Staff Draft March 25, 2003

1	SECTION 1. SHORT TITLE; TABLE OF CONTENTS
2	(a) SHORT TITLE.—This Act may be cited as
3	(b) Table of Contents.—The table of contents for this act is as follows:
	Sec. 1. Short Title; Table of Contents.
	TITLE I—OIL AND GAS
	 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. Suspension of Operations on Outer Continental Shelf Lease to Reevaluate Technology. Sec. 109. Orphaned, Abandoned, or Idled Wells on Federal Lands. Sec. 110. Incentives for Natural Gas Production from Deep Wells in the Shallow Waters of the Gulf of Mexico. Sec. 111. Alternate Energy-Related Uses on the Outer Continental Shelf. Sec. 112. Coastal Impact Assistance. Sec. 113. National Energy Resource Database.
	Subtitle B—Access to Federal Lands
	Sec. 121. Office of Federal Energy Permit Coordination. Sec. 122. Pilot Program to Improve Federal Permit Coordination. Sec. 123. Coordination of Federal Agencies to Establish Priority Energy Transmission Rights-of-way. Sec. 124. USGS Estimates of Oil and Gas Resources Underlying Onshore Federal Lands. 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. State Study of Alternative Means of Construction. Sec. 140. Clarification of ANGTA Status and Authorities.

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- Sec. 238. Experts' Appointment and Report; Court Review and Hearing
- Sec. 239. Court's Final Response to Petition: Valuation Concerning Economically Recoverable Oil or Gas Resources Lost or Delayed, Suspension or Termination, And Payment Order.
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- Sec. 1302. Weatherization Assistance Program.
- Sec. 1303. State Energy Plans.

1

TITLE I — OIL AND GAS

2	SEC. 101. PERMANENT AUTHORITY TO OPERATE THE STRATEGIC PETROLEUM
3	RESERVE AND OTHER ENERGY PROGRAMS.
4	(a) Amendment to Title I of the Energy Policy and Conservation
5	ACT.—Title I of the Energy Policy and Conservation Act (42 U.S.C. 6211 et seq.) is
6	amended—
7	(1) by striking section 166 (42 U.S.C. 6246) and inserting—
8	"AUTHORIZATION OF APPROPRIATIONS
9	"SEC. 166. There are authorized to be appropriated to the Secretary such sums as may be
10	necessary to carry out this part and part D, to remain available until expended.";
11	(2) by striking section 186 (42 U.S.C. 6250(e); and
12	(3) by striking part E (42 U.S.C. 6251; relating to the expiration of title I of
13	the Act).
14	(b) Amendment to Title II of the Energy Policy and Conservation
15	ACT.—Title II of the Energy Policy and Conservation Act (42 U.S.C. 6271 et seq.) is

1	amended—
2	(1) by striking section 256(h) (42 U.S.C. 6276(h)) and inserting—
3	"(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be
4	appropriated to the Secretary such sums as may be necessary to carry out this part, to
5	remain available until expended.";
6	(2) by inserting before section 273 (42 U.S.C. 6283) the following:
7	"PART C—SUMMER FILL AND FUEL BUDGETING PROGRAMS";
8	(3) by striking section 273(e) (42 U.S.C. 6283(e); relating to the expiration
9	of summer fill and fuel budgeting programs); and
10	(4) by striking part D (42 U.S.C. 6285; relating to the expiration of title II of
11	the Act).
12	(c) TECHNICAL AMENDMENTS.—The table of contents for the Energy Policy and
13	Conservation Act is amended—
14	(1) by amending the items relating to part D of title I to read as follows:
	"PART D—NORTHEAST HOME HEATING OIL RESERVE
	"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 title II to read as follows:
2	"PART C—SUMMER FILL AND FUEL BUDGETING PROGRAMS
3	"Sec. 273. Summer fill and fuel budgeting programs."; and
4	(3) by striking the items relating to part D of title II.
5	(d) NORTHEAST HOME HEATING OIL.—Section 183(b)(1) of the Energy Policy and
6	Conservation Act (42 U.S.C. 6250(b)(1)) is amended by inserting "(considered as a heating
7	season average)" after "mid-October through March" and before "and continues".
8	SEC. 102. STUDY ON INVENTORY ON PETROLEUM AND NATURAL GAS STORAGE.
9	(a) DEFINITION.—For purposes of this section "petroleum" means crude oil, motor
10	gasoline, jet fuel, distillates and propane.

1	(b) Study.—The Secretary of Energy shall conduct a study on petroleum and
2	natural gas storage capacity and operational inventory levels, nationwide and by major
3	geographical regions.
4	(c) CONTENTS.—The study shall address—
5	(1) historical normal ranges for petroleum and natural gas inventory levels;
6	(2) historical and projected storage capacity trends;
7	(3) estimated operation inventory levels below which outages, delivery
8	slowdown, rationing, interruptions in service or other indicators of shortage begin
9	to appear;
10	(4) explanations for inventory levels dropping below normal ranges; and
11	(5) the ability of industry to meet U.S. demand for petroleum and natural
12	gas without shortages or price spikes, when inventory levels are below normal
13	ranges.
14	(d) REPORT TO CONGRESS.—Not later than one year from enactment of this Act, the
15	Secretary shall submit a report to Congress on the results of the study including findings
16	and any recommendations for preventing future supply shortages.
17	SEC. 103. PROGRAM ON OIL AND GAS ROYALTIES IN KIND.
18	(a) APPLICABILITY OF SECTION.—Notwithstanding any other provision of law, the
19	provisions of this section shall apply to all royalty in kind accepted by the Secretary of the
20	Interior under any Federal oil or gas lease or permit under section 36 of the Mineral
21	Leasing Act (30 U.S.C. 192), section 27 of the Outer Continental Shelf Lands Act (43
22	U.S.C. 1353), or any other mineral leasing law beginning on the date of the enactment of
23	this Act.
24	(b) TERMS AND CONDITIONS.—All royalty accruing to the United States under any
25	Federal oil or gas lease or permit under the Mineral Leasing Act (30 U.S.C. 181 et seq.) or
26	the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.) shall, on the demand of the
27	Secretary of the Interior, be paid in oil or gas. If the Secretary of the Interior makes such a
28	demand, the following provisions apply to such payment:
29	(1) Delivery by, or on behalf of, the lessee of the royalty amount and quality
30	due under the lease satisfies the lessee's royalty obligation for the amount

1	delivered, except that transportation and processing reimbursements paid to, or
2	deductions claimed by, the lessee shall be subject to review and audit.
3	(2) Royalty production shall be placed in marketable condition by the lessee
4	at no cost to the United States.
5	(3) The Secretary of the Interior may—
6	(A) sell or otherwise dispose of any royalty production taken in kind
7	(other than oil or gas transferred under section 27(a)(3) of the Outer
8	Continental Shelf Lands Act (43 U.S.C. 1353(a)(3)) for not less than the
9	market price; and
10	(B) transport or process (or both) any royalty production taken in
11	kind.
12	(4) The Secretary of the Interior may, notwithstanding section 3302 of title
13	31, United States Code, retain and use a portion of the revenues from the sale of oil
14	and gas royalties taken in kind that otherwise would be deposited to miscellaneous
15	receipts, without regard to fiscal year limitation, or may use royalty production, to
16	pay the cost of—
17	(A) transporting the royalty production;
18	(B) processing the royalty production;
19	(C) disposing of the royalty production; or
20	(D) any combination of transporting, processing, and disposing of
21	the royalty production.
22	(5) The Secretary of the Interior may use a portion of the revenues from the
23	sale of oil royalties taken in kind, without fiscal year limitation, to pay
24	transportation costs, salaries, and other administrative costs directly related to
25	filling the Strategic Petroleum Reserve.
26	(c) REIMBURSEMENT OF COST.—If the lessee, pursuant to an agreement with the
27	United States or as provided in the lease, processes the royalty gas or delivers the royalty
28	oil or gas at a point not on or adjacent to the lease area, the Secretary of the Interior shall—
29	(1) reimburse the lessee for the reasonable costs of transportation (not

