend
- 23 Terms and Conditions To Meet Current Project
- 24 REQUIREMENTS.—Any Federal officer or agency respon-
- 25 sible for granting or issuing any certificate, permit, right-

- 1 of-way, lease, or other authorization under section 9 of
- 2 the Alaska Natural Gas Transportation Act of 1976 (15
- 3 U.S.C. 719(g)) may add to, amend, or abrogate any term
- 4 or condition included in such certificate, permit, right-of-
- 5 way, lease, or other authorization to meet current project
- 6 requirements (including the physical design, facilities, and
- 7 tariff specifications), so long as such action does not com-
- 8 pel a change in the basic nature and general route of the
- 9 Alaska natural gas transportation system as designated
- 10 and described in section 2 of the President's decision, or
- 11 would otherwise prevent or impair in any significant re-
- 12 spect the expeditious construction and initial operation of
- 13 such transportation system.
- 14 (c) UPDATED ENVIRONMENTAL REVIEWS.—The Sec-
- 15 retary of Energy shall require the sponsor of the Alaska
- 16 natural gas transportation system to submit such updated
- 17 environmental data, reports, permits, and impact analyses
- 18 as the Secretary determines are necessary to develop de-
- 19 tailed terms, conditions, and compliance plans required by
- 20 section 5 of the President's decision.

#### 21 SEC. 141. SENSE OF CONGRESS.

- It is the sense of Congress that an Alaska natural
- 23 gas transportation project will provide significant eco-
- 24 nomic benefits to the United States and Canada. In order
- 25 to maximize those benefits, Congress urges the sponsors

- 1 of the pipeline project to make every effort to use steel
- 2 that is manufactured or produced in North America and
- 3 to negotiate a project labor agreement to expedite con-
- 4 struction of the pipeline.

#### 5 SEC. 142. PARTICIPATION OF SMALL BUSINESS CONCERNS.

- 6 (a) Sense of Congress.—It is the sense of Con-
- 7 gress that an Alaska natural gas transportation project
- 8 will provide significant economic benefits to the United
- 9 States and Canada. In order to maximize those benefits,
- 10 Congress urges the sponsors of the pipeline project to
- 11 maximize the participation of small business concerns in
- 12 contracts and subcontracts awarded in carrying out the
- 13 project.
- 14 (b) Study.—
- 15 (1) The Comptroller General shall conduct a
- study on the extent to which small business concerns
- participate in the construction of oil and gas pipe-
- lines in the United States.
- 19 (2) Not later that 1 year after the date of en-
- actment of this Act, the Comptroller General shall
- 21 transmit to Congress a report containing the results
- of the study.
- 23 (3) The Comptroller General shall update the
- study at least once every 5 years and transmit to

1	Congress a report containing the results of the up-
2	date.
3	(4) After the date of completion of the con-
4	struction of an Alaska natural gas transportation
5	project, this subsection shall no longer apply.
6	(c) Small Business Concern Defined.—In this
7	section, the term "small business concern" has the mean-
8	ing given such term in section 3(a) of the Small Business
9	Act (15 U.S.C. 632(a)).
10	SEC. 143. ALASKA PIPELINE CONSTRUCTION TRAINING
11	PROGRAM.
12	(a) Establishment of Program.—The Secretary
13	of Labor (in this section referred to as the "Secretary")
14	may make grants to the Alaska Department of Labor and
15	Workforce Development to—
16	(1) develop a plan to train, through the work-
17	force investment system established in the State of
18	Alaska under the Workforce Investment Act of 1998
19	(112 Stat. 936 et seq.), adult and dislocated work-
20	ers, including Alaska Natives, in urban and rural
21	Alaska in the skills required to construct and oper-
22	ate an Alaska gas pipeline system; and
23	(2) implement the plan developed pursuant to
24	paragraph (1).

1	(b) REQUIREMENTS FOR PLANNING GRANTS.—The
2	Secretary may make a grant under subsection (a)(1) only
3	if—
4	(1) the Governor of Alaska certifies in writing
5	to the Secretary that there is a reasonable expecta-
6	tion that construction of an Alaska gas pipeline will
7	commence within 3 years after the date of such cer-
8	tification; and
9	(2) the Secretary of the Interior concurs in
10	writing to the Secretary with the certification made
11	under paragraph (1).
12	(c) REQUIREMENTS FOR IMPLEMENTATION
13	GRANTS.—The Secretary may make a grant under sub-
14	section (a)(2) only if—
15	(1) the Secretary has approved a plan developed
16	pursuant to subsection (a)(1);
17	(2) the Governor of Alaska requests the grant
18	funds and certifies in writing to the Secretary that
19	there is a reasonable expectation that the construc-
20	tion of an Alaska gas pipeline system will commence
21	within 2 years after the date of such certification;
22	and
23	(3) the Secretary of the Interior concurs in
24	writing to the Secretary with the certification made
25	under paragraph (2) after considering—

1	(A) the status of necessary State and Fed-
2	eral permits;
3	(B) the availability of financing for the
4	pipeline project; and
5	(C) other relevant factors and cir-
6	cumstances.
7	(d) Authorization of Appropriations.—There is
8	authorized to be appropriated to the Secretary such sums
9	as may be necessary, but not to exceed \$20,000,000, to
10	carry out this section.
11	SEC. 144. LOAN GUARANTEES.
12	(a) Authority.—
13	(1) The Secretary may enter agreements with 1
14	or more holders of a certificate of public convenience
15	and necessity issued under section 133(b) of this Act
16	or section 9 of the Alaska Natural Gas Transpor-
17	tation Act of 1976 (15 U.S.C. 719g) to issue Fed-
18	eral guarantee instruments with respect to loans and
19	other debt obligations for a qualified infrastructure
20	project.
21	(2) Subject to the requirements of this section,
22	the Secretary may also enter into agreements with
23	1 or more owners of the Canadian portion of a
24	qualified infrastructure project to issue Federal

guarantee instruments with respect to loans and

- other debt obligations for a qualified infrastructure project as though such owner were a holder described in paragraph (1).
- eral guarantee instruments under this section for a qualified infrastructure project shall expire on the date that is 2 years after the date on which the final certificate of public convenience and necessity (including any Canadian certificates of public convenience and necessity) is issued for the project. A final certificate shall be considered to have been issued when all certificates of public convenience and necessity have been issued that are required for the initial transportation of commercially economic quantities of natural gas from Alaska to the continental United States.

## (b) Conditions.—

(1) The Secretary may issue a Federal guarantee instrument for a qualified infrastructure project only after a certificate of public convenience and necessity under section 133(b) of this Act or an amended certificate under section 9 of the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719g) has been issued for the project.

- (2) The Secretary may issue a Federal guarantee instrument under this section for a qualified infrastructure project only if the loan or other debt obligation guaranteed by the instrument has been issued by an eligible lender.
  - (3) The Secretary shall not require as a condition of issuing a Federal guarantee instrument under this section any contractual commitment or other form of credit support of the sponsors (other than equity contribution commitments and completion guarantees), or any throughput or other guarantee from prospective shippers greater than such guarantees as shall be required by the project owners.

### (c) Limitations on Amounts.—

- (1) The amount of loans and other debt obligations guaranteed under this section for a qualified infrastructure project shall not exceed 80 percent of the total capital costs of the project, including interest during construction.
- (2) The principal amount of loans and other debt obligations guaranteed under this section shall not exceed, in the aggregate, \$18,000,000,000, which amount shall be indexed for United States

- dollar inflation from the date of enactment of this
- 2 Act, as measured by the Consumer Price Index.
- 3 (d) Loan Terms and Fees.—
- (1) The Secretary may issue Federal guarantee instruments under this section that take into account repayment profiles and grace periods justified by project cash flows and project-specific considerations. The term of any loan guaranteed under this section shall not exceed 30 years.
- 10 (2) An eligible lender may assess and collect
  11 from the borrower such other fees and costs associ12 ated with the application and origination of the loan
  13 or other debt obligation as are reasonable and cus14 tomary for a project finance transaction in the oil
  15 and gas sector.
- (e) REGULATIONS.—The Secretary may issue regula-tions to carry out this section.
- 18 (f) Authorization of Appropriations.—There
- 19 are authorized to be appropriated such sums as may be
- 20 necessary to cover the cost of loan guarantees, as defined
- 21 by section 502(5) of the Federal Credit Reform Act of
- 22 1990 (2 U.S.C. 661a(5)). Such sums shall remain avail-
- 23 able until expended.
- 24 (g) Definitions.—In this section, the following defi-
- 25 nitions apply:

- 1 (1) The term "Consumer Price Index" means 2 the Consumer Price Index for all-urban consumers, 3 United States city average, as published by the Bu-4 reau of Labor Statistics, or if such index shall cease 5 to be published, any successor index or reasonable 6 substitute thereof.
  - (2) The term "eligible lender" means any non-Federal qualified institutional buyer (as defined by section 230.144A(a) of title 17, Code of Federal Regulations (or any successor regulation), known as Rule 144A(a) of the Securities and Exchange Commission and issued under the Securities Act of 1933), including—
    - (A) a qualified retirement plan (as defined in section 4974(c) of the Internal Revenue Code of 1986 (26 U.S.C. 4974(c)) that is a qualified institutional buyer; and
    - (B) a governmental plan (as defined in section 414(d) of the Internal Revenue Code of 1986 (26 U.S.C. 414(d)) that is a qualified institutional buyer.
  - (3) The term "Federal guarantee instrument" means any guarantee or other pledge by the Secretary to pledge the full faith and credit of the United States to pay all of the principal and interest

- on any loan or other debt obligation entered into by a holder of a certificate of public convenience and necessity.
- (4) The term "qualified infrastructure project" 5 means an Alaskan natural gas transportation project 6 consisting of the design, engineering, finance, con-7 struction, and completion of pipelines and related 8 transportation and production systems (including 9 gas treatment plants), and appurtenances thereto, 10 that are used to transport natural gas from the 11 Alaska North Slope to the continental United 12 States.
- 13 (5) The term "Secretary" means the Secretary of Energy.

### 15 SEC. 145. SENSE OF CONGRESS ON NATURAL GAS DEMAND.

- 16 It is the sense of Congress that:
- 17 (1) North American demand for natural gas 18 will increase dramatically over the course of the next 19 several decades.
- 20 (2) Both the Alaska Natural Gas Pipeline and 21 the McKenzie Delta Natural Gas project in Canada 22 will be necessary to help meet the increased demand 23 for natural gas in North America.
- (3) Federal and State officials should work to gether with officials in Canada to ensure both

- 1 projects can move forward in a mutually beneficial 2 fashion. (4) Federal and State officials should acknowl-3 edge that the smaller scope, fewer permitting re-5 quirements and lower cost of the McKenzie Delta 6 project means it will most likely be completed before 7 the Alaska Natural Gas Pipeline. 8 (5) Lower 48 and Canadian natural gas pro-9 duction alone will not be able to meet all domestic 10 demand in the coming decades. 11 (6) As a result, natural gas delivered from 12 Alaska's North Slope will not displace or reduce the 13 commercial viability of Canadian natural gas pro-14 duced from the McKenzie Delta nor production from 15 the Lower 48. TITLE II—COAL 16 **Subtitle A—Clean Coal Power** 17 **Initiative** 18 19 SEC. 201. AUTHORIZATION OF APPROPRIATIONS.
- 20 (a) CLEAN COAL POWER INITIATIVE.— There is au21 thorized to be appropriated to the Secretary of Energy (in
  22 this subtitle, referred to as "Secretary") to carry out the
  23 activities authorized by this subtitle \$200,000,000 for
  24 each of the fiscal years 2003 through 2011, to remain
  25 available until expended.

# 1 SEC. 202. PROJECT CRITERIA.

2	(a) In General.—The Secretary shall not provide
3	funding under this subtitle for any project that does not
4	advance efficiency, environmental performance, and cost
5	competitiveness well beyond the level of technologies that
6	are in operation or have been demonstrated as of the date
7	of the enactment of this Act.
8	(b) Technical Criteria for Gasification.—In
9	allocating the funds made available under section 201, the
10	Secretary shall ensure that at least 80 percent of the
11	funds are used for coal-based gasification technologies or
12	coal-based projects that include gasification combined
13	cycle, gasification fuel cells, gasification co-production, or
14	hybrid gasification/combustion. The Secretary shall set
15	technical milestones specifying emissions levels that coal
16	gasification projects must be designed to and reasonably
17	expected to achieve. The milestones shall get more restric-
18	tive through the life of the program. The milestones shall
19	be designed to achieve by 2020 coal gasification projects
20	able to—
21	(1) remove 99 percent of sulfur dioxide;
22	(2) emit no more than .05 lbs of $\mathrm{NO}_x$ per mil-
23	lion BTU;
24	(3) achieve substantial reductions in mercury
25	emissions; and

(4) achieve a thermal efficiency of—

1	(A) 60 percent for coal of more than 9,000
2	Btu;
3	(B) 59 percent for coal of 7,000 to 9,000
4	Btu; and
5	(C) 57 percent for coal of less than 7,000
6	Btu.
7	(c) Technical Criteria for Other
8	Projects.—For projects not described in sub-
9	section (b), the Secretary shall set technical mile-
10	stones specifying emissions levels that the projects
11	must be designed to and reasonably expected to
12	achieve. The milestones shall get more restrictive
13	through the life of the program. The milestones shall
14	be designed to achieve by 2010 projects able to—
15	(1) remove 97 percent of sulfur dioxide;
16	(2) emit no more than .08 lbs of $NO_x$ per mil-
17	lion BTU;
18	(3) achieve substantial reductions in mercury
19	emissions; and
20	(4) achieve a thermal efficiency of—
21	(A) 45 percent for coal of more than 9,000
22	Btu;
23	(B) 44 percent for coal of 7,000 to 9,000
24	Btu: and

(C) 42 percent for coal of less than 7,000 1 2 Btu. 3 (d) Existing Units.—In the case of projects at existing units, in lieu of the thermal efficiency requirements 5 set forth in paragraphs (b)(4) and (c)(4), the projects shall be designed to achieve an overall thermal design effi-6 ciency improvement compared to the efficiency of the unit 8 as operated, of not less than— 9 (1) 7 percent for coal of more than 9,000 Btu; 10 (2) 6 percent for coal of 7,000 to 9,000 Btu; 11 or 12 (3) 4 percent for coal of less than 7,000 Btu. 13 (e) Permitted Uses.—In allocating funds made available in this section, the Secretary may allocate funds 14 15 to projects that include, as part of the project, the separation and capture of carbon dioxide. 16 17 (f) Consultation.—Before setting the technical 18 milestones under subsections (b) and (c), the Secretary shall consult with the Administrator of the Environmental 19 20 Protection Agency and interested entities, including coal 21 producers, industries using coal, organizations to promote coal or advanced coal technologies, environmental organi-23 zations, and organizations representing workers. 24 (g) FINANCIAL CRITERIA.—The Secretary shall not provide a funding award under this title unless the recipi-

1	ent has documented to the satisfaction of the Secretary
2	that—
3	(1) the award recipient is financially viable
4	without the receipt of additional Federal funding;
5	(2) the recipient will provide sufficient informa-
6	tion to the Secretary for the Secretary to ensure
7	that the award funds are spent efficiently and effec-
8	tively; and
9	(3) a market exists for the technology being
10	demonstrated or applied, as evidenced by statements
11	of interest in writing from potential purchasers of
12	the technology.
13	(h) FINANCIAL ASSISTANCE.—The Secretary shall
14	provide financial assistance to projects that meet the re-
15	quirements of this section and are likely to—
16	(1) achieve overall cost reductions in the utiliza-
17	tion of coal to generate useful forms of energy;
18	(2) improve the competitiveness of coal among
19	various forms of energy; and
20	(3) demonstrate methods and equipment that
21	are applicable to 25 percent of the electricity gener-
22	ating facilities that use coal as the primary feedstock
23	as of the date of the enactment of this Act.

1	(i) FEDERAL SHARE.—The Federal share of the cos
2	of a coal or related technology project funded by the Sec
3	retary shall not exceed 50 percent.
4	(j) Applicability.—No technology, or level of emis
5	sion reduction, shall be treated as adequately dem
6	onstrated for purposes of section 111 of the Clean Air Act
7	achievable for purposes of section 169 of that Act, or
8	achievable in practice for purposes of section 171 of that
9	Act solely by reason of the use of such technology, or the
10	achievement of such emission reduction, by one or more
11	facilities receiving assistance under this title.
12	SEC. 203. REPORTS.
12	(a) Ten-Year Plan.—By September 30, 2004, the
13	(a) Ten-Year Plan.—By September 30, 2004, the
13 14	(a) Ten-Year Plan.—By September 30, 2004, the Secretary shall transmit to Congress a report, with respect
13 14 15	(a) Ten-Year Plan.—By September 30, 2004, the Secretary shall transmit to Congress a report, with respect to section 202(a), a 10-year plan containing—
13 14 15 16	(a) Ten-Year Plan.—By September 30, 2004, the Secretary shall transmit to Congress a report, with respect to section 202(a), a 10-year plan containing—  (1) a detailed assessment of whether the aggre
13 14 15 16	(a) Ten-Year Plan.—By September 30, 2004, the Secretary shall transmit to Congress a report, with respect to section 202(a), a 10-year plan containing—  (1) a detailed assessment of whether the aggregate funding levels provided under section 201 are
13 14 15 16 17	(a) Ten-Year Plan.—By September 30, 2004, the Secretary shall transmit to Congress a report, with respect to section 202(a), a 10-year plan containing—  (1) a detailed assessment of whether the aggregate funding levels provided under section 201 are appropriate funding levels for that program;
13 14 15 16 17 18	(a) Ten-Year Plan.—By September 30, 2004, the Secretary shall transmit to Congress a report, with respect to section 202(a), a 10-year plan containing—  (1) a detailed assessment of whether the aggregate funding levels provided under section 201 are appropriate funding levels for that program;  (2) a detailed description of how proposals will
13 14 15 16 17 18 19	(a) Ten-Year Plan.—By September 30, 2004, the Secretary shall transmit to Congress a report, with respect to section 202(a), a 10-year plan containing—  (1) a detailed assessment of whether the aggregate funding levels provided under section 201 are appropriate funding levels for that program;  (2) a detailed description of how proposals will be solicited and evaluated, including a list of all according to the solicited and evaluated, including a list of all according to the solicited and evaluated, including a list of all according to the solicited and evaluated, including a list of all according to the solicited and evaluated, including a list of all according to the solicited and evaluated, including a list of all according to the solicited and evaluated, including a list of all according to the solicited and evaluated, including a list of all according to the solicited and evaluated, including a list of all according to the solicited and evaluated, including a list of all according to the solicited and evaluated.

sued; and

- 1 (4) a detailed description of how the program 2 will avoid problems enumerated in General Account-3 ing Office reports on the Clean Coal Technology Program, including problems that have resulted in 5 unspent funds and projects that failed either finan-6 cially or scientifically. 7 (b) TECHNICAL MILESTONES.—Not later than 1 year 8 after the date of the enactment of this Act, and once every 9 2 years thereafter through 2011, the Secretary, in con-10 sultation with other appropriate Federal agencies, shall transmit to the Congress, a report describing— 12 (1) the technical milestones set forth in section 13 212 and how those milestones ensure progress to-14 ward meeting the requirements of subsections (b) 15 and (c) of section 212; and 16 (2) the status of projects funded under this 17 title. 18 SEC. 204. CLEAN COAL CENTERS OF EXCELLENCE. 19 As part of the program authorized in section 211, the Secretary shall award competitive, merit-based grants 21 to universities for the establishment of Centers of Excel-
- 23 shall provide grants to universities that can show the

lence for Energy Systems of the Future. The Secretary

- 24 greatest potential for advancing new clean coal tech-
- 25 nologies.

# **Subtitle B—Federal Coal Leases**

2	SEC. 211. REPEAL OF THE 160-ACRE LIMITATION FOR COAL
3	LEASES.
4	Section 3 of the Mineral Leasing Act (30 U.S.C. 203)
5	is amended by striking all the text in the first sentence
6	after "upon" and inserting the following: "a finding by
7	the Secretary that it (1) would be in the interest of the
8	United States, (2) would not displace a competitive inter-
9	est in the lands, and (3) would not include lands or depos-
10	its that can be developed as part of another potential or
11	existing operation, secure modifications of the original coal
12	lease by including additional coal lands or coal deposits
13	contiguous or cornering to those embraced in such lease,
14	but in no event shall the total area added by such modi-
15	fications to an existing coal lease exceed 320 acres, or add
16	acreage larger than that in the original lease.".
17	SEC. 212. MINING PLANS.
18	Section $2(d)(2)$ of the Mineral Leasing Act (30
19	U.S.C. 202a(2)) is amended—
20	(1) by inserting "(A)" after "(2)"; and
21	(2) by adding at the end the following:
22	"(B) The Secretary may establish a period
23	of more than forty years if the Secretary deter-
24	mines that the longer period will ensure the
25	maximum economic recovery of a coal deposit.

1	or the longer period is in the interest of the or-
2	derly, efficient, or economic development of a
3	coal resource.".
4	SEC. 213. PAYMENT OF ADVANCE ROYALTIES UNDER COAL
5	LEASES.
6	Section 7(b) of the Mineral Leasing Act of 1920 (30
7	U.S.C. 207(b)) is amended by striking all after "Sec-
8	retary)." through to "a lease." and inserting: "The aggre-
9	gate number of years during the period of any lease for
10	which advance royalties may be accepted in lieu of the con-
11	dition of continued operation shall not exceed twenty. The
12	amount of any production royalty paid for any year shall
13	be reduced (but not below 0) by the amount of any ad-
14	vance royalties paid under such lease to the extent that
15	such advance royalties have not been used to reduce pro-
16	duction royalties for a prior year.".
17	SEC. 214. ELIMINATION OF DEADLINE FOR SUBMISSION OF
18	COAL LEASE OPERATION AND RECLAMATION
19	PLAN.
20	Section 7(c) of the Mineral Leasing Act (30 U.S.C.
21	207(c)) is amended by striking "and not later than three
22	years after a lease is issued,".
23	SEC. 215. APPLICATION OF AMENDMENTS.
24	The amendments made by this Act apply with respect
25	to any coal lease issued on or after the date of enactment

1	of this Act, and, with respect to any coal lease issued be
2	fore the date of enactment of this Act, upon the date of
3	readjustment of the lease as provided for by section 7(a
4	of the Mineral Leasing Act, or upon request by the lessee
5	prior to such date.
6	Subtitle C—Powder River Basin
7	<b>Shared Mineral Estates</b>
8	SEC. 221. RESOLUTION OF FEDERAL RESOURCE DEVELOP
9	MENT CONFLICTS IN THE POWDER RIVER
10	BASIN.
11	The Secretary of the Interior shall—
12	(1) undertake a review of existing authorities to
13	resolve conflicts between the development of Federa
14	coal and the development of Federal and non-Fed
15	eral coalbed methane in the Powder River Basin in
16	Wyoming and Montana; and
17	(2) not later than 6 months after the enactmen
18	of this Act, report to the Congress on alternatives to
19	resolve these conflicts and identification of a pre
20	ferred alternative with specific legislative language
21	if any, required to implement the preferred alter
22	native.

## 1 TITLE III—INDIAN ENERGY

- 2 SEC. 301. SHORT TITLE.
- This title may be cited as the "Indian Tribal Energy
- 4 Development and Self-Determination Act of 2003".
- 5 SEC. 302. OFFICE OF INDIAN ENERGY POLICY AND PRO-
- 6 GRAMS.
- 7 (a) In General.—Title II of the Department of En-
- 8 ergy Organization Act (42 U.S.C. 7131 et seq.) is amend-
- 9 ed by adding at the end the following:
- 10 "OFFICE OF INDIAN ENERGY POLICY AND PROGRAMS
- 11 "Sec. 217.(a) Establishment.—There is estab-
- 12 lished within the Department an Office of Indian Energy
- 13 Policy and Programs (referred to in this section as the
- 14 'Office'). The Office shall be headed by a Director, who
- 15 shall be appointed by the Secretary and compensated at
- 16 a rate equal to that of level IV of the Executive Schedule
- 17 under section 5315 of title 5, United States Code.
- 18 "(b) Duties of Director.—The Director shall in
- 19 accordance with Federal policies promoting Indian self-de-
- 20 termination and the purposes of this Act, provide, direct,
- 21 foster, coordinate, and implement energy planning, edu-
- 22 cation, management, conservation, and delivery programs
- 23 of the Department that—
- 24 (1) promote Indian tribal energy development,
- efficiency, and use;

1	"(2) reduce or stabilize energy costs;
2	"(3) enhance and strengthen Indian tribal en-
3	ergy and economic infrastructure relating to natural
4	resource development and electrification; and
5	"(4) electrify Indian tribal land and the homes
6	of tribal members.
7	"COMPREHENSIVE INDIAN ENERGY ACTIVITIES
8	"Sec. 218. (a) Indian Energy Education Plan-
9	NING AND MANAGEMENT ASSISTANCE.—
10	"(1) The Director shall establish programs
11	within the Office of Indian Energy Policy and Pro-
12	grams to assist Indian tribes in meeting energy edu-
13	cation, research and development, planning, and
14	management needs.
15	"(2) In carrying out this section, the Director
16	may provide grants, on a competitive basis, to an In-
17	dian tribe or tribal consortium for use in carrying
18	out—
19	"(A) energy, energy efficiency, and energy
20	conservation programs;
21	"(B) studies and other activities sup-
22	porting tribal acquisition of energy supplies,
23	services, and facilities;
24	"(C) planning, construction, development,
25	operation, maintenance, and improvement of
26	tribal electrical generation, transmission, and

1	distribution facilities located on Indian land;
2	and
3	"(D) development, construction, and inter-
4	connection of electric power transmission facili-
5	ties located on Indian land with other electric
6	transmission facilities.
7	"(3)(A) The Director may develop, in consulta-
8	tion with Indian tribes, a formula for providing
9	grants under this section.
10	"(B) In providing a grant under this sub-
11	section, the Director shall give priority to an
12	application received from an Indian tribe with
13	inadequate electric service (as determined by
14	the Director).
15	"(4) The Secretary may promulgate such regu-
16	lations as the Secretary determines are necessary to
17	carry out this subsection.
18	"(5) There is authorized to be appropriated to
19	carry out this section \$20,000,000 for each of fiscal
20	years 2004 through 2011.
21	"(b) Loan Guarantee Program.—
22	"(1) Subject to paragraph (3), the Secretary
23	may provide loan guarantees (as defined in section
24	502 of the Federal Credit Reform Act of $1990$ (2
25	U.S.C. 661a)) for not more than 90 percent of the

1	unpaid principal and interest due on any loan made
2	to any Indian tribe for energy development.
3	"(2) A loan guaranteed under this subsection
4	shall be made by—
5	"(A) a financial institution subject to ex-
6	amination by the Secretary; or
7	"(B) an Indian tribe, from funds of the In-
8	dian tribe.
9	"(3) The aggregate outstanding amount guar-
10	anteed by the Secretary at any time under this sub-
11	section shall not exceed \$2,000,000,000.
12	"(4) The Secretary may promulgate such regu-
13	lations as the Secretary determines are necessary to
14	carry out this subsection.
15	"(5) There are authorized to be appropriated
16	such sums as are necessary to carry out this sub-
17	section, to remain available until expended.
18	"(6) Not later than 1 year from the date of en-
19	actment of this section, the Secretary shall report to
20	the Congress on the financing requirements of In-
21	dian tribes for energy development on Indian land.
22	"(e) Indian Energy Preference.—
23	"(1) In purchasing electricity or any other en-
24	ergy product or byproduct, a Federal agency or de-
25	partment may give preference to an energy and re-

1	source production enterprise, partnership, consor-
2	tium, corporation, or other type of business organi-
3	zation the majority of the interest in which is owned
4	and controlled by 1 or more Indian tribes.
5	"(2) In carrying out this subsection, a Federal
6	agency or department shall not—
7	"(A) pay more than the prevailing market
8	price for an energy product or byproduct; and
9	"(B) obtain less than prevailing market
10	terms and conditions.".
11	(b) Conforming Amendments.—
12	(1) The table of contents of the Department of
13	Energy Organization Act (42 U.S.C. prec. 7101) is
14	amended—
15	(A) in the item relating to section 209, by
16	striking "Section" and inserting "Sec."; and
17	(B) by striking the items relating to sec-
18	tions 213 through 216 and inserting the fol-
19	lowing:
	"Sec. 213. Establishment of policy for National Nuclear Security Administration.
	"Sec. 214. Establishment of security, counterintelligence, and intelligence policies.
	"Sec. 215. Office of Counterintelligence.  "Sec. 216. Office of Intelligence.  "Sec. 217. Office of Indian Energy Policy and Programs.  "Sec. 218. Comprehensive Indian Energy Activities.".
20	(2) Section 5315 of title 5, United States Code,
21	is amended by inserting "Director, Office of Indian

1	Energy Policy and Programs, Department of En-
2	ergy." after "Inspector General, Department of En-
3	ergy.".
4	SEC. 303. INDIAN ENERGY.
5	Title XXVI of the Energy Policy Act of 1992 (25
6	U.S.C. 3501 et seq.) is amended to read as follows:
7	"TITLE XXVI—INDIAN ENERGY
8	"SEC. 2601. DEFINITIONS.
9	"For purposes of this title:
10	"(1) The term 'Director' means the Director of
11	the Office of Indian Energy Policy and Programs.
12	"(2) The term 'Indian land' means—
13	"(A) any land located within the bound-
14	aries of an Indian reservation, pueblo, or
15	rancheria;
16	"(B) any land not located within the
17	boundaries of an Indian reservation, pueblo, or
18	rancheria, the title to which is held—
19	"(i) in trust by the United States for
20	the benefit of an Indian tribe;
21	"(ii) by an Indian tribe, subject to re-
22	striction by the United States against
23	alienation; or
24	"(iii) by a dependent Indian commu-
25	nity; and

1	"(C) land conveyed to a Native Corpora-
2	tion under the Alaska Native Claims Settlement
3	Act (43 U.S.C. 1601 et seq.).
4	"(3) The term 'Indian reservation' includes—
5	"(A) an Indian reservation in existence in
6	any State or States as of the date of enactment
7	of this paragraph;
8	"(B) a public domain Indian allotment;
9	"(C) a former reservation in the State of
10	Oklahoma;
11	"(D) a parcel of land owned by a Native
12	Corporation under the Alaska Native Claims
13	Settlement Act (43 U.S.C. 1601 et seq.); and
14	"(E) a dependent Indian community lo-
15	cated within the borders of the United States,
16	regardless of whether the community is lo-
17	cated—
18	"(i) on original or acquired territory
19	of the community; or
20	"(ii) within or outside the boundaries
21	of any particular State.
22	"(4) The term 'Indian tribe' has the meaning
23	given the term in section 4 of the Indian Self-Deter-
24	mination and Education Assistance Act (25 U.S.C.
25	450b).

1	"(5) The term 'Native Corporation' has the
2	meaning given the term in section 3 of the Alaska
3	Native Claims Settlement Act (43 U.S.C. 1602).
4	"(6) The term 'organization' means a partner-
5	ship, joint venture, limited liability company, or
6	other unincorporated association or entity that is es-
7	tablished to develop Indian energy resources.
8	"(7) The term 'Program' means the Indian en-
9	ergy resource development program established
10	under section 2602(a).
11	"(8) The term 'Secretary' means the Secretary
12	of the Interior.
13	"(9) The term 'tribal consortium' means an or-
14	ganization that consists of 2 or more entities, at
15	least 1 of which is an Indian tribe.
16	"(10) The term 'tribal land' means any land or
17	interests in land owned by any Indian tribe, band,
18	nation, pueblo, community, rancheria, colony or
19	other group, title to which is held in trust by the
20	United States or which is subject to a restriction
21	against alienation imposed by the United States.
22	"(11) The term 'vertical integration of energy
23	resources' means any project or activity that pro-
24	motes the location and operation of a facility (in-

cluding any pipeline, gathering system, transpor-

1	tation system or facility, or electric transmission fa-
2	cility), on or near Indian land to process, refine,
3	generate electricity from, or otherwise develop en-
4	ergy resources on, Indian land.
5	"SEC. 2602. INDIAN TRIBAL ENERGY RESOURCE DEVELOP-
6	MENT.
7	"(a) In General.—To assist Indian tribes in the de-
8	velopment of energy resources and further the goal of In-
9	dian self-determination, the Secretary shall establish and
10	implement an Indian energy resource development pro-
11	gram to assist Indian tribes and tribal consortia in achiev-
12	ing the purposes of this title.
13	"(b) Grants and Loans.—In carrying out the pro-
14	gram, the Secretary shall—
15	"(1) provide development grants to Indian
16	tribes and tribal consortia for use in developing or
17	obtaining the managerial and technical capacity
18	needed to develop energy resources on Indian land;
19	"(2) provide grants to Indian tribes and tribal
20	consortia for use in carrying out projects to promote
21	the vertical integration of energy resources, and to
22	process, use, or develop those energy resources, on
23	Indian land; and
24	"(3) provide low-interest loans to Indian tribes
25	and tribal consortia for use in the promotion of en-

1	ergy resource development and vertical integration
2	or energy resources on Indian land.
3	"(c) Authorization of Appropriations.—There
4	are authorized to be appropriated to carry out this section
5	such sums as are necessary for each of fiscal years 2004
6	through 2014.
7	"SEC. 2603. INDIAN TRIBAL ENERGY RESOURCE REGULA-
8	TION.
9	"(a) Grants.—The Secretary may provide to Indian
10	tribes and tribal consortia, on an annual basis, grants for
11	use in developing, administering, implementing, and en-
12	forcing tribal laws (including regulations) governing the
13	development and management of energy resources on In-
14	dian land.
15	"(b) Use of Funds.—Funds from a grant provided
16	under this section may be used by an Indian tribe or tribal
17	consortium for—
18	"(1) the development of a tribal energy resource
19	inventory or tribal energy resource on Indian land;
20	"(2) the development of a feasibility study or
21	other report necessary to the development of energy
22	resources on Indian land;
23	"(3) the development and enforcement of tribal
24	laws and the development of technical infrastructure
25	to protect the environment under applicable law; or

1	"(4) the training of employees that—
2	"(A) are engaged in the development of en-
3	ergy resources on Indian land; or
4	"(B) are responsible for protecting the en-
5	vironment.
6	"(c) Other Assistance.—To the maximum extent
7	practicable, the Secretary and the Secretary of Energy
8	shall make available to Indian tribes and tribal consortia
9	scientific and technical data for use in the development
10	and management of energy resources on Indian land.
11	"SEC. 2604. LEASES, BUSINESS AGREEMENTS, AND RIGHTS-
12	OF-WAY INVOLVING ENERGY DEVELOPMENT
13	OR TRANSMISSION.
14	"(a) Leases and Agreements.—Subject to the
15	provisions of this section—
16	"(1) an Indian tribe may, at its discretion,
17	enter into a lease or business agreement for the pur-
18	pose of energy development, including a lease or
19	business agreement for—
20	"(A) exploration for, extraction of, proc-
21	essing of, or other development of energy re-
22	sources on tribal land; and
23	"(B) construction or operation of an elec-
24	tric generation, transmission, or distribution fa-
25	cility located on tribal land; or a facility to

1	process or refine energy resources developed on
2	tribal land; and
3	"(2) a lease or business agreement described in
4	paragraph (1) shall not require the approval of the
5	Secretary under section 2103 of the Revised Stat-
6	utes (25 U.S.C. 81) or any other provision of law,
7	if—
8	"(A) the lease or business agreement is ex-
9	ecuted in accordance with a tribal energy re-
10	source agreement approved by the Secretary
11	under subsection (e);
12	"(B) the term of the lease or business
13	agreement does not exceed—
14	"(i) 30 years; or
15	"(ii) in the case of a lease for the pro-
16	duction of oil and gas resources, 10 years
17	and as long thereafter as oil or gas is pro-
18	duced in paying quantities; and
19	"(C) the Indian tribe has entered into a
20	tribal energy resource agreement with the Sec-
21	retary, as described in subsection (e), relating
22	to the development of energy resources on tribal
23	land (including an annual trust asset evaluation
24	of the activities of the Indian tribe conducted in
25	accordance with the agreement).

1	"(b) Rights-of-Way for Pipelines or Electric
2	Transmission or Distribution Lines.—An Indian
3	tribe may grant a right-of-way over tribal land for a pipe-
4	line or an electric transmission or distribution line without
5	specific approval by the Secretary if—
6	"(1) the right-of-way is executed in accordance
7	with a tribal energy resource agreement approved by
8	the Secretary under subsection (e);
9	"(2) the term of the right-of-way does not ex-
10	ceed 30 years;
11	"(3) the pipeline or electric transmission or dis-
12	tribution line serves—
13	"(A) an electric generation, transmission,
14	or distribution facility located on tribal land; or
15	"(B) a facility located on tribal land that
16	processes or refines energy resources developed
17	on tribal land; and
18	"(4) the Indian tribe has entered into a tribal
19	energy resource agreement with the Secretary, as de-
20	scribed in subsection (e), relating to the development
21	of energy resources on tribal land (including an an-
22	nual trust asset evaluation of the activities of the In-
23	dian tribe conducted in accordance with the agree-
24	ment.

1	"(c) Renewals.—A lease or business agreement en-
2	tered into or a right-of-way granted by an Indian tribe
3	under this section may be renewed at the discretion of the
4	Indian tribe in accordance with this section.
5	"(d) Validity.—No lease, business agreement, or
6	right-of-way under this section shall be valid unless the
7	lease, business agreement, or right-of-way is authorized in
8	accordance with tribal energy resource agreements ap-
9	proved by the Secretary under subsection (e).
10	"(e) Tribal Energy Resource Agreements.—
11	"(1) On promulgation of regulations under
12	paragraph (9), an Indian tribe may submit to the
13	Secretary for approval a tribal energy resource
14	agreement governing leases, business agreements
15	and rights-of-way under this section.
16	"(2)(A) Not later than 180 days after the date
17	on which the Secretary receives a tribal energy re-
18	source agreement submitted by an Indian tribe
19	under paragraph (1) (or such later date as may be
20	agreed to by the Secretary and the Indian tribe), the
21	Secretary shall approve or disapprove the tribal en-
22	ergy resource agreement.
23	"(B) The Secretary shall approve a tribal en-
24	ergy resource agreement submitted under paragraph
25	(1) if

1	"(i) the Secretary determines that the In-
2	dian tribe has demonstrated that the Indian
3	tribe has sufficient capacity to regulate the de-
4	velopment of energy resources of the Indian
5	tribe; and
6	"(ii) the tribal energy resource agreement
7	includes provisions that, with respect to a lease,
8	business agreement, or right-of-way under this
9	section—
10	"(I) ensure the acquisition of nec-
11	essary information from the applicant for
12	the lease, business agreement, or right-of-
13	way;
14	"(II) address the term of the lease or
15	business agreement or the term of convey-
16	ance of the right-of-way;
17	"(III) address amendments and re-
18	newals;
19	"(IV) address consideration for the
20	lease, business agreement, or right-of-way;
21	"(V) address technical or other rel-
22	evant requirements;
23	"(VI) establish requirements for envi-
24	ronmental review in accordance with sub-
25	paragraph (C);

1	"(VII) ensure compliance with all ap-
2	plicable environmental laws;
3	"(VIII) identify final approval author-
4	ity;
5	"(IX) provide for public notification of
6	final approvals;
7	"(X) establish a process for consulta-
8	tion with any affected States concerning
9	potential off-reservation impacts associated
10	with the lease, business agreement, or
11	right-of-way; and
12	"(XI) describe the remedies for
13	breach of the lease, agreement, or right-of-
14	way.
15	"(C) Tribal energy resource agreements sub-
16	mitted under paragraph (1) shall establish, and in-
17	clude provisions to ensure compliance with, an envi-
18	ronmental review process that, with respect to a
19	lease, business agreement, or right-of-way under this
20	section, provides for—
21	"(i) the identification and evaluation of all
22	significant environmental impacts (as compared
23	with a no-action alternative), including effects
24	on cultural resources;

1	"(ii) the identification of proposed mitiga-
2	tion;
3	"(iii) a process for ensuring that the public
4	is informed of and has an opportunity to com-
5	ment on any proposed lease, business agree-
6	ment, or right-of-way before tribal approval of
7	the lease, business agreement, or right-of-way
8	(or any amendment to or renewal of the lease,
9	business agreement, or right-of-way); and
10	"(iv) sufficient administrative support and
11	technical capability to carry out the environ-
12	mental review process.
13	"(D) A tribal energy resource agreement nego-
14	tiated between the Secretary and an Indian tribe in
15	accordance with this subsection shall include—
16	"(i) provisions requiring the Secretary to
17	conduct an annual trust asset evaluation to
18	monitor the performance of the activities of the
19	Indian tribe associated with the development of
20	energy resources on tribal land by the Indian
21	tribe; and
22	"(ii) in the case of a finding by the Sec-
23	retary of imminent jeopardy to a physical trust
24	asset, provisions authorizing the Secretary to
25	reassume responsibility for activities associated

1	with the development of energy resources on
2	tribal land.
3	"(3) The Secretary shall provide notice and op-
4	portunity for public comment on tribal energy re-
5	source agreements submitted under paragraph (1).
6	"(4) If the Secretary disapproves a tribal en-
7	ergy resource agreement submitted by an Indian
8	tribe under paragraph (1), the Secretary shall—
9	"(A) notify the Indian tribe in writing of
10	the basis for the disapproval;
11	"(B) identify what changes or other ac-
12	tions are required to address the concerns of
13	the Secretary; and
14	"(C) provide the Indian tribe with an op-
15	portunity to revise and resubmit the tribal en-
16	ergy resource agreement.
17	"(5) If an Indian tribe executes a lease or busi-
18	ness agreement or grants a right-of-way in accord-
19	ance with a tribal energy resource agreement ap-
20	proved under this subsection, the Indian tribe shall,
21	in accordance with the process and requirements set
22	forth in the Secretary's regulations adopted pursu-
23	ant to subsection (e)(9), provide to the Secretary—
24	"(A) a copy of the lease, business agree-
25	ment, or right-of-way document (including all

1	amendments to and renewals of the document);
2	and
3	"(B) in the case of a tribal energy resource
4	agreement or a lease, business agreement, or
5	right-of-way that permits payment to be made
6	directly to the Indian tribe, documentation of
7	those payments sufficient to enable the Sec-
8	retary to discharge the trust responsibility of
9	the United States as appropriate under applica-
10	ble law.
11	"(6) The Secretary shall continue to have a
12	trust obligation to ensure that the rights of an In-
13	dian tribe are protected in the event of a violation
14	of the terms of any lease, business agreement or
15	right-of-way by any other party to the lease, busi-
16	ness agreement, or right-of-way.
17	"(7)(A) The United States shall not be liable
18	for any loss or injury sustained by any party (includ-
19	ing an Indian tribe or any member of an Indian
20	tribe) to a lease, business agreement, or right-of-way
21	executed in accordance with tribal energy resource
22	agreements approved under this subsection.
23	"(B) On approval of a tribal energy resource
24	agreement of an Indian tribe under paragraph (1),

the Indian tribe shall be stopped from asserting a

claim against the United States on the ground that
Secretary should not have approved the Tribal energy resource agreement.

"(8)(A) In this paragraph, the term 'interested party' means any person or entity the interests of which have sustained or will sustain a significant adverse impact as a result of the failure of an Indian tribe to comply with a tribal energy resource agreement of the Indian tribe approved by the Secretary under paragraph (2).

"(B) After exhaustion of tribal remedies, and in accordance with the process and requirements set forth in regulations adopted by the Secretary pursuant to subsection (e)(9), an interested party may submit to the Secretary a petition to review compliance of an Indian tribe with a tribal energy resource agreement of the Indian tribe approved under this subsection.

"(C) If the Secretary determines that an Indian tribe is not in compliance with a tribal energy resource agreement approved under this subsection, the Secretary shall take such action as is necessary to compel compliance, including—

"(i) suspending a lease, business agreement, or right-of-way under this section until

1	an Indian tribe is in compliance with the ap-
2	proved tribal energy resource agreement; and
3	"(ii) rescinding approval of the tribal en-
4	ergy resource agreement and reassuming the re-
5	sponsibility for approval of any future leases,
6	business agreements, or rights-of-way associ-
7	ated with an energy pipeline or distribution line
8	described in subsections (a) and (b).
9	"(D) If the Secretary seeks to compel compli-
10	ance of an Indian tribe with an approved tribal en-
11	ergy resource agreement under subparagraph (C)(ii),
12	the Secretary shall—
13	"(i) make a written determination that de-
14	scribes the manner in which the tribal energy
15	resource agreement has been violated;
16	"(ii) provide the Indian tribe with a writ-
17	ten notice of the violation together with the
18	written determination; and
19	"(iii) before taking any action described in
20	subparagraph (C)(ii) or seeking any other rem-
21	edy, provide the Indian tribe with a hearing and
22	a reasonable opportunity to attain compliance
23	with the tribal energy resource agreement.

1	"(E)(i) An Indian tribe described in subpara-
2	graph (D) shall retain all rights to appeal as pro-
3	vided in regulations promulgated by the Secretary.
4	"(ii) The decision of the Secretary with respect
5	to an appeal described in clause (i), after any agency
6	appeal provided for by regulation, shall constitute a
7	final agency action.
8	"(9) Not later than 180 days after the date of
9	enactment of the Indian Tribal Energy Development
10	and Self-Determination Act of 2003, the Secretary
11	shall promulgate regulations that implement the pro-
12	visions of this subsection, including—
13	"(A) criteria to be used in determining the
14	capacity of an Indian tribe described in para-
15	graph (2)(B)(i), including the experience of the
16	Indian tribe in managing natural resources and
17	financial and administrative resources available
18	for use by the Indian tribe in implementing the
19	approved tribal energy resource agreement of
20	the Indian tribe; and
21	"(B) a process and requirements in accord-
22	ance with which an Indian tribe may—
23	"(i) voluntarily rescind an approved
24	tribal energy resource agreement approved
25	by the Secretary under this subsection; and

1	"(ii) return to the Secretary the re-
2	sponsibility to approve any future leases,
3	business agreements, and rights-of-way de-
4	scribed in this subsection.
5	"(f) NO EFFECT ON OTHER LAW.—Nothing in this
6	section affects the application of—
7	"(1) any Federal environmental law;
8	"(2) the Surface Mining Control and Reclama-
9	tion Act of 1977 (30 U.S.C. 1201 et seq.); or
10	"(3) except as otherwise provided in this title,
11	the Indian Mineral Development Act of 1982 (25
12	U.S.C. 2101 et seq.).
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	"SEC. 2605. FEDERAL POWER MARKETING ADMINISTRA-
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13 14 15	"SEC. 2605. FEDERAL POWER MARKETING ADMINISTRA-
13 14	"SEC. 2605. FEDERAL POWER MARKETING ADMINISTRA- TIONS.
13 14 15 16	"SEC. 2605. FEDERAL POWER MARKETING ADMINISTRA- TIONS.  "(a) DEFINITIONS.—In this section:
13 14 15	"SEC. 2605. FEDERAL POWER MARKETING ADMINISTRA- TIONS.  "(a) DEFINITIONS.—In this section:  "(1) The term 'Administrator' means the Ad-
13 14 15 16 17	"SEC. 2605. FEDERAL POWER MARKETING ADMINISTRA- TIONS.  "(a) DEFINITIONS.—In this section:  "(1) The term 'Administrator' means the Administrator of the Bonneville Power Administration
13 14 15 16 17	"SEC. 2605. FEDERAL POWER MARKETING ADMINISTRA- TIONS.  "(a) DEFINITIONS.—In this section:  "(1) The term 'Administrator' means the Administrator of the Bonneville Power Administration and the Administrator of the Western Area Power
13 14 15 16 17 18	"SEC. 2605. FEDERAL POWER MARKETING ADMINISTRA- TIONS.  "(a) DEFINITIONS.—In this section:  "(1) The term 'Administrator' means the Administrator of the Bonneville Power Administration and the Administrator of the Western Area Power Administration.
13 14 15 16 17 18 19 20	"SEC. 2605. FEDERAL POWER MARKETING ADMINISTRA- TIONS.  "(a) DEFINITIONS.—In this section:  "(1) The term 'Administrator' means the Administrator of the Bonneville Power Administration and the Administrator of the Western Area Power Administration.  "(2) The term 'power marketing administra-
13 14 15 16 17 18 19 20 21	"SEC. 2605. FEDERAL POWER MARKETING ADMINISTRA- TIONS.  "(a) DEFINITIONS.—In this section:  "(1) The term 'Administrator' means the Administrator of the Bonneville Power Administration and the Administrator of the Western Area Power Administration.  "(2) The term 'power marketing administration' means—

1	"(C) any other power administration the
2	power allocation of which is used by or for the
3	benefit of an Indian tribe located in the service
4	area of the administration.
5	"(b) Encouragement of Indian Tribal Energy
6	DEVELOPMENT.—Each Administrator shall encourage In-
7	dian tribal energy development by taking such actions as
8	are appropriate, including administration of programs of
9	the Bonneville Power Administration and the Western
10	Area Power Administration, in accordance with this sec-
11	tion.
12	"(c) Action by the Administrator.—In carrying
13	out this section, and in accordance with existing law—
14	"(1) each Administrator shall consider the
15	unique relationship that exists between the United
16	States and Indian tribes.
17	"(2) power allocations from the Western Area
18	Power Administration to Indian tribes may be used
19	to meet firming and reserve needs of Indian-owned
20	energy projects on Indian land;
21	"(3) the Administrator of the Western Area
22	Power Administration may purchase power from In-
23	dian tribes to meet the firming and reserve require-
24	ments of the Western Area Power Administration;
25	and

1	"(4) each Administrator shall not pay more
2	than the prevailing market price for an energy prod-
3	uct nor obtain less than prevailing market terms and
4	conditions.
5	"(d) Assistance for Transmission System
6	USE.—
7	"(1) An Administrator may provide technical
8	assistance to Indian tribes seeking to use the high-
9	voltage transmission system for delivery of electric
10	power.
11	"(2) The costs of technical assistance provided
12	under paragraph (1) shall be funded by the Sec-
13	retary of Energy using nonreimbursable funds ap-
14	propriated for that purpose, or by the applicable In-
15	dian tribes.
16	"(e) POWER ALLOCATION STUDY.—Not later than 2
17	years after the date of enactment of the Indian Tribal En-
18	ergy Development and Self-Determination Act of 2003,
19	the Secretary of Energy shall submit to the Congress a
20	report that—
21	"(1) describes the use by Indian tribes of Fed-
22	eral power allocations of the Western Area Power
23	Administration (or power sold by the Southwestern
24	Power Administration) and the Bonneville Power

1	Administration to or for the benefit of Indian tribes
2	in service areas of those administrations; and
3	"(2) identifies—
4	"(A) the quantity of power allocated to In-
5	dian tribes by the Western Area Power Admin-
6	istration;
7	"(B) the quantity of power sold to Indian
8	tribes by other power marketing administra-
9	tions; and
10	"(C) barriers that impede tribal access to
11	and use of Federal power, including an assess-
12	ment of opportunities to remove those barriers
13	and improve the ability of power marketing ad-
14	ministrations to facilitate the use of Federal
15	power by Indian tribes.
16	"(f) AUTHORIZATION OF APPROPRIATIONS.—There
17	is authorized to be appropriated to carry out this section
18	\$750,000, which shall remain available until expended and
19	shall not be reimbursable.
20	"SEC. 2606. INDIAN MINERAL DEVELOPMENT REVIEW.
21	"(a) In General.—The Secretary shall conduct a
22	review of all activities being conducted under the Indian
23	Mineral Development Act of 1982 (25 U.S.C. 2101 et
24	seq.) as of that date.

1	"(b) Report.—Not later than 1 year after the date
2	of enactment of the Indian Tribal Energy Development
3	and Self-Determination Act of 2003, the Secretary shall
4	submit to the Congress a report that includes—
5	"(1) the results of the review;
6	"(2) recommendations to ensure that Indian
7	tribes have the opportunity to develop Indian energy
8	resources; and
9	"(3) an analysis of the barriers to the develop-
10	ment of energy resources on Indian land (including
11	legal, fiscal, market, and other barriers), along with
12	recommendations for the removal of those barriers.
13	"SEC. 2607. WIND AND HYDROPOWER FEASIBILITY STUDY.
	"SEC. 2607. WIND AND HYDROPOWER FEASIBILITY STUDY.  "(a) STUDY.—The Secretary, in coordination with
13 14 15	
14	"(a) Study.—The Secretary, in coordination with
14 15	"(a) STUDY.—The Secretary, in coordination with the Secretary of the Army and the Secretary of the Inte-
14 15 16 17	"(a) STUDY.—The Secretary, in coordination with the Secretary of the Army and the Secretary of the Inte- rior, shall conduct a study of the cost and feasibility of
14 15 16 17	"(a) STUDY.—The Secretary, in coordination with the Secretary of the Army and the Secretary of the Inte- rior, shall conduct a study of the cost and feasibility of developing a demonstration project that would use wind
14 15 16 17	"(a) STUDY.—The Secretary, in coordination with the Secretary of the Army and the Secretary of the Inte- rior, shall conduct a study of the cost and feasibility of developing a demonstration project that would use wind energy generated by Indian tribes and hydropower gen-
114 115 116 117 118	"(a) STUDY.—The Secretary, in coordination with the Secretary of the Army and the Secretary of the Inte- rior, shall conduct a study of the cost and feasibility of developing a demonstration project that would use wind energy generated by Indian tribes and hydropower gen- erated by the Army Corps of Engineers on the Missouri
114 115 116 117 118 119 220	"(a) STUDY.—The Secretary, in coordination with the Secretary of the Army and the Secretary of the Inte- rior, shall conduct a study of the cost and feasibility of developing a demonstration project that would use wind energy generated by Indian tribes and hydropower gen- erated by the Army Corps of Engineers on the Missouri River to supply firming power to the Western Area Power
14 15 16 17 18 19 20 21	"(a) STUDY.—The Secretary, in coordination with the Secretary of the Army and the Secretary of the Inte- rior, shall conduct a study of the cost and feasibility of developing a demonstration project that would use wind energy generated by Indian tribes and hydropower gen- erated by the Army Corps of Engineers on the Missouri River to supply firming power to the Western Area Power Administration.