1	including gathering) from the lease to the point of delivery or for processing costs;
2	or
3	(2) at the discretion of the Secretary of the Interior, allow the lessee to
4	deduct such transportation or processing costs in reporting and paying royalties in
5	value for other Federal oil and gas leases.
6	(d) BENEFIT TO THE UNITED STATES REQUIRED.— The Secretary of the Interior may
7	receive oil or gas royalties in kind only if the Secretary determines that receiving such
8	royalties provides benefits to the United States greater than or equal to those likely to have
9	been received had royalties been taken in value.
10	(e) REPORT TO CONGRESS.—In Fiscal Year 2005, the Secretary of the Interior shall
11	provide a report to the Congress that covers—
12	(1) actions taken to develop an organization, business processes and
13	automated systems to support a full royalty-in-kind capability to be used in tandem
14	with the royalty-in-value approach to managing Federal oil and gas revenues, and
15	(2) Future royalty-in-kind business operations plans and objectives.
16	(f) DEDUCTION OF EXPENSES.—
17	(1) Before making payments under section 35 of the Mineral Leasing Act
18	(30 U.S.C. 191) or section 8(g) of the Outer Continental Shelf Lands Act (43 U.S.C
19	1337(g)) of revenues derived from the sale of royalty production taken in kind from
20	a lease, the Secretary of the Interior shall deduct amounts paid or deducted under
21	subsections (b)(4) and (c), and shall deposit such amounts to miscellaneous
22	receipts.
23	(2) If the Secretary of the Interior allows the lessee to deduct transportation
24	or processing costs under subsection (c), the Secretary may not reduce any
25	payments to recipients of revenues derived from any other Federal oil and gas lease
26	as a consequence of that deduction.
27	(g) CONSULTATION WITH STATES.—The Secretary of the Interior shall consult—
28	(1) with a State before conducting a royalty in-kind program under this title
29	within the State, and may delegate management of any portion of the Federal

1	royalty in-kind program to such State except as otherwise prohibited by Federal
2	law; and
3	(2) annually with any State from which Federal oil or gas royalty is being
4	taken in kind to ensure to the maximum extent practicable that the royalty in-kind
5	program provides revenues to the State greater than or equal to those likely to have
6	been received had royalties been taken in value.
7	(h) Provisions for Small Refineries.—
8	(1) If the Secretary of the Interior determines that sufficient supplies of
9	crude oil are not available in the open market to refineries not having their own
10	source of supply for crude oil, the Secretary may grant preference to such refineries
11	in the sale of any royalty oil accruing or reserved to the United States under Federal
12	oil and gas leases issued under any mineral leasing law, for processing or use in
13	such refineries at private sale at not less than the market price.
14	(2) In disposing of oil under this subsection, the Secretary of the Interior
15	may, at the discretion of the Secretary, prorate such oil among such refineries in the
16	area in which the oil is produced.
17	(i) Disposition to Federal Agencies.—
18	(1) Any royalty oil or gas taken by the Secretary of the Interior in kind from
19	onshore oil and gas leases may be sold at not less than the market price to any
20	department or agency of the United States.
21	(2) Any royalty oil or gas taken in kind from Federal oil and gas leases on
22	the outer Continental Shelf may be disposed of only under section 27 of the Outer
23	Continental Shelf Lands Act (43 U.S.C. 1353).
24	(j) Preference for Federal Low-Income Energy Assistance Programs.—In
25	disposing of royalty oil or gas taken in kind under this section, the Secretary may grant a
26	preference to any person, including any State or Federal agency, for the purpose of
27	providing additional resources to any Federal low-income energy assistance program.
28	SEC. 104. MARGINAL PROPERTY PRODUCTION INCENTIVES.
29	(a) MARGINAL PROPERTY DEFINED.—Until such time as the Secretary of the
30	Interior issues rules under subsection (e) that prescribe a different definition, for purposes

1	of this section, the term "marginal property" means an onshore unit, communitization
2	agreement, or lease not within a unit or communitization agreement that produces on
3	average the combined equivalent of less than 15 barrels of oil per well per day or 90
4	million British thermal units of gas per well per day calculated based on the average over
5	the three most recent production months and including those wells that produce more than
6	half the days in the three most recent production months.
7	(b) CONDITIONS FOR REDUCTION OF ROYALTY RATE.—Until such time as the
8	Secretary of the Interior promulgates rules under subsection (e) that prescribe different
9	thresholds or standards—
10	(1) the Secretary shall reduce the royalty rate on oil production from
11	marginal properties as prescribed in subsection (c) when the spot price of West
12	Texas Intermediate crude oil at Cushing, Oklahoma, is, on average, less than \$15
13	per barrel for 90 consecutive trading days; and
14	(2) the Secretary shall reduce the royalty rate on gas production from
15	marginal properties as prescribed in subsection (c) when the spot price of natural
16	gas delivered at Henry Hub, Louisiana, is, on average, less than \$2.00 per million
17	British thermal units for 90 consecutive trading days.
18	(c) REDUCED ROYALTY RATE.—
19	(1) When a marginal property meets the conditions specified in subsection
20	(b), the royalty rate shall be the lesser of—
21	(A) 5 percent; or
22	(B) the applicable rate under any other statutory or regulatory
23	royalty relief provision that applies to the affected production.
24	(2) The reduced royalty rate under this subsection shall be effective on the
25	first day of the production month following the date on which the applicable price
26	standard prescribed in subsection (b) is met.
27	(d) TERMINATION OF REDUCED ROYALTY RATE.— A royalty rate prescribed in
28	subsection (c)(1) shall terminate on the first date of the production month following the
29	date on which prices are above those specified in (b).

1	(e) RULES PRESCRIBING DIFFERENT RELIEF.—
2	(1) The Secretary of the Interior, after consultation with the Secretary of
3	Energy, may by rule prescribe different parameters, standards, and requirements
4	for, and a different degree or extent of, royalty relief for marginal properties in lieu
5	of those prescribed in subsections (b) through (d).
6	(2) The Secretary of the Interior, after consultation with the Secretary of
7	Energy, and within 1 year after the date of enactment of this Act, shall—
8	(A) by rule prescribe standards and requirements for, and the extent
9	of royalty relief for, marginal properties for oil and gas leases on the outer
10	Continental Shelf; and
11	(B) by rule define what constitutes a marginal property on the outer
12	Continental Shelf for purposes of this section.
13	(3) In promulgating rules under this subsection, the Secretary of the Interior
14	may consider—
15	(A) oil and gas prices and market trends;
16	(B) production costs;
17	(C) abandonment costs;
18	(D) Federal and State tax provisions and their effects on production
19	economics;
20	(E) other royalty relief programs; and
21	(F) other relevant matters.
22	(f) SAVINGS PROVISION.—Nothing in this section shall prevent a lessee from
23	receiving royalty relief or a royalty reduction pursuant to any other law or regulation that
24	provides more relief than the amounts provided by this section.
25	SEC. 105. COMPREHENSIVE INVENTORY OF OCS OIL AND NATURAL GAS RESOURCES.
26	(a) In General.—The Secretary of the Interior shall conduct an inventory and
27	analysis of oil and natural gas resources beneath all of the waters of the United States Outer
28	Continental Shelf ("OCS"). The inventory and analysis shall:
29	(1) use available data on oil and gas resources in areas offshore of Mexico
30	and Canada that will provide information on trends of oil and gas accumulation in

areas of the OCS:

- (2) utilize any available technology, including 3-D seismic technology to obtain accurate resources estimates:
- (3) analyze how resource estimates in OCS areas have changed over time as geological and geophysical data is gathered; initial exploration has occurred; or full field development occurred, 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 facilities and pipeline landings.
- (b) REPORTS.—The Secretary shall submit a report to the Speaker of the United States House of Representatives and the President of the United States Senate on the inventory of estimates and the analysis of restrictions or impediments, together with any recommendations, within six months of the date of enactment of the section. The report shall be publically available and updated at least every five years.