1	Missouri River dams operated by the Army Corps of
2	Engineers;
3	"(2) review historical purchase requirements
4	and projected purchase requirements for firming and
5	the patterns of availability and use of firming en-
6	ergy;
7	"(3) assess the wind energy resource potential
8	on tribal land and projected cost savings through a
9	blend of wind and hydropower over a 30-year period;
10	"(4) determine seasonal capacity needs and as-
11	sociated transmission upgrades for integration of
12	tribal wind generation; and
13	"(5) include an independent tribal engineer as
14	a study team member.
15	"(c) Report.—Not later than 1 year after the date
16	of enactment of this Act, the Secretary and Secretary of
17	the Army shall submit to Congress a report that describes
18	the results of the study, including—
19	"(1) an analysis of the potential energy cost or
20	benefits to the customers of the Western Area Power
21	Administration through the blend of wind and hy-
22	dropower;
23	"(2) an evaluation of whether a combined wind
24	and hydropower system can reduce reservoir fluctua-
25	tion, enhance efficient and reliable energy produc-

1	tion, and provide Missouri River management flexi-
2	bility;
3	"(3) recommendations for a demonstration
4	project that could be carried out by the Western
5	Area Power Administration in partnership with an
6	Indian tribal government or tribal consortium to
7	demonstrate the feasibility and potential of using
8	wind energy produced on Indian land to supply firm-
9	ing energy to the Western Area Power Administra-
10	tion or any other Federal power marketing agency;
11	and
12	"(4) an identification of—
13	"(A) the economic and environmental costs
14	or benefits to be realized through such a Fed-
15	eral-tribal partnership; and
16	"(B) the manner in which such a partner-
17	ship could contribute to the energy security of
18	the United States.
19	"(d) Funding.—
20	"(1) There is authorized to be appropriated to
21	carry out this section \$500,000, to remain available
22	until expended.
23	"(2) Costs incurred by the Secretary in car-
24	rying out this section shall be nonreimbursable.".

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- 2 The Dine Power Authority, an enterprise of the Nav-
- 3 ajo Nation, shall be eligible to receive grants and other
- 4 assistance as authorized by section 302 of this title and
- 5 section 2602 of the Energy Policy Act of 1992, as amend-
- 6 ed by this title, for activities associated with the develop-
- 7 ment of a transmission line from the Four Corners Area
- 8 to southern Nevada, including related power generation
- 9 opportunities.

### 10 SEC. 305. ENERGY EFFICIENCY IN FEDERALLY ASSISTED

- 11 **HOUSING.**
- 12 (a) IN GENERAL.—The Secretary of Housing and
- 13 Urban Development shall promote energy conservation in
- 14 housing that is located on Indian land and assisted with
- 15 Federal resources through—
- 16 (1) the use of energy-efficient technologies and
- innovations (including the procurement of energy-ef-
- 18 ficient refrigerators and other appliances);
- 19 (2) the promotion of shared savings contracts;
- 20 and
- 21 (3) the use and implementation of such other
- similar technologies and innovations as the Secretary
- of Housing and Urban Development considers to be
- 24 appropriate.
- 25 (b) AMENDMENT.—Section 202(2) of the Native
- 26 American Housing and Self-Determination Act of 1996

- 1 (25 U.S.C. 4132(2)) is amended by inserting "improve-
- 2 ment to achieve greater energy efficiency," after "plan-
- 3 ning,".

### 4 SEC. 306. CONSULTATION WITH INDIAN TRIBES.

- 5 In carrying out this Act and the amendments made
- 6 by this Act, the Secretary of Energy and the Secretary
- 7 shall, as appropriate and to the maximum extent prac-
- 8 ticable, involve and consult with Indian tribes in a manner
- 9 that is consistent with the Federal trust and the govern-
- 10 ment-to-government relationships between Indian tribes
- 11 and the United States.

## 12 TITLE IV—NUCLEAR MATTERS

## 13 Subtitle A-Price-Anderson Act

## 14 **Amendments**

- 15 SEC. 401. SHORT TITLE.
- 16 This subtitle may be cited as the "Price-Anderson
- 17 Amendments Act of 2003".
- 18 SEC. 402. EXTENSION OF INDEMNIFICATION AUTHORITY.
- 19 (a) Indemnification of Nuclear Regulatory
- 20 Commission Licensees.—Section 170c. of the Atomic
- 21 Energy Act of 1954 (42 U.S.C. 2210(c)) is amended—
- 22 (1) in the subsection heading, by striking "LI-
- 23 CENSES" and inserting "LICENSEES";

1	(2) by striking "licenses issued between August
2	30, 1954, and December 31, 2003" and inserting
3	"licenses issued after August 30, 1954"; and
4	(3) by striking "With respect to any production
5	or utilization facility for which a construction permit
6	is issued between August 30, 1954, and December
7	31, 2003, the requirements of this subsection shall
8	apply to any license issued for such facility subse-
9	quent to December 31, 2003."
10	(b) Indemnification of Department of Energy
11	Contractors.—Section 170d.(1)(A) of the Atomic En-
12	ergy Act of 1954 (42 U.S.C. 2210(d)(1)(A)) is amended
13	by striking ", until December 31, 2004,".
14	(c) Indemnification of Nonprofit Educational
15	Institutions.—Section 170k. of the Atomic Energy Act
16	of 1954 (42 U.S.C. 2210(k)) is amended—
17	(1) by striking "licenses issued between August
18	30,1954, and August 1, 2002" and replacing it with
19	"licenses issued after August 30, 1954"; and
20	(2) by striking "With respect to any production
21	or utilization facility for which a construction permit
22	is issued between August 30, 1954, and August 1,
23	2002, the requirements of this subsection shall apply
24	to any license issued for such facility subsequent to
25	August 1, 2002."

1	SEC. 403. MAXIMUM ASSESSMENT.
2	Section 170 of the Atomic Energy Act of 1954 (42
3	U.S.C. 2210) is amended—
4	(1) in the second proviso of the third sentence
5	of subsection b.(l)—
6	(A) by striking "\$63,000,000" and insert-
7	ing "\$94,000,000"; and
8	(B) by striking "\$10,000,000 in any 1
9	year" and inserting "\$15,000,000 in any 1 year
10	(subject to adjustment for inflation under sub-
11	section t.)"; and
12	(2) in subsection t.(1)—
13	(A) by inserting "total and annual" after
14	"amount of the maximum";
15	(B) by striking "the date of the enactment
16	of the Price-Anderson Amendments Act of
17	1988" and inserting "July 1, 2003"; and
18	(C) by striking "such date of enactment"
19	and inserting "July 1, 2003".
20	SEC. 404. DEPARTMENT OF ENERGY LIABILITY LIMIT.
21	(a) Indemnification of Department of Energy
22	Contractors.—Section 170d. of the Atomic Energy Act
23	of 1954 (42 U.S.C. 2210(d)) is amended by striking para-
24	graph (2) and inserting the following:
25	"(2) In an agreement of indemnification en-
26	tered into under paragraph (1), the Secretary—

1 "(A) may require the contractor to provide 2 and maintain financial protection of such a type 3 and in such amounts as the Secretary shall de-4 termine to be appropriate to cover public liabil-5 ity arising out of or in connection with the con-6 tractual activity; and

- "(B) shall indemnify the persons indemnified against such liability above the amount of the financial protection required, in the amount of \$10,000,000,000 (subject to adjustment for inflation under subsection t.), in the aggregate, for all persons indemnified in connection with the contract and for each nuclear incident, including such legal costs of the contractor as are approved by the Secretary.".
- 16 (b) CONTRACT AMENDMENTS.—Section 170d. of the 17 Atomic Energy Act of 1954 (42 U.S.C. 2210(d)) is further 18 amended by striking paragraph (3) and inserting the fol-19 lowing:
- "(3) All agreements of indemnification under which the Department of Energy (or its predecessor agencies) may be required to indemnify any person under this section shall be deemed to be amended, on the date of enactment of the Price-Anderson Amendments Act of 2003, to reflect the amount of indemnity for public liability and any

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- 1 applicable financial protection required of the contractor
- 2 under this subsection.".
- 3 (c) Liability Limit.—Section 170e.(1)(B) of the
- 4 Atomic Energy Act of 1954 (42 U.S.C. 2210(e)(1)(B)) is
- 5 amended by—
- 6 (1) striking "the maximum amount of financial
- 7 protection required under subsection b. or"; and
- 8 (2) striking "paragraph (3) of subsection d.,
- 9 whichever amount is more" and inserting "para-
- 10 graph (2) of subsection d.".
- 11 SEC. 405. INCIDENTS OUTSIDE THE UNITED STATES.
- 12 (a) Amount of Indemnification.—Section
- 13 170d.(5) of the Atomic Energy Act of 1954 (42 U.S.C.
- 14 2210(d)(5)) is amended by striking "\$100,000,000" and
- 15 inserting "\$500,000,000".
- 16 (b) Liability Limit.—Section 170e.(4) of the Atom-
- 17 ic Energy Act of 1954 (42 U.S.C. 2210(e)(4)) is amended
- 18 by striking "\$100,000,000" and inserting
- 19 "\$500,000,000".
- 20 **SEC. 406. REPORTS.**
- 21 Section 170p. of the Atomic Energy Act of 1954 (42
- 22 U.S.C. 2210(p)) is amended by striking "August 1, 1998"
- 23 and inserting "August 1, 2013".

1	SEC. 407. INFLATION ADJUSTMENT.
2	Section 170t. of the Atomic Energy Act of 1954 (42
3	U.S.C. 2210(t)) is amended—
4	(1) by redesignating paragraph (2) as para-
5	graph (3); and
6	(2) by adding after paragraph (1) the following:
7	"(2) The Secretary shall adjust the amount of
8	indemnification provided under an agreement of in-
9	demnification under subsection d. not less than once
10	during each 5-year period following July 1, 2003, in
11	accordance with the aggregate percentage change in
12	the Consumer Price Index since—
13	"(A) that date, in the case of the first ad-
14	justment under this paragraph; or
15	"(B) the previous adjustment under this
16	paragraph.".
17	SEC. 408. TREATMENT OF MODULAR REACTORS.
18	Section 170 b. of the Atomic Energy Act of 1954 (42
19	U.S.C. 2210(b)) is amended by adding at the end the fol-
20	lowing:
21	"(5)(A) For purposes of this section only, the
22	Commission shall consider a combination of facilities
23	described in subparagraph (B) to be a single facility
24	having a rated capacity of 100,000 electrical kilo-

watts or more.

- 1 "(B) A combination of facilities referred to in
- 2 subparagraph (A) is 2 or more facilities located at
- a single site, each of which has a rated capacity of
- 4 100,000 electrical kilowatts or more but not more
- 5 than 300,000 electrical kilowatts, with a combined
- 6 rated capacity of not more than 1,300,000 electrical
- 7 kilowatts.".

### 8 SEC. 409. APPLICABILITY.

- 9 The amendments made by sections 403, 404, and 405
- 10 do not apply to a nuclear incident that occurs before the
- 11 date of the enactment of this Act.

## 12 SEC. 410. CIVIL PENALTIES.

- 13 (a) Repeal of Automatic Remission.—Section
- 14 234Ab.(2) of the Atomic Energy Act of 1954 (42 U.S.C.
- 15 2282a(b)(2)) is amended by striking the last sentence.
- 16 (b) Limitation for Not-For-Profit Institu-
- 17 Tions.—Subsection d. of section 234A of the Atomic En-
- 18 ergy Act of 1954 (42 U.S.C. 2282a(d)) is amended to read
- 19 as follows:
- 20 "d.(1) Notwithstanding subsection a., in the case of
- 21 any not-for-profit contractor, subcontractor, or supplier,
- 22 the total amount of civil penalties paid under subsection
- 23 a. may not exceed the total amount of fees paid within
- 24 any one-year period (as determined by the Secretary)
- 25 under the contract under which the violation occurs.

1	"(2) For purposes of this section, the term "not-for-
2	profit" means that no part of the net earnings of the con-
3	tractor, subcontractor, or supplier inures to the benefit of
4	any natural person or for-profit artificial person.".
5	(c) Effective Date.—The amendments made by
6	this section shall not apply to any violation of the Atomic
7	Energy Act of 1954 occurring under a contract entered
8	into before the date of enactment of this section.
9	Subtitle B—Deployment of New
10	<b>Nuclear Plants</b>
11	SEC. 421. SHORT TITLE.
12	This subtitle may be cited as the "Nuclear Energy
13	Finance Act of 2003".
14	SEC. 422. DEFINITIONS.
15	For purposes of this subtitle:
16	(1) The term "advanced reactor design" means
17	a nuclear reactor that enhances safety, efficiency,
18	proliferation resistance, or waste reduction compared
19	to commercial nuclear reactors in use in the United
20	States on the date of enactment of this Act.
21	(2) The term "eligible project costs" means all
22	costs incurred by a project developer that are rea-
23	sonably related to the development and construction
24	of a project under this subtitle, including costs re-
25	sulting from regulatory or licensing delays.

1	(3) The term "financial assistance" means a
2	loan guarantee, purchase agreement, or any com-
3	bination of the foregoing.

- (4) The term "loan guarantee" means any guarantee or other pledge by the Secretary to pay all or part of the principal and interest on a loan or other debt obligation issued by a project developer and funded by a lender.
- (5) The term "project" means any commercial nuclear power facility for the production of electricity that uses one or more advanced reactor designs.
- (6) The term "project developer" means an individual, corporation, partnership, joint venture, trust, or other entity that is primarily liable for payment of a project's eligible costs.
- 17 (7) The term "purchase agreement" means a 18 contract to purchase the electric energy produced by 19 a project under this subtitle.
- 20 (8) The term "Secretary" means the Secretary21 of Energy.

## 22 SEC. 423. RESPONSIBILITIES OF THE SECRETARY.

- 23 (a) FINANCIAL ASSISTANCE.—Subject to the require-
- 24 ments of the Federal Credit Reform Act of 1990 (2 U.S.C.
- 25 661 et seq.), the Secretary may, subject to appropriations,

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- 1 make available to project developers for eligible project
- 2 costs such financial assistance as the Secretary determines
- 3 is necessary to supplement private-sector financing for
- 4 projects if he determines that such projects are needed to
- 5 contribute to energy security, fuel or technology diversity,
- 6 or clean air attainment goals. The Secretary shall pre-
- 7 scribe such terms and conditions for financial assistance
- 8 as the Secretary deems necessary or appropriate to protect
- 9 the financial interests of the United States.
- 10 (b) Requirements.—Approval criteria for financial
- 11 assistance shall include—
- 12 (1) the creditworthiness of the project;
- 13 (2) the extent to which financial assistance
- would encourage public-private partnerships and at-
- 15 tract private-sector investment;
- 16 (3) the likelihood that financial assistance
- would hasten commencement of the project; and
- 18 (4) any other criteria the Secretary deems nec-
- 19 essary or appropriate.
- 20 (c) Confidentiality.—The Secretary shall protect
- 21 the confidentiality of any information that is certified by
- 22 a project developer to be commercially sensitive.
- 23 (d) Full Faith and Credit.—All financial assist-
- 24 ance provided by the Secretary under this subtitle shall

- 1 be general obligations of the United States backed by its
- 2 full faith and credit.

### 3 SEC. 424. LIMITATIONS

- 4 (a) Financial Assistance.—The total financial as-
- 5 sistance per project provided by this subtitle shall not ex-
- 6 ceed fifty percent of eligible project costs.
- 7 (b) Generation.—The total electrical generation ca-
- 8 pacity of all projects provided by this subtitle shall not
- 9 exceed 8,400 megawatts.

#### 10 SEC. 425. REGULATIONS

- 11 Not later than 12 months from the date of enactment
- 12 of this Act, the Secretary shall issue regulations to imple-
- 13 ment this subtitle.

## 14 Subtitle C—Advanced Reactor

# 15 Hydrogen Co-Generation Project

- 16 SEC. 431. PROJECT ESTABLISHMENT.
- 17 The Secretary is directed to establish an Advanced
- 18 Reactor Hydrogen Co-Generation Project.
- 19 SEC. 432. PROJECT DEFINITION.
- The project shall conduct the research, development,
- 21 design, construction, and operation of a hydrogen produc-
- 22 tion co-generation testbed that, relative to the current
- 23 commercial reactors, enhances safety features, reduces
- 24 waste production, enhances thermal efficiencies, increases
- 25 proliferation resistance, and has the potential for improved

- 1 economics and physical security in reactor siting. This
- 2 testbed shall be constructed so as to enable research and
- 3 development on advanced reactors of the type selected and
- 4 on alternative approaches for reactor-based production of
- 5 hydrogen.

#### 6 SEC. 433. PROJECT MANAGEMENT.

- 7 (a) Management.—The project shall be managed
- 8 within the Department by the Office of Nuclear Energy
- 9 Science and Technology.
- 10 (b) LEAD LABORATORY.—The lead laboratory for the
- 11 program, providing the site for the reactor construction,
- 12 shall be the Idaho National Engineering and Environ-
- 13 mental Laboratory ("INEEL").
- 14 (c) Steering Committee.—The Secretary shall es-
- 15 tablish a national steering committee with membership
- 16 from the national laboratories, universities, and industry
- 17 to provide advice to the Secretary and the Director of the
- 18 Office of Nuclear Energy, Science and Technology on
- 19 technical and program management aspects of the project.
- 20 (d) Collaboration.—Project activities shall be con-
- 21 ducted at INEEL, other national laboratories, univer-
- 22 sities, domestic industry, and international partners.

## 23 SEC. 434. PROJECT REQUIREMENTS.

- 24 (a) Research and Development.—The project
- 25 shall include planning, research and development, design,

- 1 and construction of an advanced, next-generation, nuclear
- 2 energy system suitable for enabling further research and
- 3 development on advanced reactor technologies and alter-
- 4 native approaches for reactor-based generation of hydro-
- 5 gen.
- 6 (1) The project shall utilize, where appropriate,
- 7 extensive reactor test capabilities resident at
- 8 INEEL.
- 9 (2) The project shall be designed to explore
- technical, environmental, and economic feasibility of
- alternative approaches for reactor-based hydrogen
- 12 production.
- 13 (3) The industrial lead for the project must be
- a United States-based company.
- 15 (b) International Collaboration.—The Sec-
- 16 retary shall seek international cooperation, participation,
- 17 and financial contribution in this program.
- 18 (1) The project may contract for assistance
- from specialists or facilities from member countries
- of the Generation IV International Forum, the Rus-
- sian Federation, or other international partners
- 22 where such specialists or facilities provide access to
- cost-effective and relevant skills or test capabilities.
- 24 (2) International activities shall be coordinated
- with the Generation IV International Forum.

- 1 (3) The Secretary may combine this project
- with the Generation IV Nuclear Energy Systems
- 3 Program.
- 4 (c) Demonstration.—The overall project, which
- 5 may involve demonstration of selected project objectives
- 6 in a partner nation, must demonstrate both electricity and
- 7 hydrogen production and may provide flexibility, where
- 8 technically and economically feasible in the design and
- 9 construction, to enable tests of alternative reactor core
- 10 and cooling configurations.
- 11 (d) Partnerships.—The Secretary shall establish
- 12 cost-shared partnerships with domestic industry or inter-
- 13 national participants for the research, development, de-
- 14 sign, construction and operation of the demonstration fa-
- 15 cility, and preference in determining the final project
- 16 structure shall be given to an overall project which retains
- 17 United States leadership while maximizing cost sharing
- 18 opportunities and minimizing federal funding responsibil-
- 19 ities.
- 20 (e) Target Date.—The Secretary shall select tech-
- 21 nologies and develop the project to provide initial testing
- 22 of either hydrogen production or electricity generation by
- 23 2010 or provide a report to Congress why this date is not
- 24 feasible.

- 1 (f) WAIVER OF CONSTRUCTION TIMELINES.—The
- 2 Secretary is authorized to conduct the Advanced Reactor
- 3 Hydrogen Co-Generation Project without the constraints
- 4 of DOE Order 413.3 as deemed necessary to meet the
- 5 specified operational date.
- 6 (g) Competition.—The Secretary may fund up to
- 7 two teams for up to one year to develop detailed proposals
- 8 for competitive evaluation and selection of a single pro-
- 9 posal and concept for further progress. The Secretary
- 10 shall define the format of the competitive evaluation of
- 11 proposals.
- 12 (h) Use of Facilities.—Research facilities in in-
- 13 dustry, national laboratories, or universities either within
- 14 the United States or with cooperating international part-
- 15 ners may be used to develop the enabling technologies for
- 16 the demonstration facility. Utilization of domestic univer-
- 17 sity-based testbeds shall be encouraged to provide edu-
- 18 cational opportunities for student development.
- 19 (i) ROLE OF NUCLEAR REGULATORY COMMISSION.—
- 20 The Secretary shall seek active participation of the Nu-
- 21 clear Regulatory Commission throughout the project to
- 22 develop risk-based criteria for any future commercial de-
- 23 velopment of a similar reactor architecture.
- 24 (j) Report.—A comprehensive project plan shall be
- 25 developed no later than April 30, 2004. The project plan

- 1 shall be updated annually with each annual budget sub-
- 2 mission.

#### 3 SEC. 435. AUTHORIZATION OF APPROPRIATIONS.

- 4 (a) Research, Development and Design Pro-
- 5 GRAMS.—The following sums are authorized to be appro-
- 6 priated to the Secretary for all activities under this sub-
- 7 title except for reactor construction:
- 8 (1) For fiscal year 2004, \$35,000,000.
- 9 (2) For each of fiscal years 2005–2008,
- 10 \$150,000,000.
- 11 (3) For fiscal years beyond 2008, such funds as
- are needed are authorized to be appropriated.
- 13 (b) REACTOR CONSTRUCTION.—The following sum is
- 14 authorized to be appropriated to the Secretary for all
- 15 project-related construction activities, to be available until
- 16 expended, \$500,000,000.

## 17 Subtitle D—Miscellaneous Matters

- 18 SEC. 441. URANIUM SALES AND TRANSFERS.
- 19 Section 3112 of the USEC Privatization Act (42
- 20 U.S.C. 2297h–10) is amended by striking subsections (d)
- 21 and (e) and inserting the following:
- (d)(1)(A) The aggregate annual deliveries of ura-
- 23 nium in any form (including natural uranium con-
- 24 centrates, natural uranium hexafluoride, enriched ura-
- 25 nium, and depleted uranium) sold or transferred for com-

- 1 mercial nuclear power end uses by the United States Gov-
- 2 ernment shall not exceed 3,000,000 pounds  $U_3O_8$  equiva-
- 3 lent per year through calendar year 2009. Such aggregate
- 4 annual deliveries shall not exceed 5,000,000 pounds U<sub>3</sub>O<sub>8</sub>
- 5 equivalent per year in calendar years 2010 and 2011.
- 6 Such aggregate annual deliveries shall not exceed
- 7 7,000,000 pounds U<sub>3</sub>O<sub>8</sub> equivalent in calendar year 2012.
- 8 Such aggregate annual deliveries shall not exceed
- 9 10,000,000 pounds  $U_3O_8$  equivalent per year in calendar
- 10 year 2013 and each year thereafter. Any sales or transfers
- 11 by the United States Government to commercial end users
- 12 shall be limited to long-term contracts of no less than 3
- 13 years duration.
- 14 "(B) The recovery and extraction of the uranium
- 15 component from contaminated uranium bearing materials
- 16 from United States Government sites by commercial enti-
- 17 ties shall be the preferred method of making uranium
- 18 available under this subsection. The uranium component
- 19 contained in such contaminated materials shall be counted
- 20 against the annual maximum deliveries set forth in this
- 21 section, provided that uranium is sold to end users.
- 22 "(C) Sales or transfers of uranium by the United
- 23 States Government for the following purposes are exempt
- 24 from the provisions of this paragraph—

1	"(i) sales or transfers provided for under exist-
2	ing law for use by the Tennessee Valley Authority in
3	relation to the Department of Energy's high-en-
4	riched uranium or tritium programs;
5	"(ii) sales or transfers to the Department of
6	Energy research reactor sales program;
7	"(iii) the transfer of up to 3,293 metric tons of
8	uranium to the United States Enrichment Corpora-
9	tion to replace uranium that the Secretary trans-
10	ferred, prior to privatization of the United States
11	Enrichment Corporation in July 1998, to the Cor-
12	poration on or about June 30, 1993, April 20, 1998,
13	and May 18, 1998, and that does not meet commer-
14	cial specifications;
15	"(iv) the sale or transfer of any uranium for
16	emergency purposes in the event of a disruption in
17	supply to end users in the United States;
18	"(v) the sale or transfer of any uranium in ful-
19	fillment of the United States Government's obliga-
20	tions to provide security of supply with respect to
21	implementation of the Russian HEU Agreement;
22	and
23	"(vi) the sale or transfer of any enriched ura-
24	nium for use in an advanced commercial nuclear

1	power plant in the United States with nonstandard
2	fuel requirements.
3	"(D) The Secretary may transfer or sell enriched ura-
4	nium to any person for national security purposes, as de-
5	termined by the Secretary.
6	"(2) Except as provided in subsections (b) and (c),
7	and in paragraph (1)(B), clauses (i) through (iii) of para-
8	graph (1)(C), and paragraph (1)(D) of this subsection, no
9	sale or transfer of uranium in any form shall be made
10	by the United States Government unless—
11	"(A) the President determines that the material
12	is not necessary for national security needs;
13	"(B) the price paid to the Secretary, if the
14	transaction is a sale, will not be less than the fair
15	market value of the material, as determined at the
16	time that such material is contracted for sale;
17	"(C) prior to any sale or transfer, the Secretary
18	solicits the written views of the Department of State
19	and the National Security Council with regard to
20	whether such sale or transfer would have any ad-
21	verse effect on national security interests of the
22	United States, including interests related to the im-
23	plementation of the Russian HEU Agreement; and
24	"(D) neither the Department of State nor the
25	National Security Council objects to such sale or

- 1 transfer. The Secretary shall endeavor to determine
- 2 whether a sale or transfer is permitted under this
- 3 paragraph within 30 days. The Secretary's deter-
- 4 minations pursuant to this paragraph shall be made
- 5 available to interested members of the public prior
- 6 to authorizing any such sale or transfer.
- 7 "(3) Within 1 year after the date of enactment of
- 8 this subsection and annually thereafter the Secretary shall
- 9 undertake an assessment for the purpose of reviewing
- 10 available excess Government uranium inventories, and de-
- 11 termining, consistent with the procedures and limitations
- 12 established in this subsection, the level of inventory to be
- 13 sold or transferred to end users.
- 14 "(4) Within 5 years after the date of enactment of
- 15 this subsection and biennially thereafter the Secretary
- 16 shall report to the Congress on the implementation of this
- 17 subsection. The report shall include a discussion of all
- 18 sales or transfers made by the United States Government,
- 19 the impact of such sales or transfers on the domestic ura-
- 20 nium industry, the spot market uranium price, and the
- 21 national security interests of the United States, and any
- 22 steps taken to remediate any adverse impacts of such sales
- 23 or transfers.

- 1 "(5) For purposes of this subsection, the term
- 2 'United States Government' does not include the Ten-
- 3 nessee Valley Authority.".

#### 4 SEC. 442. DECOMMISSIONING PILOT PROGRAM.

- 5 (a) PILOT PROGRAM.—The Secretary shall establish
- 6 a decommissioning pilot program to decommission and de-
- 7 contaminate the sodium-cooled fast breeder experimental
- 8 test-site reactor located in northwest Arkansas in accord-
- 9 ance with the decommissioning activities contained in the
- 10 August 31, 1998 Department of Energy report on the re-
- 11 actor.
- 12 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
- 13 authorized to be appropriated to carry out this section
- 14 \$16,000,000.

## 15 TITLE V—RENEWABLE ENERGY

### 16 Subtitle A—General Provisions

- 17 SEC. 501. ASSESSMENT OF RENEWABLE ENERGY RE-
- 18 **SOURCES.**
- 19 (a) RESOURCE ASSESSMENT.—Not later than 6
- 20 months after the date of enactment of this title, and each
- 21 year thereafter, the Secretary of Energy shall review the
- 22 available assessments of renewable energy resources with-
- 23 in the United States, including solar, wind, biomass, ocean
- 24 (tidal and thermal), geothermal, and hydroelectric energy
- 25 resources, and undertake new assessments as necessary,

- 1 taking into account changes in market conditions, avail-
- 2 able technologies, and other relevant factors.
- 3 (b) Contents of Reports.—Not later than 1 year
- 4 after the date of enactment of this title, and each year
- 5 thereafter, the Secretary shall publish a report based on
- 6 the assessment under subsection (a). The report shall con-
- 7 tain—
- 8 (1) a detailed inventory describing the available
- 9 amount and characteristics of the renewable energy
- 10 resources; and
- 11 (2) such other information as the Secretary be-
- lieves would be useful in developing such renewable
- energy resources, including descriptions of sur-
- rounding terrain, population and load centers, near-
- by energy infrastructure, location of energy and
- water resources, and available estimates of the costs
- 17 needed to develop each resource, together with an
- identification of any barriers to providing adequate
- transmission for remote sources of renewable energy
- resources to current and emerging markets, rec-
- ommendations for removing or addressing such bar-
- riers, and ways to provide access to the grid that do
- 23 not unfairly disadvantage renewable or other energy
- 24 producers.

- 1 (c) AUTHORIZATION OF APPROPRIATIONS.—For the
- 2 purposes of this section, there are authorized to be appro-
- 3 priated to the Secretary of Energy \$10,000,000 for each
- 4 of fiscal years 2004 through 2008.

#### 5 SEC. 502. RENEWABLE ENERGY PRODUCTION INCENTIVE.

- 6 (a) INCENTIVE PAYMENTS.—Section 1212(a) of the
- 7 Energy Policy Act of 1992 (42 U.S.C. 13317(a)) is
- 8 amended by striking "and which satisfies" and all that
- 9 follows through "Secretary shall establish." and inserting
- 10 ". If there are insufficient appropriations to make full pay-
- 11 ments for electric production from all qualified renewable
- 12 energy facilities in any given year, the Secretary shall as-
- 13 sign 60 percent of appropriated funds for that year to fa-
- 14 cilities that use solar, wind, geothermal, or closed-loop
- 15 (dedicated energy crops) biomass technologies to generate
- 16 electricity, and assign the remaining 40 percent to other
- 17 projects. The Secretary may, after transmitting to the
- 18 Congress an explanation of the reasons therefor, alter the
- 19 percentage requirements of the preceding sentence.".
- 20 (b) Qualified Renewable Energy Facility.—
- 21 Section 1212(b) of the Energy Policy Act of 1992 (42
- 22 U.S.C. 13317(b)) is amended—
- 23 (1) by striking "a State or any political" and
- all that follows through "nonprofit electrical cooper-
- ative" and inserting "a not-for-profit electric cooper-

- 1 ative, a public utility described in section 115 of the
- 2 Internal Revenue Code of 1986, a State, Common-
- wealth, territory, or possession of the United States
- 4 or the District of Columbia, or a political subdivision
- 5 thereof, or an Indian tribal government of subdivi-
- 6 sion thereof,"; and
- 7 (2) by inserting "landfill gas," after "wind, bio-
- 8 mass,".
- 9 (c) Eligibility Window.—Section 1212(c) of the
- 10 Energy Policy Act of 1992 (42 U.S.C. 13317(c)) is
- 11 amended by striking "during the 10-fiscal year period be-
- 12 ginning with the first full fiscal year occurring after the
- 13 enactment of this section" and inserting "after October
- 14 1, 2003, and before October 1, 2013".
- 15 (d) Amount of Payment.—Section 1212(e)(1) of
- 16 the Energy Policy Act of 1992 (42 U.S.C. 13317(e)(1))
- 17 is amended by inserting "landfill gas," after "wind, bio-
- 18 mass,".
- 19 (e) Sunset.—Section 1212(f) of the Energy Policy
- 20 Act of 1992 (42 U.S.C. 13317(f)) is amended by striking
- 21 "the expiration of" and all that follows through "of this
- 22 section" and inserting "September 30, 2023".
- 23 (f) Authorization of Appropriations.—Section
- 24 1212(g) of the Energy Policy Act of 1992 (42 U.S.C.
- 25 13317(g)) is amended to read as follows:

1	"(g) Authorization of Appropriations—
2	"(1) In General.—Subject to paragraph (2)
3	there are authorized to be appropriated such sums
4	as may be necessary to carry out this section for fis-
5	cal years 2003 through 2023.
6	"(2) Availability of funds.—Funds made
7	available under paragraph (1) shall remain available
8	until expended.".
9	SEC. 503. RENEWABLE ENERGY ON FEDERAL LANDS.
10	(a) Report.—Within 24 months after the date of en-
11	actment of this Act, the Secretary of the Interior, in co-
12	operation with the Secretary of Agriculture, shall develop
13	and report to the Congress recommendations on opportu-
14	nities to develop renewable energy on public lands under
15	the jurisdiction of the Secretary of the Interior and Na-
16	tional Forest System lands under the jurisdiction of the
17	Secretary of Agriculture. The report shall include—
18	(1) 5-year plans developed by the Secretary of
19	the Interior and the Secretary of Agriculture, re-
20	spectively, for encouraging the development of re-
21	newable energy consistent with applicable law and
22	management plans; and
23	(2) an analysis of—

1	(A) the use of rights-of-way, leases, or
2	other methods to develop renewable energy on
3	such lands;
4	(B) the anticipated benefits of grants,
5	loans, tax credits, or other provisions to pro-
6	mote renewable energy development on such
7	lands; and
8	(C) any issues that the Secretary of the
9	Interior or the Secretary of Agriculture have
10	encountered in managing renewable energy
11	projects on such lands, or believe are likely to
12	arise in relation to the development of renew-
13	able energy on such lands;
14	(3) a list, developed in consultation with the
15	Secretary of Energy and the Secretary of Defense,
16	of lands under the jurisdiction of the Department of
17	Energy or Defense that would be suitable for devel-
18	opment for renewable energy, and any recommended
19	statutory and regulatory mechanisms for such devel-
20	opment; and
21	(4) any recommendations pertaining to the
22	issues addressed in the report.
23	(b) National Academy of Sciences Study.—
24	(1) Not later than 90 days after the date of the
25	enactment of this section, the Secretary of the Inte-

1	rior shall contract with the National Academy of
2	Sciences to—
3	(A) study the potential for the development
4	of wind, solar, and ocean (tidal and thermal)
5	energy on the Outer Continental Shelf;
6	(B) assess existing Federal authorities for
7	the development of such resources; and
8	(C) recommend statutory and regulatory
9	mechanisms for such development.
10	(2) The results of the study shall be trans-
11	mitted to the Congress within 24 months after the
12	date of the enactment of this section.
13	SEC. 504. FEDERAL PURCHASE REQUIREMENT.
14	(a) Requirement.—The President, acting through
15	the Secretary of Energy, shall seek to ensure that, to the
16	extent economically feasible and technically practicable, of
17	the total amount of electric energy the Federal Govern-
18	ment consumes during any fiscal year, the following
19	amounts shall be renewable energy—
20	(1) not less than 3 percent in fiscal years 2005
21	through 2007,
22	(2) not less than 5 percent in fiscal years 2008
23	through 2010, and
24	(3) not less than 7.5 percent in fiscal year 2011
25	and each fiscal year thereafter.

1	(b) Definition.—For purposes of this section—
2	(1) the term "biomass" means any solid, non-
3	hazardous, cellulosic material that is derived from—
4	(A) any of the following forest-related re-
5	sources: mill residues, precommercial thinnings,
6	slash, and brush, or nonmerchantable material;
7	(B) solid wood waste materials, including
8	waste pallets, crates, dunnage, manufacturing
9	and construction wood wastes (other than pres-
10	sure-treated, chemically-treated, or painted
11	wood wastes), and landscape or right-of-way
12	tree trimmings, but not including municipal
13	solid waste (garbage), gas derived from the bio-
14	degradation of solid waste, or paper that is
15	commonly recycled; or
16	(C) agriculture wastes, including orchard
17	tree crops, vineyard, grain, legumes, sugar, and
18	other crop by-products or residues, and live-
19	stock waste nutrients; or
20	(D) a plant that is grown exclusively as a
21	fuel for the production of electricity.
22	(2) the term "renewable energy" means electric
23	energy generated from solar, wind, biomass, geo-
24	thermal, municipal solid waste, or new hydroelectric
25	generation capacity achieved from increased effi-

1	ciency or additions of new capacity at an existing
2	hydroelectric project.
3	(c) Calculation.—For purposes of determining
4	compliance with the requirement of this section, the
5	amount of renewable energy shall be doubled if—
6	(1) the renewable energy is produced and used
7	on-site at a Federal facility;
8	(2) the renewable energy is produced on Fed-
9	eral lands and used at a Federal facility; or
10	(3) the renewable energy is produced on Indian
11	land as defined in title XXVI of the Energy Policy
12	Act of 1992 (25 U.S.C. 3501 et seq.) and used at
13	a Federal facility.
14	(d) Report.—Not later than April 15, 2005, and
15	every 2 years thereafter, the Secretary of Energy shall
16	provide a report to the Congress on the progress of the
17	Federal Government in meeting the goals established by
18	this section.
19	SEC. 505. INSULAR AREA RENEWABLE AND ENERGY EFFI
20	CIENCY PLANS.
21	The Secretary of Energy shall update the energy sur-
22	veys, estimates, and assessments for the insular areas of
23	Puerto Rico, the Virgin Islands, Guam, American Samoa

24 the Commonwealth of the Northern Mariana Islands, the

25 Republic of the Marshall Islands, the Federated States of

- 1 Micronesia, and the Republic of Palau undertaken pursu-
- 2 ant to section 604 of Public Law 96–597 (48 U.S.C.
- 3 1492) and revise the comprehensive energy plan for the
- 4 insular areas to reduce reliance on energy imports and in-
- 5 crease use of renewable energy resources and energy effi-
- 6 ciency opportunities. The update and revision shall by un-
- 7 dertaken in consultation with the Secretary of the Interior
- 8 and the chief executive officer of each insular area and
- 9 shall be completed and submitted to Congress and to the
- 10 chief executive officer of each insular area by December
- 11 31, 2005.

# Subtitle B—Hydroelectric

# 13 Licensing

- 14 SEC. 511. ALTERNATIVE CONDITIONS AND FISHWAYS.
- 15 (a) Federal Reservations.—Section 4(e) of the
- 16 Federal Power Act (16 U.S.C. 797(e)) is amended by in-
- 17 serting after "adequate protection and utilization of such
- 18 reservation." at the end of the first proviso the following:
- 19 "The license applicant shall be entitled to a determination
- 20 on the record, after opportunity for an agency trial-type
- 21 hearing of any disputed issues of material fact, with re-
- 22 spect to such conditions.".
- 23 (b) Fishways.—Section 18 of the Federal Power Act
- 24 (16 U.S.C. 811) is amended by inserting after "and such
- 25 fishways as may be prescribed by the Secretary of Com-

- 1 merce." the following: "The license applicant shall be enti-
- 2 tled to a determination on the record, after opportunity
- 3 for an agency trial-type hearing of any disputed issues of
- 4 material fact, with respect to such fishways.".
- 5 (c) Alternative Conditions and Prescrip-
- 6 TIONS.—Part I of the Federal Power Act (16 U.S.C. 791a
- 7 et seq.) is amended by adding the following new section
- 8 at the end thereof:

#### 9 "SEC. 33. ALTERNATIVE CONDITIONS AND PRESCRIPTIONS.

- 10 "(a) Alternative Conditions.—
- 11 "(1) Whenever any person applies for a license 12 for any project works within any reservation of the 13 United States, and the Secretary of the Department 14 under whose supervision such reservation falls (re-15 ferred to in this subsection as 'the Secretary') deems 16 a condition to such license to be necessary under the 17 first proviso of section 4(e), the license applicant

may propose an alternative condition.

"(2) Notwithstanding the first proviso of section 4(e), the Secretary shall accept the proposed alternative condition referred to in paragraph (1), and the Commission shall include in the license such alternative condition, if the Secretary determines, based on substantial evidence provided by the license

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1	applicant or otherwise available to the Secretary,
2	that such alternative condition—
3	"(A) provides for the adequate protection
4	and utilization of the reservation; and
5	"(B) will either—
6	"(i) cost less to implement; or
7	"(ii) result in improved operation of
8	the project works for electricity production,
9	as compared to the condition initially
10	deemed necessary by the Secretary.
11	"(3) The Secretary concerned shall submit into
12	the public record of the Commission proceeding with
13	any condition under section 4(e) or alternative con-
14	dition it accepts under this section, a written state-
15	ment explaining the basis for such condition, and
16	reason for not accepting any alternative condition
17	under this section. The written statement must dem-
18	onstrate that the Secretary gave equal consideration
19	to the effects of the condition adopted and alter-
20	natives not accepted on energy supply, distribution,
21	cost, and use; flood control; navigation; water sup-
22	ply; and air quality (in addition to the preservation
23	of other aspects of environmental quality); based on
24	such information as may be available to the Sec-
25	retary, including information voluntarily provided in

- a timely manner by the applicant and others. The Secretary shall also submit, together with the aforementioned written statement, all studies, data, and other factual information available to the Secretary and relevant to the Secretary's decision.
  - "(4) Nothing in this section shall prohibit other interested parties from proposing alternative conditions.
  - "(5) If the Secretary does not accept an applicant's alternative condition under this section, and the Commission finds that the Secretary's condition would be inconsistent with the purposes of this part, or other applicable law, the Commission may refer the dispute to the Commission's Dispute Resolution Service. The Dispute Resolution Service shall consult with the Secretary and the Commission and issue a non-binding advisory within 90 days. The Secretary may accept the Dispute Resolution Service advisory unless the Secretary finds that the recommendation will not adequately protect the reservation. The Secretary shall submit the advisory and the Secretary's final written determination into the record of the Commission's proceeding.
- 24 "(b) Alternative Prescriptions.—

1	(1) Whenever the Secretary of the Interior or
2	the Secretary of Commerce prescribes a fishway
3	under section 18, the license applicant or licensee
4	may propose an alternative to such prescription to
5	construct, maintain, or operate a fishway. The alter-
6	native may include a fishway or an alternative to a
7	fishway.
8	"(2) Notwithstanding section 18, the Secretary
9	of the Interior or the Secretary of Commerce, as ap-
10	propriate, shall accept and prescribe, and the Com-
11	mission shall require, the proposed alternative re-
12	ferred to in paragraph (1), if the Secretary of the
13	appropriate department determines, based on sub-
14	stantial evidence provided by the licensee or other-
15	wise available to the Secretary, that such alter-
16	native—
17	"(A) will be no less protective of the fish
18	resources than the fishway initially prescribed
19	by the Secretary; and
20	"(B) will either—
21	"(i) cost less to implement; or
22	"(ii) result in improved operation of
23	the project works for electricity production,
24	as compared to the fishway initially
25	deemed necessary by the Secretary.

1 "(3) The Secretary concerned shall submit into 2 the public record of the Commission proceeding with 3 any prescription under section 18 or alternative prescription it accepts under this section, a written 5 statement explaining the basis for such prescription, 6 and reason for not accepting any alternative pre-7 scription under this section. The written statement 8 must demonstrate that the Secretary gave equal con-9 sideration to the effects of the condition adopted and 10 alternatives not accepted on energy supply, distribu-11 tion, cost, and use; flood control; navigation; water 12 supply; and air quality (in addition to the preserva-13 tion of other aspects of environmental quality); 14 based on such information as may be available to 15 the Secretary, including information voluntarily pro-16 vided in a timely manner by the applicant and oth-17 ers. The Secretary shall also submit, together with 18 the aforementioned written statement, all studies, 19 data, and other factual information available to the 20 Secretary and relevant to the Secretary's decision.

- "(4) Nothing in this section shall prohibit other interested parties from proposing alternative prescriptions.
- "(5) If the Secretary concerned does not accept an applicant's alternative prescription under this

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1 section, and the Commission finds that the Sec-2 retary's prescription would be inconsistent with the 3 purposes of this part, or other applicable law, the Commission may refer the dispute to the Commission's Dispute Resolution Service. The Dispute Res-6 olution Service shall consult with the Secretary and 7 the Commission and issue a non-binding advisory within 90 days. The Secretary may accept the Dis-8 9 pute Resolution Service advisory unless the Sec-10 retary finds that the recommendation will not ade-11 quately protect the fish resources. The Secretary 12 shall submit the advisory and the Secretary's final 13 written determination into the record of the Com-14 mission's proceeding.".

# 15 Subtitle C—Geothermal Energy

- 16 SEC. 521. COMPETITIVE LEASE SALE REQUIREMENTS.
- 17 (a) In General.—Section 4 of the Geothermal
- 18 Steam Act of 1970 (30 U.S.C. 1003) is amended by strik-
- 19 ing the text and inserting the following:
- 20 "(a) Nominations.—The Secretary shall accept
- 21 nominations at any time from companies and individuals
- 22 of lands to be leased under this Act.
- 23 "(b) Competitive Lease Sale Required.—The
- 24 Secretary shall hold a competitive lease sale at least once
- 25 every 2 years for lands in a State in which there are nomi-

- 1 nations pending under subsection (a) where such lands are
- 2 otherwise available for leasing.
- 3 "(c) Noncompetitive Leasing.—The Secretary
- 4 shall make available for a period of 2 years for non-
- 5 competitive leasing any tract for which a competitive lease
- 6 sale is held, but for which the Secretary does not receive
- 7 any bids in the competitive lease sale.".
- 8 (b) Pending Lease Applications.—It shall be a
- 9 priority for the Secretary of the Interior and, with respect
- 10 to National Forest lands, the Secretary of Agriculture, to
- 11 ensure timely completion of administrative actions nec-
- 12 essary to conduct competitive lease sales for lands with
- 13 pending applications for geothermal leasing as of the date
- 14 of enactment of this section where such lands are other-
- 15 wise available for leasing.
- 16 SEC. 522. GEOTHERMAL LEASING AND PERMITTING ON
- 17 FEDERAL LANDS.
- 18 (a) IN GENERAL.—Not later than 180 days after the
- 19 date of the enactment of this section, the Secretary of the
- 20 Interior and the Secretary of Agriculture shall enter into
- 21 and submit to the Congress a memorandum of under-
- 22 standing in accordance with this section regarding leasing
- 23 and permitting for geothermal development of public lands
- 24 and National Forest System lands under their respective
- 25 jurisdictions.

1	(b) Lease and Permit Applications.—The memo-
2	randum of understanding shall—
3	(1) identify known geothermal resources areas
4	on lands included in the National Forest System
5	and, when necessary, require review of management
6	plans to consider leasing under the Geothermal
7	Steam Act of 1970 (30 U.S.C. 1001 et seq.) as a
8	land use; and
9	(2) establish an administrative procedure for
10	processing geothermal lease applications, including
11	lines of authority, steps in application processing,
12	and time limits for application processing.
13	(c) Data Retrieval System.—The memorandum
14	of understanding shall establish a joint data retrieval sys-
15	tem that is capable of tracking lease and permit applica-
16	tions and providing to the applicant information as to
17	their status within the Departments of the Interior and
18	Agriculture, including an estimate of the time required for
19	administrative action.
20	SEC. 523. LEASING AND PERMITTING ON FEDERAL LANDS
21	WITHDRAWN FOR MILITARY PURPOSES.
22	Not later than 1 year after the date of the enactment
23	of this Act, the Secretary of the Interior and the Secretary
24	of Defense, in consultation with interested states, coun-
25	ties, representatives of the geothermal industry, and inter-

1	ested members of the public, shall submit to the Congress
2	a joint report concerning leasing and permitting activities
3	for geothermal energy on Federal lands withdrawn for
4	military purposes. Such report shall—
5	(1) describe any differences, including dif-
6	ferences in royalty structure and revenue sharing
7	with states and counties, between—
8	(A) the implementation of the Geothermal
9	Steam Act of 1970 (30 U.S.C. 1001 et seq.)
10	and other applicable Federal law by the Sec-
11	retary of the Interior; and
12	(B) the administration of geothermal leas-
13	ing under section 2689 of title 10, United
14	States Code, by the Secretary of Defense;
15	(2) identify procedures for interagency coordi-
16	nation to ensure efficient processing and administra-
17	tion of leases or contracts for geothermal energy on
18	federal lands withdrawn for military purposes, con-
19	sistent with the defense purposes of such with-
20	drawals; and
21	(3) provide recommendations for legislative or
22	administrative actions that could facilitate program
23	administration, including a common royalty struc-
24	ture.

#### 1 SEC. 524. REINSTATEMENT OF LEASES TERMINATED FOR

- 2 FAILURE TO PAY RENT.
- 3 Section 5(c) of the Geothermal Steam Act of 1970
- 4 (30 U.S.C. 1004(c)), is amended in the last sentence by
- 5 inserting "or was inadvertent," after "reasonable dili-
- 6 gence,".

#### 7 SEC. 525. ROYALTY REDUCTION AND RELIEF.

- 8 (a) Rulemaking.—Within one year after the date of
- 9 enactment of this Act, the Secretary shall promulgate a
- 10 final regulation providing a methodology for determining
- 11 the amount or value of the steam for purposes of calcu-
- 12 lating the royalty due to be paid on such production pursu-
- 13 ant to section 5 of the Geothermal Steam Act of 1970
- 14 (30 U.S.C. 1004). The final regulation shall provide for
- 15 a simplified methodology for calculating the royalty. In
- 16 undertaking the rulemaking, the Secretary shall consider
- 17 the use of a percent of revenue method and shall ensure
- 18 that the final rule will result in the same level of royalty
- 19 revenues as the regulation in effect on the date of enact-
- 20 ment of this provision.
- 21 (b) Low Temperature Direct Use.—Notwith-
- 22 standing the provisions of section 5(a) of the Geothermal
- 23 Steam Act of 1979 (30 U.S.C. 1004(a)), with respect to
- 24 the direct use of low temperature geothermal resources for
- 25 purposes other than the generation of electricity, the Sec-
- 26 retary shall establish a schedule of fees and collect fees

- 1 pursuant to such schedule in lieu of royalties based upon
- 2 the total amount of geothermal resources used. The sched-
- 3 ule of fees shall ensure that there is a fair return to the
- 4 public for the use of the low temperature geothermal re-
- 5 source. With the consent of the lessee, the Secretary may
- 6 modify the terms of a lease in existence on the date of
- 7 enactment of this Act in order to reflect the provisions
- 8 of this subsection.

# 9 Subtitle D—Biomass Energy

- 10 SEC. 531. DEFINITIONS.
- 11 For the purposes of this subtitle:
- 12 (1) The term "eligible operation" means a facil-
- ity that is located within the boundaries of an eligi-
- ble community and uses biomass from federal or In-
- dian lands as a raw material to produce electric en-
- ergy, sensible heat, transportation fuels, or sub-
- stitutes for petroleum-based products.
- 18 (2) The term "biomass" means pre-commercial
- thinnings of trees and woody plants, or non-mer-
- 20 chantable material, from preventative treatments to
- 21 reduce hazardous fuels, or reduce or contain disease
- or insect infestations.
- 23 (3) The term "green ton" means 2,000 pounds
- of biomass that has not been mechanically or artifi-
- cially dried.

1	(4) The term "Secretary" means—
2	(A) with respect to lands within the Na-
3	tional Forest System, the Secretary of Agri-
4	culture; or
5	(B) with respect to Federal lands under
6	the jurisdiction of the Secretary of the Interior
7	and Indian lands, the Secretary of the Interior.
8	(5) The term "eligible community" means any
9	Indian Reservation, or any county, town, township,
10	municipality, or other similar unit of local govern-
11	ment that has a population of not more than 50,000
12	individuals and is determined by the Secretary to be
13	located in an area near federal of Indian lands which
14	is at significant risk of catastrophic wildfire, disease,
15	or insect infestation or which suffers from disease or
16	insect infestation.
17	(6) The term "Indian tribe" has the meaning
18	given the term in section 4(e) of the Indian Self-De-
19	termination and Education Assistance Act (25
20	U.S.C. 450b(e)).
21	(7) The term "person" includes—
22	(A) an individual;
23	(B) a community;
24	(C) an Indian tribe;

1	(D) a small business or a corporation that
2	is incorporated in the United States; or
3	(E) a nonprofit organization.
4	SEC. 532. BIOMASS COMMERCIAL UTILIZATION GRANT PRO-
5	GRAM.
6	(a) IN GENERAL.—The Secretary may make grants
7	to any person that owns or operates an eligible operation
8	to offset the costs incurred to purchase biomass for use
9	by such eligible operation with priority given to operations
10	using biomass from the highest risk areas.
11	(b) LIMITATION.—No grant provided under this sub-
12	section shall be paid at a rate that exceeds \$20 per green
13	ton of biomass delivered.
14	(c) Records.—Each grant recipient shall keep such
15	records as the Secretary may require to fully and correctly
16	disclose the use of the grant funds and all transactions
17	involved in the purchase of biomass. Upon notice by the
18	Secretary, the grant recipient shall provide the Secretary
19	reasonable access to examine the inventory and records
20	of any eligible operation receiving grant funds.
21	(d) AUTHORIZATION OF APPROPRIATIONS.—For the
22	purposes of this section, there are authorized to be appro-
23	priated \$12,500,000 each to the Secretary of the Interior
24	and the Secretary of Agriculture for each fiscal year from
25	2004 through 2008, to remain available until expended.

1	SEC. 533. IMPROVED BIOMASS UTILIZATION GRANT PRO-
2	GRAM.
3	(a) In General.—The Secretary may make grants
4	to persons in eligible communities to offset the costs of
5	developing or researching proposals to improve the use of
6	biomass or add value to biomass utilization.
7	(b) Selection.—Grant recipients shall be selected
8	based on the potential for the proposal to—
9	(1) develop affordable thermal or electric energy
10	resources for the benefit of an eligible community;
11	(2) provide opportunities for the creation or ex-
12	pansion of small businesses within an eligible com-
13	munity;
14	(3) create new job opportunities within an eligi-
15	ble community, and
16	(4) reduce the hazardous fuels from the highest
17	risk areas.
18	(e) Limitation.—No grant awarded under this sub-
19	section shall exceed \$500,000.
20	(d) AUTHORIZATION OF APPROPRIATIONS.—For the
21	purposes of this section, there are authorized to be appro-
22	priated \$12,500,000 each to the Secretary of the Interior
23	and the Secretary of Agriculture for each fiscal year from
24	2004 through 2008, to remain available until expended.

#### 1 SEC. 534. REPORT.

- 2 Not later than 3 years after the date of enactment
- 3 of this subtitle, the Secretary of the Interior and the Sec-
- 4 retary of Agriculture shall jointly submit to the Congress
- 5 a report that describes the interim results of the programs
- 6 authorized under this subtitle.

### 7 TITLE VI—ENERGY EFFICIENCY

## 8 Subtitle A—Federal Programs

- 9 SEC. 601. ENERGY MANAGEMENT REQUIREMENTS.
- 10 (a) Energy Reduction Goals.—Section 543(a)(1)
- 11 of the National Energy Conservation Policy Act (42
- 12 U.S.C. 8253(a)(1)) is amended by striking "its Federal
- 13 buildings so that" and all that follows through the end
- 14 and inserting "the Federal buildings of the agency (includ-
- 15 ing each industrial or laboratory facility) so that the en-
- 16 ergy consumption per gross square foot of the Federal
- 17 buildings of the agency in fiscal years 2004 through 2013
- 18 is reduced, as compared with the energy consumption per
- 19 gross square foot of the Federal buildings of the agency
- 20 in fiscal year 2000, by the percentage specified in the fol-
- 21 lowing table:

"Fiscal Year	Percentage reduction
2004	2
2005	4
2006	6
2007	8
2008	10
2009	
2010	
2011	

	"Fiscal Year Percentage reduction 2012
1	(b) Effective Date.—The energy reduction goals
2	and baseline established in paragraph (1) of section
3	543(a) of the National Energy Conservation Policy Act,
4	as amended by subsection (a) of this section, supersede
5	all previous goals and baselines under such paragraph,
6	and related reporting requirements.
7	(c) REVIEW OF ENERGY PERFORMANCE REQUIRE-
8	MENTS.—Section 543(a) of the National Energy Con-
9	servation Policy Act (42 U.S.C. 8253(a)) is further
10	amended by adding at the end the following:
11	"(3) Not later than December 31, 2011, the
12	Secretary shall review the results of the implementa-
13	tion of the energy performance requirement estab-
14	lished under paragraph (1) and submit to Congress
15	recommendations concerning energy performance re-
16	quirements for fiscal years 2014 through 2022.".
17	(d) Exclusions.—Section 543(c)(1) of the National
18	Energy Conservation Policy Act (42 U.S.C. 8253(c)(1))
19	is amended by striking "An agency may exclude" and all
20	that follows through the end and inserting—
21	"(A) An agency may exclude, from the energy
22	performance requirement for a fiscal year estab-
23	lished under subsection (a) and the energy manage-
24	ment requirement established under subsection (b)

1	any Federal building or collection of Federal build-
2	ings, if the head of the agency finds that—
3	"(i) compliance with those requirements
4	would be impracticable;
5	"(ii) the agency has completed and sub-
6	mitted all federally required energy manage-
7	ment reports;
8	"(iii) the agency has achieved compliance
9	with the energy efficiency requirements of this
10	Act, the Energy Policy Act of 1992, Executive
11	Orders, and other Federal law; and
12	"(iv) the agency has implemented all prac-
13	ticable, life-cycle cost-effective projects with re-
14	spect to the Federal building or collection of
15	Federal buildings to be excluded.
16	"(B) A finding of impracticability under sub-
17	paragraph (A)(i) shall be based on—
18	"(i) the energy intensiveness of activities
19	carried out in the Federal building or collection
20	of Federal buildings; or
21	"(ii) the fact that the Federal building or
22	collection of Federal buildings is used in the
23	performance of a national security function.".

- 1 (e) REVIEW BY SECRETARY.—Section 543(c)(2) of
- 2 the National Energy Conservation Policy Act (42 U.S.C.
- 3 8253(c)(2)) is amended—
- 4 (1) by striking "impracticability standards" and
- 5 inserting "standards for exclusion"; and
- 6 (2) by striking "a finding of impracticability"
- 7 and inserting "the exclusion".
- 8 (f) Criteria.—Section 543(c) of the National En-
- 9 ergy Conservation Policy Act (42 U.S.C. 8253(c)) is fur-
- 10 ther amended by adding at the end the following:
- 11 "(3) Not later than 180 days after the date of
- 12 enactment of this paragraph, the Secretary shall
- issue guidelines that establish criteria for exclusions
- under paragraph (1).".
- 15 (g) Retention of Energy Savings.—Section 546
- 16 of the National Energy Conservation Policy Act (42
- 17 U.S.C. 8256) is amended by adding at the end the fol-
- 18 lowing new subsection:
- 19 "(e) RETENTION OF ENERGY SAVINGS.—An agency
- 20 may retain any funds appropriated to that agency for en-
- 21 ergy expenditures, at buildings subject to the requirements
- 22 of section 543(a) and (b), that are not made because of
- 23 energy savings. Except as otherwise provided by law, such
- 24 funds may be used only for energy efficiency or unconven-
- 25 tional and renewable energy resources projects.".

1	(h) REPORTS.—Section 548(b) of the National En-
2	ergy Conservation Policy Act (42 U.S.C. 8258(b)) is
3	amended—
4	(1) in the subsection heading, by inserting
5	"THE PRESIDENT AND" before "CONGRESS"; and
6	(2) by inserting "President and" before "Con-
7	gress''.
8	(i) Conforming Amendment.—Section 550(d) of
9	the National Energy Conservation Policy Act (42 U.S.C.
10	8258b(d)) is amended in the second sentence by striking
11	"the 20 percent reduction goal established under section
12	543(a) of the National Energy Conservation Policy Act
13	(42 U.S.C. 8253(a))." and inserting "each of the energy
13 14	(42 U.S.C. 8253(a))." and inserting "each of the energy reduction goals established under section 543(a).".
14	reduction goals established under section 543(a).".
14 15	reduction goals established under section 543(a).".  SEC. 602. ENERGY USE MEASUREMENT AND ACCOUNT-
14 15 16 17	reduction goals established under section 543(a).".  SEC. 602. ENERGY USE MEASUREMENT AND ACCOUNTABILITY.
14 15 16 17	reduction goals established under section 543(a).".  SEC. 602. ENERGY USE MEASUREMENT AND ACCOUNTABILITY.  Section 543 of the National Energy Conservation
14 15 16 17	reduction goals established under section 543(a).".  SEC. 602. ENERGY USE MEASUREMENT AND ACCOUNTABILITY.  Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is further amended by adding
14 15 16 17 18	reduction goals established under section 543(a).".  SEC. 602. ENERGY USE MEASUREMENT AND ACCOUNTABILITY.  Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is further amended by adding at the end the following:
14 15 16 17 18 19 20	reduction goals established under section 543(a).".  SEC. 602. ENERGY USE MEASUREMENT AND ACCOUNTABILITY.  Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is further amended by adding at the end the following:  "(e) METERING OF ENERGY USE.—
14 15 16 17 18 19 20 21	reduction goals established under section 543(a).".  SEC. 602. ENERGY USE MEASUREMENT AND ACCOUNTABILITY.  Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is further amended by adding at the end the following:  "(e) METERING OF ENERGY USE.—  "(1) DEADLINE.—By October 1, 2010, in ac-
14 15 16 17 18 19 20 21	reduction goals established under section 543(a).".  SEC. 602. ENERGY USE MEASUREMENT AND ACCOUNTABILITY.  Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is further amended by adding at the end the following:  "(e) METERING OF ENERGY USE.—  "(1) DEADLINE.—By October 1, 2010, in accordance with guidelines established by the Section 543(a).".

1 buildings, be metered or submetered. Each agency 2 shall use, to the maximum extent practicable, ad-3 vanced meters or advanced metering devices that 4 provide data at least daily and that measure at least 5 hourly consumption of electricity in the Federal 6 buildings of the agency. Such data shall be incor-7 porated into existing Federal energy tracking sys-8 tems and made available to Federal facility energy 9 managers. 10 "(2) Guidelines.— "(A) IN GENERAL.—Not later than 180 11 12 days after the date of enactment of this sub-13 section, the Secretary, in consultation with the 14 Department of Defense, the General Services 15 Administration, representatives from the metering industry, utility industry, energy services in-16 17 dustry, energy efficiency industry, national lab-18 oratories, universities, and Federal facility en-19 ergy managers, shall establish guidelines for 20 agencies to carry out paragraph (1). "(B) REQUIREMENTS FOR GUIDELINES.— 21 22 The guidelines shall— 23 "(i) take into consideration— "(I) the cost of metering and 24

submetering and the reduced cost of

1	operation and maintenance expected
2	to result from metering and sub-
3	metering;
4	"(II) the extent to which meter-
5	ing and submetering are expected to
6	result in increased potential for en-
7	ergy management, increased potential
8	for energy savings and energy effi-
9	ciency improvement, and cost and en-
10	ergy savings due to utility contract
11	aggregation; and
12	"(III) the measurement and
13	verification protocols of the Depart-
14	ment of Energy;
15	"(ii) include recommendations con-
16	cerning the amount of funds and the num-
17	ber of trained personnel necessary to gath-
18	er and use the metering information to
19	track and reduce energy use;
20	"(iii) establish priorities for types and
21	locations of buildings to be metered and
22	submetered based on cost effectiveness and
23	a schedule of one or more dates, not later
24	than 1 year after the date of issuance of
25	the guidelines, on which the requirements

1	specified in paragraph (1) shall take effect;
2	and
3	"(iv) establish exclusions from the re-
4	quirements specified in paragraph (1)
5	based on the de minimis quantity of energy
6	use of a Federal building, industrial proc-
7	ess, or structure.
8	"(3) Plan.—No later than 6 months after the
9	date guidelines are established under paragraph (2),
10	in a report submitted by the agency under section
11	548(a), each agency shall submit to the Secretary a
12	plan describing how the agency will implement the
13	requirements of paragraph (1), including—
14	"(A) how the agency will designate per-
15	sonnel primarily responsible for achieving the
16	requirements; and
17	"(B) demonstration by the agency, com-
18	plete with documentation, of any finding that
19	advanced meters or advanced metering devices,
20	as defined in paragraph (1), are not prac-
21	ticable.".
22	SEC. 603. FEDERAL BUILDING PERFORMANCE STANDARDS.
23	Section 305(a) of the Energy Conservation and Pro-
24	duction Act (42 U.S.C. 6834(a)) is amended—

1	(1) in paragraph (2)(A), by striking "CABO
2	Model Energy Code, 1992" and inserting "the 2000
3	International Energy Conservation Code"; and
4	(2) by adding at the end the following:
5	"(3) Revised federal building energy ef-
6	FICIENCY PERFORMANCE STANDARDS.—
7	"(A) IN GENERAL.—Not later than 1 year
8	after the date of enactment of this paragraph,
9	the Secretary of Energy shall establish, by rule,
10	revised Federal building energy efficiency per-
11	formance standards that require that, if cost-ef-
12	fective, for new Federal buildings—
13	"(i) such buildings be designed so as
14	to achieve energy consumption levels at
15	least 30 percent below those of the most
16	recent version of the International Energy
17	Conservation Code, as appropriate; and
18	"(ii) sustainable design principles are
19	applied to the siting, design, and construc-
20	tion of all new and replacement buildings.
21	"(B) Additional revisions.—Not later
22	than 1 year after the date of approval of
23	amendments to ASHRAE Standard 90.1 or the
24	2000 International Energy Conservation Code,
25	the Secretary of Energy shall determine, based

1	on the cost-effectiveness of the requirements
2	under the amendments, whether the revised
3	standards established under this paragraph
4	should be updated to reflect the amendments.
5	"(C) STATEMENT ON COMPLIANCE OF NEW
6	BUILDINGS.—In the budget request of the Fed-
7	eral agency for each fiscal year and each report
8	submitted by the Federal agency under section
9	548(a) of the National Energy Conservation
10	Policy Act (42 U.S.C. 8258(a)), the head of
11	each Federal agency shall include—
12	"(i) a list of all new Federal buildings
13	owned, operated, or controlled by the Fed-
14	eral agency; and
15	"(ii) a statement concerning whether
16	the Federal buildings meet or exceed the
17	revised standards established under this
18	paragraph.".
19	SEC. 604. ENERGY SAVINGS PERFORMANCE CONTRACTS.
20	(a) Permanent Extension.—Section 801(c) of the
21	National Energy Conservation Policy Act (42 U.S.C
22	8287(c)) is repealed.
23	(b) Replacement Facilities.—Section 801(a) of
24	the National Energy Conservation Policy Act (42 U.S.C

1 8287(a)) is amended by adding at the end the following 2 new paragraph:

"(3)(A) In the case of an energy savings contract or energy savings performance contract providing for energy savings through the construction and operation of one or more buildings or facilities to replace one or more existing buildings or facilities, benefits ancillary to the purpose of such contract under paragraph (1) may include savings resulting from reduced life-cycle 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 methodology set forth in the contract.

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

1	(c) Energy Savings.—Section 804(2) of the Na-
2	tional Energy Conservation Policy Act (42 U.S.C.
3	8287c(2)) is amended to read as follows:
4	"(2) The term 'energy savings' means—
5	"(A) a reduction in the cost of energy or
6	water, from a base cost established through a
7	methodology set forth in the contract, used in
8	an existing federally owned building or build-
9	ings or other federally owned facilities as a re-
10	sult of—
11	"(i) the lease or purchase of operating
12	equipment, improvements, altered oper-
13	ation and maintenance, or technical serv-
14	ices;
15	"(ii) the increased efficient use of ex-
16	isting energy sources by co-generation or
17	heat recovery, excluding any co-generation
18	process for other than a federally owned
19	building or buildings or other federally
20	owned facilities; or
21	"(iii) the increased efficient use of ex-
22	isting water sources; or
23	"(B) in the case of a replacement building
24	or facility described in section 801(a)(3), a re-
25	duction in the cost of energy, from a base cost

1	established through a methodology set forth in
2	the contract, that would otherwise be utilized in
3	one or more existing federally owned buildings
4	or other federally owned facilities by reason of
5	the construction and operation of the replace-
6	ment building or facility.".
7	(d) Energy Savings Contract.—Section 804(3) of
8	the National Energy Conservation Policy Act (42 U.S.C.
9	8287c(3)) is amended to read as follows:
10	"(3) The terms 'energy savings contract' and
11	'energy savings performance contract' mean a con-
12	tract which provides for—
13	"(A) the performance of services for the
14	design, acquisition, installation, testing, and,
15	where appropriate, operation, maintenance and
16	repair, of an identified energy or water con-
17	servation measure or series of measures at one
18	or more locations; or
19	"(B) energy savings through the construc-
20	tion and operation of one or more buildings or
21	facilities to replace one or more existing build-
22	ings or facilities. Such contracts shall, with re-
23	spect to an agency facility that is a public
24	building as such term is defined in section
25	13(1) of the Public Buildings Act of 1959 (40

1	U.S.C. 612(1)), be in compliance with the pro-
2	spectus requirements and procedures of section
3	7 of the Public Buildings Act of 1959 (40
4	U.S.C. 606).".
5	(e) Energy or Water Conservation Measure.—
6	Section 804(4) of the National Energy Conservation Pol-
7	icy Act (42 U.S.C. 8287c(4)) is amended to read as fol-
8	lows:
9	"(4) The term 'energy or water conservation
10	measure' means—
11	"(A) an energy conservation measure, as
12	defined in section 551(4) (42 U.S.C. 8259(4));
13	or
14	"(B) a water conservation measure that
15	improves water efficiency, is life-cycle cost-effec-
16	tive, and involves water conservation, water re-
17	cycling or reuse, more efficient treatment of
18	wastewater or stormwater, improvements in op-
19	eration or maintenance efficiencies, retrofit ac-
20	tivities, or other related activities, not at a Fed-
21	eral hydroelectric facility.".
22	(f) Pilot Program for Non-Building Applica-
23	TIONS.—
24	(1) The Secretary of Defense, and the heads of
25	other interested Federal agencies, are authorized to

enter into up to 10 energy savings performance con-
tracts under Title VIII of the National Energy Con-
servation Policy Act (42 U.S.C. 8287 et seq.) for the
purpose of achieving energy or water savings, sec-
ondary savings, and benefits incidental to those pur-
poses, in non-building applications, provided that the
aggregate payments to be made by the Federal gov-
ernment under such contracts shall not exceed
\$100,000,000.

- (2) The Secretary of Energy, in consultation with the Secretary of Defense and the heads of other interested Federal agencies, shall select projects that demonstrate the applicability and benefits of energy savings performance contracting to a range of non-building applications.
  - (3) For the purposes of this subsection:
- (A) The term "non-building application" means—

(i) any class of vehicles, devices, or equipment that is transportable under its own power by land, sea, or air that consumes energy from any fuel source for the purpose of such transportability, or to maintain a controlled environment within such vehicle, device, or equipment; or

- 1 (ii) any Federally owned equipment 2 used to generate electricity or transport 3 water.
  - (B) The term "secondary savings", means additional energy or cost savings that are a direct consequence of the energy or water savings that result from the financing and implementation of the energy savings performance contract, including, but not limited to, energy or cost savings that result from a reduction in the need for fuel delivery and logistical support, or the increased efficiency in the production of electricity.
    - (4) Not later than 3 years after the date of enactment of this section, the Secretary of Energy shall report to the Congress on the progress and results of the projects funded pursuant to this section. Such report shall include a description of projects undertaken; the energy, water and cost savings, secondary savings and other benefits that resulted from such projects; and recommendations on whether the pilot program should be extended, expanded, or authorized permanently as a part of the program authorized under Title VIII of the National Energy Conservation Policy Act (42 U.S.C. 8287 et seq.).

1	(5) Section $546(c)(3)$ of the National Energy
2	Conservation Policy Act (42 U.S.C. 8256) is amend-
3	ed by striking the word "facilities", and inserting
4	the words "facilities, equipment and vehicles", in
5	lieu thereof.
6	(g) Review.—Within 180 days after the date of the
7	enactment of this section, the Secretary of Energy shall
8	complete a review of the Energy Savings Performance
9	Contract program to identify statutory, regulatory, and
10	administrative obstacles that prevent Federal agencies
11	from fully utilizing the program. In addition, this review
12	shall identify all areas for increasing program flexibility
13	and effectiveness, including audit and measurement
14	verification requirements, accounting for energy use in de-
15	termining savings, contracting requirements, including the
16	identification of additional qualified contractors, and en-
17	ergy efficiency services covered. The Secretary shall report
18	these findings to the Committee on Energy and Commerce
19	of the House of Representatives and the Committee on
20	Energy and Natural Resources of the Senate, and shall
21	implement identified administrative and regulatory
22	changes to increase program flexibility and effectiveness
23	to the extent that such changes are consistent with statu-
24	tory authority.

1	SEC. 605. PROCUREMENT OF ENERGY EFFICIENT PROD-
2	UCTS.
3	(a) Part 3 of title V of the National Energy Con-
4	servation Policy Act is amended by adding at the end the
5	following:
6	"SEC. 552. FEDERAL PROCUREMENT OF ENERGY EFFI-
7	CIENT PRODUCTS.
8	"(a) Definitions.—In this section:
9	"(1) The term 'Energy Star product' means a
10	product that is rated for energy efficiency under an
11	Energy Star program.
12	"(2) The term 'Energy Star program' means
13	the program established by section 324A of the En-
14	ergy Policy and Conservation Act.
15	"(3) The term 'executive agency' has the mean-
16	ing given the term in section 4 of the Office of Fed-
17	eral Procurement Policy Act (41 U.S.C. 403).
18	"(4) The term 'FEMP designated product'
19	means a product that is designated under the Fed-
20	eral Energy Management Program of the Depart-
21	ment of Energy as being among the highest 25 per-
22	cent of equivalent products for energy efficiency.
23	"(b) Procurement of Energy Efficient Prod-
24	UCTS.—
25	"(1) Requirement.—To meet the require-
26	ments of an executive agency for an energy con-

- suming product, the head of the executive agency shall, except as provided in paragraph (2), procure an Energy Star product or a FEMP designated product.
  - "(2) EXCEPTIONS.—The head of an executive agency is not required to procure an Energy Star product or FEMP designated product under paragraph (1) if the head of the executive agency finds in writing that—
    - "(A) an Energy Star product or FEMP designated product is not cost-effective over the life of the product taking energy cost savings into account; or
    - "(B) no Energy Star product or FEMP designated product is reasonably available that meets the functional requirements of the executive agency.
  - "(3) Procurement planning.—The head of an executive agency shall incorporate into the specifications for all procurements involving energy consuming products and systems, including guide specifications, project specifications, and construction, renovation, and services contracts that include provision of energy consuming products and systems, and into the factors for the evaluation of offers received

- 1 for the procurement, criteria for energy efficiency
- 2 that are consistent with the criteria used for rating
- 3 Energy Star products and for rating FEMP des-
- 4 ignated products.
- 5 "(c) Listing of Energy Efficient Products in
- 6 Federal Catalogs.—Energy Star products and FEMP
- 7 designated products shall be clearly identified and promi-
- 8 nently displayed in any inventory or listing of products
- 9 by the General Services Administration or the Defense Lo-
- 10 gistics Agency. The General Services Administration or
- 11 the Defense Logistics Agency shall supply only Energy
- 12 Star products or FEMP designated products for all prod-
- 13 uct categories covered by the Energy Star program or the
- 14 Federal Energy Management Program, except in cases
- 15 where the agency ordering a product specifies in writing
- 16 that no Energy Star product or FEMP designated product
- 17 is available to meet the buyer's functional requirements,
- 18 or that no Energy Star product or FEMP designated
- 19 product is cost-effective for the intended application over
- 20 the life of the product, taking energy cost savings into ac-
- 21 count.
- 22 "(d) Designation of Electric Motors.—In the
- 23 case of electric motors of 1 to 500 horsepower, agencies
- 24 shall select only premium efficient motors that meet a
- 25 standard designated by the Secretary. The Secretary shall

- 1 designate such a standard within 120 days after the date
- 2 of the enactment of this section, after considering the rec-
- 3 ommendations of associated electric motor manufacturers
- 4 and energy efficiency groups.
- 5 "(e) Regulations.—Not later than 180 days after
- 6 the date of the enactment of this section, the Secretary
- 7 shall issue guidelines to carry out this section.".
- 8 (b) Conforming Amendment.—The table of con-
- 9 tents in section 1(b) of the National Energy Conservation
- 10 Policy Act (42 U.S.C. 8201 note) is amended by inserting
- 11 after the item relating to the end of the items relating
- 12 to part 3 of title V the following:

"Sec. 552. Federal procurement of energy efficient products.".

- 13 SEC. 606. CONGRESSIONAL BUILDING EFFICIENCY.
- (a) In General.—Part 3 of title V of the National
- 15 Energy Conservation Policy Act is further amended by
- 16 adding at the end:
- 17 "SEC. 553. ENERGY AND WATER SAVINGS MEASURES IN
- 18 **CONGRESSIONAL BUILDING.**
- 19 "(a) IN GENERAL.—The Architect of the Capitol—
- 20 "(1) shall develop, update, and implement a
- 21 cost-effective energy conservation and management
- plan (referred to in this section as the 'plan') for all
- facilities administered by the Congress (referred to
- in this section as 'congressional buildings') to meet

1	the energy performance requirements for Federal
2	buildings established under section 543(a)(1); and
3	"(2) shall submit the plan to Congress, not
4	later than 180 days after the date of enactment of
5	this section.
6	"(b) Plan Requirements.—The plan shall in-
7	clude—
8	"(1) a description of the life-cycle cost analysis
9	used to determine the cost-effectiveness of proposed
10	energy efficiency projects;
11	"(2) a schedule of energy surveys to ensure
12	complete surveys of all congressional buildings every
13	5 years to determine the cost and payback period of
14	energy and water conservation measures;
15	"(3) a strategy for installation of life-cycle cost-
16	effective energy and water conservation measures;
17	"(4) the results of a study of the costs and ben-
18	efits of installation of submetering in congressional
19	buildings; and
20	"(5) information packages and 'how-to' guides
21	for each Member and employing authority of Con-
22	gress that detail simple, cost-effective methods to
23	save energy and taxpayer dollars in the workplace.
24	"(c) Annual Report.—The Architect shall submit
25	to Congress annually a report on congressional energy

- 1 management and conservation programs required under
- 2 this section that describes in detail—
- 3 "(1) energy expenditures and savings estimates
- 4 for each facility;
- 5 "(2) energy management and conservation
- 6 projects; and
- 7 "(3) future priorities to ensure compliance with
- 8 this section.".
- 9 (b) Table of Contents Amendment.—The table
- 10 of contents in section 1(b) of the National Energy Con-
- 11 servation Policy Act is amended by adding at the end of
- 12 the items relating to part 3 of title V the following new
- 13 item:

"Sec. 553. Energy and water savings measures in congressional buildings.".

- 14 (c) Repeal.—Section 310 of the Legislative Branch
- 15 Appropriations Act, 1999 (40 U.S.C. 166i), is repealed.
- 16 (d) Energy Infrastructure.—The Architect of
- 17 the Capitol, building on the Master Plan Study completed
- 18 in July 2000, shall commission a study to evaluate the
- 19 energy infrastructure of the Capital Complex to determine
- 20 how the infrastructure could be augmented to become
- 21 more energy efficient, using unconventional and renewable
- 22 energy resources, in a way that would enable the Complex
- 23 to have reliable utility service in the event of power fluc-
- 24 tuations, shortages, or outages.

1	(e) AUTHORIZATION.—There are authorized to be ap-
2	propriated to the Architect of the Capitol to carry out sub-
3	section (d), not more than \$2,000,000 for fiscal year
4	2004.
5	SEC. 607. INCREASED USE OF RECOVERED MINERAL COM-
6	PONENT IN FEDERALLY FUNDED PROJECTS
7	INVOLVING PROCUREMENT OF CEMENT OR
8	CONCRETE.
9	(a) Amendment.—Subtitle F of the Solid Waste
10	Disposal Act (42 U.S.C. 6961 et seq.) is amended by add-
11	ing at the end the following new section:
12	"SEC. 6005. INCREASED USE OF RECOVERED MINERAL
13	COMPONENT IN FEDERALLY FUNDED
	COMPONENT IN FEDERALLY FUNDED PROJECTS INVOLVING PROCUREMENT OF
14	
14 15	PROJECTS INVOLVING PROCUREMENT OF
14 15 16	PROJECTS INVOLVING PROCUREMENT OF CEMENT OR CONCRETE.
14 15 16 17	PROJECTS INVOLVING PROCUREMENT OF CEMENT OR CONCRETE.  "(a) DEFINITIONS.—In this section:
14 15 16 17 18	PROJECTS INVOLVING PROCUREMENT OF CEMENT OR CONCRETE.  "(a) DEFINITIONS.—In this section:  "(1) AGENCY HEAD.—The term 'agency head'
13 14 15 16 17 18 19 20	PROJECTS INVOLVING PROCUREMENT OF CEMENT OR CONCRETE.  "(a) DEFINITIONS.—In this section:  "(1) AGENCY HEAD.—The term 'agency head' means—
14 15 16 17 18	PROJECTS INVOLVING PROCUREMENT OF CEMENT OR CONCRETE.  "(a) DEFINITIONS.—In this section:  "(1) AGENCY HEAD.—The term 'agency head' means—  "(A) the Secretary of Transportation; and
14 15 16 17 18 19 20	PROJECTS INVOLVING PROCUREMENT OF CEMENT OR CONCRETE.  "(a) DEFINITIONS.—In this section:  "(1) AGENCY HEAD.—The term 'agency head' means—  "(A) the Secretary of Transportation; and "(B) the head of each other Federal agen-
14 15 16 17 18 19 20 21	PROJECTS INVOLVING PROCUREMENT OF CEMENT OR CONCRETE.  "(a) DEFINITIONS.—In this section:  "(1) AGENCY HEAD.—The term 'agency head' means—  "(A) the Secretary of Transportation; and "(B) the head of each other Federal agency that on a regular basis procures, or provides

1	"(2) CEMENT OR CONCRETE PROJECT.—The
2	term 'cement or concrete project' means a project
3	for the construction or maintenance of a highway or
4	other transportation facility or a Federal, State, or
5	local government building or other public facility
6	that—
7	"(A) involves the procurement of cement
8	or concrete; and
9	"(B) is carried out in whole or in part
10	using Federal funds.
11	"(3) RECOVERED MINERAL COMPONENT.—The
12	term 'recovered mineral component' means—
13	"(A) ground granulated blast furnace slag;
14	"(B) coal combustion fly ash; and
15	"(C) any other waste material or byprod-
16	uct recovered or diverted from solid waste that
17	the Administrator, in consultation with an
18	agency head, determines should be treated as
19	recovered mineral component under this section
20	for use in cement or concrete projects paid for,
21	in whole or in part, by the agency head.
22	"(b) Implementation of Requirements.—
23	"(1) In general.—Not later than 1 year after
24	the date of enactment of this section, the Adminis-
25	trator and each agency head shall take such actions

- as are necessary to implement fully all procurement requirements and incentives in effect as of the date of enactment of this section (including guidelines under section 6002) that provide for the use of cement and concrete incorporating recovered mineral component in cement or concrete projects.
  - "(2) Priority.—In carrying out paragraph (1) an agency head shall give priority to achieving greater use of recovered mineral component in cement or concrete projects for which recovered mineral components historically have not been used or have been used only minimally.
  - "(3) Conformance.—The Administrator and each agency head shall carry out this subsection in accordance with section 6002.

## "(c) Full Implementation Study.—

"(1) In General.—The Administrator, in cooperation with the Secretary of Transportation and the Secretary of Energy, shall conduct a study to determine the extent to which current procurement requirements, when fully implemented in accordance with subsection (b), may realize energy savings and environmental benefits attainable with substitution of recovered mineral component in cement used in cement or concrete projects.

1	"(2) Matters to be addressed.—The study
2	shall—
3	"(A) quantify the extent to which recov-
4	ered mineral components are being substituted
5	for Portland cement, particularly as a result of
6	current procurement requirements, and the en-
7	ergy savings and environmental benefits associ-
8	ated with that substitution;
9	"(B) identify all barriers in procurement
10	requirements to fuller realization of energy sav-
11	ings and environmental benefits, including bar-
12	riers resulting from exceptions from current
13	law; and
14	"(C)(i) identify potential mechanisms to
15	achieve greater substitution of recovered min-
16	eral component in types of cement or concrete
17	projects for which recovered mineral compo-
18	nents historically have not been used or have
19	been used only minimally;
20	"(ii) evaluate the feasibility of establishing
21	guidelines or standards for optimized substi-
22	tution rates of recovered mineral component in
23	those cement or concrete projects; and
24	"(iii) identify any potential environmental
25	or economic effects that may result from great-

1	er substitution of recovered mineral component
2	in those cement or concrete projects.
3	"(3) Report.—Not later than 30 months after
4	the date of enactment of this section, the Adminis-
5	trator shall submit to the Committee on Appropria-
6	tions and Committee on Environment and Public
7	Works of the Senate and the Committee on Appro-
8	priations, Committee on Energy and Commerce, and
9	Committee on Transportation and Infrastructure of
10	the House of Representatives a report on the study.
11	"(d) Additional Procurement Requirements.—
12	Unless the study conducted under subsection (c) identifies
13	any effects or other problems described in subsection
14	(c)(2)(C)(iii) that warrant further review or delay, the Ad-
15	ministrator and each agency head shall, within 1 year of
16	the release of the report in accordance with subsection
17	(e)(3), take additional actions authorized under this sec-
18	tion to establish procurement requirements and incentives
19	that provide for the use of cement and concrete with in-
20	creased substitution of recovered mineral component in
21	the construction and maintenance of cement or concrete
22	projects, so as to—
23	"(1) realize more fully the energy savings and
24	environmental benefits associated with increased
25	substitution; and

- 1 "(2) eliminate barriers identified under sub-
- 2 section (c).
- 3 "(e) Effect of Section.—Nothing in this section
- 4 affects the requirements of section 6002 (including the
- 5 guidelines and specifications for implementing those re-
- 6 quirements).".
- 7 (b) Table of Contents Amendment.—The table
- 8 of contents of the Solid Waste Disposal Act is amended
- 9 by adding after the item relating to section 6004 the fol-
- 10 lowing new item:

"Sec. 6005. Increased use of recovered mineral component in federally funded projects involving procurement of cement or concrete.".

## 11 SEC. 608. UTILITY ENERGY SERVICE CONTRACTS.

- Section 546(c)(1) of the National Energy Conserva-
- 13 tion Policy Act (42 U.S.C. 8256(c)) is amended to read
- 14 as follows:
- "(1) Agencies are authorized and encouraged to
- 16 participate in programs, including utility energy
- 17 services contracts, conducted by gas, water and elec-
- tric utilities and generally available to customers of
- such utilities, for the purposes of increased energy
- efficiency, water conservation or the management of
- 21 electricity demand.".

## 22 SEC. 609. STUDY OF ENERGY EFFICIENCY STANDARDS.

- The Secretary of Energy shall contract with the Na-
- 24 tional Academy of Sciences for a study, to be completed

1	within one year of enactment of this section, to examine
2	whether the goals of energy efficiency standards are best
3	served by measurement of energy consumed, and efficiency
4	improvements, at the actual site of energy consumption,
5	or through the full fuel cycle, beginning at the source of
6	energy production. The Secretary shall submit the report
7	of the Academy to the Congress.
8	Subtitle B—State and Local
9	Programs
10	SEC. 611. LOW INCOME COMMUNITY ENERGY EFFICIENCY
11	PILOT PROGRAM.
12	(a) Grants.—The Secretary of Energy is authorized
13	to make grants to units of local government, private, non-
14	profit community development organizations, and Indian
15	tribe economic development entities to improve energy effi-
16	ciency, identify and develop alternative, renewable and dis-
17	tributed energy supplies, and increase energy conservation
18	in low income rural and urban communities.
19	(b) Purpose of Grants.—The Secretary may make
20	grants on a competitive basis for—
21	(1) investments that develop alternative, renew-
22	able and distributed energy supplies;
23	(2) energy efficiency projects and energy con-
24	servation programs;

1	(3) studies and other activities that improve en-
2	ergy efficiency in low income rural and urban com-
3	munities;

- (4) planning and development assistance for increasing the energy efficiency of buildings and facilities; and
- 7 (5) technical and financial assistance to local 8 government and private entities on developing new 9 renewable and distributed sources of power or com-10 bined heat and power generation.
- 11 (c) Definition.—For purposes of this section, the 12 term "Indian tribe" means any Indian tribe, band, nation, or other organized group or community, including any Alaskan Native village or regional or village corporation 14 15 as defined in or established pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.), which 16 is recognized as eligible for the special programs and services provided by the United States to Indians because of 18 19 their status as Indians.
- 20 (d) AUTHORIZATION OF APPROPRIATIONS.—For the 21 purposes of this section there are authorized to be appro-22 priated to the Secretary of Energy \$20,000,000 for fiscal 23 year 2004 and each fiscal year thereafter through fiscal 24 year 2006.

5

## 1 SEC. 612. ENERGY EFFICIENT PUBLIC BUILDINGS.

2	(a) Grants.—The Secretary of Energy may make
3	grants to the State agency responsible for developing State
4	energy conservation plans under section 362 of the Energy
5	Policy and Conservation Act (42 U.S.C. 6322), or, if no
6	such agency exists, a State agency designated by the Gov-
7	ernor of the State, to assist units of local government in
8	the State in improving the energy efficiency of public
9	buildings and facilities—
10	(1) through construction of new energy efficient
11	public buildings that use at least 30 percent less en-
12	ergy than a comparable public building constructed
13	in compliance with standards prescribed in chapter
14	8 of the 2000 International Energy Conservation
15	Code, or a similar State code intended to achieve
16	substantially equivalent efficiency levels; or
17	(2) through renovation of existing public build-
18	ings to achieve reductions in energy use of at least
19	30 percent as compared to the baseline energy use
20	in such buildings prior to renovation, assuming a 3-
21	year, weather-normalized average for calculating
22	such baseline.
23	(b) Administration.—State energy offices receiving
24	grants under this section shall—
25	(1) maintain such records and evidence of com-
26	pliance as the Secretary may require; and

1	(2) develop and distribute information and ma-
2	terials and conduct programs to provide technical
3	services and assistance to encourage planning, fi-
4	nancing, and design of energy efficient public build-
5	ings by units of local government.
6	(c) AUTHORIZATION OF APPROPRIATIONS.—For the
7	purposes of this section, there are authorized to be appro-
8	priated to the Secretary of Energy such sums as may be
9	necessary for each of fiscal years 2003 through 2012. Not
10	more than 30 percent of appropriated funds shall be used
11	for administration.
12	SEC. 613. ENERGY EFFICIENT APPLIANCE REBATE PRO-
13	GRAMS.
13 14	GRAMS.  (a) DEFINITIONS.—In this section:
14	(a) Definitions.—In this section:
14 15	<ul><li>(a) Definitions.—In this section:</li><li>(1) The term "eligible State" means a State</li></ul>
14 15 16	<ul><li>(a) Definitions.—In this section:</li><li>(1) The term "eligible State" means a State that meets the requirements of subsection (b).</li></ul>
14 15 16 17	<ul> <li>(a) DEFINITIONS.—In this section:</li> <li>(1) The term "eligible State" means a State that meets the requirements of subsection (b).</li> <li>(2) The term "Energy Star program" means</li> </ul>
14 15 16 17 18	<ul> <li>(a) DEFINITIONS.—In this section:</li> <li>(1) The term "eligible State" means a State that meets the requirements of subsection (b).</li> <li>(2) The term "Energy Star program" means the program established by section 324A of the En-</li> </ul>
14 15 16 17 18	<ul> <li>(a) Definitions.—In this section:</li> <li>(1) The term "eligible State" means a State that meets the requirements of subsection (b).</li> <li>(2) The term "Energy Star program" means the program established by section 324A of the Energy Policy and Conservation Act.</li> </ul>
14 15 16 17 18 19 20	<ul> <li>(a) Definitions.—In this section:</li> <li>(1) The term "eligible State" means a State that meets the requirements of subsection (b).</li> <li>(2) The term "Energy Star program" means the program established by section 324A of the Energy Policy and Conservation Act.</li> <li>(3) The term "residential Energy Star product"</li> </ul>
14 15 16 17 18 19 20 21	<ul> <li>(a) Definitions.—In this section:</li> <li>(1) The term "eligible State" means a State that meets the requirements of subsection (b).</li> <li>(2) The term "Energy Star program" means the program established by section 324A of the Energy Policy and Conservation Act.</li> <li>(3) The term "residential Energy Star product" means a product for a residence that is rated for energy Policy and Conservation Act.</li> </ul>
14 15 16 17 18 19 20 21	<ul> <li>(a) Definitions.—In this section:</li> <li>(1) The term "eligible State" means a State that meets the requirements of subsection (b).</li> <li>(2) The term "Energy Star program" means the program established by section 324A of the Energy Policy and Conservation Act.</li> <li>(3) The term "residential Energy Star product" means a product for a residence that is rated for energy efficiency under the Energy Star program.</li> </ul>

1	conservation plans under section 362 of the Energy
2	Policy and Conservation Act (42 U.S.C. 6322).
3	(5) The term "State program" means a State
4	energy efficient appliance rebate program described
5	in subsection $(b)(1)$ .
6	(b) Eligible States.—A State shall be eligible to
7	receive an allocation under subsection (c) if the State—
8	(1) establishes (or has established) a State en-
9	ergy efficient appliance rebate program to provide
10	rebates to residential consumers for the purchase of
11	residential Energy Star products to replace used ap-
12	pliances of the same type;
13	(2) submits an application for the allocation at
14	such time, in such form, and containing such infor-
15	mation as the Secretary may require; and
16	(3) provides assurances satisfactory to the Sec-
17	retary that the State will use the allocation to sup-
18	plement, but not supplant, funds made available to
19	carry out the State program.
20	(c) Amount of Allocations.—
21	(1) Subject to paragraph (2), for each fiscal
22	year, the Secretary shall allocate to the State energy
23	office of each eligible State to carry out subsection
24	(d) an amount equal to the product obtained by mul-
25	tiplying the amount made available under subsection

1	(f) for the fiscal year by the ratio that the popu-
2	lation of the State in the most recent calendar year
3	for which data are available bears to the total popu-
4	lation of all eligible States in that calendar year.

- (2) For each fiscal year, the amounts allocated under this subsection shall be adjusted proportionately so that no eligible State is allocated a sum that is less than an amount determined by the Secretary.
- 9 (d) USE OF ALLOCATED FUNDS.—The allocation to 10 a State energy office under subsection (c) may be used 11 to pay up to 50 percent of the cost of establishing and 12 carrying out a State program.
- 13 (e) Issuance of Rebates.—Rebates may be pro-14 vided to residential consumers that meet the requirements 15 of the State program. The amount of a rebate shall be 16 determined by the State energy office, taking into consid-17 eration—
  - (1) the amount of the allocation to the State energy office under subsection (c);
- 20 (2) the amount of any Federal or State tax in-21 centive available for the purchase of the residential 22 Energy Star product; and
- 23 (3) the difference between the cost of the resi-24 dential Energy Star product and the cost of an ap-25 pliance that is not a residential Energy Star prod-

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1	uct, but is of the same type as, and is the nearest
2	capacity, performance, and other relevant character-
3	istics (as determined by the State energy office) to
4	the residential Energy Star product.
5	(f) Authorization of Appropriations.—There
6	are authorized to be appropriated to carry out this section
7	\$50,000,000 for each of the fiscal years 2004 through
8	2008.
9	<b>Subtitle C—Consumer Products</b>
10	SEC. 621. ENERGY CONSERVATION STANDARDS FOR ADDI-
11	TIONAL PRODUCTS.
12	(a) Definitions.—Section 321 of the Energy Policy
13	and Conservation Act (42 U.S.C. 6291) is amended—
14	(1) in subparagraph (30)(S), by striking the pe-
15	riod and adding at the end the following:
16	"but does not include any lamps specifically de-
17	signed to be used for special purpose applica-
18	tions, and also does not include any lamp not
19	described in subparagraph (D) that is excluded
20	by the Secretary, by rule."; and
21	(2) by adding at the end the following:
22	"(32) The term 'battery charger' means a de-
23	vice that charges batteries for consumer products.

1	"(33) The term 'commercial refrigerator, freez-
2	er and refrigerator-freezer' means a refrigerator,
3	freezer or refrigerator-freezer that—
4	"(A) is not a consumer product regulated
5	under this Act; and
6	"(B) incorporates most components in-
7	volved in the vapor-compression cycle and the
8	refrigerated compartment in a single package.
9	"(34) The term 'external power supply' means
10	an external power supply circuit that is used to con-
11	vert household electric current into either DC cur-
12	rent or lower-voltage AC current to operate a con-
13	sumer product.
14	"(35) The term 'illuminated exit sign' means a
15	sign that—
16	"(A) is designed to be permanently fixed in
17	place to identify an exit; and
18	"(B) consists of an electrically powered in-
19	tegral light source that illuminates the legend
20	'EXIT' and any directional indicators and pro-
21	vides contrast between the legend, any direc-
22	tional indicators, and the background.
23	"(36)(A) Except as provided in subparagraph
24	(B), the term 'low-voltage dry-type transformer'
25	means a transformer that—

1	"(i) has an input voltage of 600 volts or
2	less;
3	"(ii) is air-cooled;
4	"(iii) does not use oil as a coolant; and
5	"(iv) is rated for operation at a frequency
6	of 60 Hertz.
7	"(B) The term 'low-voltage dry-type trans-
8	former' does not include—
9	"(i) transformers with multiple voltage
10	taps, with the highest voltage tap equaling at
11	least 20 percent more than the lowest voltage
12	tap;
13	"(ii) transformers, such as those commonly
14	known as drive transformers, rectifier trans-
15	formers, auto-transformers, Uninterruptible
16	Power System transformers, impedance trans-
17	formers, harmonic transformers, regulating
18	transformers, sealed and nonventilating trans-
19	formers, machine tool transformers, welding
20	transformers, grounding transformers, or test-
21	ing transformers, that are designed to be used
22	in a special purpose application and are unlikely
23	to be used in general purpose applications; or
24	"(iii) any transformer not listed in clause
25	(ii) that is excluded by the Secretary by rule be-

1	cause the transformer is designed for a special
2	application and the application of standards to
3	the transformer would not result in significant
4	energy savings.
5	"(37)(A) Except as provided in subsection (B),
6	the term 'distribution transformer' means a trans-
7	former that —
8	"(i) has an input voltage of 34.5 kilovolts
9	or less;
10	"(ii) has an output voltage of 600 volts or
11	less; and
12	"(iii) is rated for operation at a frequency
13	of 60 Hertz.
14	"(B) The term 'distribution transformer' does
15	not include —
16	"(i) transformers with multiple voltage
17	taps, with the highest voltage tap equaling at
18	least 15 percent more than the lowest voltage
19	tap;
20	"(ii) transformers, such as those commonly
21	known as drive transformers, rectifier trans-
22	formers, autotransformers, Uninterruptible
23	Power System transformers, impedance trans-
24	formers, harmonic transformers, regulating
25	transformers, sealed and nonventilating trans-

1	formers, machine tool transformers, welding
2	transformers, grounding transformers, or test-
3	ing transformers, that are designed to be used
4	in a special purpose application, and are un-
5	likely to be used in general purpose applica-
6	tions; or
7	"(iii) any transformer not listed in clause
8	(ii) that is excluded by the Secretary by rule be-
9	cause the transformer is designed for a special
10	application, is unlikely to be used in general
11	purpose applications, and the application of
12	standards to the transformer would not result
13	in significant energy savings.
14	"(38) The term 'standby mode' means the low-
15	est amount of electric power used by a household ap-
16	pliance when not performing its active functions, as
17	defined on an individual product basis by the Sec-
18	retary.
19	"(39) The term 'torchiere' means a portable
20	electric lamp with a reflector bowl that directs light
21	upward so as to give indirect illumination.
22	"(40) The term 'transformer' means a device
23	consisting of two or more coils of insulated wire that

transfers alternating current by electromagnetic in-

1	duction from one coil to another to change the origi-
2	nal voltage or current value.
3	"(41) The term 'unit heater' means a self-con-
4	tained fan-type heater designed to be installed with-
5	in the heated space, except that such term does not
6	include a warm air furnace.
7	"(42) The term 'traffic signal module' means $\epsilon$
8	standard 8-inch (200mm) or 12-inch (300mm) traf-
9	fic signal indication, consisting of a light source, a
10	lens, and all other parts necessary for operation
11	that communicates movement messages to drivers
12	through red, amber, and green colors.".
13	(b) Test Procedures.—Section 323 of the Energy
14	Policy and Conservation Act (42 U.S.C. 6293) is amend-
15	ed—
16	(1) in subsection (b), by adding at the end the
17	following:
18	"(9) Test procedures for illuminated exit signs
19	shall be based on the test method used under
20	Version 2.0 of the Energy Star program of the Envi-
21	ronmental Protection Agency for illuminated exit
22	signs.
23	"(10) Test procedures for low voltage dry-type
24	distribution transformers shall be based on the

'Standard Test Method for Measuring the Energy

- 1 Consumption of Distribution Transformers' pre-2 scribed by the National Electrical Manufacturers As-3 sociation (NEMA TP 2–1998). The Secretary may 4 review and revise this test procedure.
  - "(11) Test procedures for traffic signal modules shall be based on the test method used under the Energy Star program of the Environmental Protection Agency for traffic signal modules, as in effect on the date of enactment of this paragraph.
    - "(12) Test procedures for medium base compact fluorescent lamps shall be based on the test methods used under the August 9, 2001 version of the Energy Star program of the Environmental Protection Agency and Department of Energy for compact fluorescent lamps. Covered products shall meet all test requirements for regulated parameters in section 325(bb). However, covered products may be marketed prior to completion of lamp life and lumen maintenance at 40% of rated life testing provided manufacturers document engineering predictions and analysis that support expected attainment of lumen maintenance at 40% rated life and lamp life time."; and (2) by adding at the end the following:
- 24 "(f) ADDITIONAL CONSUMER AND COMMERCIAL
   25 PRODUCTS.—The Secretary shall within 24 months after

1	the date	of enactment	of this	subsection	prescribe	testing

2 requirements for suspended ceiling fans, refrigerated bot-

- 3 tled or canned beverage vending machines, and commer-
- 4 cial refrigerators, freezers and refrigerator-freezers. Such
- 5 testing requirements shall be based on existing test proce-
- 6 dures used in industry to the extent practical and reason-
- 7 able. In the case of suspended ceiling fans, such test proce-
- 8 dures shall include efficiency at both maximum output and
- 9 at an output no more than 50 percent of the maximum
- 10 output.".
- 11 (c) New Standards.—Section 325 of the Energy
- 12 Policy and Conservation Act (42 U.S.C. 6295) is amended
- 13 by adding at the end the following:
- 14 "(u) Standby Mode Electric Energy Consump-
- 15 TION.—
- 16 "(1) Initial rulemaking.—
- 17 "(A) The Secretary shall, within 18
- months after the date of enactment of this sub-
- section, prescribe by notice and comment, defi-
- 20 nitions of standby mode and test procedures for
- 21 the standby mode power use of battery chargers
- and external power supplies. In establishing
- these test procedures, the Secretary shall con-
- sider, among other factors, existing test proce-
- dures used for measuring energy consumption

1	in standby mode and assess the current and
2	projected future market for battery chargers
3	and external power supplies. This assessment
4	shall include estimates of the significance of po-
5	tential energy savings from technical improve-
6	ments to these products and suggested product
7	classes for standards. Prior to the end of this
8	time period, the Secretary shall hold a scoping
9	workshop to discuss and receive comments on
10	plans for developing energy conservation stand-
11	ards for standby mode energy use for these
12	products.
13	"(B) The Secretary shall, within 3 years
14	after the date of enactment of this subsection,
15	issue a final rule that determines whether en-
16	ergy conservation standards shall be promul-
17	gated for battery chargers and external power
18	supplies or classes thereof. For each product
19	class, any such standards shall be set at the
20	lowest level of standby energy use that—
21	"(i) meets the criteria of subsections
22	(o), (p), (q), (r), (s) and (t); and
23	"(ii) will result in significant overall
24	annual energy savings, considering both

standby mode and other operating modes.

1	"(2) Designation of Additional Covered
2	PRODUCTS.—
3	"(A) Not later than 180 days after the
4	date of enactment of this subsection, the Sec-
5	retary shall publish for public comment and
6	public hearing a notice to determine whether
7	any non-covered products should be designated
8	as covered products for the purpose of insti-
9	tuting a rulemaking under this section to deter-
10	mine whether an energy conservation standard
11	restricting standby mode energy consumption,
12	should be promulgated; except that any restric-
13	tion on standby mode energy consumption shall
14	be limited to major sources of such consump-
15	tion.
16	"(B) In making the determinations pursu-
17	ant to subparagraph (A) of whether to des-
18	ignate new covered products and institute
19	rulemakings, the Secretary shall, among other
20	relevant factors and in addition to the criteria
21	in section 322(b), consider—
22	"(i) standby mode power consumption
23	compared to overall product energy con-
24	sumption; and

1	"(ii) the priority and energy savings
2	potential of standards which may be pro-
3	mulgated under this subsection compared
4	to other required rulemakings under this
5	section and the available resources of the
6	Department to conduct such rulemakings.

"(C) Not later than 1 year after the date of enactment of this subsection, the Secretary shall issue a determination of any new covered products for which he intends to institute rulemakings on standby mode pursuant to this section and he shall state the dates by which he intends to initiate those rulemakings.

"(3) Review of Standby energy use in covered products.—In determining pursuant to section 323 whether test procedures and energy conservation standards pursuant to this section should be revised, the Secretary shall consider for covered products which are major sources of standby mode energy consumption whether to incorporate standby mode into such test procedures and energy conservation standards, taking into account, among other relevant factors, the criteria for non-covered products in subparagraph (B) of paragraph (2) of this subsection.

1	"(4) Rulemaking.—
2	"(A) Any rulemaking instituted under this
3	subsection or for covered products under this
4	section which restricts standby mode power con
5	sumption shall be subject to the criteria and
6	procedures for issuing energy conservation
7	standards set forth in this section and the cri
8	teria set forth in subparagraph (B) of para
9	graph (2) of this subsection.
10	"(B) No standard can be proposed for new
11	covered products or covered products in a
12	standby mode unless the Secretary has promul
13	gated applicable test procedures for each prod
14	uct pursuant to section 323.
15	"(C) The provisions of section 327 shall
16	apply to new covered products which are subject
17	to the rulemakings for standby mode after a
18	final rule has been issued.
19	"(5) Effective date.—Any standard promul
20	gated under this subsection shall be applicable to
21	products manufactured or imported 3 years after the
22	date of promulgation.
23	"(6) Voluntary programs.—The Secretary
24	and the Administrator shall collaborate and develop

programs, including programs pursuant to section

- 1 324A (relating to Energy Star Programs) and other
- 2 voluntary industry agreements or codes of conduct,
- which are designed to reduce standby mode energy
- 4 use.
- 5 "(v) Suspended Ceiling Fans, Vending Ma-
- 6 CHINES, AND COMMERCIAL REFRIGERATORS, FREEZERS
- 7 AND REFRIGERATOR-FREEZERS.—The Secretary shall
- 8 within 36 months after the date on which testing require-
- 9 ments are prescribed by the Secretary pursuant to section
- 10 323(f), prescribe, by rule, energy conservation standards
- 11 for suspended ceiling fans, refrigerated bottled or canned
- 12 beverage vending machines, and commercial refrigerators,
- 13 freezers and refrigerator-freezers. In establishing stand-
- 14 ards under this subsection, the Secretary shall use the cri-
- 15 teria and procedures contained in subsections (l) and (m).
- 16 Any standard prescribed under this subsection shall apply
- 17 to products manufactured 3 years after the date of publi-
- 18 cation of a final rule establishing such standard.
- 19 "(w) Illuminated Exit Signs.—Illuminated exit
- 20 signs manufactured on or after January 1, 2005 shall
- 21 meet the Version 2.0 Energy Star Program performance
- 22 requirements for illuminated exit signs prescribed by the
- 23 Environmental Protection Agency.
- 24 "(x) Torchieres manufactured on or
- 25 after January 1, 2005—

- 1 "(1) shall consume not more than 190 watts of
- 2 power; and
- 3 "(2) shall not be capable of operating with
- 4 lamps that total more than 190 watts.
- 5 "(y) DISTRIBUTION TRANSFORMERS.—The efficiency
- 6 of low voltage dry-type transformers manufactured on or
- 7 after January 1, 2005 shall be the Class I Efficiency Lev-
- 8 els for distribution transformers specified in Table 4–2 of
- 9 the 'Guide for Determining Energy Efficiency for Dis-
- 10 tribution Transformers' published by the National Elec-
- 11 trical Manufacturers Association (NEMA TP-1-2002).
- 12 "(z) Traffic Signal Modules.—Traffic signal
- 13 modules manufactured on or after January 1, 2006 shall
- 14 meet the performance requirements used under the En-
- 15 ergy Star program of the Environmental Protection Agen-
- 16 cy for traffic signals, as in effect on the date of enactment
- 17 of this paragraph, and shall be installed with compatible,
- 18 electrically-connected signal control interface devices and
- 19 conflict monitoring systems.
- 20 "(aa) Unit Heaters.—Unit heaters manufactured
- 21 on or after the date that is three years after the date of
- 22 enactment of the Energy Policy Act of 2003 shall be
- 23 equipped with an intermittent ignition device and shall
- 24 have either power venting or an automatic flue damper.

- 1 "(bb) Medium Base Compact Fluorescent
- 2 Lamps.—Bare lamp and covered lamp (no reflector) me-
- 3 dium base compact fluorescent lamps manufactured on or
- 4 after January 1, 2005 shall meet the following require-
- 5 ments prescribed by the August 9, 2001 version of the
- 6 Energy Star Program Requirements for CFLs, Energy
- 7 Star Eligibility Criteria, Energy-Efficiency Specification
- 8 issued by the Environmental Protection Agency and De-
- 9 partment of Energy: minimum initial efficacy; lumen
- 10 maintenance at 1000 hours; lumen maintenance at 40%
- 11 of rated life; rapid cycle stress test; and lamp life. The
- 12 Secretary may, by rule, establish requirements for color
- 13 quality (CRI); power factor; operating frequency; and
- 14 maximum allowable start time based on the requirements
- 15 prescribed by the August 9, 2001 version of the Energy
- 16 Star Program Requirements for CFLs. The Secretary
- 17 may, by rule, revise these requirements or establish other
- 18 requirements considering energy savings, cost effective-
- 19 ness, and consumer satisfaction.
- 20 "(cc) Effective Date.—The provisions of section
- 21 327 shall apply—
- "(1) to products for which standards are to be
- set pursuant to subsection (v) of this section on the
- date on which a final rule is issued by the Depart-
- 25 ment of Energy, except that any state or local

standards prescribed or enacted for any such product prior to the date on which such final rule is issued shall not be preempted until the standard set pursuant to subsection (v) for that product takes effect; and

"(2) to products for which standards are set in subsections (w) through (bb) of this section on the date of enactment of the Energy Policy Act of 2003, except that any state or local standards prescribed or enacted prior to the date of enactment of the Energy Policy Act of 2003 shall not be preempted until the standards set in subsections (w) through (bb) take effect."