SEC. 106. ROYALTY RELIEF FOR DEEP WATER PRODUCTION.

(a) IN GENERAL.—For all tracts located in water depths of greater than 400 meters in the Western and Central Planning Area of the Gulf of Mexico, including that portion of the Eastern Planning Area of the Gulf of Mexico encompassing whole lease blocks lying west of 87 degrees, 30 minutes West longitude, any oil or gas lease sale under the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.) occurring within 5 years after the date of the enactment of this Act shall use the bidding system authorized in section 8(a)(1)(H) of the Outer Continental Shelf Lands Act (43 U.S.C. 1337(a)(1)(H)), except that the suspension of royalties shall be set at a volume of not less than the following:

1	(1) 5 million barrels of oil equivalent for each lease in water depths of 400
2	to 800 meters.
3	(2) 9 million barrels of oil equivalent for each lease in water depths of 800
4	to 1,600 meters.
5	(3) 12 million barrels of oil equivalent for each lease in water depths greater
6	than 1,600 meters.
7	SEC. 107. ALASKA OFFSHORE ROYALTY SUSPENSION.
8	The Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq, section 8(a)(3)(B) is
9	amended with the following: add "and in the Planning Areas offshore Alaska" after "West
10	longitude" and before "the Secretary".
11	SEC. 108. SUSPENSION OF OPERATIONS ON OUTER CONTINENTAL SHELF LEASE TO
12	REEVALUATE TECHNOLOGY.
13	Section 5 of the Outer Continental Shelf Lands Act (43 U.S.C. 1334) is amended by
14	adding at the end:
15	"(k) Suspension of Operations.—The Secretary may grant a request for a
16	suspension of operations under any lease to allow the lessee to reevaluate the lease using
17	new technologies, if the Secretary determines the suspension would prevent the drilling of
18	unnecessary wells and would increase recovery of hydrocarbon resources under the lease.
19	Any suspension shall be limited to the minimum period of time the Secretary determines is
20	necessary to achieve the objectives of this subsection.".
21	SEC. 109. ORPHANED, ABANDONED OR IDLED WELLS ON FEDERAL LANDS.
22	(a) In General.—The Secretary of the Interior, in cooperation with the Secretary
23	of Agriculture, shall establish a program within 1 year after the date of enactment of this
24	Act for remediation, reclamation and closure of orphaned, abandoned, or idled oil and gas
25	wells located on lands administered by the land management agencies within the
26	Department of the Interior and Agriculture. The program shall—
27	(1) include a means of ranking orphaned, abandoned, or idled wells site for
28	priority in remediation, reclamation and closure.
29	(2) provide for identification and recovery of the costs of remediation,
30	reclamation and closure from persons or other entities currently providing a bond or

1	other financial assurance required under State or Federal law for an oil or gas well
2	that is orphaned, abandoned or idled.
3	(b) COOPERATION AND CONSULTATIONS.—In carrying out the program, the
4	Secretary of the Interior shall work cooperatively with the Secretary of Agriculture and the
5	States within which the Federal lands are located and consult with the Secretary of Energy
6	and the Interstate Oil and Gas Compact commission.
7	(c) REPORT.—Within 2 years after the date of enactment of the section, the
8	Secretary of the Interior, in cooperation with the Secretary of Agriculture, shall prepare a
9	report describing the development and accomplishments of the program established under
10	subsection (a) and transmit copies of the plan to the Speaker of the United States House of
11	Representatives and the President of the United States Senate.
12	(d) DEFINITION.—For purposes of this section, a well is idled if it has been non-
13	operational for 7 years and there is non anticipated beneficial use of the well.
14	(e) AUTHORIZATION.—To carry out this section there is authorized to be
15	appropriated to the Secretary of the Interior \$20,000,000 for each of the fiscal years 2004
16	through 2008.
17	SEC. 110. INCENTIVES FOR NATURAL GAS PRODUCTION FROM DEEP WELLS IN THE
18	SHALLOW WATERS OF THE GULF OF MEXICO
19	No later than 90 days after enactment, the Secretary of the Interior shall promulgate
20	final regulations providing royalty incentives for natural gas produced from deep wells, as
21	defined by the Secretary, on oil and gas leases issued under the Outer Continental Shelf
22	Lands Act (43 U.S.C. 1331 et seq.) and issued prior to January 1, 2001, in shallow waters
23	of the Gulf of Mexico, wholly west of 87 degrees, 30 minutes West longitude that are less
24	than 200 meters deep.
25	SEC. 111. ALTERNATE ENERGY-RELATED USES ON THE OUTER CONTINENTAL SHELF.
26	(a) AMENDMENT TO OUTER CONTINENTAL SHELF LANDS ACT.—Section 8 of the
27	Outer Continental Shelf Lands Act (43 U.S.C. 1337) is amended by adding at the end the
28	following new subsection:
29	"(p) Easements or Rights-of-way for Energy and Related Purposes.—
30	"(1) The Secretary may grant an easement or right-of-way on the Outer

1	Continental Shelf for activities not otherwise authorized in this Act, the Deepwater
2	Port Act of 1974 (33 U.S.C. 1501 et seq.), or the Ocean Thermal Energy
3	Conversion Act of 1980 (42 U.S.C. 9101 et seq.), or other applicable law when
4	such activities—
5	"(A) support exploration, development, production, transportation,
6	or storage of oil, natural gas, or other minerals;
7	"(B) produce or support production, transportation, or transmission
8	of energy from sources other than oil and gas; or
9	"(C) use facilities currently or previously used for activities
10	authorized under this Act.
11	"(2) The Secretary shall promulgate regulations to implement the provisions
12	of this subsection, including regulations to ensure that energy related activities are
13	conducted in a manner that provides for safety, protection of the environment, and
14	appropriate coordination with other Federal agencies and a fair return to the Federal
15	government for any easement right-of-way granted under this subsection.
16	"(3) This subsection shall not apply to any area on the Outer Continental
17	Shelf designated as a National Marine Sanctuary.".
18	SEC. 112. COASTAL IMPACT ASSISTANCE.
19	Section 31 of the Outer Continental Shelf Lands Act (43 U.S.C. 1356a.) is amended
20	by striking all and replacing with the following:
21	"(a) Definitions.—When used in this section:
22	"(1) The term 'coastal political subdivision' means a county, parish, or any
23	equivalent subdivision of a Producing Coastal State which subdivision lies within
24	the coastal zone (as defined in section 304(1) of the Coastal Zone Management Act
25	(16 U.S.C. 1453(1)) and within a distance of 200 miles from the geographic center
26	of any leased tract.
27	"(2) The term 'coastal population' means the population of all political
28	subdivisions, as determined by the most recent official data of the Census Bureau,
29	contained in whole or in part within the designated coastal boundary of a State as
30	defined in a State's coastal zone management program under the Coastal Zone