# 14 SEC. 622. ENERGY LABELING.

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lowing:

- 15 (a) RULEMAKING ON EFFECTIVENESS OF CONSUMER
  16 PRODUCT LABELING.—Paragraph (2) of section 324(a) of
  17 the Energy Policy and Conservation Act (42 U.S.C.
  18 6294(a)(2)) is amended by adding at the end the fol-
- 20 "(F) Not later than 3 months after the 21 date of enactment of this subparagraph, the 22 Commission shall initiate a rulemaking to con-23 sider the effectiveness of the current consumer 24 products labeling program in assisting con-25 sumers in making purchasing decisions and im-

- proving energy efficiency and to consider
  changes to the labeling rules that would improve the effectiveness of consumer product labels. Such rulemaking shall be completed within
  years after the date of enactment of this subparagraph.".
- 7 (b) RULEMAKING ON LABELING FOR ADDITIONAL 8 PRODUCTS.—Section 324(a) of the Energy Policy and 9 Conservation Act (42 U.S.C. 6294(a)) is further amended 10 by adding at the end the following:
- 11 "(5) The Secretary or the Commission, as ap-12 propriate, may for covered products referred to in 13 subsections (u) through (aa) of section 325, pre-14 scribe, by rule, pursuant to this section, labeling re-15 quirements for such products after a test procedure 16 has been set pursuant to section 323. In the case of 17 products to which TP-1 standards under section 18 325(y) apply, labeling requirements shall be based 19 on the 'Standard for the Labeling of Distribution 20 Transformer Efficiency' prescribed by the National 21 Electrical Manufacturers Association (NEMA TP-3) 22 as in effect upon the date of enactment of this 23 Act.".

# 1 SEC. 623. ENERGY STAR PROGRAM.

2 (	(a)	AMENDMENT.—	-The	Energy	Policy	and	Conserva-

- 3 tion Act (42 U.S.C. 6201 et. seq.) is amended by inserting
- 4 the following after section 324:

# 5 "SEC. 324A. ENERGY STAR PROGRAM.

- 6 "There is established at the Department of Energy
- 7 and the Environmental Protection Agency a voluntary
- 8 program to identify and promote energy-efficient products
- 9 and buildings in order to reduce energy consumption, im-
- 10 prove energy security, and reduce pollution through vol-
- 11 untary labeling of or other forms of communication about
- 12 products and buildings that meet the highest energy effi-
- 13 ciency standards. Responsibilities under the program shall
- 14 be divided between the Department of Energy and the En-
- 15 vironmental Protection Agency consistent with the terms
- 16 of agreements between the two agencies. The Adminis-
- 17 trator and the Secretary shall—
- 18 "(1) promote Energy Star compliant tech-
- 19 nologies as the preferred technologies in the market-
- 20 place for achieving energy efficiency and to reduce
- 21 pollution;
- 22 "(2) work to enhance public awareness of the
- Energy Star label, including special outreach to
- 24 small businesses;
- 25 "(3) preserve the integrity of the Energy Star
- 26 label;

1	"(4) solicit the comments of interested parties
2	in establishing a new Energy Star product category,
3	specifications, or criteria, or in revising a product
4	category, and upon adoption of a new or revised
5	product category, specifications, or criteria, publish
5	a notice of any changes in product categories, speci-
7	fications or criteria along with an explanation of
8	such changes, and, where appropriate, responses to
9	comments submitted by interested parties; and

- "(5) unless waived or reduced by mutual agreement between the Administrator, the Secretary, and the affected parties, provide not less than 12 months lead time prior to implementation of changes in product categories, specifications, or criteria as may be adopted pursuant to this section."
- 16 (b) Table of Contents Amendment.—The table 17 of contents of the Energy Policy and Conservation Act is 18 amended by inserting after the item relating to section 19 324 the following new item:

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

# 20 SEC. 624. HVAC MAINTENANCE CONSUMER EDUCATION

- 21 **PROGRAM.**
- Section 337 of the Energy Policy and Conservation
- 23 Act (42 U.S.C. 6307) is amended by adding at the end
- 24 the following:

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- 1 "(c) HVAC MAINTENANCE.—For the purpose of en-
- 2 suring that installed air conditioning and heating systems
- 3 operate at their maximum rated efficiency levels, the Sec-
- 4 retary shall, within 180 days of the date of enactment of
- 5 this subsection, carry out a program to educate home-
- 6 owners and small business owners concerning the energy
- 7 savings resulting from properly conducted maintenance of
- 8 air conditioning, heating, and ventilating systems. The
- 9 Secretary shall carry out the program in a cost-shared
- 10 manner in cooperation with the Administrator of the Envi-
- 11 ronmental Protection Agency and such other entities as
- 12 the Secretary considers appropriate, including industry
- 13 trade associations, industry members, and energy effi-
- 14 ciency organizations.
- 15 "(d) SMALL BUSINESS EDUCATION AND ASSIST-
- 16 ANCE.—The Administrator of the Small Business Admin-
- 17 istration, in consultation with the Secretary of Energy and
- 18 the Administrator of the Environmental Protection Agen-
- 19 cy, shall develop and coordinate a Government-wide pro-
- 20 gram, building on the existing Energy Star for Small
- 21 Business Program, to assist small business to become
- 22 more energy efficient, understand the cost savings obtain-
- 23 able through efficiencies, and identify financing options
- 24 for energy efficiency upgrades. The Secretary and the Ad-
- 25 ministrator shall make the program information available

1	directly to small businesses and through other Federal
2	agencies, including the Federal Emergency Management
3	Program, and the Department of Agriculture.".
4	Subtitle D—Public Housing
5	SEC. 631. CAPACITY BUILDING FOR ENERGY-EFFICIENT, AF-
6	FORDABLE HOUSING.
7	Section 4(b) of the HUD Demonstration Act of 1993
8	(42 U.S.C. 9816 note) is amended—
9	(1) in paragraph (1), by inserting before the
10	semicolon at the end the following: ", including ca-
11	pabilities regarding the provision of energy efficient,
12	affordable housing and residential energy conserva-
13	tion measures"; and
14	(2) in paragraph (2), by inserting before the
15	semicolon the following: ", including such activities
16	relating to the provision of energy efficient, afford-
17	able housing and residential energy conservation
18	measures that benefit low-income families".
19	SEC. 632. INCREASE OF CDBG PUBLIC SERVICES CAP FOR
20	ENERGY CONSERVATION AND EFFICIENCY
21	ACTIVITIES.
22	Section 105(a)(8) of the Housing and Community
23	Development Act of 1974 (42 U.S.C. 5305(a)(8)) is
24	amended—

1	(1) by inserting "or efficiency" after "energy
2	conservation";
3	(2) by striking ", and except that" and insert-
4	ing "; except that"; and
5	(3) by inserting before the semicolon at the end
6	the following: "; and except that each percentage
7	limitation under this paragraph on the amount of
8	assistance provided under this title that may be used
9	for the provision of public services is hereby in-
10	creased by 10 percent, but such percentage increase
11	may be used only for the provision of public services
12	concerning energy conservation or efficiency".
13	SEC. 633. FHA MORTGAGE INSURANCE INCENTIVES FOR
14	ENERGY EFFICIENT HOUSING.
	ENERGY EFFICIENT HOUSING.  (a) Single Family Housing Mortgage Insur-
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14 15 16	(a) Single Family Housing Mortgage Insur-
14 15 16 17	(a) Single Family Housing Mortgage Insur- Ance.—Section 203(b)(2) of the National Housing Act
14 15 16 17	(a) Single Family Housing Mortgage Insur- Ance.—Section 203(b)(2) of the National Housing Act (12 U.S.C. 1709(b)(2)) is amended, in the first undesign
114 115 116 117 118	(a) Single Family Housing Mortgage Insur- Ance.—Section 203(b)(2) of the National Housing Act (12 U.S.C. 1709(b)(2)) is amended, in the first undesignated and indented paragraph beginning after subpara-
14 15 16 17	(a) Single Family Housing Mortgage Insur- Ance.—Section 203(b)(2) of the National Housing Act (12 U.S.C. 1709(b)(2)) is amended, in the first undesignated and indented paragraph beginning after subpara- graph (B)(iii) (relating to solar energy systems)—
14 15 16 17 18 19 20	(a) Single Family Housing Mortgage Insur- Ance.—Section 203(b)(2) of the National Housing Act (12 U.S.C. 1709(b)(2)) is amended, in the first undesignated and indented paragraph beginning after subpara- graph (B)(iii) (relating to solar energy systems)—  (1) by inserting "or paragraph (10)" before the
14 15 16 17 18 19 20 21	(a) Single Family Housing Mortgage Insur- Ance.—Section 203(b)(2) of the National Housing Act (12 U.S.C. 1709(b)(2)) is amended, in the first undesignated and indented paragraph beginning after subparagraph (B)(iii) (relating to solar energy systems)—  (1) by inserting "or paragraph (10)" before the first comma; and
14 15 16 17 18 19 20 21	(a) Single Family Housing Mortgage Insur- Ance.—Section 203(b)(2) of the National Housing Act (12 U.S.C. 1709(b)(2)) is amended, in the first undesignated and indented paragraph beginning after subparagraph (B)(iii) (relating to solar energy systems)—  (1) by inserting "or paragraph (10)" before the first comma; and (2) by striking "20 percent" and inserting "30"

- 1 U.S.C. 1713(c)) is amended, in the second undesignated
- 2 paragraph beginning after paragraph (3) (relating to solar
- 3 energy systems and residential energy conservation meas-
- 4 ures), by striking "20 percent" and inserting "30 per-
- 5 cent".
- 6 (c) Cooperative Housing Mortgage Insur-
- 7 ANCE.—Section 213(p) of the National Housing Act (12
- 8 U.S.C. 1715e(p)) is amended by striking "20 per centum"
- 9 and inserting "30 percent".
- 10 (d) Rehabilitation and Neighborhood Con-
- 11 SERVATION HOUSING MORTGAGE INSURANCE.—Section
- 12 220(d)(3)(B)(iii) of the National Housing Act (12 U.S.C.
- 13 1715k(d)(3)(B)(iii)) is amended by striking "20 per cen-
- 14 tum" and inserting "30 percent".
- 15 (e) Low-Income Multifamily Housing Mort-
- 16 GAGE INSURANCE.—Section 221(k) of the National Hous-
- 17 ing Act (12 U.S.C. 1715l(k)) is amended by striking "20
- 18 per centum" and inserting "30 percent".
- 19 (f) Elderly Housing Mortgage Insurance—
- 20 The proviso at the end of section 231(c)(2) of the National
- 21 Housing Act (12 U.S.C. 1715v(c)(2)) is amended by strik-
- 22 ing "20 per centum" and inserting "30 percent".
- 23 (g) Condominium Housing Mortgage Insur-
- 24 ANCE.—Section 234(j) of the National Housing Act (12

1	U.S.C. 1715y(j)) is amended by striking "20 per centum"
2	and inserting "30 percent".
3	SEC. 634. PUBLIC HOUSING CAPITAL FUND.
4	Section 9 of the United States Housing Act of 1937
5	(42 U.S.C. 1437g) is amended—
6	(1) in subsection $(d)(1)$ —
7	(A) in subparagraph (I), by striking "and"
8	at the end;
9	(B) in subparagraph (J), by striking the
10	period at the end and inserting a semicolon;
11	and
12	(C) by adding at the end the following new
13	subparagraphs:
14	"(K) improvement of energy and water-use
15	efficiency by installing fixtures and fittings that
16	conform to the American Society of Mechanical
17	Engineers/American National Standards Insti-
18	tute standards A112.19.2–1998 and
19	A112.18.1–2000, or any revision thereto, appli-
20	cable at the time of installation, and by increas-
21	ing energy efficiency and water conservation by
22	such other means as the Secretary determines
23	are appropriate; and

1	"(L) integrated utility management and
2	capital planning to maximize energy conserva-
3	tion and efficiency measures."; and
4	(2) in subsection (e)(2)(C)—
5	(A) by striking "The" and inserting the
6	following:
7	"(i) IN GENERAL.—The"; and
8	(B) by adding at the end the following:
9	"(ii) Third party contracts.—
10	Contracts described in clause (i) may in-
11	clude contracts for equipment conversions
12	to less costly utility sources, projects with
13	resident-paid utilities, and adjustments to
14	frozen base year consumption, including
15	systems repaired to meet applicable build-
16	ing and safety codes and adjustments for
17	occupancy rates increased by rehabilita-
18	tion.
19	"(iii) TERM OF CONTRACT.—The total
20	term of a contract described in clause (i)
21	shall not exceed 20 years to allow longer
22	payback periods for retrofits, including
23	windows, heating system replacements,
24	wall insulation, site-based generations, ad-
25	vanced energy savings technologies, includ-

1	ing renewable energy generation, and other
2	such retrofits.".
3	SEC. 635. GRANTS FOR ENERGY-CONSERVING IMPROVE-
4	MENTS FOR ASSISTED HOUSING.
5	Section 251(b)(1) of the National Energy Conserva-
6	tion Policy Act (42 U.S.C. 8231(1)) is amended—
7	(1) by striking "financed with loans" and in-
8	serting "assisted";
9	(2) by inserting after "1959," the following:
10	"which are eligible multifamily housing projects (as
11	such term is defined in section 512 of the Multi-
12	family Assisted Housing Reform and Affordability
13	Act of 1997 (42 U.S.C. 1437f note)) and are subject
14	to mortgage restructuring and rental assistance suf-
15	ficiency plans under such Act,"; and
16	(3) by inserting after the period at the end of
17	the first sentence the following new sentence: "Such
18	improvements may also include the installation of
19	energy and water conserving fixtures and fittings
20	that conform to the American Society of Mechanical
21	Engineers/American National Standards Institute
22	standards A112.19.2–1998 and A112.18.1–2000, or
23	any revision thereto, applicable at the time of instal-
24	lation.".

# 1 SEC. 636. NORTH AMERICAN DEVELOPMENT BANK.

- 2 Part 2 of subtitle D of title V of the North American
- 3 Free Trade Agreement Implementation Act (22 U.S.C.
- 4 290m-290m-3) is amended by adding at the end the fol-
- 5 lowing:

# 6 "SEC. 545. SUPPORT FOR CERTAIN ENERGY POLICIES.

- 7 "Consistent with the focus of the Bank's Charter on
- 8 environmental infrastructure projects, the Board members
- 9 representing the United States should use their voice and
- 10 vote to encourage the Bank to finance projects related to
- 11 clean and efficient energy, including energy conservation,
- 12 that prevent, control, or reduce environmental pollutants
- 13 or contaminants.".

#### 14 SEC. 637. ENERGY-EFFICIENT APPLIANCES.

- 15 In purchasing appliances, a public housing agency
- 16 shall purchase energy-efficient appliances that are Energy
- 17 Star products or FEMP-designated products, as such
- 18 terms are defined in section 553 of the National Energy
- 19 Policy and Conservation Act (as amended by this Act),
- 20 unless the purchase of energy-efficient appliances is not
- 21 cost-effective to the agency.

## 22 SEC. 638. ENERGY EFFICIENCY STANDARDS.

- 23 Section 109 of the Cranston-Gonzalez National Af-
- 24 fordable Housing Act (42 U.S.C. 12709) is amended—
- 25 (1) in subsection (a)—
- 26 (A) in paragraph (1)—

1	(i) by striking "1 year after the date
2	of the enactment of the Energy Policy Act
3	of 1992" and inserting "September 30,
4	2003'';
5	(ii) in subparagraph (A), by striking
6	"and" at the end;
7	(iii) in subparagraph (B), by striking
8	the period at the end and inserting ";
9	and"; and
10	(iv) by adding at the end the fol-
11	lowing:
12	"(C) rehabilitation and new construction of
13	public and assisted housing funded by HOPE
14	VI revitalization grants under section 24 of the
15	United States Housing Act of 1937 (42 U.S.C.
16	1437v), where such standards are determined
17	to be cost effective by the Secretary of Housing
18	and Urban Development."; and
19	(B) in paragraph (2), by striking "Council
20	of American" and all that follows through
21	"90.1–1989')" and inserting "2000 Inter-
22	national Energy Conservation Code";
23	(2) in subsection (b)—
24	(A) by striking "1 year after the date of
25	the enactment of the Energy Policy Act of

1	1992" and inserting "September 30, 2003";
2	and
3	(B) by striking "CABO" and all that fol-
4	lows through "1989" and inserting "the 2000
5	International Energy Conservation Code"; and
6	(3) in subsection (e)—
7	(A) in the heading, by striking "MODEL
8	ENERGY CODE" and inserting "INTER-
9	NATIONAL ENERGY CONSERVATION
10	CODE"; and
11	(B) by striking "CABO" and all that fol-
12	lows through "1989" and inserting "the 2000
13	International Energy Conservation Code".
14	SEC. 639. ENERGY STRATEGY FOR HUD.
15	The Secretary of Housing and Urban Development
16	shall develop and implement an integrated strategy to re-
17	duce utility expenses through cost-effective energy con-
18	servation and efficiency measures and energy efficient de-
19	sign and construction of public and assisted housing. The
20	energy strategy shall include the development of energy
21	reduction goals and incentives for public housing agencies.
22	The Secretary shall submit a report to Congress, not later
23	than one year after the date of the enactment of this Act,
24	on the energy strategy and the actions taken by the De-
25	partment of Housing and Urban Development to monitor

1	the energy usage of public housing agencies and shall sub-
2	mit an update every two years thereafter on progress in
3	implementing the strategy.
4	TITLE VII—TRANSPORTATION
5	FUELS
6	Subtitle A—Alternative Fuel
7	Programs
8	SEC. 701. USE OF ALTERNATIVE FUELS BY DUAL-FUELED
9	VEHICLES.
10	Section 400AA(a)(3)(E) of the Energy Policy and
11	Conservation Act (42 U.S.C. 6374(a)(3)(E)) is amended
12	to read as follows:
13	"(E)(i) Dual-fueled vehicles acquired pursuant to this
14	section shall be operated on alternative fuels unless the
15	Secretary determines that an agency qualifies for a waiver
16	of such requirement for vehicles operated by the agency
17	in a particular geographic area where—
18	"(I) the alternative fuel otherwise required to
19	be used in the vehicle is not reasonably available to
20	retail purchasers of the fuel, as certified to the Sec-
21	retary by the head of the agency; or
22	"(II) the cost of the alternative fuel otherwise
23	required to be used in the vehicle is unreasonably
24	more expensive compared to gasoline, as certified to
25	the Secretary by the head of the agency.

1	"(ii) The Secretary shall monitor compliance with
2	this subparagraph by all such fleets and shall report annu-
3	ally to the Congress on the extent to which the require-
4	ments of this subparagraph are being achieved. The report
5	shall include information on annual reductions achieved
6	from the use of petroleum-based fuels and the problems,
7	if any, encountered in acquiring alternative fuels.".
8	SEC. 702. FUEL USE CREDITS.
9	(a) In General.—Section 312 of the Energy Policy
10	Act of 1992 (42 U.S.C. 13220) is amended to read as
11	follows:
12	"SEC. 312. FUEL USE CREDITS.
13	"(a) Allocation.—
14	"(1) The Secretary shall allocate one credit
15	under this section to a fleet or covered person for
16	each qualifying volume of alternative fuel or bio-
17	diesel purchased for use in an on-road motor vehicle
18	operated by the fleet that weighs more than 8,500
19	pounds gross vehicle weight rating.
20	"(2) No credits shall be allocated under this
21	section for purchase of an alternative fuel or bio-
22	diesel that is required by Federal or State law.
23	
	"(3) A fleet or covered person seeking a credit
24	"(3) A fleet or covered person seeking a credit under this section shall provide written documenta-

- 1 credit to such fleet or covered person under this sec-
- 2 tion.
- 3 "(b) USE.—At the request of a fleet or covered per-
- 4 son allocated a credit under subsection (a), the Secretary
- 5 shall, for the year in which the purchase of a qualifying
- 6 volume is made, treat that purchase as the acquisition of
- 7 one alternative fueled vehicle the fleet or covered person
- 8 is required to acquire under this title, title IV, or title V.
- 9 "(c) Treatment.—A credit provided to a fleet or
- 10 covered person under this section shall be considered a
- 11 credit under section 508.
- 12 "(d) Issuance of Rule.—Not later than 6 months
- 13 after the date of enactment of this section, the Secretary
- 14 shall issue a rule establishing procedures for the imple-
- 15 mentation of this section.
- 16 "(e) Definitions.—For the purposes of this sec-
- 17 tion—
- 18 "(1) the term 'biodiesel' means a diesel fuel
- 19 substitute produced from non-petroleum renewable
- 20 resources that meets the registration requirements
- for fuels and fuel additives established by the Envi-
- 22 ronmental Protection Agency under section 211 of
- 23 the Clean Air Act; and
- 24 "(2) the term 'qualifying volume' means—

1	"(A) in the case of biodiesel, when used as
2	a component of fuel containing at least 20 per-
3	cent biodiesel by volume, 450 gallons, or if the
4	Secretary determines by rule that the average
5	annual alternative fuel use in light duty vehicles
6	by fleets and covered persons exceeds 450 gal-
7	lons or gallon equivalents, the amount of such
8	average annual alternative fuel use; or
9	"(B) in the case of an alternative fuel, the
10	amount of such fuel determined by the Sec-
11	retary to have an equivalent energy content to
12	the amount of biodiesel defined as a qualifying
13	volume pursuant to subparagraph (A).".
14	(b) Table of Contents Amendment.—The table
15	of contents of the Energy Policy Act of 1992 is amended
16	by adding at the end of the items relating to title III the
17	following new item:
	"Sec. 312. Fuel use credits."
18	SEC. 703. NEIGHBORHOOD ELECTRIC VEHICLES.
19	Section 301 of the Energy Policy Act of 1992 (42
20	U.S.C. 13211) is amended—
21	(1) in paragraph (3), by striking "or a dual
22	fueled vehicle" and inserting ", a dual fueled vehicle,
23	or a neighborhood electric vehicle";
24	(2) by striking "and" at the end of paragraph

(13);

1	(3) by striking the period at the end of para-
2	graph (14) and inserting "; and; and
3	(4) by adding at the end the following:
4	"(15) the term 'neighborhood electric vehicle'
5	means a motor vehicle—
6	"(A) which meets the definition of a low-
7	speed vehicle, as such term is defined in part
8	571 of title 49, Code of Federal Regulations;
9	"(B) which meets the definition of a zero-
10	emission vehicle, as such term is defined in sec-
11	tion 86.1702–99 of title 40, Code of Federal
12	Regulations;
13	"(C) which meets the requirements of Fed-
14	eral Motor Vehicle Safety Standard No. 500;
15	and
16	"(D) which has a top speed of not greater
17	than 25 miles per hour.".
18	SEC. 704. CREDITS FOR MEDIUM AND HEAVY DUTY DEDI-
19	CATED VEHICLES.
20	Section 508 of the Energy Policy Act of 1992 (42
21	U.S.C. 13258) is amended by adding at the end the fol-
22	lowing:
23	"(e) Credit for Purchase of Medium and
24	HEAVY DUTY DEDICATED VEHICLES.—
25	"(1) Definitions.—In this subsection:

1	"(A) The term 'medium duty dedicated ve-
2	hicle' means a dedicated vehicle that has a
3	gross vehicle weight rating of more than 8,500
4	pounds but not more than 14,000 pounds.
5	"(B) The term 'heavy duty dedicated vehi-
6	cle' means a dedicated vehicle that has a gross
7	vehicle weight rating of more than 14,000
8	pounds.
9	"(2) Credits for medium duty vehicles.—
10	The Secretary shall issue 2 full credits to a fleet or
11	covered person under this title, if the fleet or covered
12	person acquires a medium duty dedicated vehicle.
13	"(3) Credits for heavy duty vehicles.—
14	The Secretary shall issue 3 full credits to a fleet or
15	covered person under this title, if the fleet or covered
16	person acquires a heavy duty dedicated vehicle.
17	"(4) Use of credits.—At the request of a
18	fleet or covered person allocated a credit under this
19	subsection, the Secretary shall, for the year in which
20	the acquisition of the dedicated vehicle is made,
21	treat that credit as the acquisition of 1 alternative

fueled vehicle that the fleet or covered person is re-

quired to acquire under this title.".

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# 1 SEC. 705. ALTERNATIVE FUEL INFRASTRUCTURE.

2	Section 508 of the Energy Policy Act of 1992 (42
3	U.S.C. 13258) is further amended by adding at the end
4	the following:
5	"(f) Credit for Investment in Alternative
6	FUEL INFRASTRUCTURE.—
7	"(1) Definitions.—In this subsection, the
8	term 'qualifying infrastructure' means—
9	"(A) equipment required to refuel or re-
10	charge alternative fueled vehicles;
11	"(B) facilities or equipment required to
12	maintain, repair, or operate alternative fueled
13	vehicles; and
14	"(C) such other activities the Secretary
15	considers to constitute an appropriate expendi-
16	ture in support of the operation, maintenance,
17	or further widespread adoption of or utilization
18	of alternative fueled vehicles.
19	"(2) Issuance of credits.—The Secretary
20	shall issue a credit to a fleet or covered person under
21	this title for investment in qualifying infrastructure
22	if the qualifying infrastructure is open to the general
23	public during regular business hours.
24	"(3) Amount.—For the purposes of credits
25	under this subsection—

1	"(A) 1 credit shall be equal to a minimum
2	investment of \$25,000 in cash or equivalent ex-
3	penditure, as determined by the Secretary; and
4	"(B) except in the case of a Federal or
5	State fleet, no part of the investment may be
6	provided by Federal or State funds.
7	"(4) Use of credits—At the request of a
8	fleet or covered person allocated a credit under this
9	subsection, the Secretary shall, for the year in which
10	the investment is made, treat that credit as the ac-
11	quisition of 1 alternative fueled vehicle that the fleet
12	or covered person is required to acquire under this
13	title.".
14	SEC. 706. INCREMENTAL COST ALLOCATION.
15	Section 303(c) of the Energy Policy Act of 1992 (42
16	U.S.C. 13212(c) is amended by striking "may" and insert-
17	ing "shall".
18	SEC. 707. REVIEW OF ALTERNATIVE FUEL PROGRAMS.
19	(a) In General.—Not later than 1 year after the
20	date of enactment of this section, the Secretary shall com-
21	plete a study to determine the effect that titles III, IV
22	and V of the Energy Policy Act of 1992 (42 U.S.C. 13211
23	et seq.) have had on the development of alternative fueled

24 vehicle technology, its availability in the market, and the

- 1 cost of light duty motor vehicles that are alternative fueled
- 2 vehicles.

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- 3 (b) Topics.—As part of such study, the Secretary
- 4 shall specifically identify—
- 5 (1) the number of alternative fueled vehicles acquired by fleets or covered persons required to acquire alternative fueled vehicles;
- 8 (2) the amount, by type, of alternative fuel actually used in alternative fueled vehicles acquired by
- 10 fleets or covered persons;
- 11 (3) the amount of petroleum displaced by the 12 use of alternative fuels in alternative fueled vehicles 13 acquired by fleets or covered persons;
  - (4) the cost of compliance with vehicle acquisition requirements by fleets or covered persons; and
  - (5) the existence of obstacles preventing compliance with vehicle acquisition requirements and increased use of alternative fuel in alternative fueled vehicles acquired by fleets or covered persons.
- 20 (c) Report.—Upon completion of the study, the Sec-
- 21 retary shall submit to the Congress a report that describes
- 22 the results of the study conducted under this section and
- 23 includes any recommendations of the Secretary for legisla-
- 24 tive or administrative changes concerning the alternative
- 25 fueled vehicle requirements under titles III, IV, and V of

- 1 the Energy Policy Act of 1992 (42 U.S.C. 13211 et seq.).
- 2 Such study shall be updated on a regular basis as deemed
- 3 necessary by the Secretary.

# 4 SEC. 708. HIGH OCCUPANCY VEHICLE EXCEPTION.

- Notwithstanding section 102(a)(1) of title 23, United
- 6 States Code, a State may permit a vehicle with fewer than
- 7 2 occupants to operate in high occupancy vehicle lanes if
- 8 such vehicle is a dedicated vehicle (as defined in section
- 9 301 of the Energy Policy Act of 1992 (42 U.S.C. 13211)).

# 10 SEC. 709. ALTERNATIVE COMPLIANCE AND FLEXIBILITY.

- 11 (a) Alternative Compliance.—Title V of the En-
- 12 ergy Policy Act of 1992 is amended by adding at the end
- 13 the following:

## 14 "SEC. 515. ALTERNATIVE COMPLIANCE.

- 15 "(a) Application for Waiver.—Any covered per-
- 16 son subject to the requirements of section 501 and any
- 17 State subject to the requirement of section 507(o) may
- 18 petition the Secretary for a waiver of the applicable re-
- 19 quirements of section 501 or 507(o).
- 20 "(b) Grant of Waiver.—The Secretary may grant
- 21 a waiver of the requirements of section 501 or 507(o)
- 22 upon a showing that the fleet owned, operated, leased, or
- 23 otherwise controlled by the State or covered person—
- 24 "(1) will achieve a reduction in its annual con-
- 25 sumption of petroleum fuels equal to the reduction

1	in consumption of petroleum that would result from
2	compliance with section 501 or 507(o); and
3	"(2) is in compliance with all applicable vehicle
4	emission standards established by the Administrator
5	under the Clean Air Act.
6	"(c) REVOCATION OF WAIVER.—The Secretary shall
7	revoke any waiver granted under this section if the State
8	or covered person fails to comply with the requirements
9	of subsection (b).".
10	(b) Credit for Hybrid Vehicles, Dedicated Al-
11	TERNATIVE FUEL VEHICLES, AND INFRASTRUCTURE.—
12	Section 507 of the Energy Policy Act of 1992 (42 U.S.C.
13	13258) (as amended by section 705) is amended by adding
14	at the end the following:
15	"(r) Credits for New Qualified Hybrid Motor
16	Vehicles.—
17	"(1) Definitions.—In this subsection:
18	"(A) 2000 MODEL YEAR CITY FUEL EFFI-
19	CIENCY.—The term '2000 model year city fuel
20	efficiency', with respect to a motor vehicle,
21	means fuel efficiency determined in accordance
22	with the following tables:
23	(i) In the case of a passenger auto-
24	mobile:

	"If venicle inertia weight class is: I he 2000 model y	
	fuel effic	•
	1,500 or 1,750 lbs	43.7 mpg
	2,000 lbs	38.3 mpg
	2,250 lbs	34.1 mpg
	2,500 lbs	30.7 mpg
	2,750 lbs	27.9 mpg
	3,000 lbs	25.6 mpg
	3,500 lbs	22.0 mpg
	4,000 lbs	19.3 mpg
	4,500 lbs	17.2 mpg
	5,000 lbs	15.5 mpg
	5,500 lbs	14.1 mpg
	6,000 lbs	12.9 mpg
	6,500 lbs	11.9 mpg
	7,000 to 8,500 lbs	11.1 mpg.
	"(ii) In the case of a light truck  "If vehicle inertia weight class is: The 2000 model y fuel effic  1,500 or 1,750 lbs 2,000 lbs 2,250 lbs 2,500 lbs 3,000 lbs 3,500 lbs 4,000 lbs 4,500 lbs 5,500 lbs 5,500 lbs 6,000 lbs	ear city
	6,500 lbs	12.8 mpg
	7,000 to 8,500 lbs	12.0 mpg.
2	"(B) Administrator.—The term "	
3	istrator' means the Administrator of th	e Envi-
4	ronmental Protection Agency.	
5	"(C) Energy storage device	E.—The
6	term 'energy storage device' means an o	onboard
7	rechargeable energy storage system or	similar
8	storage device.	

1	"(D) FUEL EFFICIENCY.—The term 'fuel
2	efficiency' means the percentage increased fuel
3	efficiency specified in table 1 in paragraph
4	(2)(C) over the average 2000 model year city
5	fuel efficiency of vehicles in the same weight
6	class.
7	"(E) MAXIMUM AVAILABLE POWER.—The
8	term 'maximum available power', with respect
9	to a new qualified hybrid motor vehicle that is
10	a passenger vehicle or light truck, means the
11	quotient obtained by dividing—
12	"(i) the maximum power available
13	from the electrical storage device of the
14	new qualified hybrid motor vehicle, during
15	a standard 10-second pulse power or equiv-
16	alent test; by
17	"(ii) the sum of—
18	"(I) the maximum power de-
19	scribed in clause (i); and
20	"(II) the net power of the inter-
21	nal combustion or heat engine, as de-
22	termined in accordance with stand-
23	ards established by the Society of
24	Automobile Engineers.

1	"(F) MOTOR VEHICLE.—The term 'motor
2	vehicle' has the meaning given the term in sec-
3	tion 216 of the Clean Air Act (42 U.S.C.
4	7550).
5	"(G) New qualified hybrid motor ve-
6	HICLE.—The term 'new qualified hybrid motor
7	vehicle' means a motor vehicle that—
8	"(i) draws propulsion energy from
9	both—
10	"(I) an internal combustion en-
11	gine (or heat engine that uses com-
12	bustible fuel); and
13	"(II) an energy storage device;
14	"(ii) in the case of a passenger auto-
15	mobile or light truck—
16	"(I) in the case of a 2001 or
17	later model vehicle, receives a certifi-
18	cate of conformity under the Clean
19	Air Act (42 U.S.C. 7401 et seq.) and
20	produces emissions at a level that is
21	at or below the standard established
22	by a qualifying California standard
23	described in section 243(e)(2) of the
24	Clean Air Act (42 U.S.C. 7583(e)(2))
25	for that make and model year; and

1	"(II) in the case of a $2004$ or
2	later model vehicle, is certified by the
3	Administrator as producing emissions
4	at a level that is at or below the level
5	established for Bin 5 vehicles in the
6	Tier 2 regulations promulgated by the
7	Administrator under section 202(i) of
8	the Clean Air Act (42 U.S.C. 7521(i))
9	for that make and model year vehicle;
10	and
11	"(iii) employs a vehicle braking sys-
12	tem that recovers waste energy to charge
13	an energy storage device.
14	"(H) Vehicle inertia weight class.—
15	The term 'vehicle inertia weight class' has the
16	meaning given the term in regulations promul-
17	gated by the Administrator for purposes of the
18	administration of title II of the Clean Air Act
19	(42 U.S.C. 7521 et seq.).
20	"(2) Allocation.—
21	"(A) IN GENERAL.—The Secretary shall
22	allocate a partial credit to a fleet or covered
23	person under this title if the fleet or person ac-
24	quires a new qualified hybrid motor vehicle that

1

is eligible to receive a credit under each of the

2	tables in subparagraph (C).
3	"(B) Amount.—The amount of a partial
4	credit allocated under subparagraph (A) for a
5	vehicle described in that subparagraph shall be
6	equal to the sum of—
7	"(i) the partial credits determined
8	under table 1 in subparagraph (C); and
9	"(ii) the partial credits determined
10	under table 2 in subparagraph (C).
11	"(C) Tables.—The tables referred to in
12	subparagraphs (A) and (B) are as follows:
	"Table 1
	"Partial credit for increased fuel efficiency:  At least 125% but less than 150% of 2000 model year city fuel
	efficiency 0.14 At least 150% but less than 175% of 2000 model year city fuel
	efficiency
	·
	At least 200% but less than 225% of 2000 model year city fuel efficiency
	efficiency
	efficiency
	efficiency
	efficiency
	efficiency
	efficiency
	efficiency
113	efficiency

1	under this subsection, the Secretary shall, for
2	the year in which the acquisition of the quali-
3	fied hybrid motor vehicle is made, treat that
4	credit as the acquisition of 1 alternative fueled
5	vehicle that the fleet or covered person is re-
6	quired to acquire under this title.
7	"(3) Regulations.—The Secretary shall pro-
8	mulgate regulations under which any Federal fleet
9	that acquires a new qualified hybrid motor vehicle
10	will receive partial credits determined under the ta-
11	bles contained in paragraph (2)(C) for purposes of
12	meeting the requirements of section 303.
13	"(s) Credit for Substantial Contribution To-
14	WARDS USE OF DEDICATED VEHICLES IN NONCOVERED
15	FLEETS.—
16	"(1) Definitions.—In this subsection:
17	"(A) DEDICATED VEHICLE.—The term
18	'dedicated vehicle' includes—
19	"(i) a light, medium, or heavy duty
20	vehicle; and
21	"(ii) a neighborhood electric vehicle.
22	"(B) Medium or heavy duty vehi-
23	CLE.—The term 'medium or heavy duty vehicle'
24	includes a vehicle that—

1	"(i) operates solely on alternative fuel;
2	and
3	"(ii)(I) in the case of a medium duty
4	vehicle, has a gross vehicle weight rating of
5	more than 8,500 pounds but not more
6	than 14,000 pounds; or
7	"(II) in the case of a heavy duty
8	vehicle, has a gross vehicle weight rat-
9	ing of more than 14,000 pounds.
10	"(C) Substantial contribution.—The
11	term 'substantial contribution' (equal to 1 full
12	credit) means not less than \$15,000 in cash or
13	in kind services, as determined by the Sec-
14	retary.
15	"(2) Issuance of Credits.—The Secretary
16	shall issue a credit to a fleet or covered person under
17	this title if the fleet or person makes a substantial
18	contribution toward the acquisition and use of dedi-
19	cated vehicles by a person that owns, operates,
20	leases, or otherwise controls a fleet that is not cov-
21	ered by this title.
22	"(3) Multiple credits for medium and
23	HEAVY DUTY DEDICATED VEHICLES.—The Secretary
24	shall issue 2 full credits to a fleet or covered person

1	under this title if the fleet or person acquires a me-
2	dium or heavy duty dedicated vehicle.
3	"(4) Use of credits.—At the request of a
4	fleet or covered person allocated a credit under this
5	subsection, the Secretary shall, for the year in which
6	the acquisition of the dedicated vehicle is made,
7	treat that credit as the acquisition of 1 alternative
8	fueled vehicle that the fleet or covered person is re-
9	quired to acquire under this title.
10	"(5) Limitation.—Per vehicle credits acquired
11	under this subsection shall not exceed the per vehicle
12	credits allowed under this section to a fleet for quali-
13	fying vehicles in each of the weight categories (light,
14	medium, or heavy duty).
15	"(t) Credit for Substantial Investment in Al-
16	TERNATIVE FUEL INFRASTRUCTURE.—
17	"(1) Definitions.—In this section, the term
18	'qualifying infrastructure' means—
19	"(A) equipment required to refuel or re-
20	charge alternative fueled vehicles;
21	"(B) facilities or equipment required to
22	maintain, repair, or operate alternative fueled
23	vehicles;
24	"(C) training programs, educational mate-
25	rials, or other activities necessary to provide in-

1	formation regarding the operation, mainte-
2	nance, or benefits associated with alternative
3	fueled vehicles; and
4	"(D) such other activities the Secretary
5	considers to constitute an appropriate expendi-
6	ture in support of the operation, maintenance,
7	or further widespread adoption of or utilization
8	of alternative fueled vehicles.
9	"(2) Issuance of credits.—The Secretary
10	shall issue a credit to a fleet or covered person under
11	this title for investment in qualifying infrastructure
12	if the qualifying infrastructure is open to the general
13	public during regular business hours.
14	"(3) Amount.—For the purposes of credits
15	under this subsection—
16	"(A) 1 credit shall be equal to a minimum
17	investment of \$25,000 in cash or in kind serv-
18	ices, as determined by the Secretary; and
19	"(B) except in the case of a Federal or
20	State fleet, no part of the investment may be
21	provided by Federal or State funds.
22	"(4) Use of credits.—At the request of a
23	fleet or covered person allocated a credit under this
24	subsection, the Secretary shall, for the year in which
25	the investment is made, treat that credit as the ac-

1	quisition of 1 alternative fueled vehicle that the fleet
2	or covered person is required to acquire under this
3	title.".
4	(c) Lease Condensate Fuels.—Section 301 of the
5	Energy Policy Act of 1992 (42 U.S.C. 13211) is amend-
6	ed—
7	(1) in paragraph (2), by inserting "mixtures
8	containing 50 percent or more by volume of lease
9	condensate or fuels extracted from lease conden-
10	sate;" after "liquified petroleum gas;";
11	(2) in paragraph (15), by inserting "mixtures
12	containing 50 percent or more by volume of lease
13	condensate or fuels extracted from lease conden-
14	sate;" after "liquified petroleum gas;"; and
15	(3) by adding at the end the following:
16	"(16) the term 'lease condensate' means a mix-
17	ture, primarily of pentanes and heavier hydro-
18	carbons, which is recovered as a liquid from natural
19	gas in lease separation facilities.".
20	Subtitle B—Automobile Fuel
21	Economy
22	SEC. 711. AUTOMOBILE FUEL ECONOMY STANDARDS.
23	(a) Title 49 Amendment.—Section 32902(f) of
24	title 49, United States Code, is amended to read as fol-
25	lows:

"(f) Considerations.—When deciding maximum 1 2 feasible average fuel economy under this section, the Secretary of Transportation shall consider the following mat-3 4 ters: "(1) technological feasibility; 5 6 "(2) economic practicability; "(3) the effect of other motor vehicle standards 7 of the Government on fuel economy; 8 9 "(4) the need of the United States to conserve 10 energy; 11 "(5) the effects of fuel economy standards on 12 motor vehicle and passenger safety; and 13 "(6) the effects of compliance with average fuel economy standards on levels of employment in the 14 15 United States.". 16 (b) AUTHORITY.—Section CLARIFICATION OF 32902(b) of title 49, United States Code, is amended by 18 inserting before the period at the end the following: "or 19 such other number as the Secretary prescribes under sub-20 section (c)". 21 (c) Environmental Assessment.—When issuing 22 final regulations setting forth increased average fuel econ-23 omy standards under section 32902(a) or section 32902(c) of title 49, United States Code, the Secretary of Transpor-

tation shall also issue an environmental assessment of the

- 1 effects of the increased standards on the environment
- 2 under the National Environmental Policy Act of 1969 (42)
- 3 U.S.C. 4321 et seq.).
- 4 (d) Authorization of Appropriations.—For the
- 5 purposes of this section, there are authorized to be appro-
- 6 priated to the Secretary of Transportation \$5,000,000 for
- 7 each of fiscal years 2004 through 2008.
- 8 SEC. 712. DUAL-FUELED AUTOMOBILES.
- 9 (a) Manufacturing Incentives.—Section 32905
- 10 of title 49, United States Code, is amended—
- 11 (1) in subsections (b) and (d), by striking
- "1993–2004" and inserting "1993–2008";
- 13 (2) in subsection (f), by striking "2001" and
- 14 inserting "2005";
- 15 (3) in subsection (f)(1), by striking "2004" and
- inserting "2008"; and
- 17 (4) in subsection (g), by striking "September
- 18 30, 2000" and inserting "September 30, 2004".
- 19 (b) Maximum Fuel Economy Increase.—Sub-
- 20 section (a)(1) of section 32906 of title 49, United States
- 21 Code, is amended—
- 22 (1) in subparagraph (A), by striking "the model
- years 1993–2004" and inserting "model years
- 24 1993–2008"; and

- 1 (2) in subparagraph (B), by striking "the model
- 2 years 2005–2008" and inserting "model years
- 3 2009–2012".
- 4 SEC. 713. FEDERAL FLEET FUEL ECONOMY.
- 5 Section 32917 of title 49, United States Code, is
- 6 amended to read as follows:
- 7 "§ 32917. Standards for executive agency automobiles
- 8 "(a) Baseline Average Fuel Economy.—The
- 9 head of each executive agency shall determine, for all auto-
- 10 mobiles in the agency's fleet of automobiles that were
- 11 leased or bought as a new vehicle in fiscal year 1999, the
- 12 average fuel economy for such automobiles. For the pur-
- 13 poses of this section, the average fuel economy so deter-
- 14 mined shall be the baseline average fuel economy for the
- 15 agency's fleet of automobiles.
- 16 "(b) Increase of Average Fuel Economy.—The
- 17 head of an executive agency shall manage the procurement
- 18 of automobiles for that agency in such a manner that not
- 19 later than September 30, 2005, the average fuel economy
- 20 of the new automobiles in the agency's fleet of automobiles
- 21 is not less than 3 miles per gallon higher than the baseline
- 22 average fuel economy determined under subsection (a) for
- 23 that fleet.
- 24 "(c) Calculation of Average Fuel Economy.—
- 25 Average fuel economy shall be calculated for the purposes

- 1 of this section in accordance with guidance which the Sec-
- 2 retary of Transportation shall prescribe for the implemen-
- 3 tation of this section.
- 4 "(d) Definitions.—In this section:
- 5 "(1) The term 'automobile' does not include
- 6 any vehicle designed for combat-related missions,
- 7 law enforcement work, or emergency rescue work.
- 8 "(2) The term 'executive agency' has the mean-
- 9 ing given that term in section 105 of title 5.
- 10 "(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,
- 14 after September 30, 1999.".

#### 15 SEC. 714. RAILROAD EFFICIENCY.

- 16 (a) Establishment.—The Secretary of Energy, in
- 17 cooperation with the Secretary of Transportation and the
- 18 Administrator of the Environmental Protection Agency,
- 19 shall establish a cost-shared, public-private research part-
- 20 nership to develop and demonstrate railroad locomotive
- 21 technologies that increase fuel economy, reduce emissions,
- 22 and lower costs of operation. Such partnership shall in-
- 23 volve the Federal Government, railroad carriers, loco-
- 24 motive manufacturers and equipment suppliers, and the
- 25 Association of American Railroads.

- 1 (b) AUTHORIZATION OF APPROPRIATIONS.— For the
- 2 purposes of this section, there are authorized to be appro-
- 3 priated to the Secretary of Energy \$25,000,000 for fiscal
- 4 year 2004, \$35,000,000 for fiscal year 2005, and
- 5 \$50,000,000 for fiscal year 2006.

#### 6 SEC. 715. REDUCTION OF ENGINE IDLING IN HEAVY-DUTY

- 7 **VEHICLES.**
- 8 (a) IDENTIFICATION.—Not later than 180 days after
- 9 the date of enactment of this section, the Secretary of En-
- 10 ergy, in consultation with the Secretary of Transportation
- 11 and the Administrator of the Environmental Protection
- 12 Agency, shall commence a study to analyze the potential
- 13 fuel savings and emissions reductions resulting from use
- 14 of idling reduction technologies as they are applied to
- 15 heavy-duty vehicles. Upon completion of the study, the
- 16 Secretary of Energy shall, by rule, certify those idling re-
- 17 duction technologies with the greatest economic or tech-
- 18 nical feasibility and the greatest potential for fuel savings
- 19 and emissions reductions, and publish a list of such cer-
- 20 tified technologies in the Federal Register.
- 21 (b) Vehicle Weight Exemption.—Section 127(a)
- 22 of Title 23, United States Code, is amended by adding
- 23 at the end the following:
- 24 "In order to promote reduction of fuel use and emissions
- 25 due to engine idling, the maximum gross vehicle weight

- 1 limit and the axle weight limit for any motor vehicle
- 2 equipped with an idling reduction technology certified by
- 3 the U.S. Department of Energy will be increased by an
- 4 amount necessary to compensate for the additional weight
- 5 of the idling reduction system, provided that the weight
- 6 increase shall be no greater than 400 pounds."
- 7 (c) Definitions.—For the purposes of this section:
- 8 (1) The term "idling reduction technology"
- 9 means a device or system of devices utilized to re-
- duce long-duration idling of a vehicle.
- 11 (2) The term "heavy-duty vehicle" means a ve-
- hicle that has a gross vehicle weight rating greater
- than 8,500 pounds and is powered by a diesel en-
- 14 gine.
- 15 (3) The term "long-duration idling" means the
- operation of a main drive engine, for a period great-
- er than 30 consecutive minutes, where the main
- drive engine is not engaged in gear. Such term does
- not apply to routine stoppages associated with traf-
- fic movement or congestion.

1	TITLE VIII—HYDROGEN	
2	Subtitle A—Basic Research	
3	Programs	
4	SEC. 801. SHORT TITLE.	
5	This subtitle may be cited as the "George E. Brown,	
6	Jr. and Robert S. Walker Hydrogen Future Act of 2003".	
7	SEC. 802. MATSUNAGA ACT AMENDMENT.	
8	The Spark M. Matsunaga Hydrogen Research, Devel-	
9	opment, and Demonstration Act of 1990 (42 U.S.C.	
10	12401 et seq.) is amended by striking sections 102	
11	through 109 and inserting the following:	
12	"SEC. 102. DEFINITIONS.	
13	"In this Act—	
14	"(1) the term 'advisory committee' means the	
15	Hydrogen and Fuel Cell Technical Advisory Com-	
16	mittee established under section 107.	
17	"(2) the term 'Department' means the Depart-	
18	ment of Energy.	
19	"(3) the term 'fuel cell' means a device that di-	
20	rectly converts the chemical energy of a fuel into	
21	electricity by an electrochemical process.	
22	"(4) the term 'infrastructure' means the equip-	
23	ment, systems, or facilities used to produce, dis-	
24	tribute, deliver, or store hydrogen.	

1	"(5) the term 'Secretary' means the Secretary
2	of Energy.
3	"SEC. 103. HYDROGEN RESEARCH AND DEVELOPMENT.
4	"(a) In General.—The Secretary shall conduct a
5	research and development program on technologies related
6	to the production, distribution, storage, and use of hydro-
7	gen energy, fuel cells, and related infrastructure.
8	"(b) GOAL.—The goal of such program shall be to
9	enable the safe, economic, and environmentally sound use
10	of hydrogen energy, fuel cells, and related infrastructure
11	for transportation, commercial, industrial, residential, and
12	electric power generation applications.
13	"(c) Focus.—In carrying out activities under this
14	section, the Secretary shall focus on critical technical
15	issues including, but not limited to—
16	"(1) the production of hydrogen from diverse
17	energy sources, with emphasis on cost-effective pro-
18	duction from renewable energy sources;
19	"(2) the delivery of hydrogen, including safe de-
20	livery in fueling stations and use of existing hydro-
21	gen pipelines;
22	"(3) the storage of hydrogen, including storage
23	of hydrogen in surface transportation;

1	"(4) fuel cell technologies for transportation,	
2	stationary and portable applications, with emphasis	
3	on cost-reduction of fuel cell stacks; and	
4	"(5) the use of hydrogen energy and fuel cells,	
5	including use in—	
6	"(A) isolated villages, islands, and areas in	
7	which other energy sources are not available of	
8	are very expensive; and	
9	"(B) foreign markets, particularly where	
10	an energy infrastructure is not well developed.	
11	"(d) Codes and Standards.—The Secretary shall	
12	facilitate the development of domestic and international	
13	codes and standards and seek to resolve other critical reg-	
14	ulatory and technical barriers preventing the introduction	
15	of hydrogen energy and fuel cells into the marketplace.	
16	"(e) Solicitation.—The Secretary shall carry out	
17	the research and development activities authorized under	
18	this section through solicitation of proposals, and evalua-	
19	tion using competitive merit review.	
20	"(f) Cost Sharing.—The Secretary shall require a	
21	commitment from non-Federal sources of at least 20 per-	
22	cent of the cost of proposed research and development	
23	projects. The Secretary may reduce or eliminate the cost	
24	sharing requirement—	

- 1 "(1) if the Secretary determines that the re-2 search and development is of a basic or fundamental 3 nature, or
- "(2) for technical analyses, outreach activities,
  and educational programs that the Secretary does
  not expect to result in a marketable product.

## 7 "SEC. 104. DEMONSTRATION PROGRAMS.

- 8 "(a) Requirement.—In conjunction with activities
- 9 conducted under section 103, the Secretary shall conduct
- 10 demonstrations of hydrogen energy and fuel cell tech-
- 11 nologies in order to evaluate the commercial potential of
- 12 such technologies.
- 13 "(b) Solicitation.—The Secretary shall carry out
- 14 the demonstrations authorized under this section through
- 15 solicitation of proposals, and evaluation using competitive
- 16 merit review.
- 17 "(c) Cost Sharing.—The Secretary shall require a
- 18 commitment from non-Federal sources of at least 50 per-
- 19 cent of the costs directly relating to a demonstration
- 20 project under this section. The Secretary may reduce such
- 21 non-Federal requirement if the Secretary determines that
- 22 the reduction is appropriate considering the technological
- 23 risks involved in the project.
- 24 "SEC. 105. TECHNOLOGY TRANSFER.
- 25 "The Secretary shall conduct programs to—

1	"(1) transfer critical hydrogen energy and fue
2	cell technologies to the private sector in order to
3	promote wider understanding of such technologies
4	and wider use of research progress under this Act
5	"(2) to accelerate wider application of hydrogen
6	energy and fuel cell technologies in foreign countries
7	in order to increase the global market for the tech-
8	nologies and foster global development without
9	harmful environmental effects;
10	"(3) foster the exchange of generic, nonpropri-
11	etary information and technology developed pursuant
12	to this Act, among industry, academia, and the Fed-
13	eral agencies; and
14	"(4) inventory and assess the technical and
15	commercial viability of technologies related to pro-
16	duction, distribution, storage, and use of hydrogen
17	energy and fuel cells.
18	"SEC. 106. COORDINATION AND CONSULTATION.
19	"The Secretary shall have overall management re-
20	sponsibility for carrying out programs under this Act. In
21	carrying out such programs, the Secretary—
22	"(1) shall establish a central point for the co-
23	ordination of all hydrogen energy and fuel cell re-
24	search, development, and demonstration activities of

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the Department;

"(2) in carrying out the Secretary's authorities
pursuant to this Act, shall consult with other Federal agencies as appropriate, and may obtain the assistance of any Federal agency, on a reimbursable
basis or otherwise and with the consent of such
agency;

"(3) shall attempt to ensure that activities under this Act do not unnecessarily duplicate any available research and development results or displace or compete with privately funded hydrogen and fuel cell energy activities.

### 12 "SEC. 107. ADVISORY COMMITTEE.

- 13 "(a) Establishment.—There is hereby established
- 14 the Hydrogen and Fuel Cell Technical Advisory Com-
- 15 mittee, to advise the Secretary on the programs under this
- 16 Act.

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- 17 "(b) Membership.—The advisory committee shall be
- 18 comprised of not fewer than 12 nor more than 25 mem-
- 19 bers appointed by the Secretary based on their technical
- 20 and other qualifications from domestic industry, auto-
- 21 makers, universities, professional societies, Federal labora-
- 22 tories, financial institutions, and environmental and other
- 23 organizations as the Secretary deems appropriate. The ad-
- 24 visory committee shall have a chairperson, who shall be
- 25 elected by the members from among their number.

1	"(c) Terms.—Members of the advisory	committee
2	shall be appointed for terms of 3 years, with	each term

- 3 to begin not later than 3 months after the date of enact-
- 4 ment of the Energy Policy Act of 2003, except that one-
- 5 third of the members first appointed shall serve for 1 year,
- 6 and one-third of the members first appointed shall serve
- 7 for 2 years, as designated by the Secretary at the time
- 8 of appointment.
- 9 "(d) Review.—The advisory committee shall review
- 10 and make any necessary recommendations to the Sec-
- 11 retary on—
- 12 "(1) implementation and conduct of programs
- under this Act;
- 14 "(2) economic, technological, and environmental
- 15 consequences of the deployment of technologies re-
- lated to production, distribution, storage, and use of
- 17 hydrogen energy, and fuel cells;
- 18 "(3) means for resolving barriers to imple-
- menting hydrogen and fuel cell technologies; and
- 20 "(4) the coordination plan and any updates
- 21 thereto prepared by the Secretary pursuant to sec-
- tion 108.
- "(e) Response.—The Secretary shall consider any
- 24 recommendations made by the advisory committee, and
- 25 shall provide a response to the advisory committee within

- 1 30 days after receipt of such recommendations. Such re-
- 2 sponse shall either describe the implementation of the ad-
- 3 visory committee's recommendations or provide an expla-
- 4 nation of the reasons that any such recommendations will
- 5 not be implemented.
- 6 "(f) Support.—The Secretary shall provide such
- 7 staff, funds and other support as may be necessary to en-
- 8 able the advisory committee to carry out its functions. In
- 9 carrying out activities pursuant to this section, the advi-
- 10 sory committee may also obtain the assistance of any Fed-
- 11 eral agency, on a reimbursable basis or otherwise and with
- 12 the consent of such agency.
- 13 "SEC. 108. COORDINATION PLAN.
- 14 "(a) Plan.—The Secretary, in consultation with
- 15 other Federal agencies, shall prepare and maintain on an
- 16 ongoing basis a comprehensive plan for activities under
- 17 this Act.
- 18 "(b) DEVELOPMENT.—In developing such plan, the
- 19 Secretary shall—
- 20 "(1) consider the guidance of the National Hy-
- 21 drogen Energy Roadmap published by the Depart-
- ment in November 2002 and any updates thereto;
- "(2) consult with the advisory committee;
- 24 "(3) consult with interested parties from do-
- 25 mestic industry, automakers, universities, profes-

1	sional societies, Federal laboratories, financial insti-
2	tutions, and environmental and other organizations
3	as the Secretary deems appropriate.
4	"(c) Contents.—At a minimum, the plan shall pro-
5	vide—
6	"(1) an assessment of the effectiveness of the
7	programs authorized under this Act, including a
8	summary of recommendations of the advisory com-
9	mittee for improvements in such programs;
10	"(2) a description of proposed research, devel-
11	opment, and demonstration activities planned by the
12	Department for the next five years;
13	"(3) a description of the role Federal labora-
14	tories, institutions of higher education, small busi-
15	nesses, and other private sector firms are expected
16	to play in such programs;
17	"(4) cost and performance milestones that will
18	be used to evaluate the programs for the next five
19	years; and
20	"(5) any significant technical, regulatory, and
21	other hurdles that stand in the way of achieving
22	such cost and performance milestones, and how the
23	programs will address those hurdles; and
24	"(6) to the extent practicable, an analysis of
25	Federal, State, local, and private sector hydrogen re-

- 1 search, development, and demonstration activities to 2 identify areas for increased intergovernmental and 3 private-public sector collaboration. "(d) REPORT.—Not later than January 1, 2005, and 4 5 biennially thereafter, the Secretary shall transmit to Congress the comprehensive plan developed for the programs 6 authorized under this Act, or any updates thereto. 7 8 "SEC. 109. AUTHORIZATION OF APPROPRIATIONS. 9 "There are authorized to be appropriated to carry out 10 the purposes of this Act— 11 "(1) such sums as may be necessary for fiscal 12 years 1992 through 2003; 13 "(2) \$105,000,000 for fiscal year 2004; "(3) \$150,000,000 for fiscal year 2005; 14 15 "(4) \$175,000,000 for fiscal year 2006; "(5) \$200,000,000 for fiscal year 2007; and 16 17 "(6) \$225,000,000 for fiscal year 2008.". 18 SEC. 803. HYDROGEN TRANSPORTATION AND FUEL INITIA-19 TIVE. 20 (a) Vehicle Technologies.—The Secretary shall 21 carry out a research, development, demonstration, and 22 commercial application program on advanced hydrogenpowered vehicle technologies. Such program shall ad-24 dress—
- 25 (1) engine and emission control systems;

1	(2) energy storage, electric propulsion, and hy-
2	brid systems;
3	(3) automotive materials;
4	(4) hydrogen-carrier fuels; and
5	(5) other advanced vehicle technologies.
6	(b) Hydrogen Fuel Initiative.—In coordination
7	with the program authorized in subsection (a), the Sec-
8	retary of Energy, in partnership with the private sector,
9	shall conduct a research, development, demonstration and
10	commercial application program designed to enable the
11	rapid and coordinated introduction of hydrogen-fueled ve-
12	hicles and associated infrastructure into commerce. Such
13	program shall address—
14	(1) production of hydrogen from diverse energy
15	resources, including—
16	(A) renewable energy resources;
17	(B) fossil fuels, in conjunction with carbon
18	capture and sequestration;
19	(C) hydrogen-carrier fuels; and
20	(D) nuclear energy;
21	(2) delivery of hydrogen or hydrogen-carrier
22	fuels, including—
23	(A) transmission by pipeline and other dis-
24	tribution methods; and

1	(B) safe, convenient, and economic refuel-
2	ing of vehicles, either at central refueling sta-
3	tions or through distributed on-site generation;
4	(3) storage of hydrogen or hydrogen-carrier
5	fuels, including development of materials for safe
6	and economic storage in gaseous, liquid or solid
7	forms at refueling facilities or onboard vehicles;
8	(4) development of advanced vehicle tech-
9	nologies, such as efficient fuel cells and direct hydro-
10	gen combustion engines, and related component
11	technologies such as advanced materials and control
12	systems; and
13	(5) development of necessary codes, standards,
14	and safety practices to accompany the production,
15	distribution, storage and use of hydrogen or hydro-
16	gen-carrier fuels in transportation.
17	(c) Matsunaga Act.—In carrying out programs and
18	projects under subsections (a) and (b), the Secretary shall
19	ensure that such programs and projects are consistent
20	with, and do not unnecessarily duplicate, activities carried
21	out under the programs authorized under the Spark M.
22	Matsunaga Hydrogen Research, Development, and Dem-
23	onstration Act of 1990 (42 U.S.C. 12401 et seq.).
24	(d) Advisory Committee.—The Hydrogen and
25	Fuel Cell Technical Advisory Committee authorized under

1	section 107 of the Spark M. Matsunaga Hydrogen Re-
2	search, Development, and Demonstration Act of 1990 (42
3	U.S.C. 12408), as amended in this title, shall also advise
4	the Secretary on the programs and activities carried out
5	under this section.
6	(e) Solicitation.—The Secretary shall carry out
7	the programs authorized under this section through solici-
8	tation of proposals, and evaluation using competitive merit
9	review.
10	(f) Cost Sharing.—The Secretary shall require a
11	commitment from non-Federal sources of at least 50 per-
12	cent of the costs directly relating to a demonstration
13	project under this section. The Secretary may reduce such
14	non-Federal requirement if the Secretary determines that
15	the reduction is appropriate considering the technological
16	risks involved in the project.
17	(g) Authorization of Appropriations.—For the
18	purposes of this section, there are authorized to be appro-
19	priated to the Secretary—
20	(1) for activities pursuant to subsection (a), to
21	remain available until expended—
22	(A) \$100,000,000 for each of fiscal years
23	2004 and 2005;
24	(B) \$110,000,000 for each of fiscal years
25	2006 and 2007; and

1	(C) $$120,000,000$ for fiscal year 2008; and
2	(2) for activities pursuant to subsection (b), to
3	remain available until expended—
4	(A) \$125,000,000 for fiscal year 2004;
5	(B) \$150,000,000 for fiscal year 2005;
6	(C) $$175,000,000$ for fiscal year 2006; and
7	(D) $$200,000,000$ for each of fiscal years
8	2007 and 2008.
9	SEC. 804. INTERAGENCY TASK FORCE AND COORDINATION
10	PLAN.
11	(a) Establishment.—Not later than 120 days after
12	the date of enactment of this Act, the Secretary shall es-
13	tablish an interagency task force to coordinate Federal hy-
14	drogen and fuel cell energy activities.
15	(b) Composition.—The task force shall be chaired
16	by a designee of the Secretary, and shall include represent-
17	atives of—
18	(1) the Office of Science and Technology Policy;
19	(2) the Department of Transportation;
20	(3) the Department of Defense;
21	(4) the Department of Commerce (including the
22	National Institute for Standards and Technology);
23	(5) the Environmental Protection Agency;
24	(6) the National Aeronautics and Space Admin-
25	istration;

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1	(7) the Department of State; and
2	(8) other Federal agencies as the Director con-
3	siders appropriate.
4	(c) COORDINATION PLAN.—The task force shall pre-
5	pare a comprehensive coordination plan for Federal hydro-
6	gen and fuel cell energy activities, which shall include a
7	summary of such activities.
8	(d) REPORT.—Not later than one year after it is es-
9	tablished, the task force shall report to Congress on the
10	coordination plan in subsection (c) and on the interagency
11	coordination of Federal hydrogen and fuel cell energy ac-
12	tivities.
13	SEC. 805. REVIEW BY THE NATIONAL ACADEMIES.
14	Not later than two years after the date of enactment
15	of this Act, and every four years thereafter, the Secretary
16	shall enter into a contract with the National Academies.
17	Such contract shall require the National Academies to per-
18	form a review of the progress made through Federal hy-
19	drogen and fuel cell energy programs and activities, in-
20	cluding the need for modified or additional programs, and
21	to report to the Congress on the results of such review.

There are authorized to be appropriated to the Secretary

such sums as may be necessary to carry out the require-

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# **Subtitle B—Demonstration** 1 **Programs** 2 3 SEC. 811. DEFINITIONS. For the purposes of this subtitle and subtitle C:— 4 5 (1) The term "fuel cell" means a device that di-6 rectly converts the chemical energy of a fuel into 7 electricity by an electrochemical process. (2) The term "hydrogen-carrier fuel" means 8 9 any hydrocarbon fuel that is capable of being thermochemically processed or otherwise reformed to 10 11 produce hydrogen; (3) The term "infrastructure" means the equip-12 13 ment, systems, or facilities used to produce, dis-14 tribute, deliver, or store hydrogen or hydrogen-car-15 rier fuels. 16 (4) The term "institution of higher education" 17 has the meaning given that term in section 101(a) 18 of the Higher Education Act of 1965 (20 U.S.C. 19 1001(a)). 20 (5) The term "Secretary" means the Secretary 21 of Energy. 22 SEC. 812. HYDROGEN VEHICLE DEMONSTRATION PRO-23 GRAM. 24 (a) IN GENERAL.—The Secretary shall establish a program for demonstration and commercial application of

1	hydrogen-powered vehicles and associated hydrogen fuel-
2	ing infrastructure in a variety of transportation-related
3	applications, including—
4	(1) fuel cell vehicles in light-duty vehicle fleets;
5	(2) heavy-duty fuel cell on-road and off-road ve-
6	hicles, including mass transit buses;
7	(3) use of hydrogen-powered vehicles and hy-
8	drogen fueling infrastructure (including multiple hy-
9	drogen refueling stations) along major transpor-
10	tation routes or in entire regions; and
11	(4) other similar projects as the Secretary may
12	deem necessary to contribute to the rapid dem-
13	onstration and deployment of hydrogen-based tech-
14	nologies in widespread use for transportation.
15	(b) Eligibility.—Federal, state, tribal, and local
16	governments, academic and other non-profit organiza-
17	tions, private entities, and consortia of these entities shall
18	be eligible for these projects.
19	(c) Selection.—In selecting projects under this sec-
20	tion, the Secretary shall—
21	(1) consult with Federal, State, local and pri-
22	vate fleet managers to identify potential projects
23	where hydrogen-powered vehicles may be placed into
24	service;

1	(2) identify not less than 10 sites at which to
2	carry out projects under this program, 2 of which
3	must be based at Federal facilities;
4	(3) select projects based on the following fac-
5	tors—
6	(A) geographic diversity;
7	(B) a diverse set of operating environ-
8	ments, duty cycles, and likely weather condi-
9	tions;
10	(C) the interest and capability of the par-
11	ticipating agencies, entities, or fleets;
12	(D) the availability and appropriateness of
13	potential sites for refueling infrastructure and
14	for maintenance of the vehicle fleet;
15	(E) the existence of traffic congestion in
16	the area expected to be served by the hydrogen-
17	powered vehicles;
18	(F) proximity to non-attainment areas as
19	defined in section 171 of the Clean Air Act (42
20	U.S.C. 7501); and
21	(G) such other criteria as the Secretary de-
22	termines to be appropriate in order to carry out
23	the purposes of the program.
24	(d) Infrastructure.—In funding projects under
25	this section, the Secretary shall also support the installa-

1	tion of refueling infrastructure at sites necessary for suc-
2	cess of the project, giving preference to those infrastruc-
3	ture projects that include co-production of both—
4	(1) hydrogen for use in transportation; and
5	(2) electricity that can be consumed on site.
6	(e) Operation and Maintenance Period.—Vehi-
7	cles purchased for projects under this section shall be op-
8	erated and maintained by the participating agencies or en-
9	tities in regular duty cycles for a period of not less than
10	12 months.
11	(f) Training and Technical Support.—In fund-
12	ing proposals under this section, the Secretary shall also
13	provide funding for training and technical support as may
14	be necessary to assure the success of such projects, includ-
15	ing training and technical support in—
16	(1) the installation, operation, and maintenance
17	of fueling infrastructure;
18	(2) the operation and maintenance of fuel cell
19	vehicles; and
20	(3) data collection necessary to monitor project
21	performance.
22	(g) Cost-Sharing.—Except as otherwise provided,
23	the Secretary shall require a commitment from non-Fed-
24	eral sources of at least 50 percent of the costs directly

relating to a demonstration project under this section. The

1	Secretary may reduce such non-Federal requirement if the
2	Secretary determines that the reduction is appropriate
3	considering the technological risks involved in the project.
4	(h) Authorization of Appropriations.—For the
5	purposes of this section, there are authorized to be appro-
6	priated to the Secretary \$50,000,000 for each of fiscal
7	years 2006 through 2010, to remain available until ex-
8	pended.
9	SEC. 813. STATIONARY FUEL CELL DEMONSTRATION PRO-
10	GRAM.
11	(a) In General.—The Secretary shall establish a
12	program for demonstration and commercial application of
13	hydrogen fuel cells in stationary applications, including—
14	(1) fuel cells for use in residential and commer-
15	cial buildings;
16	(2) portable fuel cells, including auxiliary power
17	units in trucks;
18	(3) small form and micro fuel cells of 20 watts
19	or less;
20	(4) distributed generation systems with fuel
21	cells using renewable energy; and
22	(5) other similar projects as the Secretary may
23	deem necessary to contribute to the rapid dem-
24	onstration and deployment of hydrogen-based tech-
25	nologies in widespread use.

- 1 (b) Competitive Evaluation.—Proposals sub-
- 2 mitted in response to solicitations issued pursuant to this
- 3 section shall be evaluated on a competitive basis using
- 4 peer review. The Secretary is not required to make an
- 5 award under this section in the absence of a meritorious
- 6 proposal.
- 7 (c) Preference.—The Secretary shall give pref-
- 8 erence, in making an award under this section, to pro-
- 9 posals that—
- 10 (1) are submitted jointly from consortia that in-
- 11 clude two or more participants from institutions of
- higher education, industry, State, tribal, or local
- governments, and Federal laboratories; and
- 14 (2) that reflect proven experience and capability
- with technologies relevant to the projects proposed.
- 16 (d) Training and Technical Support.—In fund-
- 17 ing proposals under this section, the Secretary shall also
- 18 provide funding for training and technical support as may
- 19 be necessary to assure the success of such projects, includ-
- 20 ing training and technical support in the installation, oper-
- 21 ation, and maintenance of fuel cells and the collection of
- 22 data to monitor project performance.
- 23 (e) Cost-Sharing.—Except as otherwise provided,
- 24 the Secretary shall require a commitment from non-Fed-
- 25 eral sources of at least 50 percent of the costs directly

1	relating to a demonstration project under this section. The
2	Secretary may reduce such non-Federal requirement if the
3	Secretary determines that the reduction is appropriate
4	considering the technological risks involved in the project.
5	(f) Authorization of Appropriations.—For the
6	purposes of this section, there are authorized to be appro-
7	priated to the Secretary \$50,000,000 for each of fiscal
8	years 2006 through 2010, to remain available until ex-
9	pended.
10	SEC. 814. HYDROGEN DEMONSTRATION PROGRAMS IN NA-
11	TIONAL PARKS.
12	(a) STUDY.—Not later than 1 year after the date of
13	enactment of this section, the Secretary of the Interior
14	and the Secretary of Energy shall jointly study and report
15	to Congress on—
16	(1) the energy needs and uses at National
17	Parks; and
18	(2) the potential for fuel cell and other hydro-
19	gen-based technologies to meet such energy needs
20	in—
21	(A) stationary applications, including
22	power generation, combined heat and power for
23	buildings and campsites, and standby and
24	backup power systems: and

	20.
1	(B) transportation-related applications, in-
2	cluding support vehicles, passenger vehicles and
3	heavy-duty trucks and buses.
4	(b) PILOT PROJECTS.—Based on the results of the
5	study conducted under subsection (a), the Secretary of the
6	Interior shall fund not fewer than 3 pilot projects in na-
7	tional parks to provide for demonstration of fuel cells or
8	other hydrogen-based technologies in those applications
9	where the greatest potential for such use in National
10	Parks has been identified. Such pilot projects shall be geo-
11	graphically distributed throughout the United States.
12	(c) Definition.—For the purpose of this section,
13	the term "National Parks" means those areas of land and
14	water now or hereafter administered by the Secretary of
15	the Interior through the National Park Service for park,
16	monument, historic, parkway, recreational, or other pur-
17	poses.
18	(d) Authorization of Appropriations.—There
19	are authorized to be appropriated to the Secretary of the

- 20 Interior \$1,000,000 for fiscal year 2004, and \$15,000,000
- for fiscal year 2005, to remain available until expended.
- SEC. 815. INTERNATIONAL DEMONSTRATION PROGRAM.
- 23 (a) In General.—The Secretary, in consultation
- with the Administrator of the U.S. Agency for Inter-
- 25 national Development, shall conduct demonstrations of

1	fuel cells and associated hydrogen fueling infrastructure
2	in countries other than the United States, particularly in
3	areas where an energy infrastructure is not already well
4	developed.
5	(b) Eligible Technologies.—The program may
6	demonstrate—
7	(1) fuel cell vehicles in light-duty vehicle fleets
8	(2) heavy-duty fuel cell on-road and off-road ve-
9	hicles;
10	(3) stationary fuel cells in residential and com-
11	mercial buildings; or
12	(4) portable fuel cells, including auxiliary power
13	units in trucks.
14	(c) Participants.—
15	(1) Eligibility.—Foreign nations, non-profit
16	organizations, and private companies shall be eligible
17	for these pilot projects.
18	(2) Cooperation.—Eligible entities may per-
19	form the projects in cooperation with United States
20	non-profit organizations and private companies.
21	(3) Cost-Sharing.—The Secretary may re-
22	quire a commitment from participating private com-
23	panies and from participating foreign countries.
24	(d) Authorization of Appropriations.—For ac-
25	tivities conducted under this section, there are authorized

- 1 to be appropriated to the Secretary \$25,000,000 for each
- 2 of fiscal years 2006 through 2010, to remain available
- 3 until expended.
- 4 SEC. 816. TRIBAL STATIONARY HYBRID POWER DEM-
- 5 **ONSTRATION.**
- 6 (a) IN GENERAL.—Not later than 1 year after the
- 7 date of enactment of this Act, the Secretary, in coopera-
- 8 tion with Indian tribes, shall develop and transmit to Con-
- 9 gress a strategy for a demonstration and commercial ap-
- 10 plication program to develop hybrid distributed power sys-
- 11 tems on Indian lands that combine—
- 12 (1) one renewable electric power generating
- technology of 2 megawatts or less located near the
- site of electric energy use; and
- 15 (2) fuel cell power generation suitable for use in
- distributed power systems.
- 17 (b) Definition.—For the purposes of this section,
- 18 the terms "Indian tribe" and "Indian land" have the
- 19 meaning given such terms under title XXVI of the Energy
- 20 Policy Act of 1992 (25 U.S.C. 3501 et seq.), as amended
- 21 by this Act.
- 22 (c) Authorization of Appropriations.—For ac-
- 23 tivities under this section, there are authorized to be ap-
- 24 propriated to the Secretary of Energy \$1,000,000 for fis-

- 1 cal year 2005, and \$5,000,000 for each of fiscal years
- 2 2006 through 2008.

## 3 SEC. 817. DISTRIBUTED GENERATION PILOT PROGRAM.

- 4 (a) Establishment.—The Secretary shall support
- 5 a demonstration program to develop, deploy, and commer-
- 6 cialize distributed generation systems to significantly re-
- 7 duce the cost of producing hydrogen from renewable en-
- 8 ergy for use in fuel cells. Such program shall provide the
- 9 necessary infrastructure to test these distributed genera-
- 10 tion technologies at pilot scales in a real-world environ-
- 11 ment.
- 12 (b) AUTHORIZATION OF APPROPRIATIONS.—There
- 13 are authorized to be appropriated to the Secretary of En-
- 14 ergy, to remain available until expended, for the purposes
- 15 of carrying out this section—
- 16 (1) \$10,000,000 for fiscal year 2004;
- 17 (2) \$15,000,000 for fiscal year 2005; and
- 18 (3) \$20,000,000 for each of fiscal years 2006
- 19 through 2008.

## 20 Subtitle C—Federal Programs

- 21 SEC. 821. PUBLIC EDUCATION AND TRAINING.
- 22 (a) Education.—The Secretary shall conduct a pub-
- 23 lie education program designed to increase public interest
- 24 in and acceptance of hydrogen energy and fuel cell tech-
- 25 nologies.

- 1 (b) Training.—The Secretary shall conduct a pro-
- 2 gram to promote university-based training in critical skills
- 3 for research in, production of, and use of hydrogen energy
- 4 and fuel cell technologies. Such program may include re-
- 5 search fellowships at institutions of higher education, cen-
- 6 ters of excellence in critical technologies, internships in in-
- 7 dustry, and such other measures as the Secretary deems
- 8 appropriate.
- 9 (c) Authorization of Appropriations.—For ac-
- 10 tivities pursuant to this section, there are authorized to
- 11 be appropriated to the Secretary \$7,000,000 for each of
- 12 fiscal years 2004 through 2008.

## 13 SEC. 822. HYDROGEN TRANSITION STRATEGIC PLANNING.

- 14 (a) IN GENERAL.—Not later than September 30,
- 15 2004, the head of each federal agency with annual outlays
- 16 of greater than \$20,000,000 shall submit to the Director
- 17 of the Office of Management and Budget and to the Con-
- 18 gress a hydrogen transition strategic plan containing a
- 19 comprehensive assessment of how the transition to a hy-
- 20 drogen-based economy could to assist the mission, oper-
- 21 ation and regulatory program of the agency.
- 22 (b) Contents.—At a minimum, each plan shall con-
- 23 tain—
- 24 (1) a description of areas within the agency's
- control where using hydrogen and/or fuel cells could

1	benefit the operation of the agency, assist in the im-
2	plementation of its regulatory functions or enhance
3	the agency's mission; and
4	(2) a description of any agency management
5	practices, procurement policies, regulations, policies,
6	or guidelines that may inhibit the agency's transition
7	to use of fuel cells and hydrogen as an energy
8	source.
9	(c) Duration and Revision.—The strategic plan
10	shall cover a period of not less than the five years fol-
11	lowing the fiscal year in which it is submitted, and shall
12	be updated and revised at least every three years.
13	SEC. 823. MINIMUM FEDERAL FLEET REQUIREMENT.
13 14	SEC. 823. MINIMUM FEDERAL FLEET REQUIREMENT.  (a) Section 303(b) of the Energy Policy Act of 1992
14	
14	(a) Section 303(b) of the Energy Policy Act of 1992
14 15	(a) Section 303(b) of the Energy Policy Act of 1992 (42 U.S.C. 13212(b)) is amended by adding at the end
14 15 16	(a) Section 303(b) of the Energy Policy Act of 1992 (42 U.S.C. 13212(b)) is amended by adding at the end the following:
14 15 16 17	(a) Section 303(b) of the Energy Policy Act of 1992 (42 U.S.C. 13212(b)) is amended by adding at the end the following:  "(4) Hydrogen vehicles.—
14 15 16 17 18	(a) Section 303(b) of the Energy Policy Act of 1992 (42 U.S.C. 13212(b)) is amended by adding at the end the following:  "(4) Hydrogen vehicles.—  "(A) Of the number of vehicles acquired
14 15 16 17 18	(a) Section 303(b) of the Energy Policy Act of 1992  (42 U.S.C. 13212(b)) is amended by adding at the end the following:  "(4) Hydrogen vehicles.—  "(A) Of the number of vehicles acquired under paragraph (1)(D) by a Federal fleet of
14 15 16 17 18 19 20	(a) Section 303(b) of the Energy Policy Act of 1992 (42 U.S.C. 13212(b)) is amended by adding at the end the following:  "(4) Hydrogen vehicles.—  "(A) Of the number of vehicles acquired under paragraph (1)(D) by a Federal fleet of 100 or more vehicles, not less than—
14 15 16 17 18 19 20 21	(a) Section 303(b) of the Energy Policy Act of 1992 (42 U.S.C. 13212(b)) is amended by adding at the end the following:  "(4) Hydrogen vehicles.—  "(A) Of the number of vehicles acquired under paragraph (1)(D) by a Federal fleet of 100 or more vehicles, not less than—  "(i) 5 percent in fiscal years 2006 and

1	"(iii) 15 percent in fiscal years 2010
2	and 2011; and
3	"(iv) 20 percent in fiscal years 2012
4	and thereafter,
5	shall be hydrogen-powered vehicles that meet
6	standards for performance, reliability, cost, and
7	maintenance established by the Secretary.
8	"(B) The Secretary may establish a lesser
9	percentage, or waive the requirement under
10	subparagraph (A) for any fiscal year entirely, if
11	hydrogen-powered vehicles meeting the stand-
12	ards set by the Secretary pursuant to subpara-
13	graph (A) are not available at a purchase price
14	that is less than 150 percent of the purchase
15	price of other comparable alternative fueled ve-
16	hicles.
17	"(C) The Secretary may by rule, delay the
18	implementation of the requirements under sub-
19	paragraph (A) in the event that the Secretary
20	determines that hydrogen-powered vehicles are
21	not commercially or economically available, or
22	that fuel for such vehicles is not commercially
23	or economically available.
24	"(D) The Secretary, in consultation with
25	the Administrator of General Services, may for

1	reasons of refueling infrastructure use and cost
2	optimization, elect to allocate the acquisitions
3	necessary to achieve the requirements in sub-
4	paragraph (A) to certain Federal fleets in lieu
5	of requiring each Federal fleet to achieve the
6	requirements in subparagraph (A).".
7	(b) Refueling.—Section 304 of the Energy Policy
8	Act of 1992 (42 U.S.C. 13213) is amended—
9	(1) by redesignating subsection (b) as sub-
10	section (c);
11	(2) in the second sentence of subsection (a), by
12	striking "If publicly" and inserting the following:
13	"(b) Commercial Arrangements.—
14	"(1) IN GENERAL.—If publicly"; and
15	(3) in subsection (b) (as designated by para-
16	graph (2)), by adding at the end the following:
17	"(2) Mandatory arrangements.—
18	"(A) In general.—In a case in which
19	publicly available fueling facilities are not con-
20	venient or accessible to the locations of 2 or
21	more Federal fleets for which hydrogen-powered
22	vehicles are required to be purchased under sec-
23	tion 303(b)(4), the Federal agency for which
24	the Federal fleets are maintained (or the Fed-
25	eral agencies for which the Federal fleets are

1	maintained, acting jointly under a memo-
2	randum of agreement providing for cost shar-
3	ing) shall enter into a commercial arrangement
4	as provided in paragraph (1).
5	"(B) Sunset.—Subparagraph (A) ceases
6	to be effective at the end of fiscal year 2013.".
7	SEC. 824. STATIONARY FUEL CELL PURCHASE REQUIRE-
8	MENT.
9	(a) Requirement.—The President, acting through
10	the Secretary of Energy, shall seek to ensure that, to the
11	extent economically practicable and technically feasible, of
12	the total amount of electric energy the Federal Govern-
13	ment consumes during any fiscal year, the following
14	amounts shall be generated by fuel cells—
15	(1) not less than 1 percent in fiscal years 2006
16	through 2008;
17	(2) not less than 2 percent in fiscal years 2009
18	and 2010; and
19	(3) not less than 3 percent in fiscal year 2011
20	and each fiscal year thereafter.
21	(b) COMPLIANCE.—In complying with the require-
22	ments of subsection (a), Federal agencies are encouraged
23	to—
24	(1) use innovative purchasing practices;

1	(2) use fuel cells at the site of electricity usage
2	and in combined heat and power applications; and
3	(3) use fuel cells in stand alone power func-
4	tions, such as but not limited to battery power and
5	backup power.
6	(c) Definitions.—For purposes of this section—
7	(1) the term "fuel cells" means an integrated
8	system comprised of a fuel cell stack assembly and
9	balance of plant components that converts a fuel
10	into electricity using an electrochemical means; and
11	(2) the term "electrical energy" includes on and
12	off grid power, including premium power applica-
13	tions, standby power applications and electricity gen-
14	eration.
15	(d) Authorization of Appropriations.—For the
16	purposes of this section, there are authorized to be appro-
17	priated to the Secretary of Energy \$30,000,000 for fiscal
18	years 2004, \$70,000,000 for fiscal year 2005, and
19	\$100,000,000 for each of fiscal years 2006 and thereafter.
20	SEC. 825. DEPARTMENT OF ENERGY STRATEGY.
21	Not later than 1 year after the date of enactment
22	of this Act, the Secretary shall publish and transmit to
23	Congress a plan identifying critical technologies, enabling

24 strategies and applications, technical targets, and associ-

1	ated timeframes that support the commercialization of hy-
2	drogen-fueled fuel cell vehicles.
3	TITLE IX—RESEARCH AND
4	DEVELOPMENT
5	SEC. 901. SHORT TITLE.
6	This Title may be cited as the "Energy Research, De-
7	velopment, Demonstration, and Commercial Application
8	Act of 2003".
9	SEC. 902. GOALS.
10	(a) In General.—In order to achieve the purposes
11	of this title, the Secretary shall conduct a balanced set
12	of programs of energy research, development, demonstra-
13	tion, and commercial application, focused on—
14	(1) increasing the efficiency of all energy inten-
15	sive sectors through conservation and improved tech-
16	nologies,
17	(2) promoting diversity of energy supply,
18	(3) decreasing the nation's dependence on for-
19	eign energy supplies,
20	(4) improving United States energy security,
21	and
22	(5) decreasing the environmental impact of en-
23	ergy-related activities.

1	(b) Goals.—The Secretary shall publish measurable
2	cost and performance-based goals with each annual budget
3	submission in at least the following areas:
4	(1) energy efficiency for buildings, energy-con-
5	suming industries, and vehicles;
6	(2) electric energy generation (including distrib-
7	uted generation), transmission, and storage;
8	(3) renewable energy technologies including
9	wind power, photovoltaics, solar thermal systems,
10	geothermal energy, hydrogen-fueled systems, bio-
11	mass-based systems, biofuels, and hydropower;
12	(4) fossil energy including power generation,
13	onshore and offshore oil and gas resource recovery,
14	and transportation; and
15	(5) nuclear energy including programs for exist-
16	ing and advanced reactors, and education of future
17	specialists.
18	(c) Public Comment.—The Secretary shall provide
19	mechanisms for input on the annually published goals
20	from industry, university, and other public sources.
21	(d) Effect of Goals.—Nothing in subsection (a)
22	or the annually published goals creates any new authority
23	for any Federal agency, or may be used by a Federal agen-
24	cy to support the establishment of regulatory standards
25	or regulatory requirements.

# SEC. 903. DEFINITIONS. For purposes of this title: (1) The term "Depa

- (1) The term "Department" means the Department of Energy.
- 5 (2) The term "departmental mission" means 6 any of the functions vested in the Secretary of En-7 ergy by the Department of Energy Organization Act 8 (42 U.S.C. 7101 et seq.) or other law.
- 9 (3) The term "institution of higher education" 10 has the meaning given that term in section 101(a) 11 of the Higher Education Act of 1965 (20 U.S.C. 12 1001(a)).
- 13 (4) The term "National Laboratory" means any 14 of the following laboratories owned by the Depart-15 ment:
- 16 (A) Ames Laboratory.
- 17 (B) Argonne National Laboratory.
- 18 (C) Brookhaven National Laboratory.
- 19 (D) Fermi National Accelerator Labora-20 tory.
- 21 (E) Idaho National Engineering and Envi-22 ronmental Laboratory.
- 23 (F) Lawrence Berkeley National Labora-24 tory.
- (G) Lawrence Livermore National Laboratory.

1	(H) Los Alamos National Laboratory.
2	(I) National Energy Technology Labora-
3	tory.
4	(J) National Renewable Energy Labora-
5	tory.
6	(K) Oak Ridge National Laboratory.
7	(L) Pacific Northwest National Labora-
8	tory.
9	(M) Princeton Plasma Physics Laboratory.
10	(N) Sandia National Laboratories.
11	(O) Stanford Linear Accelerator Center.
12	(P) Thomas Jefferson National Accelerator
13	Facility.
14	(5) The term "nonmilitary energy laboratory"
15	means the laboratories listed in (4) with the exclu-
16	sion of $(4)(G)$ , $(4)(H)$ , and $(4)(N)$ .
17	(6) The term "Secretary" means the Secretary
18	of Energy.
19	(7) The term "single-purpose research facility"
20	means any of the primarily single-purpose entities
21	owned by the Department or any other organization
22	of the Department designated by the Secretary.

# Subtitle A—Energy Efficiency

2	SEC. 911. ENERGY EFFICIENCY.
3	(a) In General.—The following sums are author-
4	ized to be appropriated to the Secretary for energy effi-
5	ciency and conservation research, development, dem-
6	onstration, and commercial application activities, includ-
7	ing activities authorized under this subtitle:
8	(1) for fiscal year 2004, \$616,000,000;
9	(2) for fiscal year 2005, \$695,000,000;
10	(3) for fiscal year 2006, \$772,000,000;
11	(4) for fiscal year 2007, \$865,000,000; and
12	(5) for fiscal year 2008, \$920,000,000.
13	(b) Allocations.—From amounts authorized under
14	subsection (a), the following sums are authorized:
15	(1) For activities under section 912—
16	(A) for fiscal year 2004, \$20,000,000; and
17	(B) for fiscal year 2005, \$30,000,000.
18	(2) For activities under section 914—
19	(A) for fiscal year 2004, \$4,000,000; and
20	(B) for each of fiscal years 2005 through
21	2008, \$7,000,000.
22	(3) For activities under section 915—
23	(A) for fiscal year 2004, \$20,000,000;
<ul><li>23</li><li>24</li></ul>	<ul><li>(A) for fiscal year 2004, \$20,000,000;</li><li>(B) for fiscal year 2005, \$25,000,000;</li></ul>

1	(D) for fiscal year 2007, \$35,000,000; and
2	(E) for fiscal year 2008, \$40,000,000.
3	(c) Extended Authorization.—There are author-
4	ized to be appropriated to the Secretary for activities
5	under section 912, \$50,000,000 for each of fiscal years
6	2006 through 2013.
7	(d) None of the funds authorized to be appropriated
8	under this section may be used for—
9	(1) the promulgation and implementation of en-
10	ergy efficiency regulations;
11	(2) the Weatherization Assistance Program
12	under part A of title IV of the Energy Conservation
13	and Production Act;
14	(3) the State Energy Program under part D of
15	title III of the Energy Policy and Conservation Act;
16	or
17	(4) the Federal Energy Management Program
18	under part 3 of title V of the National Energy Con-
19	servation Policy Act.
20	SEC. 912. NEXT GENERATION LIGHTING INITIATIVE.
21	(a) In General.—The Secretary shall carry out a
22	Next Generation Lighting Initiative in accordance with
23	this section to support research, development, demonstra-
24	tion, and commercial application activities related to ad-

- 1 vanced solid-state lighting technologies based on white
- 2 light emitting diodes.
- 3 (b) Objectives.—The objectives of the initiative
- 4 shall be to develop advanced solid-state organic and inor-
- 5 ganic lighting technologies based on white light emitting
- 6 diodes that, compared to incandescent and fluorescent
- 7 lighting technologies, are longer lasting; more energy-effi-
- 8 cient; cost-competitive and have less environmental im-
- 9 pact.
- 10 (c) Industry Alliance.—The Secretary shall, with-
- 11 in 3 months from the date of enactment of this section,
- 12 competitively select an Industry Alliance to represent par-
- 13 ticipants who are private, for-profit firms which, as a
- 14 group, are broadly representative of United States solid
- 15 state lighting research, development, infrastructure, and
- 16 manufacturing expertise as a whole.
- 17 (d) Research.—
- 18 (1) The Secretary shall carry out the research
- activities of the Next Generation Lighting Initiative
- through competitively awarded grants to researchers,
- 21 including Industry Alliance participants, national
- laboratories and institutions of higher education.
- 23 (2) The Secretary shall annually solicit from
- the Industry Alliance—

1	(A) comments to identify solid-state light-
2	ing technology needs;
3	(B) assessment of the progress of the Ini-
4	tiative's research activities; and
5	(C) assistance in annually updating solid-
6	state lighting technology roadmaps.
7	(3) The information and roadmaps under (2)
8	shall be available to the public.
9	(e) DEVELOPMENT, DEMONSTRATION, AND COMMER-
10	CIAL APPLICATION.—The Secretary shall carry out a de-
11	velopment, demonstration, and commercial application
12	program for the Next Generation Lighting Initiative
13	through competitively selected awards. The Secretary may
14	give preference to participants of the Industry Alliance se-
15	lected pursuant to subsection (c).
16	(f) Cost Sharing.—The Secretary shall require cost
17	sharing according to 42 U.S.C. 13542.
18	(g) Intellectual Property.—The Secretary may
19	require, in accordance with the authorities provided in 35
20	U.S.C. 202(a)(ii), 42 U.S.C. 2182 and 42 U.S.C. 5908,
21	that for any new invention from subsection (d)—
22	(1) that the Industry Alliance members who are
23	active participants in research, development and
24	demonstration activities related to the advanced
25	solid-state lighting technologies that are the subject

- of this legislation shall be granted first option to negotiate with the invention owner, at least in the field of solid-state lighting, non-exclusive licenses and royalties on terms that are reasonable under the circumstances;
- 6 (2) that the invention owner must offer to nego7 tiate licenses with the Industry Alliance participants
  8 cited in (1), in good faith, for at least 1 year after
  9 U.S. patents are issued on any such new invention;
  10 and
- 11 (3) such other terms as the Secretary deter-12 mines are required to promote accelerated commer-13 cialization of inventions made under the Initiative.
- 14 (h) National Academy Review.—The Secretary
  15 shall enter into an arrangement with the National Acad16 emy of Sciences to conduct periodic reviews of the Next
  17 Generation Lighting Initiative.
- 18 (i) Definitions.—As used in this section:
- 19 (1) The term "advanced solid-state lighting"
  20 means a semiconducting device package and delivery
  21 system that produces white light using externally applied voltage.
- 23 (2) The term "research" includes research on 24 the technologies, materials and manufacturing proc-25 esses required for white light emitting diodes.

- 1 (3) The term "Industry Alliance" means an en-2 tity selected by the Secretary under subsection (c).
- 3 (4) The term "white light emitting diode"
  4 means a semiconducting package, utilizing either or5 ganic or inorganic materials, that produces white
  6 light using externally applied voltage.

## 7 SEC. 913. NATIONAL BUILDING PERFORMANCE INITIATIVE.

- 8 (a) Interagency Group.—Not later than 90 days
- 9 after the date of enactment of this Act, the Director of
- 10 the Office of Science and Technology Policy shall establish
- 11 an interagency group to develop, in coordination with the
- 12 advisory committee established under subsection (e), a
- 13 National Building Performance Initiative (in this section
- 14 referred to as the "Initiative"). The interagency group
- 15 shall be co-chaired by appropriate officials of the Depart-
- 16 ment and the Department of Commerce, who shall jointly
- 17 arrange for the provision of necessary administrative sup-
- 18 port to the group.
- 19 (b) Integration of Efforts.—The Initiative shall
- 20 integrate Federal, State, and voluntary private sector ef-
- 21 forts to reduce the costs of construction, operation, main-
- 22 tenance, and renovation of commercial, industrial, institu-
- 23 tional, and residential buildings.
- 24 (c) Plan.—Not later than 1 year after the date of
- 25 enactment of this Act, the interagency group shall submit

1	to Congress a plan for carrying out the appropriate Fed-
2	eral role in the Initiative. The plan shall include—
3	(1) research, development, demonstration, and
4	commercial application of systems and materials for
5	new construction and retrofit relating to the building
6	envelope and building system components; and
7	(2) the collection, analysis, and dissemination of
8	research results and other pertinent information on
9	enhancing building performance to industry, govern-
10	ment entities, and the public.
11	(d) Department of Energy Role.—Within the
12	Federal portion of the Initiative, the Department shall be
13	the lead agency for all aspects of building performance re-
14	lated to use and conservation of energy.
15	(e) Advisory Committee.—The Director of the Of-
16	fice of Science and Technology Policy shall establish an
17	advisory committee to—
18	(1) analyze and provide recommendations on
19	potential private sector roles and participation in the
20	Initiative; and
21	(2) review and provide recommendations on the
22	plan described in subsection (c).
23	(f) Construction.—Nothing in this section provides
24	any Federal agency with new authority to regulate build-
25	ing performance.

1	SEC. 914. SECONDARY ELECTRIC VEHICLE BATTERY USE
2	PROGRAM.
3	(a) Definitions.—For purposes of this section:
4	(1) The term "battery" means an energy stor-
5	age device that previously has been used to provide
6	motive power in a vehicle powered in whole or in
7	part by electricity.
8	(2) The term "associated equipment" means
9	equipment located where the batteries will be used
10	that is necessary to enable the use of the energy
11	stored in the batteries.
12	(b) Program.—The Secretary shall establish and
13	conduct a research, development, demonstration, and com-
14	mercial application program for the secondary use of bat-
15	teries. Such program shall be—
16	(1) designed to demonstrate the use of batteries
17	in secondary applications, including utility and com-
18	mercial power storage and power quality;
19	(2) structured to evaluate the performance, in-
20	cluding useful service life and costs, of such bat-
21	teries in field operations, and the necessary sup-
22	porting infrastructure, including reuse and disposal
23	of batteries; and
24	(3) coordinated with ongoing secondary battery
25	use programs at the National Laboratories and in
26	industry.

1	(c) Solicitation.—Not later than 180 days after
2	the date of the enactment of this Act, the Secretary shall
3	solicit proposals to demonstrate the secondary use of bat-
4	teries and associated equipment and supporting infra-
5	structure in geographic locations throughout the United
6	States. The Secretary may make additional solicitations
7	for proposals if the Secretary determines that such solici-
8	tations are necessary to carry out this section.
9	(d) Selection of Proposals.—
10	(1) The Secretary shall, not later than 90 days
11	after the closing date established by the Secretary
12	for receipt of proposals under subsection (c), select
13	up to 5 proposals which may receive financial assist-
14	ance under this section once the Department is in
15	receipt of appropriated funds.
16	(2) In selecting proposals, the Secretary shall
17	consider diversity of battery type, geographic and
18	climatic diversity, and life-cycle environmental ef-
19	fects of the approaches.
20	(3) No one project selected under this section
21	shall receive more than 25 percent of the funds au-
22	thorized for this Program.
23	(4) The Secretary shall consider the extent of

involvement of State or local government and other

- persons in each demonstration project to optimize
  use of federal resources.
- (5) The Secretary may consider such other cri teria as the Secretary considers appropriate.
- 5 (e) CONDITIONS.—The Secretary shall require that-
- 6 (1) relevant information be provided to the De-7 partment, the users of the batteries, the proposers, 8 and the battery manufacturers; and
- 9 (2) the proposer provide at least 50 percent of 10 the costs associated with the proposal.

#### 11 SEC. 915. ENERGY EFFICIENCY SCIENCE INITIATIVE.

- 12 (a) Establishment.—The Secretary shall establish
- 13 an Energy Efficiency Science Initiative to be managed by
- 14 the Assistant Secretary in the Department with responsi-
- 15 bility for energy conservation under section 203(a)(9) of
- 16 the Department of Energy Organization Act (42 U.S.C.
- 17 7133(a)(9)), in consultation with the Director of the Of-
- 18 fice of Science, for grants to be competitively awarded and
- 19 subject to peer review for research relating to energy effi-
- 20 ciency.
- 21 (b) Report.—The Secretary shall submit to the Con-
- 22 gress, along with the President's annual budget request
- 23 under section 1105(a) of title 31, United States Code, a
- 24 report on the activities of the Energy Efficiency Science
- 25 Initiative, including a description of the process used to

award the funds and an explanation of how the research
relates to energy efficiency.
<b>Subtitle B—Distributed Energy and</b>
<b>Electric Energy Systems</b>
SEC. 921. DISTRIBUTED ENERGY AND ELECTRIC ENERGY
SYSTEMS.
(a) In General.—
(1) The following sums are authorized to be ap-
propriated to the Secretary for distributed energy
and electric energy systems activities, including ac-
tivities authorized under this subtitle:
(A) for fiscal year 2004, \$190,000,000;
(B) for fiscal year 2005, \$200,000,000;
(C) for fiscal year 2006, \$220,000,000;
(D) for fiscal year 2007, \$240,000,000;
and
(E) for fiscal year 2008, \$260,000,000.
(2) For the Initiative in subsection 927(e),
there are authorized to be appropriated—
(A) for fiscal year 2004, \$15,000,000;
(B) for fiscal year 2005, \$20,000,000;
(C) for fiscal year 2006, \$30,000,000;
(D) for fiscal year 2007, \$35,000,000; and
(E) for fiscal year 2008, \$40,000,000.

	31 <b>-</b>
1	(b) Micro-Cogeneration Energy Tech
2	NOLOGY.—From amounts authorized under subsection
3	(a), \$20,000,000 for each of fiscal years 2004 and 2005
4	shall be available for activities under section 924.
5	SEC. 922. HYBRID DISTRIBUTED POWER SYSTEMS.
6	Not later than 1 year after the date of enactmen
7	of this Act, the Secretary shall develop and transmit to
8	the Congress a strategy for a comprehensive research, de
9	velopment, demonstration, and commercial application
10	program to develop hybrid distributed power systems that
11	combine—
12	(1) one or more renewable electric power gen
13	eration technologies of 10 megawatts or less located
14	near the site of electric energy use; and
15	(2) nonintermittent electric power generation
16	technologies suitable for use in a distributed power
17	system.
18	SEC. 923. HIGH POWER DENSITY INDUSTRY PROGRAM.
19	The Secretary shall establish a comprehensive re
20	search, development, demonstration, and commercial ap
21	plication program to improve energy efficiency of high
22	power density facilities, including data centers, server
23	farms, and telecommunications facilities. Such program

24 shall consider technologies that provide significant im-

25 provement in thermal controls, metering, load manage-

- 1 ment, peak load reduction, or the efficient cooling of elec-
- 2 tronics.
- 3 SEC. 924. MICRO-COGENERATION ENERGY TECHNOLOGY.
- 4 The Secretary shall make competitive, merit-based
- 5 grants to consortia for the development of micro-cogenera-
- 6 tion energy technology. The consortia shall explore the use
- 7 of small-scale combined heat and power in residential
- 8 heating appliances, the use of excess power to operate
- 9 other appliances within the residence and supply of excess
- 10 generated power to the power grid.
- 11 SEC. 925. DISTRIBUTED ENERGY TECHNOLOGY DEM-
- 12 **ONSTRATION PROGRAM.**
- 13 The Secretary, within the sums authorized under sec-
- 14 tion 921(a)(1), may provide financial assistance to coordi-
- 15 nating consortia of interdisciplinary participants for dem-
- 16 onstrations designed to accelerate the utilization of dis-
- 17 tributed energy technologies, such as fuel cells, microtur-
- 18 bines, reciprocating engines, thermally activated tech-
- 19 nologies, and combined heat and power systems, in highly
- 20 energy intensive commercial applications.
- 21 SEC. 926. OFFICE OF ELECTRIC TRANSMISSION AND DIS-
- TRIBUTION.
- 23 (a) Creation of an Office of Electric Trans-
- 24 MISSION AND DISTRIBUTION.—Title II of the Department

1	of Energy Organization Act is amended by inserting the
2	following after section 217 (42 U.S.C. 7144d):
3	"OFFICE OF ELECTRIC TRANSMISSION AND DISTRIBUTION
4	"Sec. 218. (a) There is established within the De-
5	partment an Office of Electric Transmission and Distribu-
6	tion. This Office shall be headed by a Director, who shall
7	be appointed by the Secretary. The Director shall be com-
8	pensated at the annual rate prescribed for level IV of the
9	Executive Schedule under section 5315 of title 5, United
10	States Code.
11	"(b) The Director shall—
12	"(1) coordinate and develop a comprehensive,
13	multi-year strategy to improve the Nation's elec-
14	tricity transmission and distribution;
15	"(2) ensure that the recommendations of the
16	Secretary's National Transmission Grid Study are
17	implemented;
18	"(3) carry out the research, development, and
19	demonstration functions;
20	"(4) grant authorizations for electricity import
21	and export;
22	"(5) perform other electricity transmission and
23	distribution-related functions assigned by the Sec-
24	retary; and
25	"(6) develop programs for workforce training in
26	power and transmission engineering.".

1	(b) Conforming Amendments.—
2	(1) The table of contents of the Department of
3	Energy Act is amended by inserting after the item
4	relating to section 217 the following new item:
	"218. Office of Electric Transmission and Distribution.".
5	(2) Section 5315 of title 5, United States Code,
6	is amended by inserting "Director, Office of Electric
7	Transmission and Distribution, Department of En-
8	ergy." after "Inspector General, Department of En-
9	ergy.".
10	SEC. 927. ELECTRIC TRANSMISSION AND DISTRIBUTION
11	PROGRAMS.
12	(a) Demonstration Program.—The Secretary,
13	acting through the Director of the Office of Electric
14	Transmission and Distribution, shall establish a com-
15	prehensive research, development, and demonstration pro-
16	gram to ensure the reliability, efficiency, and environ-
17	mental integrity of electrical transmission and distribution
18	systems. This program shall include—
19	(1) advanced energy and energy storage tech-
20	nologies, materials, and systems, giving priority to
21	new transmission technologies, including composite
22	conductor materials and other technologies that en-
<ul><li>22</li><li>23</li></ul>	conductor materials and other technologies that en- hance reliability, operational flexibility, or power-car-

1	(2) advanced grid reliability and efficiency tech-
2	nology development;
3	(3) technologies contributing to significant load
4	reductions;
5	(4) advanced metering, load management, and
6	control technologies;
7	(5) technologies to enhance existing grid compo-
8	nents;
9	(6) the development and use of high-tempera-
10	ture superconductors to
11	(A) enhance the reliability, operational
12	flexibility, or power-carrying capability of elec-
13	tric transmission or distribution systems; or
14	(B) increase the efficiency of electric en-
15	ergy generation, transmission, distribution, or
16	storage systems;
17	(7) integration of power systems, including sys-
18	tems to deliver high-quality electric power, electric
19	power reliability, and combined heat and power;
20	(8) supply of electricity to the power grid by
21	small scale, distributed and residential-based power
22	generators;
23	(9) the development and use of advanced grid
24	design, operation and planning tools;

1	(10) any	other	ınfrastructure	technologies,	as
2	appropriate; a	and			

3 (11) technology transfer and education.

(1 O)

- 4 (b) Program Plan.—Not later than 1 year after the
- 5 date of the enactment of this legislation, the Secretary,
- 6 in consultation with other appropriate Federal agencies,
- 7 shall prepare and transmit to Congress a 5-year program
- 8 plan to guide activities under this section. In preparing
- 9 the program plan, the Secretary shall consult with utili-
- 10 ties, energy services providers, manufacturers, institutions
- 11 of higher education, other appropriate State and local
- 12 agencies, environmental organizations, professional and
- 13 technical societies, and any other persons the Secretary
- 14 considers appropriate.
- 15 (c) Implementation.—The Secretary shall consider
- 16 implementing this program using a consortium of indus-
- 17 try, university and national laboratory participants.
- 18 (d) Report.—Not later than 2 years after the trans-
- 19 mittal of the plan under subsection (b), the Secretary shall
- 20 transmit a report to Congress describing the progress
- 21 made under this section and identifying any additional re-
- 22 sources needed to continue the development and commer-
- 23 cial application of transmission and distribution infra-
- 24 structure technologies.

1	(e) Power Delivery Research Initiative.—The
2	Secretary shall establish a research, development and
3	demonstration initiative specifically focused on power de-
4	livery utilizing components incorporating high tempera-
5	ture superconductivity.
6	(1) Goals of this Initiative shall be to—
7	(A) establish world-class facilities to de-
8	velop high temperature superconductivity power
9	applications in partnership with manufacturers
10	and utilities;
11	(B) provide technical leadership for estab-
12	lishing reliability for high temperature super-
13	conductivity power applications including suit-
14	able modeling and analysis;
15	(C) facilitate commercial transition toward
16	direct current power transmission, storage, and
17	use for high power systems utilizing high tem-
18	perature superconductivity; and
19	(D) facilitate the integration of very low
20	impedance high temperature superconducting
21	wires and cables in existing electric networks to
22	improve system performance, power flow control
23	and reliability.
24	(2) The Initiative shall include—

- 1 (A) feasibility analysis, planning, research,
  2 and design to construct demonstrations of
  3 superconducting links in high power, direct cur4 rent and controllable alternating current trans5 mission systems;
  - (B) public-private partnerships to demonstrate deployment of high temperature superconducting cable into testbeds simulating a realistic transmission grid and under varying transmission conditions, including actual grid insertions; and
  - (C) testbeds developed in cooperation with national laboratories, industries, and universities to demonstrate these technologies, prepare the technologies for commercial introduction, and address cost or performance roadblocks to successful commercial use.
- 18 (g) Transmission and Distribution Grid Plan19 Ning and Operations Initiative.—The Secretary shall
  20 establish a research, development and demonstration ini21 tiative specifically focused on tools needed to plan, operate
  22 and expand the transmission and distribution grids in the
  23 presence of competitive market mechanisms for energy,
  24 load demand, customer response and ancillary services.
  25 Goals of this Initiative shall be to:

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1	(1) develop and utilize a geographically distrib-
2	uted Center, consisting of research universities and
3	national laboratories, with expertise and facilities to
4	develop the underlying theory and software for
5	power system application, and to assure commercial
5	development in partnership with software vendors
7	and utilities;

- (2) provide technical leadership in engineering and economic analysis for reliability and efficiency of power systems planning and operations in the presence of competitive markets for electricity;
- (3) model, simulate and experiment with new market mechanisms and operating practices to understand and optimize such new methods before actual use; and
- 16 (4) provide technical support and technology 17 transfer to electric utilities and other participants in 18 the domestic electric industry and marketplace.