1	Management Act (16 U.S.C. 1451 et seq.).
2	"(3) The term 'Coastal State' has the same meaning as provided by
3	subsection 304(4) of the Coastal Zone Management Act (16 U.S.C. 1453(4)).
4	"(4) The term 'coastline' has the same meaning as the term 'coast line' as
5	defined in subsection 2(c) of the Submerged Lands Act (43 U.S.C. 1301(c)).
6	"(5) The term 'distance' means the minimum great circle distance,
7	measured in statute miles.
8	"(6) The term 'leased tract' means a tract maintained under section 6 or
9	leased under section 8 for the purpose of drilling for, developing, and producing oil
10	and natural gas resources.
11	"(7) The term 'Producing Coastal State' means a Coastal State with a
12	coastal seaward boundary within 200 miles from the geographic center of a leased
13	tract other than a leased tract within any area of the Outer Continental Shelf where a
14	moratorium on new leasing was in effect as of January 1, 2002 unless the lease was
15	issued prior to the establishment of the moratorium and was in production on
16	January 1, 2002.
17	"(8) The term 'qualified Outer Continental Shelf revenues' means all
18	amounts received by the United States from each leased tract or portion of a leased
19	tract lying seaward of the zone defined and governed by section 8(g) of this Act, or
20	lying within such zone but to which section 8(g) does not apply, the geographic
21	center of which lies within a distance of 200 miles from any part of the coastline of
22	any producing coastal state, including bonus bids, rents, royalties (including
23	payments for royalties taken in kind and sold), net profit share payments, and
24	related late payment interest. Such term shall only apply to leases issued after
25	January 1, 2003 and revenues from existing leases that occurs after January 1, 2003.
26	Such term does not include any revenues from a leased tract or portion of a leased
27	tract that is included within any area of the Outer Continental Shelf where a
28	moratorium on new leasing was in effect as of January 1, 2002, unless the lease was

issued prior to the establishment of the moratorium and was in production on

1	January 1, 2002.
2	"(9) The term 'Secretary' means the Secretary of Interior."
3	"(b) AUTHORIZATION.—For fiscal years 2004 through 2009, an amount equal to not
4	more than 10 percent of qualified Outer Continental Shelf revenues is authorized to be
5	appropriated for the purposes of this section.
6	"(c) Impact Assistance Payments to States and Political
7	SUBDIVISIONS.—The Secretary shall make payments from the amounts available under this
8	section to Producing Coastal States with an approved Coastal Impact Assistance Plan, and
9	to coastal political subdivisions as follows:
10	"(1) An amount equal to not more than 25 percent of the qualified Outer
11	Continental Shelf revenues' generated off the coastline of each Producing Coastal
12	State and received by the United States shall be paid by the Secretary to the same
13	Producing Coastal State off of which coastline the qualified Outer Continental Shelf
14	revenues were generated, except that where there is more than one Producing
15	Coastal State within 200 miles of a leased tract, the amount of each Producing
16	Coastal State's payment for such leased tract shall be inversely proportional to the
17	distance between the nearest point on the coastline of such State and the geographic
18	center of each leased tract or portion of the leased tract (to the nearest whole mile)
19	that is within 200 miles of that coastline, as determined by the Secretary.
20	"(2) Thirty-five percent of each Producing Coastal State's allocable share as
21	determined under paragraph (1) shall be paid directly to the coastal political
22	subdivisions by the Secretary based on the following formula:
23	"(A) Twenty-five percent shall be allocated based on the ratio of
24	such coastal political subdivision's coastal population to the coastal
25	population of all coastal political subdivisions in the Producing Coastal
26	State;
27	"(B) Twenty-five percent shall be allocated based on the ratio of
28	such coastal political subdivision's coastline miles to the coastline miles of
29	a coastal political subdivision in the Producing Coastal State except that for

those coastal political subdivisions in the State of Louisiana or the State of
Alaska without a coastline, the coastline for purposes of this element of the
formula shall be 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

"(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 Louisiana the funds for this element of the formula shall be divided equally among all 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

1	revenues received in fiscal year 2003, and calculations of payments for fiscal years
2	2007 through 2009 shall be made using qualified Outer Continental Shelf revenues
3	received in fiscal year 2006
4	"(d) Coastal Impact Assistance Plan.—
5	"(1) The Governor of each Producing Coastal State shall prepare, and
6	submit to the Secretary, a Coastal Impact Assistance Plan. The Governor shall
7	solicit local input and shall provide for public participation in the development of
8	the plan. The plan shall be submitted to the Secretary by July 1, 2004. Amounts
9	received by Producing Coastal States and coastal political subdivisions may be used
10	only for the purposes specified in the Producing Coastal State's Coastal Impact
11	Assistance Plan.
12	"(2) The Secretary shall approve a plan under paragraph (1) prior to
13	disbursement of amounts under this section. The Secretary shall approve the plan if
14	the Secretary determines that the plan is consistent with the uses set forth in
15	subsection (f) of this section and if the plan contains each of the following—
16	"(A) the name of the State agency that will have the authority to
17	represent and act for the State in dealing with the Secretary for purposes of
18	this section;
19	"(B) a program for the implementation of the plan which describes
20	how the amounts provided under this section will be used;
21	"(C) a contact for each political subdivision and description of how
22	coastal political subdivisions will use amounts provided under this section,
23	including a certification by the Governor that such uses are consistent with
24	the requirements of this section;
25	"(D) certification by the Governor that ample opportunity has been
26	accorded for public participation in the development and revision of the
27	plan; and
28	"(E) measures for taking into account other relevant Federal
29	resources and programs.

1	"(3) The Secretary shall approve or disapprove each plan or amendment
2	within 90 days of its submission.
3	"(4) Any amendment to the plan shall be prepared in accordance with the
4	requirements of this subsection and shall be submitted to the Secretary for approval
5	or disapproval.
6	"(e) AUTHORIZED USES.—Producing Coastal States and coastal political
7	subdivisions shall use amounts provided under this section, including any such amounts
8	deposited in a State or coastal political subdivision administered trust fund dedicated to
9	uses consistent with this subsection, in compliance with Federal and State law and only for
10	one or more of the following purposes:
11	"(1) projects and activities for the conservation, protection or restoration of
12	coastal areas including wetlands;
13	"(2) mitigating damage to fish, wildlife or natural resources;
14	"(3) planning assistance and administrative costs of complying with the
15	provisions of this section;
16	"(4) implementation of Federally approved marine, coastal, or
17	comprehensive conservation management plans; and
18	"(5) mitigating impacts of Outer Continental Shelf activities through
19	funding onshore infrastructure and public service needs.
20	(f) COMPLIANCE WITH AUTHORIZED USES.—If the Secretary determines that any
21	expenditure made by a Producing Coastal State or coastal political subdivision is not
22	consistent with the uses authorized in subsection (e) of this section, the Secretary shall not
23	disburse any further amounts under this section to that Producing Coastal State or coastal
24	political subdivision until the amounts used for the inconsistent expenditure have been
25	repaid or obligated for authorized uses.
26	SEC. 113. NATIONAL ENERGY RESOURCE DATABASE
27	(a) SHORT TITLE.—This section may be cited as the "National Energy Data
28	Preservation Program Act of 2003".
29	(b) PROGRAM.—The Secretary shall carry out a National Energy Data Preservation

1	Program in accordance with this section—
2	(1) to archive geologic, geophysical, and engineering data and samples
3	related to energy resources including oil, gas, coal, and geothermal resources;
4	(2) to provide a national catalog of such archival material; and
5	(3) to provide technical assistance related to the archival material.
6	(c) Energy Data Archive System.—
7	(1) The Secretary shall establish, as a component of the Program, an energy
8	data archive system, which shall provide for the storage, preservation, and
9	archiving of subsurface, and in limited cases surface, geological, geophysical and
10	engineering data and samples. The Secretary, in consultation with the Association
11	of American State Geologists and interested members of the public, shall develop
12	guidelines relating to the energy data archive system, including the types of data
13	and samples to be preserved.
14	(2) The system shall be comprised of State agencies and agencies within the
15	Department of the Interior that maintain geological and geophysical data and
16	samples regarding energy resources and that are designated by the Secretary in
17	accordance with this subsection. The Program shall provide for the storage of data
18	and samples through data repositories operated by such agencies.
19	(3) The Secretary may not designate a State agency as a component of the
20	energy data archive system unless it is the agency that acts as the geological survey
21	in the State.
22	(4) The energy data archive system shall provide for the archiving of
23	relevant subsurface data and samples obtained during energy exploration and
24	production operations on Federal lands—
25	(A) in the most appropriate repository designated under paragraph
26	(2), with preference being given to archiving data in the State in which the
27	data was collected; and
28	(B) consistent with all applicable law and requirements relating to
29	confidentiality and proprietary data.