# Subtitle C—Renewable Energy

## 20 SEC. 931. RENEWABLE ENERGY.

- 21 (a) In General.—The following sums are author-22 ized to be appropriated to the Secretary for renewable en-23 ergy research, development, demonstration, and commer-
- 24 cial application activities, including activities authorized
- 25 under this subtitle:

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1
             (1) for fiscal year 2004, $480,000,000;
 2
             (2) for fiscal year 2005, $550,000,000;
 3
             (3) for fiscal year 2006, $610,000,000;
 4
             (4) for fiscal year 2007, $659,000,000; and
 5
             (5) for fiscal year 2008, $710,000,000.
 6
             BIOENERGY.—From the amounts authorized
   under subsection (a), the following sums are authorized
 8
   to be appropriated to carry out section 932:
 9
             (1) for fiscal year 2004, $135,425,000;
10
             (2) for fiscal year 2005, $155,600,000;
11
             (3) for fiscal year 2006, $167,650,000;
12
             (4) for fiscal year 2007, $180,000,000; and
13
             (5) for fiscal year 2008, $192,000,000.
14
        (c) BIODIESEL ENGINE TESTING.—From amounts
15
    authorized under subsection (a), $5,000,000 is authorized
   to be appropriated in each of fiscal years 2004 and 2008
16
   to carry out section 933.
17
18
        (d)
               Concentrating
                                   SOLAR
                                             POWER.—From
19
    amounts authorized under subsection (a), the following
20
    sums are authorized to be appropriated to carry out sec-
21
   tion 934:
22
             (1) for fiscal year 2004, $20,000,000;
23
             (2) for fiscal year 2005, $40,000,000; and
24
             (3) for each of fiscal years 2006, 2007 and
25
        2008, $50,000,000.
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1	(e) LIMITS ON USE OF FUNDS.—
2	(1) None of the funds authorized to be appro-
3	priated under this section may be used for Renew-
4	able Support and Implementation.
5	(2) Of the funds authorized under subsection
6	(b), not less than \$5,000,000 for each fiscal year
7	shall be made available for grants to Historically
8	Black Colleges and Universities, Tribal Colleges, and
9	Hispanic-Serving Institutions.
10	(f) Consultation.—In carrying out this section, the
11	Secretary, in consultation with the Secretary of Agri-
12	culture, shall demonstrate the use of advanced wind power
13	technology, including combined use with coal gasification;
14	biomass; geothermal energy systems; and other renewable
15	energy technologies to assist in delivering electricity to
16	rural and remote locations.
17	SEC. 932. BIOENERGY PROGRAMS.
18	(a) In General.—The Secretary shall conduct a
19	program of research, development, demonstration, and
20	commercial application for bioenergy, including—
21	(1) biopower energy systems;
22	(2) biofuels;
23	(3) bioproducts;
24	(4) integrated biorefineries that may produce
25	biopower, biofuels and bioproducts;

1	(5) cross-cutting research and development in
2	feedstocks; and
3	(6) economic analysis.
4	(b) BIOFUELS AND BIOPRODUCTS.—The goals of the
5	biofuels and bioproducts programs shall be to develop, in
6	partnership with industry—
7	(1) advanced biochemical and thermo-chemical
8	conversion technologies capable of making fuels from
9	cellulosic feedstocks that are price-competitive with
10	gasoline or diesel in either internal combustion en-
11	gines or fuel cell-powered vehicles; and
12	(2) advanced biotechnology processes capable of
13	making biofuels and bioproducts with emphasis on
14	development of biorefinery technologies using en-
15	zyme-based processing systems.
16	(c) Definition.—For purposes of (b), the term "cel-
17	lulosic feedstock" means any portion of a crop not nor-
18	mally used in food production or any non-food crop grown
19	for the purpose of producing biomass feedstock.
20	SEC. 933. BIODIESEL ENGINE TESTING PROGRAM.
21	(a) In General.—Not later that 180 days after en-
22	actment of this Act, the Secretary shall initiate a partner-
23	ship with diesel engine, diesel fuel injection system, and
24	diesel vehicle manufacturers and diesel and biodiesel fuel

- 1 providers to include biodiesel testing in advanced diesel en-
- 2 gine and fuel system technology.
- 3 (b) Scope.—The study shall provide for testing to
- 4 determine the impact of biodiesel on current and future
- 5 emission control technologies, with emphasis on—
- 6 (1) the impact of biodiesel on emissions war-
- 7 ranty, in-use liability, and anti-tampering provisions;
- 8 (2) the impact of long-term use of biodiesel on
- 9 engine operations;
- 10 (3) the options for optimizing these technologies
- for both emissions and performance when switching
- between biodiesel and diesel fuel; and
- 13 (4) the impact of using biodiesel in these fuel-
- ing systems and engines when used as a blend with
- 15 2006 Environmental Protection Agency-mandated
- diesel fuel containing a maximum of 15-parts-per-
- million sulfur content.
- 18 (c) Report.—Not later than 2 years after the date
- 19 of enactment, the Secretary shall provide an interim re-
- 20 port to Congress on the findings of this study, including
- 21 a comprehensive analysis of impacts from biodiesel on en-
- 22 gine operation for both existing and expected future diesel
- 23 technologies, and recommendations for ensuring optimal
- 24 emissions reductions and engine performance with bio-
- 25 diesel.

1	(d) Definition.—For purposes of this section, the
2	term "biodiesel" means a diesel fuel substitute produced
3	from non-petroleum renewable resources that meets the
4	registration requirements for fuels and fuel additives es-
5	tablished by the Environmental Protection Agency under
6	section 211 of the Clean Air Act (42 U.S.C. 7545) and
7	that meets the American Society for Testing and Materials
8	D6751-02a "Standard Specification for Biodiesel Fuel
9	(B100) Blend Stock for Distillate Fuels".
10	SEC. 934 CONCENTRATING SOLAR POWER RESEARCH PRO-
11	GRAM.
12	(a) In General.—The Secretary shall conduct a
13	program of research and development to evaluate the po-
14	tential of concentrating solar power for hydrogen produc-
15	tion, including co-generation approaches for both hydro-
	tion, including co-generation approaches for both hydro- gen and electricity. Such program shall take advantage of
15	gen and electricity. Such program shall take advantage of
15 16	gen and electricity. Such program shall take advantage of existing facilities to the extent possible and shall include—
15 16 17	gen and electricity. Such program shall take advantage of existing facilities to the extent possible and shall include—
15 16 17 18	gen and electricity. Such program shall take advantage of existing facilities to the extent possible and shall include—  (1) development of optimized technologies that
15 16 17 18	gen and electricity. Such program shall take advantage of existing facilities to the extent possible and shall include—  (1) development of optimized technologies that are common to both electricity and hydrogen produc-
115 116 117 118 119 220	gen and electricity. Such program shall take advantage of existing facilities to the extent possible and shall include—  (1) development of optimized technologies that are common to both electricity and hydrogen production;
115 116 117 118 119 220 221	gen and electricity. Such program shall take advantage of existing facilities to the extent possible and shall include—  (1) development of optimized technologies that are common to both electricity and hydrogen production;  (2) evaluation of thermo-chemical cycles for hydrogen production;
115 116 117 118 119 220 221 222	gen and electricity. Such program shall take advantage of existing facilities to the extent possible and shall include—  (1) development of optimized technologies that are common to both electricity and hydrogen production;  (2) evaluation of thermo-chemical cycles for hydrogen production at the temperatures attainable

1	(4) system architectures and economics studies;
2	and
3	(5) coordination with activities in the Advanced
4	Reactor Hydrogen Co-generation Project on high
5	temperature materials, thermo-chemical cycle and
6	economic issues.
7	(b) Assessment.—In carrying out the program
8	under this section, the Secretary is directed to assess con-
9	flicting guidance on the economic potential of concen-
10	trating solar power for electricity production received from
11	the National Research Council report entitled "Renewable
12	Power Pathways: A Review of the U.S. Department of En-
13	ergy's Renewable Energy Programs' in 2000 and subse-
14	quent DOE-funded reviews of that report and provide an
15	assessment of the potential impact of this technology be-
16	fore, or concurrent with, submission of the fiscal year
17	2006 budget.
18	(c) Report.—Not later than 5 years after the date
19	of enactment of this section, the Secretary shall provide
20	a report to Congress on the economic and technical poten-
21	tial for electricity or hydrogen production, with or without
22	co-generation, with concentrating solar power, including
23	the economic and technical feasibility of potential con-
24	struction of a pilot demonstration facility suitable for com-

1	mercial production of electricity and/or hydrogen from
2	concentrating solar power.
3	SEC. 935. MISCELLANEOUS PROJECTS.
4	The Secretary shall conduct research, development,
5	demonstration, and commercial application programs
6	for—
7	(1) ocean energy, including wave energy;
8	(2) the combined use of renewable energy tech-
9	nologies with one another and with other energy
10	technologies, including the combined use of wind
11	power and coal gasification technologies; and
12	(3) renewable energy technologies for cogenera-
13	tion of hydrogen and electricity.
14	Subtitle D—Nuclear Energy
14 15	Subtitle D—Nuclear Energy SEC. 941. NUCLEAR ENERGY.
15 16	SEC. 941. NUCLEAR ENERGY.
15 16 17	SEC. 941. NUCLEAR ENERGY.  (a) CORE PROGRAMS.—The following sums are au-
15 16 17	SEC. 941. NUCLEAR ENERGY.  (a) CORE PROGRAMS.—The following sums are authorized to be appropriated to the Secretary for nuclear
15 16 17 18	SEC. 941. NUCLEAR ENERGY.  (a) Core Programs.—The following sums are authorized to be appropriated to the Secretary for nuclear energy research, development, demonstration, and com-
15 16 17 18 19	SEC. 941. NUCLEAR ENERGY.  (a) Core Programs.—The following sums are authorized to be appropriated to the Secretary for nuclear energy research, development, demonstration, and commercial application activities, including activities authorized
115 116 117 118 119 220	SEC. 941. NUCLEAR ENERGY.  (a) CORE PROGRAMS.—The following sums are authorized to be appropriated to the Secretary for nuclear energy research, development, demonstration, and commercial application activities, including activities authorized under this subtitle, other than those described in sub-
15 16 17 18 19 20 21	SEC. 941. NUCLEAR ENERGY.  (a) CORE PROGRAMS.—The following sums are authorized to be appropriated to the Secretary for nuclear energy research, development, demonstration, and commercial application activities, including activities authorized under this subtitle, other than those described in subsection (b):
15 16 17 18 19 20 21	SEC. 941. NUCLEAR ENERGY.  (a) CORE PROGRAMS.—The following sums are authorized to be appropriated to the Secretary for nuclear energy research, development, demonstration, and commercial application activities, including activities authorized under this subtitle, other than those described in subsection (b):  (1) for fiscal year 2004, \$273,000,000;

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1
              (5) for fiscal year 2008, $495,000,000.
 2
         (b) Nuclear Infrastructure Support.—The fol-
 3
    lowing sums are authorized to be appropriated to the Sec-
 4
    retary for activities under section 942(f):
 5
              (1) for fiscal year 2004, $125,000,000;
 6
              (2) for fiscal year 2005, $130,000,000;
 7
              (3) for fiscal year 2006, $135,000,000;
 8
              (4) for fiscal year 2007, $140,000,000; and
 9
              (5) for fiscal year 2008, $145,000,000.
10
         (c) Allocations.—From amounts authorized under
11
    subsection (a), the following sums are authorized:
12
              (1) For activities under section 943—
13
                  (A) for fiscal year 2004, $140,000,000;
14
                  (B) for fiscal year 2005, $145,000,000;
15
                  (C) for fiscal year 2006, $150,000,000;
16
                  (D) for fiscal year 2007, $155,000,000;
17
             and
18
                  (E) for fiscal year 2008, $275,000,000.
19
              (2) For activities under section 944—
20
                  (A) for fiscal year 2004, $33,000,000;
21
                  (B) for fiscal year 2005, $37,900,000;
22
                  (C) for fiscal year 2006, $43,600,000;
23
                  (D) for fiscal year 2007, $50,100,000; and
24
                  (E) for fiscal year 2008, $56,000,000.
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	$\partial \Delta J$
1	(3) For activities under section 946, for each of
2	fiscal years 2004 through 2008, \$6,000,000.
3	(d) None of the funds authorized under this section
4	may be used for decommissioning the Fast Flux Test Fa-
5	cility.
6	SEC. 942. NUCLEAR ENERGY RESEARCH PROGRAMS.
7	(a) Nuclear Energy Research Initiative.—The
8	Secretary shall carry out a Nuclear Energy Research Ini-
9	tiative for research and development related to nuclear en-
10	ergy.
11	(b) Nuclear Energy Plant Optimization Pro-
12	GRAM.—The Secretary shall carry out a Nuclear Energy
13	Plant Optimization Program to support research and de-
14	velopment activities addressing reliability, availability, pro-
15	ductivity, component aging, safety and security of existing
16	nuclear power plants.
17	(c) Nuclear Power 2010 Program.—The Sec-
18	retary shall carry out a Nuclear Power 2010 Program
19	consistent with recommendations in the October 2001 re-
20	port entitled "A Roadmap to Deploy New Nuclear Power
21	Plants in the United States by 2010" issued by the Nu-
22	clear Energy Research Advisory Committee of the Depart-
23	ment. The Program shall include—
24	(1) utilization of the expertise and capabilities

of industry, universities, and National Laboratories

1	in evaluation of advanced nuclear fuel cycles and
2	fuels testing;
3	(2) consideration of a variety of reactor designs
4	suitable for both developed and developing nations;
5	(3) participation of international collaborators
6	in research, development, and design efforts as ap-
7	propriate; and
8	(4) encouragement for university and industry
9	participation.
10	(d) Generation IV Nuclear Energy Systems
11	Initiative.—The Secretary shall carry out a Generation
12	IV Nuclear Energy Systems Initiative to develop an over-
13	all technology plan and to support research and develop-
14	ment necessary to make an informed technical decision
15	about the most promising candidates for eventual commer-
16	cial application. The Initiative shall examine advanced
17	proliferation-resistant and passively safe reactor designs,
18	including designs that—
19	(1) are economically competitive with other elec-
20	tric power generation plants;
21	(2) have higher efficiency, lower cost, and im-
22	proved safety compared to reactors in operation on
23	the date of enactment of this Act:

1	(3) use fuels that are proliferation resistant and
2	have substantially reduced production of high-level
3	waste per unit of output; and
4	(4) use improved instrumentation.
5	(e) REACTOR PRODUCTION OF HYDROGEN.—The
6	Secretary shall carry out research to examine designs for
7	high-temperature reactors capable of producing large-scale
8	quantities of hydrogen using thermo-chemical processes.
9	(f) Nuclear Infrastructure Support.—The
10	Secretary shall develop and implement a strategy for the
11	facilities of the Office of Nuclear Energy, Science, and
12	Technology and shall transmit a report containing the
13	strategy along with the President's budget request to the
14	Congress for fiscal year 2006. Such strategy shall provide
15	a cost-effective means for—
16	(1) maintaining existing facilities and infra-
17	structure, as needed;
18	(2) closing unneeded facilities;
19	(3) making facility upgrades and modifications;
20	and
21	(4) building new facilities.
22	SEC. 943. ADVANCED FUEL CYCLE INITIATIVE.
23	(a) In General.—The Secretary, through the Direc-
24	tor of the Office of Nuclear Energy, Science and Tech-
25	nology, shall conduct an advanced fuel recycling tech-

- 1 nology research and development program to evaluate pro-
- 2 liferation-resistant fuel recycling and transmutation tech-
- 3 nologies which minimize environmental or public health
- 4 and safety impacts as an alternative to aqueous reprocess-
- 5 ing technologies deployed as of the date of enactment of
- 6 this Act in support of evaluation of alternative national
- 7 strategies for spent nuclear fuel and the Generation IV
- 8 advanced reactor concepts, subject to annual review by the
- 9 Secretary's Nuclear Energy Research Advisory Committee
- 10 or other independent entity, as appropriate. Opportunities
- 11 to enhance progress of this program through international
- 12 cooperation should be sought.
- 13 (b) Reports.—The Secretary shall report on the ac-
- 14 tivities of the advanced fuel recycling technology research
- 15 and development program as part of the Department's an-
- 16 nual budget submission.
- 17 SEC. 944. UNIVERSITY NUCLEAR SCIENCE AND ENGINEER-
- 18 **ING SUPPORT.**
- 19 (a) Establishment.—The Secretary shall support
- 20 a program to invest in human resources and infrastructure
- 21 in the nuclear sciences and engineering and related fields
- 22 (including health physics and nuclear and radiochemistry),
- 23 consistent with departmental missions related to civilian
- 24 nuclear research and development.

1	(b) Duties.—In carrying out the program under this
2	section, the Secretary shall establish fellowship and faculty
3	assistance programs, as well as provide support for funda-
4	mental research and encourage collaborative research
5	among industry, national laboratories, and universities
6	through the Nuclear Energy Research Initiative. The Sec-
7	retary is encouraged to support activities addressing the
8	entire fuel cycle through involvement of both the Offices
9	of Nuclear Energy, Science and Technology and Civilian
10	Radioactive Waste Management. The Secretary shall sup-
11	port communication and outreach related to nuclear
12	science, engineering and nuclear waste management.
13	(c) Maintaining University Research and
14	TRAINING REACTORS AND ASSOCIATED INFRASTRUC-
15	TURE.—Activities under this section may include—
16	(1) converting research reactors currently using
17	high-enrichment fuels to low-enrichment fuels, up-
18	grading operational instrumentation, and sharing of
19	reactors among institutions of higher education;
20	(2) providing technical assistance, in collabora-
21	tion with the United States nuclear industry, in reli-
22	censing and upgrading training reactors as part of
23	a student training program; and

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1	(3) providing funding for reactor improvements
2	as part of a focused effort that emphasizes research
3	training, and education.
4	(d) University-National Laboratory Inter-
5	ACTIONS.—The Secretary shall develop sabbatical fellow-
6	ship and visiting scientist programs to encourage sharing
7	of personnel between national laboratories and univer-
8	sities.
9	(e) Operating and Maintenance Costs.—Fund-
10	ing for a research project provided under this section may
11	be used to offset a portion of the operating and mainte-
12	nance costs of a research reactor at an institution of high-
13	er education used in the research project.
14	SEC. 945. SECURITY OF NUCLEAR FACILITIES.
15	The Secretary, through the Director of the Office of
16	Nuclear Energy, Science and Technology shall conduct a
17	research and development program on cost-effective tech-
18	nologies for increasing the safety of nuclear facilities from
19	natural phenomena and the security of nuclear facilities
20	from deliberate attacks.
<b>3</b> 1	

## 21 SEC. 946. ALTERNATIVES TO INDUSTRIAL RADIOACTIVE

- SOURCES.
- 23 (a) Survey.—Not later than August 1, 2004, the
- 24 Secretary shall provide to the Congress results of a survey

- 1 of industrial applications of large radioactive sources. The2 survey shall—
- (1) consider well-logging sources as one class of
   industrial sources;
- 5 (2) include information on current domestic and 6 international Department, Department of Defense, 7 State Department and commercial programs to 8 manage and dispose of radioactive sources; and
- 9 (3) discuss available disposal options for cur10 rently deployed or future sources and, if deficiencies
  11 are noted for either deployed or future sources, rec12 ommend legislative options that Congress may con13 sider to remedy identified deficiencies.
- 13 14 (b) Plan.—In conjunction with the survey in sub-15 section (a), the Secretary shall establish a research and development program to develop alternatives to such 16 17 sources that reduce safety, environmental, or proliferation 18 risks to either workers using the sources or the public. 19 Miniaturized particle accelerators for well-logging or other 20 industrial applications and portable accelerators for pro-21 duction of short-lived radioactive materials at an industrial site shall be considered as part of the research and
- 23 development efforts. Details of the program plan shall be
- 24 provided to the Congress by August 1, 2004.

# Subtitle E—Fossil Energy

2	SEC. 951. FOSSIL ENERGY.
3	(a) In General.—The following sums are author-
4	ized to be appropriated to the Secretary for fossil energy
5	research, development, demonstration, and commercial ap-
6	plication activities, including activities authorized under
7	this subtitle:
8	(1) for fiscal year 2004, \$523,000,000;
9	(2) for fiscal year 2005, \$542,000,000;
10	(3) for fiscal year 2006, \$558,000,000;
11	(4) for fiscal year 2007, \$585,000,000; and
12	(5) for fiscal year 2008, \$600,000,000.
13	(b) Allocations.—From amounts authorized under
14	subsection (a), the following sums are authorized:
15	(1) For activities under section 952(b)(2),
16	\$28,000,000 for each of the fiscal years $2004$
17	through 2008.
18	(2) For activities under section 953—
19	(A) for fiscal year 2004, \$12,000,000;
20	(B) for fiscal year $2005$ , $$15,000,000$ ; and
21	(C) for each of fiscal years 2006 through
22	2008, \$20,000,000.
23	(3) For activities under section 954, to remain
24	available until expended—
25	(A) for fiscal year 2004, \$200,000,000;

1	(B) for fiscal year 2005, \$210,000,000;
2	and
3	(C) for fiscal year 2006, \$220,500,000.
4	(4) For the Office of Arctic Energy under sec-
5	tion 3197 of the Floyd D. Spence National Defense
6	Authorization Act for Fiscal Year 2001 (Public Law
7	106-398), $$25,000,000$ for each of fiscal years $2004$
8	through 2008.
9	(c) Extended Authorization.—There are author-
10	ized to be appropriated to the Secretary for the Office of
11	Arctic Energy under section 3197 of the Floyd D. Spence
12	National Defense Authorization Act for Fiscal Year 2001
13	(Public Law 106–398), \$25,000,000 for each of fiscal
14	years 2009 through 2012.
15	(d) Limits on Use of Funds.—
16	(1) None of the funds authorized under this
17	section may be used for Fossil Energy Environ-
18	mental Restoration or Import/Export Authorization.
19	(2) Of the funds authorized under subsection
20	(b)(2), not less than 20 percent of the funds appro-
21	priated for each fiscal year shall be dedicated to re-
22	search and development carried out at institutions of
23	higher education

### 1 SEC. 952. OIL AND GAS RESEARCH PROGRAMS.

2	(a) OIL AND GAS RESEARCH.—The Secretary shall
3	conduct a program of research, development, demonstra-
4	tion, and commercial application on oil and gas, includ-
5	ing—
6	(1) exploration and production;
7	(2) gas hydrates;
8	(3) reservoir life and extension;
9	(4) transportation and distribution infrastruc-
10	ture;
11	(5) ultraclean fuels;
12	(6) heavy oil and oil shale; and
13	(7) related environmental research.
14	(b) Fuel Cells.—
15	(1) The Secretary shall conduct a program of
16	research, development, demonstration, and commer-
17	cial application on fuel cells for low-cost, high-effi-
18	ciency, fuel-flexible, modular power systems.
19	(2) The demonstrations shall include fuel cell
20	proton exchange membrane technology for commer-
21	cial, residential, and transportation applications, and
22	distributed generation systems, utilizing improved
23	manufacturing production and processes.
24	(c) Natural Gas and Oil Deposits Report.—
25	Not later than 2 years after the date of the enactment

26 of this Act, and every 2 years thereafter, the Secretary

1	of the Interior, in consultation with other appropriate Fed-
2	eral agencies, shall transmit a report to the Congress of
3	the latest estimates of natural gas and oil reserves, re-
4	serves growth, and undiscovered resources in Federal and
5	State waters off the coast of Louisiana and Texas.
6	(d) Integrated Clean Power and Energy Re-
7	SEARCH.—
8	(1) The Secretary shall establish a national cen-
9	ter or consortium of excellence in clean energy and
10	power generation, utilizing the resources of the exist-
11	ing Clean Power and Energy Research Consortium,
12	to address the nation's critical dependence on energy
13	and the need to reduce emissions.
14	(2) The center or consortium will conduct a
15	program of research, development, demonstration
16	and commercial application on integrating the fol-
17	lowing six focus areas:
18	(A) efficiency and reliability of gas tur-
19	bines for power generation;
20	(B) reduction in emissions from power
21	generation;
22	(C) promotion of energy conservation
23	issues;
24	(D) effectively utilizing alternative fuels
25	and renewable energy;

1	(E) development of advanced materials
2	technology for oil and gas exploration and utili-
3	zation in harsh environments; and
4	(F) education on energy and power genera-
5	tion issues.
6	SEC. 953. RESEARCH AND DEVELOPMENT FOR COAL MIN-
7	ING TECHNOLOGIES.
8	(a) Establishment.—The Secretary shall carry out
9	a program of research and development on coal mining
10	technologies. The Secretary shall cooperate with appro-
11	priate Federal agencies, coal producers, trade associations,
12	equipment manufacturers, institutions of higher education
13	with mining engineering departments, and other relevant
14	entities.
15	(b) Program.—The research and development activi-
16	ties carried out under this section shall—
17	(1) be guided by the mining research and devel-
18	opment priorities identified by the Mining Industry
19	of the Future Program and in the recommendations
20	from relevant reports of the National Academy of
21	Sciences on mining technologies;
22	(2) include activities exploring minimization of
23	contaminants in mined coal that contribute to envi-
24	ronmental concerns including development and dem-

1	onstration of electromagnetic wave imaging ahead of
2	mining operations;
3	(3) develop and demonstrate coal bed electro-
4	magnetic wave imaging and radar techniques for
5	horizontal drilling in order to increase methane re-
6	covery efficiency, prevent spoilage of domestic coal
7	reserves and minimize water disposal associated with
8	methane extraction; and
9	(4) expand mining research capabilities at insti-
10	tutions of higher education.
11	SEC. 954. COAL AND RELATED TECHNOLOGIES PROGRAM.
12	(a) In General.—In addition to the program au-
13	thorized under Title II of this Act, the Secretary of En-
14	ergy shall conduct a program of technology research, de-
15	velopment and demonstration and commercial application
16	for coal and power systems, including programs to facili-
17	tate production and generation of coal-based power
18	through—
19	(1) innovations for existing plants;
20	(2) integrated gasification combined cycle;
21	(3) advanced combustion systems;
22	(4) turbines for synthesis gas derived from coal;
23	(5) carbon capture and sequestration research
24	and development;

1	(6) coal-derived transportation fuels and chemi-
2	cals;
3	(7) solid fuels and feedstocks; and
4	(8) advanced coal-related research.
5	(b) Cost and Performance Goals.—In carrying
6	out programs authorized by this section, the Secretary
7	shall identify cost and performance goals for coal-based
8	technologies that would permit the continued cost-com-
9	petitive use of coal for electricity generation, as chemical
10	feedstocks, and as transportation fuel in 2007, 2015, and
11	the years after 2020. In establishing such cost and per-
12	formance goals, the Secretary shall—
13	(1) consider activities and studies undertaken
14	to date by industry in cooperation with the Depart-
15	ment of Energy in support of such assessment;
16	(2) consult with interested entities, including
17	coal producers, industries using coal, organizations
18	to promote coal and advanced coal technologies, en-
19	vironmental organizations and organizations rep-
20	resenting workers;
21	(3) not later than 120 days after the date of
22	enactment of this section, publish in the Federal
23	Register proposed draft cost and performance goals
24	for public comments; and

1	(4) not later than 180 days after the date of
2	enactment of this section and every four years there-
3	after, submit to Congress a report describing final
4	cost and performance goals for such technologies
5	that includes a list of technical milestones as well as
6	an explanation of how programs authorized in this
7	section will not duplicate the activities authorized
8	under the Clean Coal Power Initiative authorized
9	under Title II of this Act.
0	SEC. 955. COMPLEX WELL TECHNOLOGY TESTING FACIL-

### 1

- 11 ITY.
- 12 The Secretary of Energy, in coordination with indus-
- 13 try leaders in extended research drilling technology, shall
- 14 establish a Complex Well Technology Testing Facility at
- 15 the Rocky Mountain Oilfield Testing Center to increase
- the range of extended drilling technologies. 16

#### Subtitle F—Science 17

- 18 SEC. 961. SCIENCE.
- 19 (a) IN GENERAL.—The following sums are author-
- 20 ized to be appropriated to the Secretary for research, de-
- 21 velopment, demonstration, and commercial application ac-
- tivities of the Office of Science, including activities author-
- ized under this subtitle, including the amounts authorized
- under the amendment made by section 967(c)(2)(D), and
- including basic energy sciences, advanced scientific and

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computing research, biological and environmental re-
 1
 2
    search, fusion energy sciences, high energy physics, nu-
 3
    clear physics, and research analysis and infrastructure
 4
    support:
 5
             (1) for fiscal year 2004, $3,785,000,000;
 6
             (2) for fiscal year 2005, $4,153,000,000;
 7
             (3) for fiscal year 2006, $4,586,000,000;
 8
             (4) for fiscal year 2007, $5,000,000,000; and
 9
             (5) for fiscal year 2008, $5,400,000,000.
10
         (b) ALLOCATIONS.—From amounts authorized under
11
    subsection (a), the following sums are authorized:
12
             (1) For activities of the Fusion Energy Sciences
13
        Program, including activities under section 962—
14
                  (A) for fiscal year 2004, $335,000,000;
15
                  (B) for fiscal year 2005, $349,000,000;
16
                  (C) for fiscal year 2006, $362,000,000;
17
                  (D) for fiscal year 2007, $377,000,000;
18
             and
19
                  (E) for fiscal year 2008, $393,000,000.
20
             (2) For the Spallation Neutron Source—
21
                  (A) for construction in fiscal year 2004,
22
             $124,600,000;
23
                  (B) for construction in fiscal year 2005,
             $79,800,000;
24
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1	(C) for completion of construction in fiscal
2	year 2006, \$41,100,000; and
3	(D) for other project costs (including re-
4	search and development necessary to complete
5	the project, preoperations costs, and capital
6	equipment related to construction),
7	\$103,279,000 for the period encompassing fis-
8	cal years 2003 through 2006, to remain avail-
9	able until expended through September 30,
10	2006.
11	(3) For Catalysis Research activities under sec-
12	tion 965—
13	(A) for fiscal year 2004, \$33,000,000;
14	(B) for fiscal year 2005, \$35,000,000;
15	(C) for fiscal year 2006, \$36,500,000;
16	(D) for fiscal year 2007, \$38,200,000; and
17	(E) for fiscal year 2008, \$40,100,000.
18	(4) For Nanoscale Science and Engineering Re-
19	search activities under section 966—
20	(A) for fiscal year 2004, \$270,000,000;
21	(B) for fiscal year 2005, \$290,000,000;
22	(C) for fiscal year 2006, \$310,000,000;
23	(D) for fiscal year 2007, \$330,000,000;
24	and
25	(E) for fiscal year 2008, \$375,000,000.

1	(5) For activities under subsection 966(c), from
2	the amounts authorized under subparagraph (4)—
3	(A) for fiscal year 2004, \$135,000,000;
4	(B) for fiscal year 2005, \$150,000,000;
5	(C) for fiscal year 2006, \$120,000,000;
6	(D) for fiscal year 2007, \$100,000,000;
7	and
8	(E) for fiscal year 2008, \$125,000,000.
9	(6) For activities in the Genomes to Life Pro-
10	gram under section 968—
11	(A) for fiscal year 2004, \$100,000,000;
12	(B) for fiscal year 2005, \$170,000,000;
13	(C) for fiscal year 2006, \$325,000,000;
14	(D) for fiscal year 2007, \$415,000,000;
15	and
16	(E) for fiscal year 2008, \$455,000,000.
17	(7) For construction and ancillary equipment of
18	the Genomes to Life User Facilities under section
19	968(d), of funds authorized under (6)—
20	(A) for fiscal year 2004, \$16,000,000;
21	(B) for fiscal year 2005, \$70,000,000;
22	(C) for fiscal year 2006, \$175,000,000;
23	(D) for fiscal year 2007, \$215,000,000;
24	and
25	(E) for fiscal year 2008, \$205,000,000.

1	(8) For activities in the Water Supply Tech-
2	nologies Program under section 970, \$30,000,000
3	for each of fiscal years 2004 through 2008.
4	(c) In addition to the funds authorized under sub-
5	section (b)(1), the following sums are authorized for con-
6	struction costs associated with the ITER project under
7	section 962—
8	(1) for fiscal year 2006, \$55,000,000;
9	(2) for fiscal year 2007, \$95,000,000; and
10	(3) for fiscal year 2008, \$115,000,000.
11	SEC. 962. UNITED STATES PARTICIPATION IN ITER.
12	(a) Participation.—
13	(1) The Secretary of Energy is authorized to
14	undertake full scientific and technological coopera-
15	tion in the International Thermonuclear Experi-
16	mental Reactor project (referred to in this title as
17	"ITER").
18	(2) In the event that ITER fails to go forward
19	within a reasonable period of time, the Secretary
20	shall send to Congress a plan, including costs and
21	schedules, for implementing the domestic burning
22	plasma experiment known as the Fusion Ignition
23	Research Expriment. Such a plan shall be developed

with full consultation with the Fusion Energy

- Sciences Advisory Committee and be reviewed by the
   National Research Council.
- 3 (3) It is the intent of Congress that such sums 4 shall be largely for work performed in the United 5 States and that such work contributes the maximum 6 amount possible to the U.S. scientific and techno-7 logical base.

#### (b) Planning.—

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- (1) Not later than 180 days of the date of enactment of this act, the Secretary shall present to Congress a plan, with proposed cost estimates, budgets and potential international partners, for the implementation of the goals of this section. The plan shall ensure that—
  - (A) existing fusion research facilities are more fully utilized;
  - (B) fusion science, technology, theory, advanced computation, modeling and simulation are strengthened;
  - (C) new magnetic and inertial fusion research facilities are selected based on scientific innovation, cost effectiveness, and their potential to advance the goal of practical fusion energy at the earliest date possible, and those that are selected are funded at a cost-effective rate;

1	(D) communication of scientific results and
2	methods between the fusion energy science com-
3	munity and the broader scientific and tech-
4	nology communities is improved;
5	(E) inertial confinement fusion facilities
6	are utilized to the extent practicable for the
7	purpose of inertial fusion energy research and
8	development; and
9	(F) attractive alternative inertial and mag-
10	netic fusion energy approaches are more fully
11	explored.
12	(2) Such plan shall also address the status of
13	and, to the degree possible, costs and schedules
14	for—
15	(A) in coordination with the program in
16	section 969, the design and implementation of
17	international or national facilities for the test-
18	ing of fusion materials; and
19	(B) the design and implementation of
20	international or national facilities for the test-
21	ing and development of key fusion technologies.
22	SEC. 963. SPALLATION NEUTRON SOURCE.
23	(a) Definition.—For the purposes of this section,
24	the term "Spallation Neutron Source" means Department

- 1 Project 9909E 09334, Oak Ridge National Laboratory,
- 2 Oak Ridge, Tennessee.
- 3 (b) Report.—The Secretary shall report on the
- 4 Spallation Neutron Source as part of the Department's
- 5 annual budget submission, including a description of the
- 6 achievement of milestones, a comparison of actual costs
- 7 to estimated costs, and any changes in estimated project
- 8 costs or schedule.
- 9 (c) AUTHORIZATION OF APPROPRIATIONS.—The
- 10 total amount obligated by the Department, including prior
- 11 year appropriations, for the Spallation Neutron Source
- 12 may not exceed—
- 13 (1) \$1,192,700,000 for costs of construction;
- (2) \$219,000,000 for other project costs; and
- 15 (3) \$1,411,700,000 for total project cost.
- 16 SEC. 964. SUPPORT FOR SCIENCE AND ENERGY FACILITIES
- 17 **AND INFRASTRUCTURE.**
- 18 (a) Facility and Infrastructure Policy.—The
- 19 Secretary shall develop and implement a strategy for fa-
- 20 cilities and infrastructure supported primarily from the
- 21 Office of Science, the Office of Energy Efficiency and Re-
- 22 newable Energy, the Office of Fossil Energy, or the Office
- 23 of Nuclear Energy, Science and Technology Programs at
- 24 all national laboratories and single-purpose research facili-
- 25 ties. Such strategy shall provide cost-effective means for—

1	(1) maintaining existing facilities and infra-
2	structure, as needed;
3	(2) closing unneeded facilities;
4	(3) making facility modifications; and
5	(4) building new facilities.
6	(b) Report.—
7	(1) The Secretary shall prepare and transmit,
8	along with the President's budget request to the
9	Congress for fiscal year 2006, a report containing
10	the strategy developed under subsection (a).
11	(2) For each national laboratory and single-pur-
12	pose research facility, for the facilities primarily
13	used for science and energy research, such report
14	shall contain—
15	(A) the current priority list of proposed fa-
16	cilities and infrastructure projects, including
17	cost and schedule requirements;
18	(B) a current ten-year plan that dem-
19	onstrates the reconfiguration of its facilities and
20	infrastructure to meet its missions and to ad-
21	dress its long-term operational costs and return
22	on investment;
23	(C) the total current budget for all facili-
24	ties and infrastructure funding: and

1	(D) the current status of each facility and
2	infrastructure project compared to the original
3	baseline cost, schedule, and scope.
4	SEC. 965. CATALYSIS RESEARCH PROGRAM.
5	(A) ESTABLISHMENT.—The Secretary, through the
6	Office of Science, shall support a program of research and
7	development in catalysis science consistent with the De-
8	partment's statutory authorities related to research and
9	development. The program shall include efforts to—
10	(1) enable catalyst design using combinations of
11	experimental and mechanistic methodologies coupled
12	with computational modeling of catalytic reactions at
13	the molecular level;
14	(2) develop techniques for high throughput syn-
15	thesis, assay, and characterization at nanometer and
16	sub-nanometer scales in situ under actual operating
17	conditions,
18	(3) synthesize catalysts with specific site archi-
19	tectures;
20	(4) conduct research on the use of precious
21	metals for catalysis; and
22	(5) translate molecular understanding to the
23	design of catalytic compounds.

1	(b) Duties of the Office of Science.—In car-
2	rying out this program, the Director of the Office of
3	Science shall—
4	(1) support both individual investigators and
5	multidisciplinary teams of investigators to pioneer
6	new approaches in catalytic design;
7	(2) develop, plan, construct, acquire, share, or
8	operate special equipment or facilities for the use of
9	investigators in collaboration with national user fa-
10	cilities such as nanoscience and engineering centers;
11	(3) support technology transfer activities to
12	benefit industry and other users of catalysis science
13	and engineering; and
14	(4) coordinate research and development activi-
15	ties with industry and other federal agencies.
16	(c) Triennial Assessment.—The National Acad-
17	emy of Sciences shall review the catalysis program every
18	three years to report on gains made in the fundamental
19	science of catalysis and its progress towards developing
20	new fuels for energy production and material fabrication
21	processes.
22	SEC. 966. NANOSCALE SCIENCE AND ENGINEERING RE-
23	SEARCH.
24	(a) Establishment.—The Secretary, acting
25	through the Office of Science, shall support a program of

1	research, development, demonstration, and commercial ap-
2	plication in nanoscience and nanoengineering. The pro-
3	gram shall include efforts to further the understanding of
4	the chemistry, physics, materials science, and engineering
5	of phenomena on the scale of nanometers and to apply
6	this knowledge to the Department's mission areas.
7	(b) Duties of the Office of Science.—In car-
8	rying out the program under this section, the Office of
9	Science shall—
10	(1) support both individual investigators and
11	teams of investigators, including multidisciplinary
12	teams;
13	(2) carry out activities under subsection (c);
14	(3) support technology transfer activities to
15	benefit industry and other users of nanoscience and
16	nanoengineering; and
17	(4) coordinate research and development activi-
18	ties with other DOE programs, industry and other
19	Federal agencies.
20	(c) Nanoscience and Nanoengineering Re-
21	SEARCH CENTERS AND MAJOR INSTRUMENTATION.—

(1) The Secretary shall carry out projects to de-

velop, plan, construct, acquire, operate, or support

special equipment, instrumentation, or facilities for

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- investigators conducting research and development
   in nanoscience and nanoengineering.
- (2) Projects under paragraph (1) may include the measurement of properties at the scale of nanometers, manipulation at such scales, and the integration of technologies based on nanoscience or nanoengineering into bulk materials or other technologies.
  - (3) Facilities under paragraph (1) may include electron microcharacterization facilities, microlithography facilities, scanning probe facilities, and related instrumentation.
- 13 (4) The Secretary shall encourage collabora-14 tions among DOE programs, institutions of higher 15 education, laboratories, and industry at facilities 16 under this subsection.

#### 17 SEC. 967. ADVANCED SCIENTIFIC COMPUTING FOR ENERGY

18 **MISSIONS.** 

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- 19 (a) IN GENERAL.—The Secretary, acting through the
- 20 Office of Science, shall support a program to advance the
- 21 Nation's computing capability across a diverse set of
- 22 grand challenge, computationally based, science problems
- 23 related to departmental missions.

1	(b) Duties of the Office of Science.—In car-
2	rying out the program under this section, the Office of
3	Science shall—

- (1) advance basic science through computation by developing software to solve grand challenge science problems on new generations of computing platforms in collaboration with other DOE program offices;
- (2) enhance the foundations for scientific computing by developing the basic mathematical and computing systems software needed to take full advantage of the computing capabilities of computers with peak speeds of 100 teraflops or more, some of which may be unique to the scientific problem of interest;
- (3) enhance national collaboratory and networking capabilities by developing software to integrate geographically separated researchers into effective research teams and to facilitate access to and movement and analysis of large (petabyte) data sets;
- (4) maintain a robust scientific computing hardware infrastructure to ensure that the computing resources needed to address departmental missions are available; and

1	(5) explore new computing approaches and
2	technologies that promise to advance scientific com-
3	puting including developments in quantum com-
4	puting.
5	(e) High-Performance Computing Act of 1991
6	AMENDMENTS.—The High-Performance Computing Act
7	of 1991 is amended—
8	(1) in section 4 (15 U.S.C. 5503)—
9	(A) in paragraph (3) by striking "means"
10	and inserting "and networking and information
11	technology' mean", and by striking "(including
12	vector supercomputers and large scale parallel
13	systems)"; and
14	(B) in paragraph (4), by striking "packet
15	switched".
16	(2) in section 203 (15 U.S.C. 5523)—
17	(A) in subsection (a), by striking all after
18	"As part of the" and inserting—
19	"Networking and Information Technology Research and
20	Development Program, the Secretary of Energy shall con-
21	duct basic and applied research in networking and infor-
22	mation technology, with emphasis on supporting funda-
23	mental research in the physical sciences and engineering,
24	and energy applications; providing supercomputer access
25	and advanced communication capabilities and facilities to

1	scientific researchers; and developing tools for distributed
2	scientific collaboration.";
3	(B) in subsection (b), by striking "Pro-
4	gram" and inserting "Networking and Informa-
5	tion Technology Research and Development
6	Program"; and
7	(C) by amending subsection (e) to read as
8	follows:
9	"(e) Authorization of Appropriations.—There
10	are authorized to be appropriated to the Secretary of En-
11	ergy to carry out the Networking and Information Tech-
12	nology Research and Development Program such sums as
13	may be necessary for fiscal years 2004 through 2008.".
14	(d) COORDINATION.—The Secretary shall ensure that
15	the program under this section is integrated and con-
16	sistent with—
17	(1) the Accelerated Strategic Computing Initia-
18	tive of the National Nuclear Security Administra-
19	tion; and
20	(2) other national efforts related to advanced
21	scientific computing for science and engineering.
22	SEC. 968. GENOMES TO LIFE PROGRAM.
23	(a) Establishment.—The Secretary shall carry out
24	a program of research, development, demonstration, and
25	commercial application, to be known as the Genomes to

1	Life Program, in systems biology and proteomics con-
2	sistent with the Department's statutory authorities.
3	(b) Planning.—
4	(1) The Secretary shall prepare a program plan
5	describing how knowledge and capabilities would be
6	developed by the program and applied to Depart-
7	ment missions relating to energy security, environ-
8	mental cleanup, and national security.
9	(2) The program plan will be developed in con-
10	sultation with other relevant Department technology
11	programs.
12	(3) The program plan shall focus science and
13	technology on long-term goals, including—
14	(A) contributing to U.S. independence
15	from foreign energy sources, including produc-
16	tion of hydrogen;
17	(B) converting carbon dioxide to organic
18	carbon;
19	(C) advancing environmental cleanup;
20	(D) providing the science and technology
21	for new biotechnology industries; and
22	(E) improving national security and com-
23	bating bioterrorism

1	(4) The program plan shall establish specific
2	short-term goals and update these goals with the
3	Secretary's annual budget submission.
4	(c) Program Execution.—In carrying out the pro-
5	gram under this Act, the Secretary shall—
6	(1) support individual investigators and multi-
7	disciplinary teams of investigators;
8	(2) subject to subsection (d), develop, plan, con-
9	struct, acquire, or operate special equipment or fa-
10	cilities for the use of investigators conducting re-
11	search, development, demonstration, or commercial
12	application in systems biology and proteomics;
13	(3) support technology transfer activities to
14	benefit industry and other users of systems biology
15	and proteomics; and
16	(4) coordinate activities by the Department
17	with industry and other federal agencies.
18	(d) Genomes to Life User Facilities and An-
19	CILLARY EQUIPMENT.—
20	(1) Within the funds authorized to be appro-
21	priated pursuant to this Act, the amounts specified
22	under section 961(b)(7) shall, subject to appropria-
23	tions, be available for projects to develop, plan, con-
24	struct, acquire, or operate special equipment, instru-
25	mentation, or facilities for investigators conducting

1	research, development, demonstration, and commer-
2	cial application in systems biology and proteomics
3	and associated biological disciplines.
4	(2) Projects under paragraph (1) may in-
5	clude—
6	(A) the identification and characterization
7	of multiprotein complexes;
8	(B) characterization of gene regulatory
9	networks;
10	(C) characterization of the functional rep-
11	ertoire of complex microbial communities in
12	their natural environments at the molecular
13	level; and
14	(D) development of computational methods
15	and capabilities to advance understanding of
16	complex biological systems and predict their be-
17	havior.
18	(3) Facilities under paragraph (1) may include
19	facilities, equipment, or instrumentation for—
20	(A) the production and characterization of
21	proteins;
22	(B) whole proteome analysis;
23	(C) characterization and imaging of molec-
24	ular machines; and

1	(D) analysis and modeling of cellular sys-
2	tems.
3	(4) The Secretary shall encourage collabora-
4	tions among universities, laboratories and industry
5	at facilities under this subsection. All facilities under
6	this subsection shall have a specific mission of tech-
7	nology transfer to other institutions.
8	SEC. 969. FISSION AND FUSION ENERGY MATERIALS RE-
9	SEARCH PROGRAM.
10	In the President's fiscal year 2006 budget request,
11	the Secretary shall establish a research and development
12	program on material science issues presented by advanced
13	fission reactors and the Department's fusion energy pro-
14	gram. The program shall develop a catalog of material
15	properties required for these applications, develop theo-
16	retical models for materials possessing the required prop-
17	erties, benchmark models against existing data, and de-
18	velop a roadmap to guide further research and develop-
19	ment in this area.
20	SEC. 970. ENERGY-WATER SUPPLY TECHNOLOGIES PRO-
21	GRAM.
22	(a) Establishment.—There is established within
23	the Office of Science, Office of Biological and Environ-
24	mental Research, the "Energy-Water Supply Technologies
25	Program," to study energy-related issues associated with

1	water resources and municipal waterworks and to study
2	water supply issues related to energy production.
3	(b) Definitions.—
4	(1) The term "Foundation" means the Amer-
5	ican Water Works Association Research Foundation.
6	(2) The term "Indian tribe" has the meaning
7	given the term in section 4 of the Indian Self-Deter-
8	mination and Education Assistance Act (25 U.S.C.
9	450b).
10	(3) The term "Program" means the Water
11	Supply Technologies Program established by section
12	970(a).
13	(c) Program Areas.—The program shall conduct
14	research and development, including—
15	(1) arsenic removal under subsection (d);
16	(2) desalination research program under sub-
17	section (e);
18	(3) the water and energy sustainability program
19	under subsection (f); and
20	(4) other energy-intensive water supply and
21	treatment technologies and other technologies se-
22	lected by the Secretary.
23	(d) Arsenic Removal Program.—
24	(1) As soon as practicable after the date of en-
25	actment of this Act, the Secretary shall enter into a

1	contract with the Foundation to utilize the facilities
2	institutions and relationships established in the
3	"Consolidated Appropriations Resolution, 2003" as
4	described in Senate Report 107–220 that will carry
5	out a research program to develop and demonstrate
6	innovative arsenic removal technologies.
7	(2) In carrying out the arsenic removal pro-
8	gram, the Foundation shall, to the maximum extent
9	practicable, conduct research on means of—
10	(A) reducing energy costs incurred in
11	using arsenic removal technologies;
12	(B) minimizing materials, operating, and
13	maintenance costs incurred in using arsenic re-
14	moval technologies; and
15	(C) minimizing any quantities of waste (es-
16	pecially hazardous waste) that result from use
17	of arsenic removal technologies.
18	(3) The Foundation shall carry out peer-re-
19	viewed research and demonstration projects to de-
20	velop and demonstrate water purification tech-
21	nologies.
22	(4) In carrying out the arsenic removal pro-
23	gram—
24	(A) demonstration projects will be imple-
25	mented with municipal water system partners

- to demonstrate the applicability of innovative arsenic removal technologies in areas with different water chemistries representative of areas across the United States with arsenic levels near or exceeding EPA guidelines; and
  - (B) not less than 40 percent of the funds of the Department used for demonstration projects under the arsenic removal program shall be expended on projects focused on needs of and in partnership with rural communities or Indian tribes.
  - (5) The Foundation shall develop evaluations of cost effectiveness of arsenic removal technologies used in the program and an education, training, and technology transfer component for the program.
  - (6) The Secretary shall consult with the Administrator of the Environmental Protection Agency to ensure that activities under the arsenic removal program are coordinated with appropriate programs of the Environmental Protection Agency and other federal agencies, state programs and academia.
  - (7) Not later than 1 year after the date of commencement of the arsenic removal program, and annually thereafter, the Secretary shall submit to Con-

gress a report on the results of the arsenic removal program.

#### (e) Desalination Program.—

(1) The Secretary, in cooperation with the Commissioner of Reclamation, shall carry out a desalination research program in accordance with the desalination technology progress plan developed in Title II of the Energy and Water Development Appropriations Act, 2002 (115 Stat. 498), and described in Senate Report 107–39 under the heading "WATER AND RELATED RESOURCES" in the "BUREAU OF RECLAMATION" section.

### (2) The desalination program shall—

- (A) draw on the national laboratory partnership established with the Bureau of Reclamation to develop the January 2003 national Desalination and Water Purification Technology Roadmap for next-generation desalination technology;
- (B) focus on research relating to, and development and demonstration of, technologies that are appropriate for use in desalinating brackish groundwater, wastewater and other saline water supplies; disposal of residual brine or salt; and

1	(C)	consider	the	use	of	renewable	energy
2	sources.						

- (3) Under the desalination program, funds made available may be used for construction projects, including completion of the National Desalination Research Center for brackish groundwater and ongoing facility operational costs.
- 8 (4) The Secretary and the Commissioner of 9 Reclamation shall jointly establish a steering com-10 mittee for the desalination program. The steering 11 committee shall be jointly chaired by 1 representa-12 tive from this Program and 1 representative from 13 the Bureau of Reclamation.
- 14 (f) Water and Energy Sustainability Pro-15 gram.—
  - (1) The Secretary shall carry out a research program to develop understanding and technologies to assist in ensuring that sufficient quantities of water are available to meet present and future requirements.
  - (2) Under this program and in collaboration with other programs within the Department including those within the Offices of Fossil Energy and Energy Efficiency and Renewable Energy, the Secretary of the Interior, Army Corps of Engineers, En-

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1	vironmental Protection Agency, Department of Com-
2	merce, Department of Defense, state agencies, non-
3	governmental agencies and academia, the Secretary
4	shall assess the current state of knowledge and pro-
5	gram activities concerning—
6	(A) future water resources needed to sup-
7	port energy production within the United States
8	including but not limited to the water needs for
9	hydropower and thermo-electric power genera-
10	tion;
11	(B) future energy resources needed to sup-
12	port development of water purification and
13	treatment including desalination and long-dis-
14	tance water conveyance;
15	(C) reuse and treatment of water produced
16	as a by-product of oil and gas extraction;
17	(D) use of impaired and non-traditional
18	water supplies for energy production and other
19	uses; and
20	(E) technologies to reduce water use in en-
21	ergy production.
22	(3) In addition to the assessments in (2), the
23	Secretary shall—
24	(A) develop a research plan defining the
25	scientific and technology development needs and

activities required to support long-term water needs and planning for energy sustainability, use of impaired water for energy production and other uses, and reduction of water use in energy production;

- (B) carry out the research plan required under (A) including development of numerical models, decision analysis tools, economic analysis tools, databases, planning methodologies and strategies;
- (C) implement at least three planning demonstration projects using the models, tools and planning approaches developed under subparagraph (B) and assess the viability of these tools at the scale of river basins with at least one demonstration involving an international border; and
- (D) transfer these tools to other federal agencies, state agencies, non-profit organizations, industry and academia for use in their energy and water sustainability efforts.
- (4) Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a report on the water and energy sustainability program that describes the research elements

1	described under paragraph (2), and makes rec-
2	ommendations for a management structure that op-
3	timizes use of Federal resources and programs.
4	(g) Cost Sharing.—
5	(1) Research projects under this section shall
6	not require cost-sharing.
7	(2) Each demonstration project carried out
8	under the Program shall be carried out on a cost-
9	shared basis, as determined by the Secretary.
10	(3) With respect to a demonstration project, the
11	Secretary may accept in-kind contributions, and
12	waive the cost-sharing requirement in appropriate
13	circumstances.
14	Subtitle G—Energy and
14 15	Subtitle G—Energy and Environment
15	Environment
15 16	Environment  SEC. 971. UNITED STATES-MEXICO ENERGY TECHNOLOGY
15 16 17	Environment  SEC. 971. UNITED STATES-MEXICO ENERGY TECHNOLOGY  COOPERATION.
15 16 17 18	Environment  SEC. 971. UNITED STATES-MEXICO ENERGY TECHNOLOGY  COOPERATION.  (a) Program.—The Secretary shall establish a research, development, demonstration, and commercial ap-
15 16 17 18	Environment  SEC. 971. UNITED STATES-MEXICO ENERGY TECHNOLOGY  COOPERATION.  (a) Program.—The Secretary shall establish a research, development, demonstration, and commercial application program to be carried out in collaboration with
15 16 17 18 19 20 21	Environment  SEC. 971. UNITED STATES-MEXICO ENERGY TECHNOLOGY  COOPERATION.  (a) Program.—The Secretary shall establish a research, development, demonstration, and commercial application program to be carried out in collaboration with
15 16 17 18 19 20 21	Environment  SEC. 971. UNITED STATES-MEXICO ENERGY TECHNOLOGY  COOPERATION.  (a) PROGRAM.—The Secretary shall establish a research, development, demonstration, and commercial application program to be carried out in collaboration with entities in Mexico and the United States to promote energy efficient, environmentally sound economic develop-
15 16 17 18 19 20 21 22 23	Environment  SEC. 971. UNITED STATES-MEXICO ENERGY TECHNOLOGY  COOPERATION.  (a) PROGRAM.—The Secretary shall establish a research, development, demonstration, and commercial application program to be carried out in collaboration with entities in Mexico and the United States to promote energy efficient, environmentally sound economic develop-

- 1 (b) Program Management.—The program under
- 2 subsection (a) shall be managed by the Department of En-
- 3 ergy Carlsbad Environmental Management Field Office.
- 4 (c) Technology Transfer.—In carrying out
- 5 projects and activities under this section, the Secretary
- 6 shall assess the applicability of technology developed under
- 7 the Environmental Management Science Program of the
- 8 Department.
- 9 (d) Intellectual Property.—In carrying out this
- 10 section, the Secretary shall comply with the requirements
- 11 of any agreement entered into between the United States
- 12 and Mexico regarding intellectual property protection.
- (e) Authorization of Appropriations.—The fol-
- 14 lowing sums are authorized to be appropriated to the Sec-
- 15 retary to carry out activities under this section:
- 16 (1) For each of fiscal years 2004 and 2005,
- \$5,000,000.
- 18 (2) For each of fiscal years 2006, 2007, and
- 19 2008, \$6,000,000.
- 20 SEC. 972. COAL TECHNOLOGY LOAN.
- There are authorized to be appropriated to the Sec-
- 22 retary \$125,000,000 to provide a loan to the owner of the
- 23 experimental plant constructed under United States De-
- 24 partment of Energy cooperative agreement number DE-
- 25 FC-22-91PC90544 on such terms and conditions as the

- 1 Secretary determines, including interest rates and upfront
- 2 payments.

# **Subtitle H—Management**

- 4 SEC. 981. AVAILABILITY OF FUNDS.
- 5 Funds authorized to be appropriated to the Depart-
- 6 ment under this title shall remain available until expended.
- 7 SEC. 982. COST SHARING.
- 8 (a) Research and Development.—Except as oth-
- 9 erwise provided in this title, for research and development
- 10 programs carried out under this title, the Secretary shall
- 11 require a commitment from non-Federal sources of at
- 12 least 20 percent of the cost of the project. Cost sharing
- 13 is not required for research and development of a basic
- 14 or fundamental nature.
- 15 (b) Demonstration and Commercial Applica-
- 16 TION.—Except as otherwise provided in this subtitle, the
- 17 Secretary shall require at least 50 percent of the costs di-
- 18 rectly and specifically related to any demonstration or
- 19 commercial application project under this subtitle to be
- 20 provided from non-Federal sources. The Secretary may re-
- 21 duce the non-Federal requirement under this subsection
- 22 if the Secretary determines that the reduction is necessary
- 23 and appropriate considering the technological risks in-
- 24 volved in the project and is necessary to meet the objec-
- 25 tives of this title.

1	(c) CALCULATION OF AMOUNT.—In calculating the
2	amount of the non-Federal commitment under subsection
3	(a) or (b), the Secretary may include personnel, services,
4	equipment, and other resources.
5	SEC. 983. MERIT REVIEW OF PROPOSALS.
6	Awards of funds authorized under this title shall be
7	made only after an impartial review of the scientific and
8	technical merit of the proposals for such awards has been
9	carried out by or for the Department.
10	SEC. 984. EXTERNAL TECHNICAL REVIEW OF DEPART
11	MENTAL PROGRAMS.
12	(a) National Energy Research and Develop-
13	MENT ADVISORY BOARDS.—
14	(1) The Secretary shall establish one or more
15	advisory boards to review Department research, de-
16	velopment, demonstration, and commercial applica-
17	tion programs in energy efficiency, renewable en-
18	ergy, nuclear energy, and fossil energy.
19	(2) The Secretary may designate an existing
20	advisory board within the Department to fulfill the
21	responsibilities of an advisory board under this sub-
22	section, and may enter into appropriate arrange-
23	ments with the National Academy of Sciences to es-

tablish such an advisory board.

- 1 (b) Utilization of Existing Committees.—The
- 2 Secretary shall continue to use the scientific program advi-
- 3 sory committees chartered under the Federal Advisory
- 4 Committee Act by the Office of Science to oversee research
- 5 and development programs under that Office.
- 6 (c) Membership.—Each advisory board under this
- 7 section shall consist of persons with appropriate expertise
- 8 representing a diverse range of interests.
- 9 (d) Meetings and Purposes.—Each advisory
- 10 board under this section shall meet at least semi-annually
- 11 to review and advise on the progress made by the respec-
- 12 tive research, development, demonstration, and commer-
- 13 cial application program or programs. The advisory board
- 14 shall also review the measurable cost and performance-
- 15 based goals for such programs as established under sec-
- 16 tion 902, and the progress on meeting such goals.
- 17 (e) Periodic Reviews and Assessments.—The
- 18 Secretary shall enter into appropriate arrangements with
- 19 the National Academy of Sciences to conduct periodic re-
- 20 views and assessments of the programs authorized by this
- 21 title, the measurable cost and performance-based goals for
- 22 such programs as established under section 902, if any,
- 23 and the progress on meeting such goals. Such reviews and
- 24 assessments shall be conducted every 5 years, or more
- 25 often as the Secretary considers necessary, and the Sec-

1	retary shall transmit to the Congress reports containing
2	the results of all such reviews and assessments.
3	SEC. 985. IMPROVED COORDINATION OF TECHNOLOGY
4	TRANSFER ACTIVITIES.
5	(a) Technology Transfer Coordinator.—The
6	Secretary shall designate a Technology Transfer Coordi-
7	nator to perform oversight of and policy development for
8	technology transfer activities at the Department. The
9	Technology Transfer Coordinator shall coordinate the ac-
10	tivities of the Technology Transfer Working Group, shall
11	oversee the expenditure of funds allocated to the Tech-
12	nology Transfer Working Group, and shall coordinate with
13	each technology partnership ombudsman appointed under
14	section 11 of the Technology Transfer Commercialization
15	Act of 2000 (42 U.S.C. 7261c).
16	(b) Technology Transfer Working Group.—
17	The Secretary shall establish a Technology Transfer
18	Working Group, which shall consist of representatives of
19	the National Laboratories and single-purpose research fa-
20	cilities, to—
21	(1) coordinate technology transfer activities oc-
22	curring at National Laboratories and single-purpose
23	research facilities;
24	(2) exchange information about technology
25	transfer practices, including alternative approaches

1	to resolution of disputes involving intellectual prop-
2	erty rights and other technology transfer matters
3	and

- 4 (3) develop and disseminate to the public and 5 prospective technology partners information about 6 opportunities and procedures for technology transfer 7 with the Department, including those related to al-8 ternative approaches to resolution of disputes involv-9 ing intellectual property rights and other technology
- 11 Transfer Responsibility.— (c) Technology
- 12 Nothing in this section shall affect the technology transfer
- 13 responsibilities of Federal employees under the Stevenson-
- Wydler Technology Innovation Act of 1980. 14

transfer matters.

#### 15 SEC. 986. TECHNOLOGY INFRASTRUCTURE PROGRAM.

- 16 (a) Establishment.—The Secretary shall establish
- a Technology Infrastructure Program in accordance with
- 18 this section.

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- 19 (b) Purpose.—The purpose of the Technology Infra-
- 20 structure Program shall be to improve the ability of Na-
- 21 tional Laboratories and single-purpose research facilities
- 22 to support departmental missions by—
- 23 (1) stimulating the development of technology
- 24 clusters that can support departmental missions at

- the National Laboratories or single-purpose research
  facilities;
- 3 (2) improving the ability of National Labora-4 tories and single-purpose research facilities to lever-5 age and benefit from commercial research, tech-6 nology, products, processes, and services; and
  - (3) encouraging the exchange of scientific and technological expertise between National Laboratories or single-purpose research facilities and entities that can support departmental missions at the National Laboratories or single-purpose research facilities, such as institutions of higher education; technology-related business concerns; nonprofit institutions; and agencies of State, tribal, or local governments.
- 16 (c) Projects.—The Secretary shall authorize the 17 Director of each National Laboratory or single-purpose re-18 search facility to implement the Technology Infrastructure 19 Program at such National Laboratory or facility through 20 projects that meet the requirements of subsections (d) and 21 (e).
- 22 (d) Program Requirements.—Each project funded 23 under this section shall meet the following requirements:
- 24 (1) Each project shall include at least one of 25 each of the following entities: a business; an institu-

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- tion of higher education; a nonprofit institution; and
  an agency of a State, local, or tribal government.
- 3 (2) Not less than 50 percent of the costs of each project funded under this section shall be pro-5 vided from non-Federal sources. The calculation of 6 costs paid by the non-Federal sources to a project 7 shall include cash, personnel, services, equipment, 8 and other resources expended on the project after 9 start of the project. Independent research and devel-10 opment expenses of Government contractors that 11 qualify for reimbursement under section 3109205 12 0918(e) of the Federal Acquisition Regulations issued pursuant to section 25(c)(1) of the Office of 13 14 Federal Procurement Policy Act (41U.S.C. 15 421(c)(1) may be credited towards costs paid by 16 non-Federal sources to a project, if the expenses 17 meet the other requirements of this section.
  - (3) All projects under this section shall be competitively selected using procedures determined by the Secretary.
  - (4) Any participant that receives funds under this section may use generally accepted accounting principles for maintaining accounts, books, and records relating to the project.

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1 (5) No Federal funds shall be made available 2 under this section for construction or any project for 3 more than 5 years.

#### (e) Selection Criteria.—

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- (1) The Secretary shall allocate funds under this section only if the Director of the National Laboratory or single-purpose research facility managing the project determines that the project is likely to improve the ability of the National Laboratory or single-purpose research facility to achieve technical success in meeting departmental missions.
- (2) The Secretary shall consider the following criteria in selecting a project to receive Federal funds—
  - (A) the potential of the project to promote the development of a commercially sustainable technology cluster following the period of Department investment, which will derive most of the demand for its products or services from the private sector, and which will support departmental missions at the participating National Laboratory or single-purpose research facility;
  - (B) the potential of the project to promote the use of commercial research, technology,

1	products, processes, and services by the partici-
2	pating National Laboratory or single-purpose
3	research facility to achieve its mission or the
4	commercial development of technological inno-
5	vations made at the participating National Lab-
6	oratory or single-purpose research facility;
7	(C) the extent to which the project involves
8	a wide variety and number of institutions of
9	higher education, nonprofit institutions, and
10	technology-related business concerns that can
11	support the missions of the participating Na-
12	tional Laboratory or single-purpose research fa-
13	cility and that will make substantive contribu-
14	tions to achieving the goals of the project;
15	(D) the extent to which the project focuses
16	on promoting the development of technology-re-
17	lated business concerns that are small busi-
18	nesses or involves such small businesses sub-
19	stantively in the project; and
20	(E) such other criteria as the Secretary de-
21	termines to be appropriate.
22	(f) Allocation.—In allocating funds for projects
23	approved under this section, the Secretary shall provide—
24	(1) the Federal share of the project costs; and

- 1 (2) additional funds to the National Laboratory
  2 or single-purpose research facility managing the
  3 project to permit the National Laboratory or single4 purpose research facility to carry out activities relat5 ing to the project, and to coordinate such activities
  6 with the project.
- 7 (g) Report to Congress.—Not later than July 1, 8 2006, the Secretary shall report to Congress on whether 9 the Technology Infrastructure Program should be contin-10 ued and, if so, how the program should be managed.

## 11 (h) Definitions.—In this section:

- (1) The term "technology cluster" means a concentration of technology-related business concerns, institutions of higher education, or nonprofit institutions, that reinforce each other's performance in the areas of technology development through formal or informal relationships.
- (2) The term "technology-related business concern" means a for-profit corporation, company, association, firm, partnership, or small business concern that conducts scientific or engineering research; develops new technologies; manufactures products based on new technologies; or performs technological services.

1	(i) Authorization of Appropriations.—There
2	are authorized to be appropriated to the Secretary for ac
3	tivities under this section \$10,000,000 for each of fisca
4	years 2004, 2005, and 2006.
5	SEC. 987. SMALL BUSINESS ADVOCACY AND ASSISTANCE.
6	(a) Small Business Advocate.—The Secretary
7	shall require the Director of each National Laboratory
8	and may require the Director of a single-purpose research
9	facility, to designate a small business advocate to—
10	(1) increase the participation of small business
11	concerns, including socially and economically dis-
12	advantaged small business concerns, in procurement
13	collaborative research, technology licensing, and
14	technology transfer activities conducted by the Na
15	tional Laboratory or single-purpose research facility
16	(2) report to the Director of the National Lab
17	oratory or single-purpose research facility on the ac-
18	tual participation of small business concerns in pro-
19	curement and collaborative research along with rec-
20	ommendations, if appropriate, on how to improve
21	participation;
22	(3) make available to small businesses training
23	mentoring, and information on how to participate in
24	procurement and collaborative research activities;

1	(4) increase the awareness inside the National
2	Laboratory or single-purpose research facility of the
3	capabilities and opportunities presented by small
4	business concerns; and
5	(5) establish guidelines for the program under
6	subsection (b) and report on the effectiveness of
7	such program to the Director of the National Lab-
8	oratory or single-purpose research facility.
9	(b) Establishment of Small Business Assist-
10	ANCE PROGRAM.—The Secretary shall require the Direc-
11	tor of each National Laboratory, and may require the Di-
12	rector of a single-purpose research facility, to establish a
13	program to provide small business concerns—
14	(1) assistance directed at making them more ef-
15	fective and efficient subcontractors or suppliers to
16	the National Laboratory or single-purpose research
17	facility; or
18	(2) general technical assistance, the cost of
19	which shall not exceed \$10,000 per instance of as-
20	sistance, to improve the small business concern's
21	products or services.
22	(c) USE OF FUNDS.—None of the funds expended
23	under subsection (b) may be used for direct grants to the
24	small business concerns.

(d) DEFINITIONS.—In this section:

1	(1) The term "small business concern" has the
2	meaning given such term in section 3 of the Small
3	Business Act (15 U.S.C. 632).
4	(2) The term "socially and economically dis-
5	advantaged small business concerns" has the mean-
6	ing given such term in section 8(a)(4) of the Small
7	Business Act (15 U.S.C. 637(a)(4)).
8	(e) Authorization of Appropriations.—There is
9	authorized to be appropriated to the Secretary for activi-
10	ties under this section \$5,000,000 for each of fiscal years
11	2004 through 2008.
11	
12	SEC. 988. MOBILITY OF SCIENTIFIC AND TECHNICAL PER-
	SEC. 988. MOBILITY OF SCIENTIFIC AND TECHNICAL PER-
12	
12 13	SONNEL.
12 13 14 15	SONNEL.  Not later than 2 years after the date of enactment
12 13 14 15	SONNEL.  Not later than 2 years after the date of enactment of this section, the Secretary shall transmit a report to
12 13 14 15 16	SONNEL.  Not later than 2 years after the date of enactment of this section, the Secretary shall transmit a report to the Congress identifying any policies or procedures of a
12 13 14 15 16	Not later than 2 years after the date of enactment of this section, the Secretary shall transmit a report to the Congress identifying any policies or procedures of a contractor operating a National Laboratory or single-pur-
12 13 14 15 16 17	Not later than 2 years after the date of enactment of this section, the Secretary shall transmit a report to the Congress identifying any policies or procedures of a contractor operating a National Laboratory or single-purpose research facility that create disincentives to the tem-
12 13 14 15 16 17 18 19 20	Not later than 2 years after the date of enactment of this section, the Secretary shall transmit a report to the Congress identifying any policies or procedures of a contractor operating a National Laboratory or single-purpose research facility that create disincentives to the temporary transfer of scientific and technical personnel

23 change of scientific and technical personnel.

# 1 SEC. 989. NATIONAL ACADEMY OF SCIENCES REPORT.

2	Not later than 90 days after the date of enactment
3	of this Act, the Secretary shall enter into an arrangement
4	with the National Academy of Sciences for the Academy
5	to—
6	(1) conduct a study on—
7	(A) the obstacles to accelerating the re-
8	search, development, demonstration, and com-
9	mercial application cycle for energy technology;
10	and
11	(B) the adequacy of Department policies
12	and procedures for, and oversight of, technology
13	transfer-related disputes between contractors of
14	the Department and the private sector; and
15	(2) report to the Congress on recommendations
16	developed as a result of the study.
17	SEC. 990. OUTREACH.
18	The Secretary shall ensure that each program au-
19	thorized by this title includes an outreach component to
20	provide information, as appropriate, to manufacturers,
21	consumers, engineers, architects, builders, energy service
22	companies, institutions of higher education, facility plan-
23	ners and managers, State and local governments, and

24 other entities.

1	SEC. 991. COMPETITIVE AWARD OF MANAGEMENT CON-
2	TRACTS.
3	None of the funds authorized to be appropriated to
4	the Secretary by this title may be used to award a manage-
5	ment and operating contract for a nonmilitary energy lab-
6	oratory of the Department unless such contract is com-
7	petitively awarded or the Secretary grants, on a case-by-
8	case basis, a waiver to allow for such a deviation. The Sec-
9	retary may not delegate the authority to grant such a
10	waiver and shall submit to the Congress a report notifying
11	the Congress of the waiver and setting forth the reasons
12	for the waiver at least 60 days prior to the date of the
13	award of such a contract.
14	SEC. 992. REPROGRAMMING.
15	(a) DISTRIBUTION REPORT.—Not later than 60 days
<ul><li>15</li><li>16</li></ul>	(a) DISTRIBUTION REPORT.—Not later than 60 days after the date of the enactment of an Act appropriating
16	after the date of the enactment of an Act appropriating
16 17	after the date of the enactment of an Act appropriating amounts authorized under this title, the Secretary shall
<ul><li>16</li><li>17</li><li>18</li></ul>	after the date of the enactment of an Act appropriating amounts authorized under this title, the Secretary shall transmit to the appropriate authorizing committees of the
16 17 18 19	after the date of the enactment of an Act appropriating amounts authorized under this title, the Secretary shall transmit to the appropriate authorizing committees of the Congress a report explaining how such amounts will be
16 17 18 19 20	after the date of the enactment of an Act appropriating amounts authorized under this title, the Secretary shall transmit to the appropriate authorizing committees of the Congress a report explaining how such amounts will be distributed among the authorizations contained in this
16 17 18 19 20 21	after the date of the enactment of an Act appropriating amounts authorized under this title, the Secretary shall transmit to the appropriate authorizing committees of the Congress a report explaining how such amounts will be distributed among the authorizations contained in this title.
<ul><li>16</li><li>17</li><li>18</li><li>19</li><li>20</li><li>21</li><li>22</li></ul>	after the date of the enactment of an Act appropriating amounts authorized under this title, the Secretary shall transmit to the appropriate authorizing committees of the Congress a report explaining how such amounts will be distributed among the authorizations contained in this title.  (b) Prohibition.—
16 17 18 19 20 21 22 23	after the date of the enactment of an Act appropriating amounts authorized under this title, the Secretary shall transmit to the appropriate authorizing committees of the Congress a report explaining how such amounts will be distributed among the authorizations contained in this title.  (b) Prohibition.—  (1) No amount identified under subsection (a)

- 1 (a) by more than 5 percent unless the Secretary has
- 2 transmitted to the appropriate authorizing commit-
- 3 tees of the Congress a report described in subsection
- 4 (c) and a period of 30 days has elapsed after such
- 5 committees receive the report.
- 6 (2) In the computation of the 30-day period de-
- 7 scribed in paragraph (1), there shall be excluded any
- 8 day on which either House of Congress is not in ses-
- 9 sion because of an adjournment of more than 3 days
- to a day certain.
- 11 (c) Reprogramming Report.—A report referred to
- 12 in subsection (b)(1) shall contain a full and complete
- 13 statement of the action proposed to be taken and the facts
- 14 and circumstances relied on in support of the proposed
- 15 action.

#### 16 SEC. 993. CONSTRUCTION WITH OTHER LAWS.

- 17 Except as otherwise provided in this title, the Sec-
- 18 retary shall carry out the research, development, dem-
- 19 onstration, and commercial application programs,
- 20 projects, and activities authorized by this title in accord-
- 21 ance with the applicable provisions of the Atomic Energy
- 22 Act of 1954 (42 U.S.C. et seq.), the Federal Nonnuclear
- 23 Research and Development Act of 1974 (42 U.S.C. 5901
- 24 et seq.), the Energy Policy Act of 1992 (42 U.S.C. 13201
- 25 et seq.), the Stevenson-Wydler Technology Innovation Act

1	of 1980 (15 U.S.C. 3701 et seq.), chapter 18 of title 35,
2	United States Code (commonly referred to as the Bayh-
3	Dole Act), and any other Act under which the Secretary
4	is authorized to carry out such activities.
5	SEC. 994. IMPROVED COORDINATION AND MANAGEMENT
6	OF CIVILIAN SCIENCE AND TECHNOLOGY
7	PROGRAMS.
8	(a) Effective Top-Level Coordination of Re-
9	SEARCH AND DEVELOPMENT PROGRAMS.—Section 202(b)
10	of the Department of Energy Organization Act (42 U.S.C.
11	7132(b)) is amended to read as follows:
12	"(b)(1) There shall be in the Department an Under
13	Secretary for Energy and Science, who shall be appointed
14	by the President, by and with the advice and consent of
15	the Senate. The Under Secretary shall be compensated at
16	the rate provided for at level III of the Executive Schedule
17	under section 5314 of title 5, United States Code.
18	"(2) The Under Secretary for Energy and Science
19	shall be appointed from among persons who—
20	"(A) have extensive background in scientific or
21	engineering fields; and
22	"(B) are well qualified to manage the civilian
23	research and development programs of the Depart-
24	ment of Energy.

1	"(3) The Under Secretary for Energy and Science
2	shall—
3	"(A) serve as the Science and Technology Advi-
4	sor to the Secretary;
5	"(B) monitor the Department's research and
6	development programs in order to advise the Sec-
7	retary with respect to any undesirable duplication or
8	gaps in such programs;
9	"(C) advise the Secretary with respect to the
10	well-being and management of the multipurpose lab-
11	oratories under the jurisdiction of the Department;
12	"(D) advise the Secretary with respect to edu-
13	cation and training activities required for effective
14	short- and long-term basic and applied research ac-
15	tivities of the Department;
16	"(E) advise the Secretary with respect to grants
17	and other forms of financial assistance required for
18	effective short- and long-term basic and applied re-
19	search activities of the Department; and
20	"(F) exercise authority and responsibility over
21	Assistant Secretaries carrying out energy research
22	and development and energy technology functions
23	under sections 203 and 209, as well as other ele-
24	ments of the Department assigned by the Sec-
25	retary.".

1	(b) Reconfiguration of Position of Director
2	OF THE OFFICE OF SCIENCE.—
3	(1) Section 209 of the Department of Energy
4	Organization Act (41 U.S.C. 7139) is amended to
5	read as follows:
6	"OFFICE OF SCIENCE
7	"Sec. 209. (a) There shall be within the Department
8	an Office of Science, to be headed by an Assistant Sec-
9	retary for Science, who shall be appointed by the Presi-
10	dent, by and with the advice and consent of the Senate,
11	and who shall be compensated at the rate provided for
12	level IV of the Executive Schedule under section 5315 of
13	title 5, United States Code.
14	"(b) The Assistant Secretary for Science shall be in
	addition to the Assistant Secretaries provided for under
15	•
15 16	section 203 of this Act.
16 17	section 203 of this Act.
16 17	section 203 of this Act.  "(c) It shall be the duty and responsibility of the As-
16 17 18	section 203 of this Act.  "(c) It shall be the duty and responsibility of the Assistant Secretary for Science to carry out the fundamental
16 17 18 19	section 203 of this Act.  "(c) It shall be the duty and responsibility of the Assistant Secretary for Science to carry out the fundamental science and engineering research functions of the Depart-
16 17 18 19 20	section 203 of this Act.  "(c) It shall be the duty and responsibility of the Assistant Secretary for Science to carry out the fundamental science and engineering research functions of the Department, including the responsibility for policy and manage-
116 117 118 119 220 221	section 203 of this Act.  "(c) It shall be the duty and responsibility of the Assistant Secretary for Science to carry out the fundamental science and engineering research functions of the Department, including the responsibility for policy and management of such research, as well as other functions vested
116 117 118 119 220 221 222	section 203 of this Act.  "(c) It shall be the duty and responsibility of the Assistant Secretary for Science to carry out the fundamental science and engineering research functions of the Department, including the responsibility for policy and management of such research, as well as other functions vested in the Secretary which he may assign to the Assistant Sec-
116 117 118 119 220 221 222 23	section 203 of this Act.  "(c) It shall be the duty and responsibility of the Assistant Secretary for Science to carry out the fundamental science and engineering research functions of the Department, including the responsibility for policy and management of such research, as well as other functions vested in the Secretary which he may assign to the Assistant Secretary.".

1	prior to the effective date of this Act to act in the
2	office of the Assistant Secretary of Energy for
3	Science until the office is filled as provided in sec-
4	tion 209 of the Department of Energy Organization
5	Act, as amended by paragraph (1). While so acting,
6	such person shall receive compensation at the rate
7	provided by this Act for the office of Assistant Sec-

- 9 (c) Additional Assistant Secretary Position
- 10 TO ENABLE IMPROVED MANAGEMENT OF NUCLEAR EN-
- 11 ERGY ISSUES.—

retary for Science.

8

18

19

- 12 (1) Section 203(a) of the Department of En-13 ergy Organization Act (42 U.S.C. 7133(a)) is 14 amended by striking "There shall be in the Depart-15 ment six Assistant Secretaries" and inserting "Ex-16 cept as provided in section 209, there shall be in the 17 Department seven Assistant Secretaries".
  - (2) It is the sense of the Congress that the leadership for departmental missions in nuclear energy should be at the Assistant Secretary level.
- 21 (d) Technical and Conforming Amendments.—
- 22 (1) Section 202 of the Department of Energy 23 Organization Act (42 U.S.C. 7132) is further 24 amended by adding the following at the end:

1	"(d) There shall be in the Department an Under Sec-
2	retary, who shall be appointed by the President, by and
3	with the advice and consent of the Senate, and who shall
4	perform such functions and duties as the Secretary shall
5	prescribe, consistent with this section. The Under Sec-
6	retary shall be compensated at the rate provided for level
7	III of the Executive Schedule under section 5314 of title
8	5, United States Code.
9	"(e) There shall be in the Department a General
10	Counsel, who shall be appointed by the President, by and
11	with the advice and consent of the Senate, and who shall
12	perform such functions and duties as the Secretary shall
13	prescribe. The General Counsel shall be compensated at
14	the rate provided for level IV of the Executive Schedule
15	under section 5315 of title 5, United States Code.".
16	(2) Section 5314 of title 5, United States Code
17	is amended by striking "Under Secretaries of En-
18	ergy (2)" and inserting "Under Secretaries of En-
19	ergy (3)".
20	(3) Section 5315 of title 5, United States Code
21	is amended by—
22	(A) striking "Director, Office of Science
23	Department of Energy."; and

1	(B) striking "Assistant Secretaries of En-
2	ergy (6)" and inserting "Assistant Secretaries
3	of Energy (8)".
4	(4) The table of contents for the Department of
5	Energy Organization Act (42 U.S.C. 7101 note) is
6	amended—
7	(A) by striking "Section 209" and insert-
8	ing "Sec. 209";
9	(B) by striking "213." and inserting "Sec.
10	213.";
11	(C) by striking "214." and inserting "Sec.
12	214.";
13	(D) by striking "215." and inserting "Sec.
14	215."; and
15	(E) by striking "216." and inserting "Sec.
16	216.".
17	SEC. 995. EDUCATIONAL PROGRAMS IN SCIENCE AND
18	MATHEMATICS.
19	(a) Section 3165a of the Department of Energy
20	Science Education Enhancement Act (42 U.S.C. 7381a)
21	is amended by adding at the end:
22	"(14) Support competitive events for students,
23	under supervision of teachers, designed to encourage
24	student interest and knowledge in science and math-
25	ematics.''

- 1 (b) Section 3169 of the Department of Energy
- 2 Science Education Enhancement Act (42 U.S.C. 7381e),
- 3 as redesignated by this Act, is amended by inserting before
- 4 the period: "; and \$40,000,000 for each of fiscal years
- 5 2004 through 2008."

#### 6 SEC. 996. OTHER TRANSACTIONS AUTHORITY.

- 7 Section 646 of the Department of Energy Organiza-
- 8 tion Act (42 U.S.C. 7256) is amended by adding at the
- 9 end the following:
- (g)(1) In addition to other authorities granted to the
- 11 Secretary under law, the Secretary may enter into other
- 12 transactions on such terms as the Secretary may deem
- 13 appropriate in furtherance of research, development, or
- 14 demonstration functions vested in the Secretary. Such
- 15 other transactions shall not be subject to the provisions
- 16 of section 9 of the Federal Nonnuclear Energy Research
- 17 and Development Act of 1974 (42 U.S.C. 5908).
- 18 "(2)(A) The Secretary shall ensure that—
- "(i) to the maximum extent the Secretary de-
- termines practicable, no transaction entered into
- 21 under paragraph (1) provides for research, develop-
- 22 ment, or demonstration that duplicates research, de-
- velopment, or demonstration being conducted under
- 24 existing projects carried out by the Department;

1	"(ii) to the extent the Secretary determines
2	practicable, the funds provided by the Government
3	under a transaction authorized by paragraph (1) do
4	not exceed the total amount provided by other par-
5	ties to the transaction; and
6	"(iii) to the extent the Secretary determines
7	practicable, competitive, merit-based selection proce-
8	dures shall be used when entering into transactions
9	under paragraph (1).
10	"(B) A transaction authorized by paragraph (1) may
11	be used for a research, development, or demonstration
12	project only if the Secretary determines the use of a stand-
13	ard contract, grant, or cooperative agreement for the
14	project is not feasible or appropriate.
15	"(3)(A) The Secretary shall protect from disclosure,
16	including disclosure under section 552 of title 5, United
17	States Code, for up to 5 years after the date the informa-
18	tion is received by the Secretary—
19	"(i) a proposal, proposal abstract, and sup-
20	porting documents submitted to the Department in
21	a competitive or noncompetitive process having the
22	potential for resulting in an award to the party sub-
23	mitting the information entering into a transaction
24	under paragraph (1): and

- 1 "(ii) a business plan and technical information
- 2 relating to a transaction authorized by paragraph
- 3 (1) submitted to the Department as confidential
- 4 business information.
- 5 "(B) The Secretary may protect from disclosure, for
- 6 up to 5 years after the information was developed, any
- 7 information developed pursuant to a transaction under
- 8 paragraph (1) which developed information is of a char-
- 9 acter that it would be protected from disclosure under sec-
- 10 tion 552(b)(4) of title 5, United States Code, if obtained
- 11 from a person other than a Federal agency.
- 12 "(4) Not later than 90 days after the date of enact-
- 13 ment of this section, the Secretary shall prescribe guide-
- 14 lines for using other transactions authorized by the
- 15 amendment under subsection (a). Such guidelines shall be
- 16 published in the Federal Register for public comment
- 17 under rulemaking procedures of the Department.
- 18 "(5) The authority of the Secretary under this sub-
- 19 section may be delegated only to an officer of the Depart-
- 20 ment who is appointed by the President by and with the
- 21 advice and consent of the Senate and may not be delegated
- 22 to any other person.".

1	SEC. 997. REPORT ON RESEARCH AND DEVELOPMENT PRO-
2	GRAM EVALUATION METHODOLOGIES.
3	Not later than 180 days after the date of enactment
4	of this Act, the Secretary shall enter into appropriate ar-
5	rangements with the National Academy of Sciences to in-
6	vestigate and report on the scientific and technical merits
7	of any evaluation methodology currently in use or pro-
8	posed for use in relation to the scientific and technical pro-
9	grams of the Department by the Secretary or other Fed-
10	eral official. Not later than 6 months after receiving the
11	report of the National Academy, the Secretary shall sub-
12	mit such report to Congress, along with any other views
13	or plans of the Secretary with respect to the future use
14	of such evaluation methodology.
15	TITLE X—PERSONNEL AND
16	TRAINING
17	SEC. 1001. WORKFORCE TRENDS AND TRAINEESHIP
18	GRANTS.
19	(a) Workforce Trends.—
20	(1) The Secretary of Energy (in this title re-
21	ferred to as the "Secretary"), in consultation with
22	the Secretary of Labor and utilizing statistical data
23	collected by the Secretary of Labor, shall monitor
24	trends in the workforce of skilled technical personnel
25	supporting energy technology industries, including
26	renewable energy industries, companies developing

- and commercializing devices to increase energy effi-
- 2 ciency, the oil and gas industry, the nuclear power
- 3 industry, the coal industry, and other industrial sec-
- 4 tors as the Secretary may deem appropriate.
- 5 (2) The Secretary shall report to the Congress
- 6 whenever the Secretary determines that significant
- 7 national shortfalls of skilled technical personnel in
- 8 one or more energy industry segments are forecast
- 9 or have occurred.
- 10 (b) Traineeship Grants for Skilled Technical
- 11 Personnel.—The Secretary, in consultation with the
- 12 Secretary of Labor, may establish grant programs in the
- 13 appropriate offices of the Department of Energy to en-
- 14 hance training of skilled technical personnel for which a
- 15 shortfall is determined under subsection (a).
- 16 (c) Definition.—For purposes of this section, the
- 17 term "skilled technical personnel" means journey and ap-
- 18 prentice level workers who are enrolled in or have com-
- 19 pleted a State or federally recognized apprenticeship pro-
- 20 gram and other skilled workers in energy technology in-
- 21 dustries.
- 22 (d) Authorization of Appropriations.—For the
- 23 purposes of this section, there are authorized to be appro-
- 24 priated to the Secretary \$20,000,000 for each of fiscal

- 1 years 2004 through 2008, to remain available until ex-
- 2 pended.
- 3 SEC. 1002. RESEARCH FELLOWSHIPS IN ENERGY RE-
- 4 SEARCH.
- 5 (a) Postdoctoral Fellowships.—The Secretary
- 6 shall establish a program of fellowships to encourage out-
- 7 standing young scientists and engineers to pursue
- 8 postdoctoral research appointments in energy research
- 9 and development at institutions of higher education of
- 10 their choice.
- 11 (b) Distinguished Senior Research Fellow-
- 12 SHIPS.—The Secretary shall establish a program of fellow-
- 13 ships to allow outstanding senior researchers in energy re-
- 14 search and development and their research groups to ex-
- 15 plore research and development topics of their choosing
- 16 for a fixed period of time. Awards under this program
- 17 shall be made on the basis of past scientific or technical
- 18 accomplishment and promise for continued accomplish-
- 19 ment during the period of support, which shall not be less
- 20 than 3 years.
- 21 (c) Authorization of Appropriations.—For the
- 22 purposes of this section, there are authorized to be appro-
- 23 priated to the Secretary \$40,000,000 for each of fiscal
- 24 years 2004 through 2008, to remain available until ex-
- 25 pended.

1	SEC. 1003. TRAINING GUIDELINES FOR ELECTRIC ENERGY
2	INDUSTRY PERSONNEL.
3	The Secretary of Labor, in consultation with the Sec-
4	retary of Energy and jointly with the electric industry and
5	recognized employee representatives, shall develop model
6	personnel training guidelines to support electric system re-
7	liability and safety. The training guidelines shall, at a min-
8	imum—
9	(1) include training requirements for workers
10	engaged in the construction, operation, inspection,
11	and maintenance of electric generation, trans-
12	mission, and distribution, including competency and
13	certification requirements, and assessment require-
14	ments that include initial and ongoing evaluation of
15	workers, recertification assessment procedures, and
16	methods for examining or testing the qualification of
17	individuals performing covered tasks; and
18	(2) consolidate existing training guidelines on
19	the construction, operation, maintenance, and in-
20	spection of electric generation, transmission, and
21	distribution facilities, such as those established by
22	the National Electric Safety Code and other indus-

23 try consensus standards.

1	SEC. 1004. NATIONAL CENTER ON ENERGY MANAGEMENT
2	AND BUILDING TECHNOLOGIES.
3	The Secretary shall support the establishment of a
4	National Center on Energy Management and Building
5	Technologies, to carry out research, education, and train-
6	ing activities to facilitate the improvement of energy effi-
7	ciency and indoor air quality in industrial, commercial,
8	and residential buildings. The National Center shall be es-
9	tablished by—
10	(1) recognized representatives of employees in
11	the heating, ventilation, and air-conditioning indus-
12	try;
13	(2) contractors that install and maintain heat-
14	ing, ventilation, and air-conditioning systems and
15	equipment;
16	(3) manufacturers of heating, ventilation, and
17	air-conditioning systems and equipment;
18	(4) representatives of the advanced building en-
19	velope industry, including design, windows, lighting,
20	and insulation industries; and
21	(5) other entities as the Secretary may deem
22	appropriate.
23	SEC. 1005. IMPROVED ACCESS TO ENERGY-RELATED SCI-
24	ENTIFIC AND TECHNICAL CAREERS.
25	(a) Department of Energy Science Education
26	Programs.—Section 3164 of the Department of Energy

1	Science Education Enhancement Act (42 U.S.C. 7381a)
2	is amended by adding at the end the following:
3	"(c) Programs for Students From Under-Rep-
4	RESENTED GROUPS.—In carrying out a program under
5	subsection (a), the Secretary shall give priority to activi-
6	ties that are designed to encourage students from under
7	represented groups to pursue scientific and technical ca-
8	reers.".
9	(b) Partnerships With Historically Black
10	Colleges and Universities, Hispanic-Servicing In-
11	STITUTIONS, AND TRIBAL COLLEGES.—The Department
12	of Energy Science Education Enhancement Act (42
13	U.S.C. 7381 et seq.) is amended—
14	(1) by redesignating sections 3167 and 3168 as
15	sections 3168 and 3169, respectively; and
16	(2) by inserting after section 3166 the fol-
17	lowing:
18	"SEC. 3167. PARTNERSHIPS WITH HISTORICALLY BLACK
19	COLLEGES AND UNIVERSITIES, HISPANIC
20	SERVING INSTITUTIONS, AND TRIBAL COL
21	LEGES.
22	"(a) Definitions.—In this section:
23	"(1) HISPANIC-SERVING INSTITUTION—The

term 'Hispanic-serving institution' has the meaning

- given that term in section 502(a) of the Higher Education Act of 1965 (20 U.S.C. 1101a(a)).
- "(2) HISTORICALLY BLACK COLLEGE OR UNI-VERSITY.— The term 'historically Black college or university' has the meaning given the term 'part B institution' in section 322 of the Higher Education Act of 1965 (20 U.S.C. 1061).
- 8 "(3) NATIONAL LABORATORY.—The term 'Na-9 tional Laboratory' has the meaning given that term 10 in section 903(5) of the Energy Policy Act of 2003.
- "(4) SCIENCE FACILITY.—The term 'science facility' has the meaning given the term 'single-purpose research facility' in section 903(8) of the Energy Policy Act of 2003.
- 15 "(5) TRIBAL COLLEGE.—The term 'tribal college' has the meaning given the term 'tribally controlled college or university' in section 2(a) of the Tribally Controlled College or University Assistance Act of 1978 (25 U.S.C. 1801(a)).
- 20 "(b) EDUCATION PARTNERSHIP.—The Secretary 21 shall direct the Director of each National Laboratory, and 22 may direct the head of any science facility, to increase the 23 participation of historically Black colleges or universities, 24 Hispanic-serving institutions, or tribal colleges in activities

- 1 or universities, Hispanic-serving institutions, or tribal col-
- 2 leges to train personnel in science or engineering.
- 3 "(c) ACTIVITIES.—An activity under subsection (b)
- 4 may include—
- 5 "(1) collaborative research;
- 6 "(2) equipment transfer;
- 7 "(3) training activities conducted at a National
- 8 Laboratory or science facility; and
- 9 "(4) mentoring activities conducted at a Na-
- tional Laboratory or science facility.
- 11 "(d) Report.—Not later than 2 years after the date
- 12 of enactment of this section, the Secretary shall submit
- 13 to the Congress a report on the activities carried out under
- 14 this section.".
- 15 SEC. 1006. NATIONAL POWER PLANT OPERATIONS TECH-
- 16 **NOLOGY AND EDUCATION CENTER.**
- 17 (a) Establishment.—The Secretary shall support
- 18 the establishment of a National Power Plant Operations
- 19 Technology and Education Center (in this section referred
- 20 to as the "Center"), to address the need for training and
- 21 educating certified operators for electric power generation
- 22 plants.
- 23 (b) Role.—The Center shall provide both training
- 24 and continuing education relating to electric power gen-
- 25 eration plant technologies and operations. The Center

- 1 shall conduct training and education activities on site and
- 2 through Internet-based information technologies that
- 3 allow for learning at remote sites.
- 4 (c) Criteria for Competitive Selection.—The
- 5 Secretary shall support the establishment of the Center
- 6 at an institution of higher education with expertise in
- 7 power plant technology and operation and with the ability
- 8 to provide on-site as well as Internet-based training.

### 9 SEC. 1007. FEDERAL MINE INSPECTORS.

- In light of projected retirements of Federal mine in-
- 11 spectors and the need for additional personnel, the Sec-
- 12 retary of Labor shall hire, train, and deploy such addi-
- 13 tional skilled Federal mine inspectors as necessary to en-
- 14 sure the availability of skilled and experienced individuals
- 15 and to maintain the number of Federal mine inspectors
- 16 at or above the levels authorized by law or established by
- 17 regulation.

# 18 TITLE XI—ELECTRICITY

- 19 SEC. 1101. DEFINITIONS.
- 20 (a) Electric Utility.—Section 3(22) of the Fed-
- 21 eral Power Act (16 U.S.C. 796(22)) is amended to read
- 22 as follows:
- 23 "(22) 'electric utility' means any person or Federal
- 24 or State agency (including any municipality) that sells

- 1 electric energy; such term includes the Tennessee Valley
- 2 Authority and each Federal power marketing agency; ".
- 3 (b) Transmitting Utility.—Section 3(23) of the
- 4 Federal Power Act (16 U.S.C. 796(23)) is amended to
- 5 read as follows:
- 6 "(23) 'transmitting utility' means an entity, including
- 7 any entity described in section 201(f), that owns or oper-
- 8 ates facilities used for the transmission of electric en-
- 9 ergy—
- 10 "(A) in interstate commerce; or
- 11 "(B) for the sale of electric energy at whole-
- 12 sale;".
- 13 (c) Additional Definitions.—At the end of sec-
- 14 tion (3) of the Federal Power Act, add the following:
- 15 "(26) 'unregulated transmitting utility' means an en-
- 16 tity that—
- 17 "(A) owns or operates facilities used for the
- 18 transmission of electric energy in interstate com-
- merce, and
- 20 "(B) is an entity described in section 201(f) or
- a rural electric cooperative with financing from the
- 22 Rural Utilities Service.
- 23 "(27) 'distribution utility' means an electric utility
- 24 that does not own or operate transmission facilities or an

1	unregulated transmitting utility that provides 90 percent
2	of the electric energy its transmits to customers at retail."
3	(d) For the purposes of this title, the term "the Com-
4	mission" means the Federal Energy Regulatory Commis-
5	sion.
6	Subtitle A—Reliability
7	SEC. 1111. ELECTRIC RELIABILITY STANDARDS.
8	Part II of the Federal Power Act (16 U.S.C. 824 et
9	seq.) is amended by adding the following:
10	"ELECTRIC RELIABILITY
11	"Sec. 215. (a) For the purposes of this section:
12	"(1) The term 'bulk-power system' means—
13	"(A) facilities and control systems nec-
14	essary for operating an interconnected electric
15	energy transmission network (or any portion
16	thereof); and
17	"(B) electric energy from generation facili-
18	ties needed to maintain transmission system re-
19	liability.
20	The term does not include facilities used in the local
21	distribution of electric energy.
22	"(2) The terms 'Electric Reliability Organiza-
23	tion' and 'ERO' mean the organization certified by
24	the Commission under subsection (c), the purpose of
25	which is to establish and enforce reliability stand-

1 ards for the bulk-power system, subject to Commis-2 sion review.

"(3) The term 'reliability standard' means a requirement, approved by the Commission under this section, to provide for reliable operation of the bulk-power system. The term includes requirements for the operation of existing bulk-power system components and the design of planned additions or modifications to such components to the extent necessary to provide for reliable operation of the bulk-power system, but the term does not include any requirement to enlarge such components or to construct new transmission capacity or generation capacity.

- "(4) The term 'reliable operation' means operating the components of the bulk-power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance or unanticipated failure of system components.
- "(5) The term 'Interconnection' means a geographic area in which the operation of bulk-power system components is synchronized such that the failure of one or more of such components may adversely affect the ability of the operators of other

- components within the system to maintain reliable operation of the portion of the system within their control.
- "(6) The term 'transmission organization' means an RTO or other transmission organization finally approved by the Commission for the operation of transmission facilities.
- 8 "(7) The term 'regional entity' means an entity 9 having enforcement authority pursuant to subsection 10 (e)(4).
- 11 "(b) The Commission shall have jurisdiction, within 12 the United States, over the ERO certified by the Commis-13 sion under subsection (c), any regional entities, and all users, owners and operators of the bulk-power system, in-14 15 cluding the entities described in section 201(f), for purposes of approving reliability standards established under 16 this section and enforcing compliance with this section. All users, owners and operators of the bulk-power system 18 19 shall comply with reliability standards that take effect under this section. The Commission shall issue a final rule 20 21 to implement the requirements of this section not later
- 23 "(c) Following the issuance of a Commission rule 24 under subsection (b), any person may submit an applica-

than 180 days after the date of enactment of this section.

1	liability Organization. The Commission may certify one
2	such ERO if the Commission determines that such ERO—
3	"(1) has the ability to develop and enforce, sub-
4	ject to subsection (d)(2), reliability standards that
5	provide for an adequate level of reliability of the
6	bulk-power system; and
7	"(2) has established rules that—
8	"(A) assure its independence of the users
9	and owners and operators of the bulk-power
10	system, while assuring fair stakeholder rep-
11	resentation in the selection of its directors and
12	balanced decisionmaking in any ERO com-
13	mittee or subordinate organizational structure;
14	"(B) allocate equitably reasonable dues,
15	fees, and other charges among end users for all
16	activities under this section;
17	"(C) provide fair and impartial procedures
18	for enforcement of reliability standards through
19	the imposition of penalties in accordance with
20	subsection (e) (including limitations on activi-
21	ties, functions, or operations, or other appro-
22	priate sanctions);
23	"(D) provide for reasonable notice and op-
24	portunity for public comment, due process,
25	openness, and balance of interests in developing

1	reliability standards and otherwise exercising its
2	duties; and
3	"(E) provide for taking, after certification,
4	
	appropriate steps to gain recognition in Canada
5	and Mexico.
6	(d)(1) The ERO shall file each reliability standard
7	or modification to a reliability standard that it proposes
8	to be made effective under this section with the Commis-
9	sion.
10	"(2) The Commission may approve by rule or order
11	a proposed reliability standard or modification to a reli-
12	ability standard if it determines that the standard is just,
13	reasonable, not unduly discriminatory or preferential, and
14	in the public interest. The Commission shall give due
15	weight to the technical expertise of the ERO with respect
16	to the content of a proposed standard or modification to
17	a reliability standard and to the technical expertise of a
18	regional entity organized on an Interconnection-wide basis
19	with respect to a reliability standard to be applicable with-
20	in that Interconnection, but shall not defer with respect
21	to the effect of a standard on competition. A proposed
22	standard or modification shall take effect upon approval
23	by the Commission.
24	"(3) The ERO shall rebuttably presume that a pro-
25	posal from a regional entity organized on an Interconnec-

- 1 tion-wide basis for a reliability standard or modification
- 2 to a reliability standard to be applicable on an Inter-
- 3 connection-wide basis is just, reasonable, and not unduly
- 4 discriminatory or preferential, and in the public interest.
- 5 "(4) The Commission shall remand to the ERO for
- 6 further consideration a proposed reliability standard or a
- 7 modification to a reliability standard that the Commission
- 8 disapproves in whole or in part.
- 9 "(5) The Commission, upon its own motion or upon
- 10 complaint, may order the ERO to submit to the Commis-
- 11 sion a proposed reliability standard or a modification to
- 12 a reliability standard that addresses a specific matter if
- 13 the Commission considers such a new or modified reli-
- 14 ability standard appropriate to carry out this section.
- 15 "(6) The final rule adopted under subsection (b) shall
- 16 include fair processes for the identification and timely res-
- 17 olution of any conflict between a reliability standard and
- 18 any function, rule, order, tariff, rate schedule, or agree-
- 19 ment accepted, approved, or ordered by the Commission
- 20 applicable to a transmission organization. Such trans-
- 21 mission organization shall continue to comply with such
- 22 function, rule, order, tariff, rate schedule or agreement ac-
- 23 cepted, approved, or ordered by the Commission until—
- 24 "(A) the Commission finds a conflict exists be-
- 25 tween a reliability standard and any such provision;

1	"(B) the Commission orders a change to such
2	provision pursuant to section 206 of this part; and
3	"(C) the ordered change becomes effective
4	under this part.
5	If the Commission determines that a reliability standard
6	needs to be changed as a result of such a conflict, it shall
7	order the ERO to develop and file with the Commission
8	a modified reliability standard under paragraph $(4)$ or $(5)$
9	of this subsection.
10	"(e)(1) The ERO may impose, subject to paragraph
11	(2), a penalty on a user or owner or operator of the bulk-
12	power system for a violation of a reliability standard ap-
13	proved by the Commission under subsection (d) if the
14	ERO, after notice and an opportunity for a hearing—
15	"(A) finds that the user or owner or operator
16	has violated a reliability standard approved by the
17	Commission under subsection (d); and
18	"(B) files notice and the record of the pro-
19	ceeding with the Commission.
20	"(2) A penalty imposed under paragraph (1) may
21	take effect not earlier than the 31st day after the ERO
22	files with the Commission notice of the penalty and the
23	record of proceedings. Such penalty shall be subject to re-
24	view by the Commission, on its own motion or upon appli-

25 cation by the user, owner or operator that is the subject

- 1 of the penalty filed within 30 days after the date such
- 2 notice is filed with the Commission. Application to the
- 3 Commission for review, or the initiation of review by the
- 4 Commission on its own motion, shall not operate as a stay
- 5 of such penalty unless the Commission otherwise orders
- 6 upon its own motion or upon application by the user,
- 7 owner or operator that is the subject of such penalty. In
- 8 any proceeding to review a penalty imposed under para-
- 9 graph (1), the Commission, after notice and opportunity
- 10 for hearing (which hearing may consist solely of the record
- 11 before the ERO and opportunity for the presentation of
- 12 supporting reasons to affirm, modify, or set aside the pen-
- 13 alty), shall by order affirm, set aside, reinstate, or modify
- 14 the penalty, and, if appropriate, remand to the ERO for
- 15 further proceedings. The Commission shall implement ex-
- 16 pedited procedures for such hearings.
- 17 "(3) On its own motion or upon complaint, the Com-
- 18 mission may order compliance with a reliability standard
- 19 and may impose a penalty against a user or owner or oper-
- 20 ator of the bulk-power system, if the Commission finds,
- 21 after notice and opportunity for a hearing, that the user
- 22 or owner or operator of the bulk-power system has en-
- 23 gaged or is about to engage in any acts or practices that
- 24 constitute or will constitute a violation of a reliability
- 25 standard.

1	"(4) The Commission shall establish regulations au-
2	thorizing the ERO to enter into an agreement to delegate
3	authority to a regional entity for the purpose of proposing
4	reliability standards to the ERO and enforcing reliability
5	standards under paragraph (1) if—
6	"(A) the regional entity is governed by an inde-
7	pendent board, a balanced stakeholder board, or a
8	combination independent and balanced stakeholder
9	board;
10	"(B) the regional entity otherwise satisfies the
11	provisions of subsection (c)(1) and (2); and
12	"(C) the agreement promotes effective and effi-
13	cient administration of bulk-power system reliability.
14	The Commission may modify such delegation. The
15	ERO and the Commission shall rebuttably presume
16	that a proposal for delegation to a regional entity
17	organized on an Interconnection-wide basis promotes
18	effective and efficient administration of bulk-power
19	system reliability and should be approved. Such reg-
20	ulation may provide that the Commission may assign
21	the ERO's authority to enforce reliability standards
22	under paragraph (1) directly to a regional entity
23	consistent with the requirements of this paragraph.
24	"(5) The Commission may take such action as is nec-
25	essary or appropriate against the ERO or a regional entity

- 1 to ensure compliance with a reliability standard or any
- 2 Commission order affecting the ERO or a regional entity.
- 3 "(6) Any penalty imposed under this section shall
- 4 bear a reasonable relation to the seriousness of the viola-
- 5 tion and shall take into consideration the efforts of such
- 6 user, owner, or operator to remedy the violation in a time-
- 7 ly manner.
- 8 "(f) The ERO shall file with the Commission for ap-
- 9 proval any proposed rule or proposed rule change, accom-
- 10 panied by an explanation of its basis and purpose. The
- 11 Commission, upon its own motion or complaint, may pro-
- 12 pose a change to the rules of the ERO. A proposed rule
- 13 or proposed rule change shall take effect upon a finding
- 14 by the Commission, after notice and opportunity for com-
- 15 ment, that the change is just, reasonable, not unduly dis-
- 16 criminatory or preferential, is in the public interest, and
- 17 satisfies the requirements of subsection (c).
- 18 "(g) The ERO shall conduct periodic assessments of
- 19 the reliability and adequacy of the bulk-power system in
- 20 North America.
- 21 "(h) The President is urged to negotiate international
- 22 agreements with the governments of Canada and Mexico
- 23 to provide for effective compliance with reliability stand-
- 24 ards and the effectiveness of the ERO in the United States
- 25 and Canada or Mexico.