1	(5)(A) Subject to the availability of appropriations, the Secretary shall
2	provide financial assistance to a State agency that is designated under paragraph (2)
3	for providing facilities to archive energy material.
4	(B) The Secretary, in consultation with the Association of American State
5	Geologists and interested members of the public, shall establish procedures for
6	providing assistance under this paragraph. The procedures shall be designed to
7	ensure that such assistance primarily supports the expansion of data and material
8	archives and the collection and preservation of new data and samples.
9	(d) National Catalog.—
10	(1) As soon as practicable after the date of the enactment of this section, the
11	Secretary shall develop and maintain, as a component of the Program, a national
12	catalog that identifies—
13	(A) energy data and samples available in the energy data archive
14	system established under subsection (c);
15	(B) the repository for particular material in such system; and
16	(C) the means of accessing the material.
17	(2) The Secretary shall make the national catalog accessible to the public on
18	the site of the Survey on the World Wide Web, consistent with all applicable
19	requirements related to confidentiality and proprietary data.
20	(3) The Secretary may carry out the requirements of this subsection by
21	contract or agreement with appropriate persons.
22	(e) TECHNICAL ASSISTANCE.—
23	(1) Subject to the availability of appropriations, as a component of the
24	Program, the Secretary shall provide financial assistance to any State agency
25	designated under subsection (c)(2) to provide technical assistance to enhance
26	understanding, interpretation, and use of materials archived in the energy data
27	archive system established under subsection (c).
28	(2) The Secretary, in consultation with the Association of American State
29	Geologists and interested members of the public, shall develop a process, which

1	shall involve the participation of representatives of relevant Federal and State
2	agencies, for the approval of financial assistance to State agencies under this
3	subsection.
4	(f) Costs.—
5	(1) The Federal share of the cost of an activity carried out with assistance
6	under subsections (c) or (e) shall be no more than 50 percent of the total cost of that
7	activity.
8	(2) The Secretary—
9	(A) may accept private contributions of property and services for
10	technical assistance and archive activities conducted under this section; and
11	(B) may apply the value of such contributions to the non-Federal
12	share of the costs of such technical assistance and archive activities.
13	(g) Reports.—
14	(1) Within year after the date of the enactment of this Act, the Secretary
15	shall submit an initial report to the Committee on Energy and Natural Resources of
16	the Senate and the Committee on Resources of the House of Representatives setting
17	forth a plan for the implementation of the Program.
18	(2) Not later than 90 days after the end of the first fiscal year beginning after
19	the submission of the report under paragraph (1) and after the end of each fiscal
20	year thereafter, the Secretary shall submit a report to the Committee on Resources
21	of the House of Representatives and the Committee on Energy and Natural
22	Resources of the Senate describing the status of the Program and evaluating
23	progress achieved during the preceding fiscal year in developing and carrying out
24	the Program.
25	(3) The Secretary shall consult with the Association of American State
26	Geologists and interested members of the public in preparing the reports required
27	by this subsection.
28	(h) Definitions.—As used in this section, the term:
29	(1) "Association of American State Geologists" means the organization of

1	the chief executives of the State geological surveys.
2	(2) "Secretary" means the Secretary of the Interior acting through the
3	Director of the United States Geological Survey.
4	(3) "Program" means the National Energy Data Preservation Program
5	carried out under this section.
6	(4) "Survey" means the United States Geological Survey.
7	(i) MAINTENANCE OF STATE EFFORT.—It is the intent of the Congress that the
8	States not use this section as an opportunity to reduce State resources applied to the
9	activities that are the subject of the Program.
10	(j) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated
11	to the Secretary \$30,000,000 for each of fiscal years 2003 through 2007 for carrying out
12	this section.
13	Subtitle B—Access to Federal Lands
14	SEC. 121. OFFICE OF FEDERAL ENERGY PERMIT COORDINATION
15	(a) ESTABLISHMENT.— The President shall establish the Office of Federal Energy
16	Permit Coordination within the Executive Office of the President in the same manner and
17	mission as the White House Energy Projects Task Force established by Executive Order
18	13212.
19	(b) STAFFING.—The Office shall be staffed by functional experts from relevant
20	federal agencies and departments on a nonreimbursable basis to carry out the mission of
21	this office.
22	(c) REPORTING.—The Office of Federal Energy Permit Coordination shall provide
23	an annual report to Congress, detailing the activities put in place to coordinate and expedite
24	Federal decisions on energy projects. The report shall including a determination as to
25	whether or not improvements in the federal decision making process has improved,
26	including any empirical data and additional recommendations or systemic changes need to
27	establish a more effective and efficient federal permitting process.
28	SEC. 122. PILOT PROGRAM TO IMPROVE FEDERAL PERMIT COORDINATION.
29	(a) CREATION OF PILOT PROJECT.—The Secretary of the Interior shall establish a

Federal Permit Streamlining Pilot Project. The Secretary shall enter into a Memorandum of
Understanding with the Secretary of Agriculture, Administrator of the Environmental
Protection Agency, and the Chief of the Corps of Engineers, as well as with the Governors
of Wyoming, Montana, Colorado, and New Mexico to establish the Federal Permit
Streamlining Pilot Project within 90 days after enactment of this Act.

- (b) DESIGNATION OF QUALIFIED STAFF.—Once the pilot program has been established by the Secretary, all signatory parties shall assign an employee on a nonreimbursable basis to each of the field offices identified in section (c), who has expertise in the regulatory issues pertaining to their office, including, as applicable, particular expertise in Endangered Species Act section 7 consultations and the preparation of Biological Opinions; Clean Water Act 404 permits; Clean Air Act regulatory matters; and planning under the National Forest Management Act and the preparation of analyses under the National Environmental Policy Act. Assigned staff shall report to the Bureau of Land Management (BLM) Field Managers in the offices to which they are assigned; and shall be responsible for carrying out all of the statutory mandates of their office or agency and participate as part of the team of employees working on proposed energy projects, planning, and environmental analyses.
- (c) FIELD OFFICES.—The following BLM Field Offices shall serve as the Federal Permit Streamlining Pilot Project offices:
 - (1) Rawlins, Wyoming;
 - (2) Buffalo, Wyoming;
 - (3) Miles City, Montana;
 - (4) Farmington, New Mexico;
 - (5) Carlsbad, New Mexico; and
 - (6) Glenwood Springs, Colorado.
- (d) REPORTS.—The Secretary is shall submit a report to the Congress, outlining the results of the Pilot Project to date, including an assessment of the pilot program, including a recommendation to the President and whether this pilot project should be implemented nationwide.

1	(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated
2	such sums as may be necessary to implement this section.
3	SEC. 123. COORDINATION OF FEDERAL AGENCIES TO ESTABLISH PRIORITY ENERGY
4	TRANSMISSION RIGHTS-OF-WAY.
5	(a) Definitions.—For purposes of this section:
6	(1) The term "energy corridor" means any linear strip of land across Federal
7	lands without definite width, but limited by technological, environmental, and
8	topographical factors, designated for use by utility facilities.
9	(2) The term "Federal authorization" means any authorization required
10	under Federal law in order to site a utility facility, including but not limited to such
11	permits, special use authorizations, certifications, opinions, or other approvals as
12	may be required, whether issued by a Federal or a State agency.
13	(3) The term "Federal lands" means all lands owned by the United States
14	except lands in the National Park System, lands held in trust for an Indian or Indian
15	tribe, and lands on the Outer Continental Shelf.
16	(4) The term "Secretary" means the Secretary of Energy.
17	(5) The term "utility facility" means any privately, publicly, or
18	cooperatively-owned line, facility, or system for the transportation of oil and
19	natural gas, synthetic liquid or gaseous fuels, any refined product produced
20	therefrom, or for storage and terminal facilities in connection therewith, or for the
21	transmission or distribution of electricity or telecommunications.
22	(b) FEDERAL ENERGY CORRIDORS.—The Secretary of Energy shall designate
23	energy corridors, pursuant to Title V of Federal Land Policy and Management Act
24	(FLPMA), 43 U.S.C. 1761 et seq., in the eleven contiguous Western States as that term is
25	identified in section 103(o) of FLPMA, 43 U.S.C. 1702(o). The Department of Energy
26	shall be the lead agency for coordinating the efforts of all affected Federal agencies to
27	jointly identify potential energy corridors in the other States. The Secretary shall jointly
28	develop with the heads of all affected Federal agencies a schedule for the designation,
29	environmental review and incorporation of all energy corridors into relevant departmental

and agency land use and resource management plans or their equivalent.

1	(c) FEDERAL PERMIT COORDINATION.—The Department of Energy shall be the lea
2	agency for coordinating the efforts of all affected Federal agencies to jointly develop an
3	expedited process for Federal authorization of rights-of-way within energy corridors. The
4	Secretary shall—
5	(1) coordinate the environmental review process to ensure that all reviews,
6	analyses, permits, licenses or approvals that must be issued by a Federal agency
7	shall be conducted concurrently and within a determined time frame pursuant to a
8	memorandum of understanding among the relevant Federal agencies;
9	(2) ensure timely completion of environmental reviews, by requiring that a
10	single environmental review document be used as the basis for all decisions
11	pertaining to establishment and modification of energy corridors and rights-of-way
12	for purposes of the National Environmental Policy Act of 1969;
13	(3) expedite applications for rights-of-way to construct or modify facilities
14	within energy corridors.
15	SEC. 124. ESTIMATES OF OIL AND GAS RESOURCES UNDERLYING ONSHORE FEDERAL
16	LANDS.
17	Section 604 of the Energy Act of 2000 (42 U.S.C. 6217) is amended by striking
18	"(a) In General" and all thereafter and inserting—
19	"(a) IN GENERAL.—The Secretary of the Interior, in consultation with the
20	Secretaries of Agriculture and Energy, shall conduct an inventory of all onshore Federal
21	lands and take measures necessary to update and revise this inventory. The inventory shall
22	identify for all federal lands—
23	"(1) the United States Geological Survey estimates of the oil and gas
24	resources underlying these lands;
25	"(2) the extent and nature of any restrictions or impediments to the
26	exploration, production and transportation of such resources, including-
27	"(A) existing land withdrawals and the underlying purpose for each
28	withdrawal;
29	"(B) restrictions or impediments affecting timeliness of granting
30	leases;

1	"(C) post-lease restrictions or impediments such as conditions of
2	approval, applications for permits to drill, applicable environmental permits;
3	"(D) permits or restrictions associated with transporting the
4	resources; and
5	"(E) identification of the authority for each restriction or impediment
6	together with the impact on additional processing or review time and
7	potential remedies; and
8	"(3) the estimates of oil and gas resources not available for exploration and
9	production by virtue of the restrictions identified above.
10	"(b) Reports.— The Secretary shall provide a progress report by October 1, 2006
11	and shall complete the inventory by October 1, 2010.
12	"(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be
13	appropriated such sums as may be necessary to implement this section.
14	Subtitle C—Alaska Natural Gas Pipeline
15	SEC. 131. SHORT TITLE.
16	This subtitle may be cited as the "Alaska Natural Gas Pipeline Act".
17	SEC. 132. DEFINITIONS.
18	In this subtitle, the following definitions apply:
19	(1) The term "Alaska natural gas" means natural gas derived from the area
20	of the State of Alaska lying north of 64 degrees North latitude.
21	(2) The term "Alaska natural gas transportation project" means any natural
22	gas pipeline system that carries Alaska natural gas to the border between Alaska
23	and Canada (including related facilities subject to the jurisdiction of the
24	Commission) that is authorized under either—
25	(A) the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C.
26	719 et seq.); or
27	(B) section 1044.
28	(3) The term "Alaska natural gas transportation system" means the Alaska
29	natural gas transportation project authorized under the Alaska Natural Gas

1	Transportation Act of 1976 and designated and described in section 2 of the
2	President's decision.
3	(4) The term "Commission" means the Federal Energy Regulatory
4	Commission.
5	(5) The term "President's decision" means the decision and report to
6	Congress on the Alaska natural gas transportation system issued by the President on
7	September 22, 1977, pursuant to section 7 of the Alaska Natural Gas Transportation
8	Act of 1976 (15 U.S.C. 719(e) and approved by Public Law 95-158 (91 Stat.1268).
9	SEC. 133. ISSUANCE OF CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY.
10	(a) AUTHORITY OF THE COMMISSION.—Notwithstanding the provisions of the
11	Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719 et seq.), the Commission
12	may, pursuant to section 7(c) of the Natural Gas Act (15 U.S.C. 717f(c)), consider and act
13	on an application for the issuance of a certificate of public convenience and necessity
14	authorizing the construction and operation of an Alaska natural gas transportation project
15	other than the Alaska natural gas transportation system.
16	(b) Issuance of Certificate.—
17	(1) The Commission shall issue a certificate of public convenience and
18	necessity authorizing the construction and operation of an Alaska natural gas
19	transportation project under this section if the applicant has satisfied the
20	requirements of section 7(e) of the Natural Gas Act (15 U.S.C. 717f(e)).
21	(2) In considering an application under this section, the Commission shall
22	presume that—
23	(A) a public need exists to construct and operate the proposed
24	Alaska natural gas transportation project; and
25	(B) sufficient downstream capacity will exist to transport the Alaska
26	natural gas moving through such project to markets in the contiguous United
27	States.
28	(c) EXPEDITED APPROVAL PROCESS.—The Commission shall issue a final order
29	granting or denying any application for a certificate of public convenience and necessity

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- 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 issuance of the final environmental impact statement for that project pursuant to section 1045.
- (d) PROHIBITION ON CERTAIN PIPELINE ROUTE.—No license, permit, lease, right-of-way, authorization, or other approval required under Federal law for the construction of any pipeline to transport natural gas from lands within the Prudhoe Bay oil and gas lease area may be granted for any pipeline that follows a route that traverses—
 - (1) the submerged lands (as defined by the Submerged Lands Act) beneath, or the adjacent shoreline of, the Beaufort Sea; and
 - (2) enters Canada at any point north of 68 degrees North latitude.
- (e) OPEN SEASON.—Except where an expansion is ordered pursuant to section 136, initial or expansion capacity on any Alaska natural gas transportation project shall be allocated in accordance with procedures to be established by the Commission in regulations governing the conduct of open seasons for such project. Such procedures shall include the criteria for and timing of any open seasons; promote competition in the exploration, development, and production of Alaska natural gas; and, for any open season for capacity beyond the initial capacity, provide the opportunity for the transportation of natural gas other than from the Prudhoe Bay and Point Thompson units. The Commission shall issue such regulations not later than 120 days after the date of enactment of this Act.
- (f) PROJECTS IN THE CONTIGUOUS UNITED STATES.—Applications for additional or expanded pipeline facilities that may be required to transport Alaska natural gas from Canada to markets in the contiguous United States may be made pursuant to the Natural Gas Act. To the extent such pipeline facilities include the expansion of any facility constructed pursuant to the Alaska Natural Gas Transportation Act of 1976, the provisions of that Act shall continue to apply.
- (g) STUDY OF IN-STATE NEEDS.—The holder of the certificate of public convenience and necessity issued, modified, or amended by the Commission for an Alaska natural gas transportation project shall demonstrate that it has conducted a study of Alaska in-State needs, including tie-in points along the Alaska natural gas transportation project

for in-State access.