- 1 "(i)(1) The ERO shall have authority to develop and
- 2 enforce compliance with reliability standards for only the
- 3 bulk-power system.
- 4 "(2) This section does not authorize the ERO or the
- 5 Commission to order the construction of additional gen-
- 6 eration or transmission capacity or to set and enforce com-
- 7 pliance with standards for adequacy or safety of electric
- 8 facilities or services.
- 9 "(3) Nothing in this section shall be construed to pre-
- 10 empt any authority of any State to take action to ensure
- 11 the safety, adequacy, and reliability of electric service
- 12 within that State, as long as such action is not incon-
- 13 sistent with any reliability standard.
- 14 "(4) Within 90 days of the application of the ERO
- 15 or other affected party, and after notice and opportunity
- 16 for comment, the Commission shall issue a final order de-
- 17 termining whether a State action is inconsistent with a
- 18 reliability standard, taking into consideration any rec-
- 19 ommendation of the ERO.
- 20 "(5) The Commission, after consultation with the
- 21 ERO, may stay the effectiveness of any State action, pend-
- 22 ing the Commission's issuance of a final order.
- 23 "(j) The Commission shall establish a regional advi-
- 24 sory body on the petition of at least two-thirds of the
- 25 States within a region that have more than one-half of

- 1 their electric load served within the region. A regional ad-
- 2 visory body shall be composed of one member from each
- 3 participating State in the region, appointed by the Gov-
- 4 ernor of each State, and may include representatives of
- 5 agencies, States, and provinces outside the United States.
- 6 A regional advisory body may provide advice to the ERO,
- 7 a regional entity, or the Commission regarding the govern-
- 8 ance of an existing or proposed regional entity within the
- 9 same region, whether a standard proposed to apply within
- 10 the region is just, reasonable, not unduly discriminatory
- 11 or preferential, and in the public interest, whether fees
- 12 proposed to be assessed within the region are just, reason-
- 13 able, not unduly discriminatory or preferential, and in the
- 14 public interest and any other responsibilities requested by
- 15 the Commission. The Commission may give deference to
- 16 the advice of any such regional advisory body if that body
- 17 is organized on an Interconnection-wide basis.
- 18 "(k) The provisions of this section do not apply to
- 19 Alaska or Hawaii.".

# 20 Subtitle B—Regional Markets

- 21 SEC. 1121. IMPLEMENTATION DATE FOR PROPOSED RULE-
- 22 **MAKING ON STANDARD MARKET DESIGN.**
- The Commission's proposed rulemaking entitled
- 24 "Remedying Undue Discrimination through Open Access
- 25 Transmission Service and Standard Electricity Market

- 1 Design" (Docket No. RM01–12–000) is remanded to the
- 2 Commission for reconsideration. No final rule pursuant to
- 3 the proposed rulemaking, including any rule or order of
- 4 general applicability within the scope of the proposed rule-
- 5 making, may be issued before July 1, 2005. Any final rule
- 6 issued by the Commission pursuant to the proposed rule-
- 7 making, including any rule or order of general applica-
- 8 bility within the scope of the proposed rulemaking, shall
- 9 be proceeded by a notice of proposed rulemaking issued
- 10 after the date of enactment of this Act and an opportunity
- 11 for public comment.

### 12 SEC. 1122. SENSE OF THE CONGRESS ON REGIONAL TRANS-

- 13 MISSION ORGANIZATIONS.
- 14 It is the sense of Congress that, in order to promote
- 15 fair, open access to electric transmission service, benefit
- 16 retail consumers, facilitate wholesale competition, improve
- 17 efficiencies in transmission grid management, promote
- 18 grid reliability, remove opportunities for unduly discrimi-
- 19 natory or preferential transmission practices, and provide
- 20 for the efficient development of transmission infrastruc-
- 21 ture needed to meet the growing demands of competitive
- 22 wholesale power markets, all transmitting utilities in inter-
- 23 state commerce should voluntarily become members of
- 24 independently administered Regional Transmission Orga-
- 25 nizations ("RTO") that have operational or functional

1	control of facilities used for the transmission of electric
2	energy in interstate commerce and do not own or control
3	generation facilities used to supply electric energy for sale
4	at wholesale.
5	SEC. 1123. FEDERAL UTILITY PARTICIPATION IN REGIONAL
6	TRANSMISSION ORGANIZATIONS.
7	(a) Definitions.—For purposes of this section:
8	(1) The term "appropriate Federal regulatory
9	authority" means—
10	(A) with respect to a Federal power mar-
11	keting agency, the Secretary of Energy, except
12	that the Secretary may designate the Adminis-
13	trator of a Federal power marketing agency to
14	act as the appropriate Federal regulatory au-
15	thority with respect to the transmission system
16	of that Federal power marketing agency; and
17	(B) with respect to the Tennessee Valley
18	Authority, the Board of Directors of the Ten-
19	nessee Valley Authority.
20	(2) The term "Federal utility" means a Federal
21	power marketing agency or the Tennessee Valley Author-
22	ity.
23	(3) The term "transmission system" means electric
24	transmission facilities owned, leased, or contracted for by
25	the United States and operated by a Federal utility.

### (b) Transfer.—

(1) The appropriate Federal regulatory authority is authorized to enter into a contract, agreement or other arrangement transferring control and use of all or part of the Federal utility's transmission system to a Regional Transmission Organization ("RTO"). Such contract, agreement or arrangement shall be voluntary and include—

(A) performance standards for operation and use of the transmission system that the head of the Federal utility determines necessary or appropriate, including standards that assure recovery of all the Federal utility's costs and expenses related to the transmission facilities that are the subject of the contract, agreement or other arrangement, consistency with existing contracts and third-party financing arrangements, and consistency with said Federal utility's statutory authorities, obligations, and limitations;

(B) provisions for monitoring and oversight by the Federal utility of the RTO fulfillment of the terms and conditions of the contract, agreement or other arrangement, including a provision that may provide for the resolution of disputes through arbitration or other
means with the RTO or with other participants,
notwithstanding the obligations and limitations
of any other law regarding arbitration; and

- (C) a provision that allows the Federal utility to withdraw from the RTO and terminate the contract, agreement or other arrangement in accordance with its terms.
- 9 (2) Neither this section, actions taken pursuant 10 to it, nor any other transaction of a Federal utility 11 using an RTO shall serve to confer upon the Com-12 mission jurisdiction or authority over the Federal 13 utility's electric generation assets, electric capacity 14 or energy that the Federal utility is authorized by 15 law to market, or the Federal utility's power sales 16 activities.
- 17 (c) Existing Statutory and Other Obliga-18 tions.—
  - (1) Any statutory provision requiring or authorizing a Federal utility to transmit electric power, or to construct, operate or maintain its transmission system shall not be construed to prohibit a transfer of control and use of its transmission system pursuant to, and subject to all requirements of subsection (b).

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1	(2) This subsection shall not be construed to—
2	(A) suspend, or exempt any Federal utility
3	from any provision of existing Federal law, in-
4	cluding but not limited to any requirement or
5	direction relating to the use of the Federal util-
6	ity's transmission system, environmental protec-
7	tion, fish and wildlife protection, flood control,
8	navigation, water delivery, or recreation; or
9	(B) authorize abrogation of any contract
10	or treaty obligation.
11	SEC. 1124. REGIONAL CONSIDERATION OF COMPETITIVE
12	WHOLESALE MARKETS.
12 13	wholesale markets.  (a) State Regulatory Commissions.—Not later
13	(a) STATE REGULATORY COMMISSIONS.—Not later than 90 days after the date of enactment of this Act, the
13 14 15	(a) STATE REGULATORY COMMISSIONS.—Not later than 90 days after the date of enactment of this Act, the
13 14 15 16	(a) State Regulatory Commissions.—Not later than 90 days after the date of enactment of this Act, the Commission shall convene regional discussions with State
13 14 15 16 17	(a) STATE REGULATORY COMMISSIONS.—Not later than 90 days after the date of enactment of this Act, the Commission shall convene regional discussions with State regulatory commissions, as defined in section 3(21) of the
13 14 15 16 17	(a) STATE REGULATORY COMMISSIONS.—Not later than 90 days after the date of enactment of this Act, the Commission shall convene regional discussions with State regulatory commissions, as defined in section 3(21) of the Federal Power Act. The regional discussions should ad-
13 14 15 16 17	(a) STATE REGULATORY COMMISSIONS.—Not later than 90 days after the date of enactment of this Act, the Commission shall convene regional discussions with State regulatory commissions, as defined in section 3(21) of the Federal Power Act. The regional discussions should address whether wholesale electric markets in each region
13 14 15 16 17 18	(a) STATE REGULATORY COMMISSIONS.—Not later than 90 days after the date of enactment of this Act, the Commission shall convene regional discussions with State regulatory commissions, as defined in section 3(21) of the Federal Power Act. The regional discussions should address whether wholesale electric markets in each region are working effectively to provide reliable service to elec-
13 14 15 16 17 18 19 20	(a) STATE REGULATORY COMMISSIONS.—Not later than 90 days after the date of enactment of this Act, the Commission shall convene regional discussions with State regulatory commissions, as defined in section 3(21) of the Federal Power Act. The regional discussions should address whether wholesale electric markets in each region are working effectively to provide reliable service to electric consumers in the region at the lowest reasonable cost.
13 14 15 16 17 18 19 20 21	(a) STATE REGULATORY COMMISSIONS.—Not later than 90 days after the date of enactment of this Act, the Commission shall convene regional discussions with State regulatory commissions, as defined in section 3(21) of the Federal Power Act. The regional discussions should address whether wholesale electric markets in each region are working effectively to provide reliable service to electric consumers in the region at the lowest reasonable cost. Priority should be given to discussions in regions that do

- 1 (1) the need for an RTO or other organizations 2 in the region to provide non-discriminatory trans-3 mission access and generation interconnection;
  - (2) a process for regional planning of transmission facilities with State regulatory authority participation and for consideration of multi-state projects;
  - (3) a means for ensuring that costs for all electric consumers, as defined in section 3(5) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2602(5)), and buyers of wholesale energy or capacity are reasonable and economically efficient;
  - (4) a means for ensuring that all electric consumers, as defined in section 3(5) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2602(5)), within the region maintain their ability to use the existing transmission system without incurring unreasonable additional costs in order to expand the transmission system for new customers;
  - (5) whether the integrated transmission and electric power supply system can and should be operated in a manner that schedules and economically prioritizes all available electric generation resources, so as to minimize the costs of electric energy to all

- consumers ("economic dispatch") and maintaining
  system reliability;
  - (6) a means to provide transparent price signals to ensure efficient expansion of the electric system and efficiently manage transmission congestion;
  - (7) eliminating in a reasonable manner, consistent with applicable State and Federal law, multiple, cumulative charges for transmission service across successive locations within a region ("pancaked rates");
  - (8) resolution of seams issues with neighboring regions and inter-regional coordination;
  - (9) a means of providing information electronically to potential users of the transmission system;
  - (10) implementation of a market monitor for the region with State regulatory authority and Commission oversight and establishment of rules and procedures that ensure that State regulatory authorities are provided access to market information and that provides for expedited consideration by the Commission of any complaints concerning exercise of market power and the operation of wholesale markets;
- 24 (11) a process by which to phase-in any pro-25 posed RTO or other organization designated to pro-

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- 1 vide non-discriminatory transmission access so as to
- 2 best meet the needs of a region, and, if relevant,
- 3 shall take into account the special circumstances
- 4 that may be found in the Western Interconnection
- 5 related to the existence of transmission congestion,
- 6 the existence of significant hydroelectric capacity,
- 7 the participation of unregulated transmitting utili-
- 8 ties, and the distances between generation and load;
- 9 and,
- 10 (12) a timetable to meet the objectives of this
- 11 section.
- 12 (b) Report.—Not later than 1 year after the date
- 13 of enactment of this Act, the Commission shall report to
- 14 Congress on the progress made in addressing the issues
- 15 in subsection (a) of this section in discussions with the
- 16 States.
- 17 (c) SAVINGS.—Nothing in this section shall affect any
- 18 discussions between the Commission and State or other
- 19 retail regulatory authorities that are on-going prior to en-
- 20 actment of this Act.

## **Subtitle C—Improving Trans**mission Access and Protecting 2 **Service Obligations** 3 SEC. 1131. SERVICE OBLIGATION SECURITY AND PARITY. 4 5 The Federal Power Act (16 U.S.C. 824e) is amended by adding the following: 7 "Sec. 220. (a)(1) The Commission shall exercise its authority under this Act to ensure that any load-serving entity that, as of the date of enactment of this section— 9 10 "(A) owns generation facilities, markets the 11 output of federal generation facilities, or holds rights 12 under one or more long-term contracts to purchase 13 electric energy, for the purpose of meeting a service 14 obligation, and "(B) by reason of ownership of transmission fa-15 16 cilities, or one or more contracts or service agree-17 ments for firm transmission service, holds firm 18 transmission rights for delivery of the output of such 19 generation facilities or such purchased energy to 20 meet such service obligation, is entitled to use such firm transmission rights, or equiva-22 lent financial transmission rights, in order to deliver such output or purchased energy, or the output of other gener-24 ating facilities or purchased energy to the extent deliverable using such rights, to meet its service obligation.

- 1 "(2) To the extent that all or a portion of the service
- 2 obligation covered by such firm transmission rights is
- 3 transferred to another load-serving entity, the successor
- 4 load-serving entity shall be entitled to use the firm trans-
- 5 mission rights associated with the transferred service obli-
- 6 gation. Subsequent transfers to another load-serving enti-
- 7 ty, or back to the original load-serving entity, shall be enti-
- 8 tled to the same rights.
- 9 "(3) The Commission shall exercise its authority
- 10 under this Act in a manner that facilitates the planning
- 11 and expansion of transmission facilities to meet the rea-
- 12 sonable needs of load-serving entities to satisfy their serv-
- 13 ice obligations.
- 14 "(b) Nothing in this section shall affect any method-
- 15 ology for the allocation of transmission rights by a Com-
- 16 mission-approved entity that, prior to the date of enact-
- 17 ment of this section, has been authorized by the Commis-
- 18 sion to allocate transmission rights.
- 19 "(c) Nothing in this Act shall relieve a load-serving
- 20 entity from any obligation under State or local law to build
- 21 transmission or distribution facilities adequate to meet its
- 22 service obligations.
- 23 "(d) Nothing in this section shall provide a basis for
- 24 abrogating any contract or service agreement for firm

- 1 transmission service or rights in effect as of the date of
- 2 the enactment of this subsection.
- 3 "(e) For purposes of this section:
- 4 "(1) The term 'distribution utility' means an 5 electric utility that has a service obligation to end-
- 6 users.
- "(2) The term 'load-serving entity' means a distribution utility or an electric utility (including an entity described in section 201(f) or a rural cooperative) that has a service obligation to end-users or a distribution utility.
- "(3) The term 'service obligation' means a requirement applicable to, or the exercise of authority granted to, an electric utility (including an entity described in section 201(f) or a rural cooperative) under Federal, State or local law or under long-term contracts to provide electric service to end-users or to a distribution utility.
- 19 "(f) Nothing in the section shall apply to an entity
- 20 located in an area referred to in section 212(k)(2)(A).".
- 21 SEC. 1132. OPEN NON-DISCRIMINATORY ACCESS.
- 22 Part II of the Federal Power Act (16 U.S.C. 824 et
- 23 seq.) is amended by inserting after section 211 the fol-
- 24 lowing:

1	"OPEN ACCESS BY UNREGULATED TRANSMITTING
2	UTILITIES
3	"Sec. 211A. (a) Subject to section 212(h), the Com-
4	mission may, by rule or order, require an unregulated
5	transmitting utility to provide transmission services—
6	"(1) at rates that are comparable to those that
7	the unregulated transmitting utility charges itself;
8	and
9	"(2) on terms and conditions (not relating to
10	rates) that are comparable to those under which
11	such unregulated transmitting utility provides trans-
12	mission services to itself and that are not unduly
13	discriminatory or preferential.
14	"(b) The Commission shall exempt from any rule or
15	order under this subsection any unregulated transmitting
16	utility that—
17	"(1) is a distribution utility that sells no more
18	than 4,000,000 megawatt hours of electricity per
19	year; or
20	"(2) does not own or operate any transmission
21	facilities that are necessary for operating an inter-
22	connected transmission system (or any portion
23	thereof); or
24	"(3) meets other criteria the Commission deter-
25	mines to be in the public interest.

- 1 "(c) Whenever the Commission, after a hearing held
- 2 upon a complaint, finds any exemption granted pursuant
- 3 to subsection (b) adversely affects the reliable and efficient
- 4 operation of an interconnected transmission system, it
- 5 may revoke the exemption.
- 6 "(d) The rate changing procedures applicable to pub-
- 7 lie utilities under subsections (c) and (d) of section 205
- 8 are applicable to unregulated transmitting utilities for
- 9 purposes of this section.
- 10 "(e) In exercising its authority under paragraph (1)
- 11 of subsection (a), the Commission may remand trans-
- 12 mission rates to an unregulated transmitting utility for
- 13 review and revision where necessary to meet the require-
- 14 ments of subsection (a).
- 15 "(f) The provision of transmission services under sub-
- 16 section (a) does not preclude a request for transmission
- 17 services under section 211.
- 18 "(g) The Commission may not require a State or mu-
- 19 nicipality to take action under this section that constitutes
- 20 a private business use for purposes of section 141 of the
- 21 Internal Revenue Code of 1986 (26 U.S.C. 141).
- 22 "(h) Nothing in this Act authorizes the Commission
- 23 to require an unregulated transmitting utility to transfer
- 24 control or operational control of its transmitting facilities
- 25 to an RTO or any other Commission-approved organiza-

1	tion designated to provide non-discriminatory trans-
2	mission access.".
3	SEC. 1133. TRANSMISSION INFRASTRUCTURE INVESTMENT.
4	Part II of the Federal Power Act is amended by add-
5	ing the following:
6	"SUSTAINABLE TRANSMISSION NETWORKS RULEMAKING
7	"Sec. 221. Within six months of enactment of this
8	section, the Commission shall issue a final rule estab-
9	lishing transmission pricing policies applicable to all public
10	utilities and policies for the allocation of costs associated
11	with the expansion, modification or upgrade of existing
12	interstate transmission facilities and for the interconnec-
13	tion of new transmission facilities for utilities and facilities
14	which are not included within a Commission approved
15	RTO. Consistent with section 205 of this Act, such rule
16	shall, to the maximum extent practicable—
17	"(1) promote capital investment in the economi-
18	cally efficient transmission systems;
19	"(2) encourage the construction of transmission
20	and generation facilities in a manner which provides
21	the lowest overall risk and cost to consumers;
22	"(3) encourage improved operation of trans-
23	mission facilities and deployment of transmission
24	technologies designed to increase capacity and effi-
25	ciency of existing networks;

1	"(4) ensure that the costs of any transmission
2	expansion or interconnection be allocated in such a
3	way that all users of the affected transmission sys-
4	tem bear the appropriate share of costs; and
5	"(5) ensure that parties who pay for facilities
6	necessary for transmission expansion or interconnec-
7	tion receive appropriate compensation for those fa-
8	cilities.".
9	Subtitle D-Amendments to the
10	Public Utility Regulatory Poli-
11	cies Act of 1978
12	SEC. 1141. NET METERING.
13	(a) Adoption of Standard.—Section 111(d) of the
14	Public Utility Regulatory Policies Act of 1978 (16 U.S.C.
15	2621(d)) is amended by adding at the end the following:
16	"(11) Net metering.—
17	"(A) Each electric utility shall make avail-
18	able upon request net metering service to any
19	electric consumer that the electric utility serves.
20	"(B) For purposes of implementing this
21	paragraph, any reference contained in this sec-
22	tion to the date of enactment of the Public Util-
23	ity Regulatory Policies Act of 1978 shall be
24	deemed to be a reference to the date of enact-
25	ment of this paragraph.

1	"(C) Notwithstanding subsections (b) and
2	(c) of section 112, each State regulatory au-
3	thority shall consider and make a determination
4	concerning whether it is appropriate to imple-
5	ment the standard set out in subparagraph (A)
6	not later than 1 year after the date of enact-
7	ment of this paragraph.".
8	(b) Special Rules for Net Metering.—Section
9	115 of the Public Utility Regulatory Policies Act of 1978
10	(16 U.S.C. 2625) is further amended by adding at the
11	end the following:
12	"(i) Net Metering.—In undertaking the consider-
13	ation and making the determination under section 111
14	with respect to the standard concerning net metering es-
15	tablished by section 111(d)(13), the term net metering
16	service shall mean a service provided in accordance with
17	the following standards:
18	"(1) An electric utility—
19	"(A) shall charge the owner or operator of
20	an on-site generating facility rates and charges
21	that are identical to those that would be
22	charged other electric consumers of the electric
23	utility in the same rate class; and
24	"(B) shall not charge the owner or oper-
25	ator of an on-site generating facility any addi-

tional standby, capacity, interconnection, or
other rate or charge.

"(2) An electric utility that sells electric energy to the owner or operator of an on-site generating facility shall measure the quantity of electric energy produced by the on-site facility and the quantity of electric energy consumed by the owner or operator of an on-site generating facility during a billing period in accordance with reasonable metering practices.

"(3) If the quantity of electric energy sold by the electric utility to an on-site generating facility exceeds the quantity of electric energy supplied by the on-site generating facility to the electric utility during the billing period, the electric utility may bill the owner or operator for the net quantity of electric energy sold, in accordance with reasonable metering practices.

"(4) If the quantity of electric energy supplied by the on-site generating facility to the electric utility exceeds the quantity of electric energy sold by the electric utility to the on-site generating facility during the billing period—

"(A) the electric utility may bill the owner or operator of the on-site generating facility for

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1	the appropriate charges for the billing period in
2	accordance with paragraph (2); and
3	"(B) the owner or operator of the on-site
4	generating facility shall be credited for the ex-
5	cess kilowatt-hours generated during the billing
6	period, with the kilowatt-hour credit appearing
7	on the bill for the following billing period.
8	"(5) An eligible on-site generating facility and
9	net metering system used by an electric consumer
10	shall meet all applicable safety, performance, reli-
11	ability, and interconnection standards established by
12	the National Electrical Code, the Institute of Elec-
13	trical and Electronics Engineers, and Underwriters
14	Laboratories.
15	"(6) The Commission, after consultation with
16	State regulatory authorities and unregulated electric
17	utilities and after notice and opportunity for com-
18	ment, may adopt, by rule, additional control and
19	testing requirements for on-site generating facilities
20	and net metering systems that the Commission de-
21	termines are necessary to protect public safety and
22	system reliability.
23	"(7) For purposes of this subsection—
24	"(A) The term 'eligible on-site generating
25	facility' means a facility on the site of a resi-

dential electric consumer with a maximum generating capacity of 10 kilowatts or less that is fueled by solar energy, wind energy, or fuel cells; or a facility on the site of a commercial electric consumer with a maximum generating capacity of 500 kilowatts or less that is fueled solely by a renewable energy resource, landfill gas, or a high efficiency system.

- "(B) The term 'renewable energy resource' means solar, wind, biomass, or geothermal energy.
- "(C) The term 'high efficiency system' means fuel cells or combined heat and power.
- "(D) The term 'net metering service' means service to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility and delivered to the local distribution facilities may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period.".

## 22 SEC. 1142. SMART METERING.

- 23 (a) IN GENERAL.—Section 111(d) of the Public Utili-
- 24 ties Regulatory Policies Act of 1978 (16 U.S.C. 2621(d))
- 25 is amended by adding at the end the following:

1	"(12) Time-based metering and commu-
2	NICATIONS.—
3	"(A) Each electric utility shall offer each
4	of its customer classes, and provide individual
5	customers upon customer request, a time-based
6	rate schedule under which the rate charged by
7	the electric utility varies during different time
8	periods and reflects the variance in the costs of
9	generating and purchasing electricity at the
10	wholesale level. The time-based rate schedule
11	shall enable the electric consumer to manage
12	energy use and cost through advanced metering
13	and communications technology.
14	"(B) The types of time-based rate sched-
15	ules that may be offered under the schedule re-
16	ferred to in subparagraph (A) include, among
17	others—
18	"(i) time-of-use pricing whereby elec-
19	tricity prices are set for a specific time pe-
20	riod on an advance or forward basis, typi-
21	cally not changing more often than twice a
22	year. Prices paid for energy consumed dur-
23	ing these periods shall be pre-established
24	and known to consumers in advance of

such consumption, allowing them to vary

1	their demand and usage in response to
2	such prices and manage their energy costs
3	by shifting usage to a lower cost period or
4	reducing their consumption overall;
5	"(ii) critical peak pricing whereby
6	time-of-use prices are in effect except for
7	certain peak days, when prices may reflect
8	the costs of generating and purchasing
9	electricity at the wholesale level and when
10	consumers may receive additional discounts
11	for reducing peak period energy consump-
12	tion; and
13	"(iii) real-time pricing whereby elec-
14	tricity prices are set for a specific time pe-
15	riod on an advanced or forward basis and
16	may change as often as hourly.
17	"(C) Each electric utility subject to sub-
18	paragraph (A) shall provide each customer re-
19	questing a time-based rate with a time-based
20	meter capable of enabling the utility and cus-
21	tomer to offer and receive such rate, respec-
22	tively.
23	"(D) For purposes of implementing this
24	paragraph, any reference contained in this sec-
25	tion to the date of enactment of the Public Util-

1 ity Regulatory Policies Act of 1978 shall be 2 deemed to be a reference to the date of enact-3 ment of this paragraph.

- "(E) In a State that permits third-party marketers to sell electric energy to retail electric consumers, such consumers shall be entitled to receive that same time-based metering and communications device and service as a retail electric consumer of the electric utility.
- "(F) Notwithstanding subsections (b) and (c) of section 112, each State regulatory authority shall, not later than twelve (12) months after enactment of this paragraph conduct an investigation in accordance with section 115(i) and issue a decision whether it is appropriate to implement the standards set out in subparagraphs (A) and (C)."
- 18 (b) STATE INVESTIGATION OF DEMAND RESPONSE
  19 AND TIME-BASED METERING.—Section 115 of the Public
  20 Utilities Regulatory Policies Act of 1978 (16 U.S.C. 2625)
  21 is amended by adding the at the end the following:
- "(k) Time-Based Metering and Communica-23 tions.—Each State regulatory authority shall conduct an 24 investigation and issue a decision whether or not it is ap-25 propriate for electric utilities to provide and install time-

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- 1 based meters and communications devices for each of their
- 2 customers which enable such customers to participate in
- 3 time-based pricing rate schedules and other demand re-
- 4 sponse programs.".
- 5 (c) Federal Assistance on Demand Re-
- 6 SPONSE.—Section 132(a) of the Public Utility Regulatory
- 7 Polices Act of 1978 (16 U.S.C. 2642(a)) is amended by
- 8 striking "and" at the end of paragraph (3), striking the
- 9 period at the end of paragraph (4) and inserting "; and",
- 10 and by adding the following at the end thereof:
- 11 "(5) technologies, techniques and rate-making
- methods related to advanced metering and commu-
- nications and the use of these technologies, tech-
- niques and methods in demand response programs.".
- 15 (d) Federal Guidance.—Section 132 of the Public
- 16 Utility Regulatory Policies Act of 1978 (16 U.S.C. 2643)
- 17 is amended by adding the following at the end thereof:
- 18 "(d) Demand Response.—The Secretary shall be
- 19 responsible for—
- 20 "(1) educating consumers on the availability,
- 21 advantages and benefits of advanced metering and
- communications technologies, including the funding
- of demonstration or pilot projects;
- 24 "(2) working with States, utilities, other energy
- 25 providers and advanced metering and communica-

1	tions experts to identify and address barriers to the
2	adoption of demand response programs; and
3	"(3) not later than 180 days after the date of
4	enactment of the Energy Policy Act of 2003, pro-
5	viding the Congress with a report that identifies and
6	quantifies the national benefits of demand response
7	and makes a recommendation on achieving specific
8	levels of such benefits by January 1, 2005.".
9	(e) Demand Response and Regional Coordina-
10	TION.—
11	(1) It is the policy of the United States to en-
12	courage States to coordinate, on a regional basis,
13	State energy policies to provide reliable and afford-
14	able demand response services to the public.
15	(2) The Secretary of Energy shall provide tech-
16	nical assistance to States and regional organizations
17	formed by two or more States to assist them in—
18	(A) identifying the areas with the greatest
19	demand response potential;
20	(B) identifying and resolving problems in
21	transmission and distribution networks, includ-
22	ing through the use of demand response; and
23	(C) developing plans and programs to use
24	demand response to respond to peak demand or
25	emergency needs.

1	(3) Not later than 1 year after the date of en-
2	actment of this Act, the Commission shall prepare
3	and publish an annual report, by appropriate region,
4	that assesses demand response resources, including
5	those available from all consumer classes, and which
6	identifies and reviews—
7	(A) saturation and penetration rate of ad-
8	vanced meters and communications tech-
9	nologies, devices and systems;
10	(B) existing demand response programs
11	and time-based rate programs;
12	(C) the annual resource contribution of de-
13	mand resources;
14	(D) the potential for demand response as
15	a quantifiable, reliable resource for regional
16	planning purposes; and
17	(E) steps taken to ensure that, in regional
18	transmission planning and operations, demand
19	resources are provided equitable treatment as a
20	quantifiable, reliable resource relative to the re-
21	source obligations of any load-serving entity,
22	transmission provider, or transmitting party.
23	(f) Federal Encouragement of Demand Re-
24	SPONSE DEVICES.—It is the policy of the United States
25	that time-based pricing and other forms of demand re-

- 1 sponse, whereby electricity customers are provided with
- 2 electricity price signals and the ability to benefit by re-
- 3 sponding to them, shall be encouraged and the deployment
- 4 of such technology and devices that enable electricity cus-
- 5 tomers to participate in such pricing and demand response
- 6 systems shall be facilitated.

## 7 SEC. 1143. ADOPTION OF ADDITIONAL STANDARDS.

- 8 (a) Adoption of Standards.—Section 113(b) of
- 9 the Public Utility Regulatory Policies Act of 1978 (16
- 10 U.S.C. 2623(b)) is amended by adding at the end the fol-
- 11 lowing:
- 12 "(6) Each electric utility shall provide distrib-
- uted generation, combined heat and power, and dis-
- trict heating and cooling systems competitive access
- to the local distribution grid and competitive pricing
- of service, and shall use simplified standard con-
- tracts for the interconnection of generating facilities
- that have a power production capacity of 250 kilo-
- watts or less.
- 20 "(7) No electric utility may refuse to inter-
- connect a generating facility with the distribution fa-
- cilities of the electric utility if the owner or operator
- of the generating facility complies with technical
- standards adopted by the State regulatory authority

- and agrees to pay the costs established by such
- 2 State regulatory authority.
- 3 "(8) Each electric utility shall develop a plan to
- 4 minimize dependence on one fuel source and to en-
- 5 sure that the electric energy it sells to consumers is
- 6 generated using a diverse range of fuels and tech-
- 7 nologies, including renewable technologies.
- 8 "(9) Each electric utility shall develop and im-
- 9 plement a ten-year plan to increase the efficiency of
- its fossil fuel generation.".
- 11 (b) Time for Adopting Standards.—Section 113
- 12 of the Public Utility Regulatory Policies Act of 1978 (16
- 13 U.S.C. 2623) is further amended by adding at the end
- 14 the following:
- 15 "(d) Special Rule.—For purposes of implementing
- 16 paragraphs (6), (7), (8), and (9) of subsection (b), any
- 17 reference contained in this section to the date of enact-
- 18 ment of the Public Utility Regulatory Policies Act of 1978
- 19 shall be deemed to be a reference to the date of enactment
- 20 of this subsection.".
- 21 SEC. 1144. TECHNICAL ASSISTANCE.
- Section 132(c) of the Public Utility Regulatory Poli-
- 23 cies Act of 1978 (16 U.S.C. 2642(c)) is amended to read
- 24 as follows:

1	"(c) Technical Assistance for Certain Respon-
2	SIBILITIES.—The Secretary may provide such technical
3	assistance as determined appropriate to assist State regu-
4	latory authorities and electric utilities in carrying out their
5	responsibilities under section 111(d)(11) and paragraphs
6	(6), (7), (8), and (9) of section 113(b).".
7	SEC. 1145. COGENERATION AND SMALL POWER PRODUC
8	TION PURCHASE AND SALE REQUIREMENTS.
9	(a) Termination of Mandatory Purchase and
10	SALE REQUIREMENTS.—Section 210 of the Public Utility
11	Regulatory Policies Act of 1978 (16 U.S.C. 824a-3) is
12	amended by adding at the end the following:
13	"(m) Termination of Mandatory Purchase and
14	Sale Requirements.—
15	"(1) Obligation to purchase.—After the
16	date of enactment of this subsection, no electric util-
17	ity shall be required to enter into a new contract or
18	obligation to purchase electric energy from a quali-
19	fying cogeneration facility or a qualifying small
20	power production facility under this section if the
21	Commission finds that the qualifying cogeneration
22	facility or qualifying small power production facility
23	has access to an independently administered, auc-
24	tion-based day ahead and real time wholesale market

for the sale of electric energy.

"(2) Obligation to sell.—After the date of enactment of this subsection, no electric utility shall be required to enter into a new contract or obligation to sell electric energy to a qualifying cogeneration facility or a qualifying small power production facility under this section if competing retail electric suppliers are able to provide electric energy to the qualifying cogeneration facility or qualifying small power production facility.

"(3) NO EFFECT ON EXISTING RIGHTS AND REMEDIES.—Nothing in this subsection affects the rights or remedies of any party under any contract or obligation, in effect on the date of enactment of this subsection, to purchase electric energy or capacity from or to sell electric energy or capacity to a facility under this Act (including the right to recover costs of purchasing electric energy or capacity).

# "(4) Recovery of Costs.—

"(A) Regulation.—The Commission shall promulgate such regulations as are necessary to ensure that an electric utility that purchases electric energy or capacity from a qualifying cogeneration facility or qualifying small power production facility in accordance with any legally enforceable obligation entered

1	into or imposed under this section before the
2	date of enactment of this subsection recovers all
3	prudently incurred costs associated with the
4	purchase.
5	"(B) Enforcement.—A regulation under
6	subparagraph (A) shall be enforceable in ac-
7	cordance with the provisions of law applicable
8	to enforcement of regulations under the Federal
9	Power Act (16 U.S.C. 791a et seq.).".
10	(b) Elimination of Ownership Limitations.—
11	Section 3 of the Federal Power Act (16 U.S.C. 796) is
12	amended—
13	(1) by striking paragraph (17)(C) and inserting
14	the following:
15	"(C) 'qualifying small power production fa-
16	cility' means a small power production facility
17	that the Commission determines, by rule, meets
18	such requirements (including requirements re-
19	specting minimum size, fuel use, and fuel effi-
20	ciency) as the Commission may, by rule, pre-
21	scribe;"; and
22	(2) by striking paragraph (18)(B) and inserting
23	the following:
24	"(B) 'qualifying cogeneration facility'
25	means a cogeneration facility that the Commis-

1	sion determines, by rule, meets such require-
2	ments (including requirements respecting min-
3	imum size, fuel use, and fuel efficiency) as the
4	Commission may, by rule, prescribe;".
5	SEC. 1146. RECOVERY OF COSTS.
6	(a) Regulation.—To ensure recovery by any elec-
7	tric utility that purchases electricity or capacity from a
8	qualifying facility pursuant to any legally enforceable obli-
9	gation entered into or imposed under section 210 of the
10	Public Utility Regulatory Policies Act of 1978 (16 U.S.C.
11	824a-3) before the date of enactment of this Act of all
12	costs associated with the purchases, the Commission shall
13	promulgate and enforce such regulations as are required
14	to ensure that no utility shall be required directly or indi-
15	rectly to absorb the costs associated with the purchases.
16	(b) Treatment.—A regulation under subsection (a)
17	shall be treated as a rule enforceable under the Federal
18	Power Act (16 U.S.C. 791a et seq.).
19	Subtitle E—Provisions Regarding
20	the Public Utility Holding Com-
21	pany Act of 1935
22	SEC. 1151. DEFINITIONS.
23	For the purposes of this subtitle:
24	(1) The term "affiliate" of a company means
25	any company 5 percent or more of the outstanding

- voting securities of which are owned, controlled, or held with power to vote, directly or indirectly, by such company.
  - (2) The term "associate company" of a company means any company in the same holding company system with such company.
    - (3) The term "Commission" means the Federal Energy Regulatory Commission.
    - (4) The term "company" means a corporation, partnership, association, joint stock company, business trust, or any organized group of persons, whether incorporated or not, or a receiver, trustee, or other liquidating agent of any of the foregoing.
    - (5) The term "electric utility company" means any company that owns or operates facilities used for the generation, transmission, or distribution of electric energy for sale.
    - (6) The terms "exempt wholesale generator" and "foreign utility company" have the same meanings as in sections 32 and 33, respectively, of the Public Utility Holding Company Act of 1935 (15 U.S.C. 79z–5, 79z–5b), as those sections existed on the day before the effective date of this subtitle.
- 24 (7) The term "gas utility company" means any 25 company that owns or operates facilities used for

distribution at retail (other than the distribution only in enclosed portable containers or distribution to tenants or employees of the company operating such facilities for their own use and not for resale) of natural or manufactured gas for heat, light, or power.

# (8) the term "holding company" means—

- (A) any company that directly or indirectly owns, controls, or holds, with power to vote, 10 percent or more of the outstanding voting securities of a public utility company or of a holding company of any public utility company; and
- (B) any person, determined by the Commission, after notice and opportunity for hearing, to exercise directly or indirectly (either alone or pursuant to an arrangement or understanding with one or more persons) such a controlling influence over the management or policies of any public utility company or holding company as to make it necessary or appropriate for the rate protection of utility customers with respect to rates that such person be subject to the obligations, duties, and liabilities imposed by this subtitle upon holding companies.

- 1 (9) The term "holding company system" means 2 a holding company, together with its subsidiary com-3 panies.
  - (10) The term "jurisdictional rates" means rates established by the Commission for the transmission of electric energy in interstate commerce, the sale of electric energy at wholesale in interstate commerce, the transportation of natural gas in interstate commerce, and the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use.
    - (11) The term "natural gas company" means a person engaged in the transportation of natural gas in interstate commerce or the sale of such gas in interstate commerce for resale.
    - (12) The term "person" means an individual or company.
    - (13) The term "public utility" means any person who owns or operates facilities used for transmission of electric energy in interstate commerce or sales of electric energy at wholesale in interstate commerce.
  - (14) The term "public utility company" means an electric utility company or a gas utility company.

- 1 (15) The term "State commission" means any 2 commission, board, agency, or officer, by whatever 3 name designated, of a State, municipality, or other 4 political subdivision of a State that, under the laws 5 of such State, has jurisdiction to regulate public util-6 ity companies.
  - (16) The term "subsidiary company" of a holding company means—
    - (A) any company, 10 percent or more of the outstanding voting securities of which are directly or indirectly owned, controlled, or held with power to vote, by such holding company; and
    - (B) any person, the management or policies of which the Commission, after notice and opportunity for hearing, determines to be subject to a controlling influence, directly or indirectly, by such holding company (either alone or pursuant to an arrangement or understanding with one or more other persons) so as to make it necessary for the rate protection of utility customers with respect to rates that such person be subject to the obligations, duties, and liabilities imposed by this subtitle upon subsidiary companies of holding companies.

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- 1 (17) The term "voting security" means any se-2 curity presently entitling the owner or holder thereof 3 to vote in the direction or management of the affairs 4 of a company.
- 5 SEC. 1152. REPEAL OF THE PUBLIC UTILITY HOLDING COM-
- 6 **PANY ACT OF 1935.**
- 7 The Public Utility Holding Company Act of 1935 (15
- 8 U.S.C. 79a et seq.) is repealed, effective 12 months after
- 9 the date of enactment of this Act.
- 10 SEC. 1153. FEDERAL ACCESS TO BOOKS AND RECORDS.
- 11 (a) IN GENERAL.—Each holding company and each
- 12 associate company thereof shall maintain, and shall make
- 13 available to the Commission, such books, accounts, memo-
- 14 randa, and other records as the Commission determines
- 15 are relevant to costs incurred by a public utility or natural
- 16 gas company that is an associate company of such holding
- 17 company and necessary or appropriate for the protection
- 18 of utility customers with respect to jurisdictional rates.
- 19 (b) Affiliate Companies.—Each affiliate of a hold-
- 20 ing company or of any subsidiary company of a holding
- 21 company shall maintain, and make available to the Com-
- 22 mission, such books, accounts, memoranda, and other
- 23 records with respect to any transaction with another affil-
- 24 iate, as the Commission determines are relevant to costs
- 25 incurred by a public utility or natural gas company that

- 1 is an associate company of such holding company and nec-
- 2 essary or appropriate for the protection of utility cus-
- 3 tomers with respect to jurisdictional rates.
- 4 (c) Holding Company Systems.—The Commission
- 5 may examine the books, accounts, memoranda, and other
- 6 records of any company in a holding company system, or
- 7 any affiliate thereof, as the Commission determines are
- 8 relevant to costs incurred by a public utility or natural
- 9 gas company within such holding company system and
- 10 necessary or appropriate for the protection of utility cus-
- 11 tomers with respect to jurisdictional rates.
- 12 (d) Confidentiality.—No member, officer, or em-
- 13 ployee of the Commission shall divulge any fact or infor-
- 14 mation that may come to his or her knowledge during the
- 15 course of examination of books, accounts, memoranda, or
- 16 other records as provided in this section, except as may
- 17 be directed by the Commission or by a court of competent
- 18 jurisdiction.

#### 19 SEC. 1154. STATE ACCESS TO BOOKS AND RECORDS.

- 20 (a) In General.—Upon the written request of a
- 21 State commission having jurisdiction to regulate a public
- 22 utility company in a holding company system, and subject
- 23 to such terms and conditions as may be necessary and ap-
- 24 propriate to safeguard against unwarranted disclosure to
- 25 the public of any trade secrets or sensitive commercial in-

- 1 formation, a holding company or any associate company
- 2 or affiliate thereof, wherever located, shall produce for in-
- 3 spection books, accounts, memoranda, and other records
- 4 that—
- 5 (1) have been identified in reasonable detail in
- 6 a proceeding before the State commission;
- 7 (2) the State commission determines are rel-
- 8 evant to costs incurred by such public utility com-
- 9 pany; and
- 10 (3) are necessary for the effective discharge of
- the responsibilities of the State commission with re-
- spect to such proceeding.
- 13 (b) Effect on State Law.—Nothing in this section
- 14 shall preempt applicable State law concerning the provi-
- 15 sion of books, accounts, memoranda, or other records, or
- 16 in any way limit the rights of any State to obtain books,
- 17 accounts, memoranda, or other records, under Federal
- 18 law, contract, or otherwise.
- 19 (c) COURT JURISDICTION.—Any United States dis-
- 20 trict court located in the State in which the State commis-
- 21 sion referred to in subsection (a) is located shall have ju-
- 22 risdiction to enforce compliance with this section.
- 23 SEC. 1155. EXEMPTION AUTHORITY.
- 24 (a) Rulemaking.—Not later than 90 days after the
- 25 date of enactment of this title, the Commission shall pro-

- 1 mulgate a final rule to exempt from the requirements of
- 2 section 203 any person that is a holding company, solely
- 3 with respect to one or more—
- 4 (1) qualifying facilities under the Public Utility
- 5 Regulatory Policies Act of 1978;
- 6 (2) exempt wholesale generators; or
- 7 (3) foreign utility companies.
- 8 (b) Other Authority.—If, upon application or
- 9 upon its own motion, the Commission finds that the books,
- 10 accounts, memoranda, and other records of any person are
- 11 not relevant to the jurisdictional rates of a public utility
- 12 company or natural gas company, or if the Commission
- 13 finds that any class of transactions is not relevant to the
- 14 jurisdictional rates of a public utility company, the Com-
- 15 mission shall exempt such person or transaction from the
- 16 requirements of section 203.

#### 17 SEC. 1156. AFFILIATE TRANSACTIONS.

- Nothing in this subtitle shall preclude the Commis-
- 19 sion or a State commission from exercising its jurisdiction
- 20 under otherwise applicable law to determine whether a
- 21 public utility company, public utility, or natural gas com-
- 22 pany may recover in rates any costs of an activity per-
- 23 formed by an associate company, or any costs of goods
- 24 or services acquired by such public utility company, public

- 1 utility, or natural gas company from an associate com-2 pany. SEC. 1157. APPLICABILITY. 4 No provision of this subtitle shall apply to, or be deemed to include— 6 (1) the United States; (2) a State or any political subdivision of a 7 8 State; 9 (3) any foreign governmental authority not op-10 erating in the United States; 11 (4) any agency, authority, or instrumentality of 12 any entity referred to in paragraph (1), (2), or (3); 13 or14 (5) any officer, agent, or employee of any entity 15 referred to in paragraph (1), (2), or (3) acting as 16 such in the course of such officer, agent, or employ-17 ee's official duty. 18 SEC. 1158. EFFECT ON OTHER REGULATIONS. 19 Nothing in this subtitle precludes the Commission or a State commission from exercising its jurisdiction under 20 21 otherwise applicable law to protect utility customers.
- 22 SEC. 1159. ENFORCEMENT.
- The Commission shall have the same powers as set
- 24 forth in sections 306 through 317 of the Federal Power

- 1 Act (16 U.S.C. 825e-825p) to enforce the provisions of
- 2 this subtitle.

#### 3 SEC. 1160. SAVINGS PROVISIONS.

- 4 (a) In General.—Nothing in this subtitle prohibits
- 5 a person from engaging in or continuing to engage in ac-
- 6 tivities or transactions in which it is legally engaged or
- 7 authorized to engage on the date of enactment of this Act,
- 8 if that person continues to comply with the terms of any
- 9 such authorization, whether by rule or by order.
- 10 (b) Effect on Other Commission Authority.—
- 11 Nothing in this subtitle limits the authority of the Com-
- 12 mission under the Federal Power Act (16 U.S.C. 791a and
- 13 following) (including section 301 of that Act) or the Nat-
- 14 ural Gas Act (15 U.S.C. 717 and following) (including sec-
- 15 tion 8 of that Act).

#### 16 SEC. 1161. IMPLEMENTATION.

- Not later than 12 months after the date of enactment
- 18 of this title, the Commission shall—
- 19 (1) promulgate such regulations as may be nec-
- 20 essary or appropriate to implement this subtitle; and
- 21 (2) submit to Congress detailed recommenda-
- tions on technical and conforming amendments to
- Federal law necessary to carry out this subtitle and
- the amendments made by this subtitle.

### 1 SEC. 1162. TRANSFER OF RESOURCES.

- 2 All books and records that relate primarily to the
- 3 functions transferred to the Commission under this sub-
- 4 title shall be transferred from the Securities and Exchange
- 5 Commission to the Commission.
- 6 SEC. 1163. EFFECTIVE DATE.
- 7 This subtitle shall take effect 12 months after the
- 8 date of enactment of this title.
- 9 SEC. 1164. CONFORMING AMENDMENT TO THE FEDERAL
- 10 **POWER ACT.**
- Section 318 of the Federal Power Act (16 U.S.C.
- 12 825q) is repealed.
- 13 Subtitle F—Market Transparency,
- 14 Anti-Manipulation And Enforce-
- 15 **ment**
- 16 SEC. 1171. MARKET TRANSPARENCY RULES.
- 17 Part II of the Federal Power Act is amended by add-
- 18 ing:
- 19 "MARKET TRANSPARENCY RULES
- "Sec. 222. (a) Not later than 180 days after the date
- 21 of enactment of this section, the Commission shall issue
- 22 rules establishing an electronic information system to pro-
- 23 vide the Commission and the public with access to such
- 24 information as is necessary or appropriate to facilitate
- 25 price transparency and participation in markets subject to
- 26 the Commission's jurisdiction. Such systems shall provide

- 1 information about the availability and market price of
- 2 wholesale electric energy and transmission services to the
- 3 Commission, State commissions, buyers and sellers of
- 4 wholesale electric energy, users of transmission services,
- 5 and the public. The Commission shall have authority to
- 6 obtain such information from any electric and transmit-
- 7 ting utility, including any entity described in section
- 8 201(f).
- 9 "(b) The Commission shall exempt from disclosure
- 10 information it determines would, if disclosed, be detri-
- 11 mental to the operation of an effective market or jeop-
- 12 ardize system security. This section shall not apply to an
- 13 entity described in section 212(k)(2)(B) with respect to
- 14 transactions for the purchase or sale of wholesale electric
- 15 energy and transmission services within the area described
- 16 in section 212(k)(2)(A).".

#### 17 SEC. 1172. MARKET MANIPULATION.

- Part II of the Federal Power Act is amended by the
- 19 following:
- 20 "PROHIBITION ON FILING FALSE INFORMATION
- 21 "Sec. 223. It shall be a violation of this Act for any
- 22 person or any other entity (including entities described in
- 23 section 201(f)) willfully and knowingly to report any infor-
- 24 mation relating to the price of electricity sold at wholesale,
- 25 which information the person or any other entity knew to
- 26 be false at the time of the reporting, to any governmental

1	entity with the intent to manipulate the data being com-
2	piled by such governmental entity.
3	"PROHIBITION ON ROUND TRIP TRADING
4	"Sec. 224. (a) It shall be a violation of this Act for
5	any person or any other entity (including entities de-
6	scribed in section 201(f)) willfully and knowingly to enter
7	into any contract or other arrangement to execute a
8	'round-trip trade' for the purchase or sale of electric en-
9	ergy at wholesale.
10	"(b) For the purposes of this section, the term 'round
11	trip trade' means a transaction, or combination of trans-
12	actions, in which a person or any other entity—
13	"(1) enters into a contract or other arrange-
14	ment to purchase from, or sell to, any other person
15	or other entity electric energy at wholesale;
16	"(2) simultaneously with entering into the con-
17	tract or arrangement described in paragraph (1), ar-
18	ranges a financially offsetting trade with such other
19	person or entity for the same such electric energy,
20	at the same location, price, quantity and terms so
21	that, collectively, the purchase and sale transactions
22	in themselves result in no financial gain or loss; and
23	"(3) enters into the contract or arrangement
24	with the intent to deceptively affect reported reve-
25	nues, trading volumes, or prices.".

# 1 SEC. 1173. ENFORCEMENT.

2	(a) Complaints.—Section 306 of the Federal Power
3	Act (16 U.S.C. 825e) is amended by—
4	(1) inserting "electric utility (including entities
5	described in section 201(f) and rural cooperative en-
6	tities)," after "Any person,"; and
7	(2) inserting "transmitting utility," after "li-
8	censee" each place it appears.
9	(b) Investigations.—Section 307(a) of the Federal
10	Power Act (16 U.S.C. 825f(a)) is amended by inserting
11	"or transmitting utility" after "any person" in the first
12	sentence.
13	(c) Review of Commission Orders.—Section
14	313(a) of the Federal Power Act (16 U.S.C. 8251) is
15	amended by inserting "electric utility," after "Any per-
16	son," in the first sentence.
17	(d) Criminal Penalties.—Section 316 of the Fed-
18	eral Power Act (16 U.S.C. 8250) is amended—
19	(1) in subsection (a), by striking "\$5,000" and
20	inserting "\$1,000,000", and by striking "two years"
21	and inserting "five years";
22	(2) in subsection (b), by striking "\$500" and
23	inserting "\$25,000"; and
24	(3) by striking subsection (c).
25	(e) Civil Penalties.—Section 316A of the Federal

26 Power Act (16 U.S.C. 8250–1) is amended—

1	(1) in subsections (a) and (b), by striking "sec-
2	tion 211, 212, 213, or 214" each place it appears
3	and inserting "Part II"; and
4	(2) in subsection (b), by striking "\$10,000"
5	and inserting "\$1,000,000".
6	(f) General Penalties.—Section 21 of the Natural
7	Gas Act (15 U.S.C. 717t) is amended—
8	(1) in subsection (a), by striking "\$5,000" and
9	inserting "\$1,000,000", and by striking "two years"
10	and inserting "five years"; and
11	(2) in subsection (b), by striking "\$500" and
12	inserting "\$50,000".
13	SEC. 1174. REFUND EFFECTIVE DATE.
14	Section 206(b) of the Federal Power Act (16 U.S.C.
15	824e(b)) is amended by—
16	(1) striking "the date 60 days after the filing
17	of such complaint nor later than 5 months after the
18	expiration of such 60-day period" in the second sen-
19	tence and inserting "the date of the filing of such
20	complaint nor later than 5 months after the filing of
21	such complaint";
22	(2) striking "60 days after" in the third sen-
23	tence and inserting "of";

1	(3) striking "expiration of such 60-day period"
2	in the third sentence and inserting "publication
3	date": and

(4) striking the fifth sentence and inserting: "If no final decision is rendered by the conclusion of the 180-day period commencing upon initiation of a proceeding pursuant to this section, the Commission shall state the reasons why it has failed to do so and shall state its best estimate as to when it reasonably expects to make such decision.".

# 11 Subtitle G—Consumer Protections

## 12 SEC. 1181. CONSUMER PRIVACY.

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- 13 The Federal Trade Commission shall issue rules pro-
- 14 tecting the privacy of electric consumers from the disclo-
- 15 sure of consumer information in connection with the sale
- 16 or delivery of electric energy to a retail electric consumer.
- 17 If the Federal Trade Commission determines that a
- 18 State's regulationsprovide equivalent or greater protection
- 19 than the provisions of this section, such State regulations
- 20 shall apply in that State in lieu of the regulations issued
- 21 by the Commission under this section.

## 22 SEC. 1182. UNFAIR TRADE PRACTICES.

- 23 (a) Slamming.—The Federal Trade Commission
- 24 shall issue rules prohibiting the change of selection of an
- 25 electric utility except with the informed consent of the

- 1 electric consumer or if determined by the appropriate
- 2 State regulatory authority to be necessary to prevent loss
- 3 of service.
- 4 (b) Cramming.—The Federal Trade Commission
- 5 shall issue rules prohibiting the sale of goods and services
- 6 to an electric consumer unless expressly authorized by law
- 7 or the electric consumer.
- 8 (c) State Authority.—If the Federal Trade Com-
- 9 mission determines that a State's regulations provide
- 10 equivalent or greater protection than the provisions of this
- 11 section, such State regulations shall apply in that State
- 12 in lieu of the regulations issued by the Commission under
- 13 this section.
- 14 SEC. 1183. DEFINITIONS.
- 15 For purposes of this subtitle—
- 16 (1) "State regulatory authority" has the mean-
- ing given that term in section 3(21) of the Federal
- 18 Power Act (16 U.S.C. 796(21)).
- 19 (2) "Electric consumer" and "electric utility"
- 20 have the meanings given those terms in section 3 of
- the Public Utility Regulatory Policies Act of 1978
- 22 (16 U.S.C. 2602).

# Subtitle H—Technical Amendments

- 2 SEC. 1191. TECHNICAL AMENDMENTS.
- 3 (a) Section 211(c) of the Federal Power Act (16
- 4 U.S.C. 824j(c)) is amended by—
- 5 (1) striking "(2)";
- 6 (2) striking "(A)" and inserting "(1)";
- 7 (3) striking "(B)" and inserting "(2)"; and
- 8 (4) striking "termination of modification" and
- 9 inserting "termination or modification".
- 10 (b) Section 211(d)(1) of the Federal Power Act (16
- 11 U.S.C. 824j(d)) is amended by striking "electric utility"
- 12 the second time it appears and inserting "transmitting
- 13 utility".
- (c) Section 315 of the Federal Power Act (16 U.S.C.
- 15 825n) is amended by striking "subsection" and inserting
- 16 "section".

# Calendar No. 87

108TH CONGRESS 1ST SESSION S. 1005

[Report No. 108-43]

# A BILL

To enhance the energy security of the United States, and for other purposes.

May 6, 2003

Read twice and placed on the calendar