- (h) ALASKA ROYALTY GAS.—The Commission, upon the request of the State of Alaska and after a hearing, may provide for reasonable access to the Alaska natural gas transportation project for the State of Alaska or its designee for the transportation of the State's royalty gas for local consumption needs within the State; except that the rates of existing shippers of subscribed capacity on such project shall not be increased as a result of such access.
- (i) REGULATIONS.—The Commission may issue regulations to carry out the provisions of this section.

SEC. 134. ENVIRONMENTAL REVIEWS.

- (a) COMPLIANCE WITH NEPA.—The issuance of a certificate of public convenience and necessity authorizing the construction and operation of any Alaska natural gas transportation project under section 133 shall be treated as a major Federal action significantly affecting the quality of the human environment within the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(c)).
- (b) DESIGNATION OF LEAD AGENCY.—The Commission shall be the lead agency for purposes of complying with the National Environmental Policy Act of 1969, and shall be responsible for preparing the statement required by section 102(2)(c) of that Act (42 U.S.C. 4332(2)(c)) with respect to an Alaska natural gas transportation project under section 133. The Commission shall prepare a single environmental statement under this section, which shall consolidate the environmental reviews of all Federal agencies considering any aspect of the project.
- (c) OTHER AGENCIES.—All Federal agencies considering aspects of the construction and operation of an Alaska natural gas transportation project under section 133 shall cooperate with the Commission, and shall comply with deadlines established by the Commission in the preparation of the statement under this section. The statement prepared under this section shall be used by all such agencies to satisfy their responsibilities under section 102(2)(c) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(c)) with respect to such project.

1	(d) EXPEDITED PROCESS.—The Commission shall issue a draft statement under this
2	section not later than 12 months after the Commission determines the application to be
3	complete and shall issue the final statement not later than 6 months after the Commission
4	issues the draft statement, unless the Commission for good cause finds that additional time
5	is needed.
6	SEC. 135. PIPELINE EXPANSION.
7	(a) AUTHORITY.—With respect to any Alaska natural gas transportation project,
8	upon the request of one or more persons and after giving notice and an opportunity for a
9	hearing, the Commission may order the expansion of such project if it determines that such
10	expansion is required by the present and future public convenience and necessity.
11	(b) REQUIREMENTS.—Before ordering an expansion, the Commission shall—
12	(1) approve or establish rates for the expansion service that are designed to
13	ensure the recovery, on an incremental or rolled-in basis, of the cost associated with
14	the expansion (including a reasonable rate of return on investment);
15	(2) ensure that the rates as established do not require existing shippers on
16	the Alaska natural gas transportation project to subsidize expansion shippers;
17	(3) find that the proposed shipper will comply with, and the proposed
18	expansion and the expansion of service will be undertaken and implemented based
19	on, terms and conditions consistent with the then-effective tariff of the Alaska
20	natural gas transportation project;
21	(4) find that the proposed facilities will not adversely affect the financial or
22	economic viability of the Alaska natural gas transportation project;
23	(5) find that the proposed facilities will not adversely affect the overall
24	operations of the Alaska natural gas transportation project;
25	(6) find that the proposed facilities will not diminish the contract rights of
26	existing shippers to previously subscribed certificated capacity;
27	(7) ensure that all necessary environmental reviews have been completed;
28	and
29	(8) find that adequate downstream facilities exist or are expected to exist to

1	deliver incremental Alaska natural gas to market.
2	(c) REQUIREMENT FOR A FIRM TRANSPORTATION AGREEMENT.—Any order of the
3	Commission issued pursuant to this section shall be null and void unless the person or
4	persons requesting the order executes a firm transportation agreement with the Alaska
5	natural gas transportation project within a reasonable period of time as specified in such
6	order.
7	(d) LIMITATION.—Nothing in this section shall be construed to expand or otherwise
8	affect any authorities of the Commission with respect to any natural gas pipeline located
9	outside the State of Alaska.
10	(e) REGULATIONS.—The Commission may issue regulations to carry out the
11	provisions of this section.
12	SEC. 136. FEDERAL COORDINATOR.
13	(a) ESTABLISHMENT.—There is established, as an independent office in the
14	executive branch, the Office of the Federal Coordinator for Alaska Natural Gas
15	Transportation Projects.
16	(b) FEDERAL COORDINATOR.—The Office shall be headed by a Federal Coordinator
17	for Alaska Natural Gas Transportation Projects, who shall—
18	(1) be appointed by the President, by and with the advice and consent of the
19	Senate;
20	(2) for a term equal to the period required to design, permit and construction
21	the project plus one year; and
22	(3) be compensated at the rate prescribed for level III of the Executive
23	Schedule (5 U.S.C. 5314).
24	(c) Duties.—The Federal Coordinator shall be responsible for—
25	(1) coordinating the expeditious discharge of all activities by Federal
26	agencies with respect to an Alaska natural gas transportation project; and
27	(2) ensuring the compliance of Federal agencies with the provisions of this
28	subtitle.
29	(d) Reviews and Actions of Other Federal Agencies.—

1	(1) All reviews conducted and actions taken by any Federal officer or
2	agency relating to an Alaska natural gas transportation project authorized under this
3	section shall be expedited, in a manner consistent with completion of the necessary
4	reviews and approvals by the deadlines set forth in this subtitle.
5	(2) No Federal officer or agency shall have the authority to include terms
6	and conditions that are permitted, but not required, by law on any certificate,
7	right-of-way, permit, lease, or other authorization issued to an Alaska natural gas
8	transportation project if the Federal Coordinator determines that the terms and
9	conditions would prevent or impair in any significant respect the expeditious
10	construction and operation of the project.
11	(3) Unless required by law, no Federal officer or agency shall add to,
12	amend, or abrogate any certificate, right-of-way, permit, lease, or other
13	authorization issued to an Alaska natural gas transportation project if the Federal
14	Coordinator determines that such action would prevent or impair in any significant
15	respect the expeditious construction and operation of the project.
16	(4) The authority of the Federal Coordinator under subsections (d)(2) and
17	(3) of this section shall not include the authority to take any action which would
18	adversely affect, or create or impose additional requirements beyond those impose
19	by the Commission or any agency with respect to—
20	(A) the implementation or enforcement of regulation issued by the
21	Commission pursuant to Section 133 (e);
22	(B) the issuance of any certificate, right-of-way, permit, lease or
23	other authorization necessary for the expansion of any Alaska natural gas
24	transportation project ordered by the Commission pursuant to Section 135
25	and
26	(C) the expeditious construction and operation of any expansion of
27	any Alaska natural gas transportation project ordered by the Commission
28	pursuant to Section 135.
29	(e) STATE COORDINATION.—The Federal Coordinator shall enter into a Joint

1	Surveillance and Monitoring Agreement, approved by the President and the Governor of
2	Alaska, with the State of Alaska similar to that in effect during construction of the
3	Trans-Alaska Oil Pipeline to monitor the construction of the Alaska natural gas
4	transportation project. The Federal Government shall have primary surveillance and
5	monitoring responsibility where the Alaska natural gas transportation project crosses
6	Federal lands and private lands, and the State government shall have primary surveillance
7	and monitoring responsibility where the Alaska natural gas transportation project crosses
8	State lands.

(f) Transfer of Federal Inspector Functions and Authority.—Upon appointment of the Federal Coordinator by the President, all of the functions and authority of the Office of Federal Inspector of Construction for the Alaska Natural Gas Transportation System vested in the Secretary of Energy pursuant to section 3012(b) of Public Law 102–486 (15 U.S.C. 719e(b)), including all functions and authority described and enumerated in the Reorganization Plan No. 1 of 1979 (44 Fed. Reg. 33,663), Executive Order No. 12142 of June 21, 1979 (44 Fed. Reg. 36,927), and section 5 of the President's decision, shall be transferred to the Federal Coordinator.

SEC. 137. JUDICIAL REVIEW.

- (a) EXCLUSIVE JURISDICTION.—Except for review by the Supreme Court of the United States on writ of certiorari, the United States Court of Appeals for the District of Columbia Circuit shall have original and exclusive jurisdiction to determine—
 - (1) the validity of any final order or action (including a failure to act) of any Federal agency or officer under this subtitle;
 - (2) the constitutionality of any provision of this subtitle, or any decision made or action taken under this subtitle; or
 - (3) the adequacy of any environmental impact statement prepared under the National Environmental Policy Act of 1969 with respect to any action under this subtitle.
- (b) DEADLINE FOR FILING CLAIM.—Claims arising under this subtitle may be brought not later than 60 days after the date of the decision or action giving rise to the

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1	claim.
2	(c) EXPEDITED CONSIDERATION.—The United States Court of Appeals for the
3	District of Columbia Circuit shall set any action brought under subsection (a) for expedited
4	consideration, taking into account the national interest as described in section 1042(a).
5	(d) AMENDMENT TO ANGTA.—Section 10(c) of the Alaska Natural Gas
6	Transportation Act of 1976 (15 U.S.C. 719h) is amended by inserting after paragraph (1)
7	the following:
8	"(2) The United States Court of Appeals for the District of Columbia Circuit shall
9	set any action brought under this section for expedited consideration, taking into account
10	the national interest described in section 2.".
11	SEC. 138. STATE JURISDICTION OVER IN-STATE DELIVERY OF NATURAL GAS.
12	(a) LOCAL DISTRIBUTION.—Any facility receiving natural gas from the Alaska
13	natural gas transportation project for delivery to consumers within the State of Alaska shall
14	be deemed to be a local distribution facility within the meaning of section 1(b) of the
15	Natural Gas Act (15 U.S.C. 717(b)), and therefore not subject to the jurisdiction of the
16	Commission.
17	(b) ADDITIONAL PIPELINES.—Nothing in this subtitle, except as provided in section
18	133(d), shall preclude or affect a future gas pipeline that may be constructed to deliver
19	natural gas to Fairbanks, Anchorage, Matanuska-Susitna Valley, or the Kenai peninsula or
20	Valdez or any other site in the State of Alaska for consumption within or distribution
21	outside the State of Alaska.
22	(c) RATE COORDINATION.—Pursuant to the Natural Gas Act, the Commission shall
23	establish rates for the transportation of natural gas on the Alaska natural gas transportation
24	project. In exercising such authority, the Commission, pursuant to section 17(b) of the
25	Natural Gas Act (15 U.S.C. 717p(b)), shall confer with the State of Alaska regarding rates

SEC. 139. STUDY OF ALTERNATIVE MEANS OF CONSTRUCTION.

Alaska natural gas transportation project for use within the State of Alaska.

(a) REQUIREMENT OF STUDY.—If no application for the issuance of a certificate or

(including rate settlements) applicable to natural gas transported on and delivered from the

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- amended certificate of public convenience and necessity authorizing the construction and operation of an Alaska natural gas transportation project has been filed with the Commission not later than 18 months after the date of enactment of this Act, the Secretary of Energy shall conduct a study of alternative approaches to the construction and operation of the project.
 - (b) Scope of Study.—The study shall consider the feasibility of establishing a Government corporation to construct an Alaska natural gas transportation project, and alternative means of providing Federal financing and ownership (including alternative combinations of Government and private corporate ownership) of the project.
 - (c) Consultation.—In conducting the study, the Secretary of Energy shall consult with the Secretary of the Treasury and the Secretary of the Army (acting through the Commanding General of the Corps of Engineers).
 - (d) REPORT.—If the Secretary of Energy is required to conduct a study under subsection (a), the Secretary shall submit a report containing the results of the study, the Secretary's recommendations, and any proposals for legislation to implement the Secretary's recommendations to Congress.

SEC. 140. CLARIFICATION OF ANGTA STATUS AND AUTHORITIES.

- (a) SAVINGS CLAUSE.—Nothing in this subtitle affects any decision, certificate, permit, right-of-way, lease, or other authorization issued under section 9 of the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719(g) or any Presidential findings or waivers issued in accordance with that Act.
- (b) CLARIFICATION OF AUTHORITY TO AMEND TERMS AND CONDITIONS TO MEET CURRENT PROJECT REQUIREMENTS.—Any Federal officer or agency responsible for granting or issuing any certificate, permit, right-of-way, lease, or other authorization under section 9 of the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719(g) may add to, amend, or abrogate any term or condition included in such certificate, permit, right-of-way, lease, or other authorization to meet current project requirements (including the physical design, facilities, and tariff specifications), so long as such action does not compel a change in the basic nature and general route of the Alaska natural gas

transportation system as designated and described in section 2 of the President's decision, or would otherwise prevent or impair in any significant respect the expeditious construction and initial operation of such transportation system.

(c) UPDATED ENVIRONMENTAL REVIEWS.—The Secretary of Energy shall require the sponsor of the Alaska natural gas transportation system to submit such updated environmental data, reports, permits, and impact analyses as the Secretary determines are necessary to develop detailed terms, conditions, and compliance plans required by section 5 of the President's decision.

SEC. 141. SENSE OF CONGRESS.

It is the sense of Congress that an Alaska natural gas transportation project will provide significant economic benefits to the United States and Canada. In order to maximize those benefits, Congress urges the sponsors of the pipeline project to make every effort to use steel that is manufactured or produced in North America and to negotiate a project labor agreement to expedite construction of the pipeline.

SEC. 142. PARTICIPATION OF SMALL BUSINESS CONCERNS.

- (a) Sense of Congress.—It is the sense of Congress that an Alaska natural gas transportation project will provide significant economic benefits to the United States and Canada. In order to maximize those benefits, Congress urges the sponsors of the pipeline project to maximize the participation of small business concerns in contracts and subcontracts awarded in carrying out the project.
 - (b) STUDY.—
 - (1) The Comptroller General shall conduct a study on the extent to which small business concerns participate in the construction of oil and gas pipelines in the United States.
 - (2) Not later that 1 year after the date of enactment of this Act, the Comptroller General shall transmit to Congress a report containing the results of the study.
 - (3) The Comptroller General shall update the study at least once every 5 years and transmit to Congress a report containing the results of the update.

1	(4) After the date of completion of the construction of an Alaska natural gas
2	transportation project, this subsection shall no longer apply.
3	(c) SMALL BUSINESS CONCERN DEFINED.—In this section, the term "small business
4	concern" has the meaning given such term in section 3(a) of the Small Business Act (15
5	U.S.C. 632(a)).
6	SEC. 143. ALASKA PIPELINE CONSTRUCTION TRAINING PROGRAM.
7	(a) Establishment of Program.—The Secretary of Labor (in this section referred
8	to as the "Secretary") may make grants to the Alaska Department of Labor and
9	Workforce Development to—
10	(1) develop a plan to train, through the workforce investment system
11	established in the State of Alaska under the Workforce Investment Act of 1998 (112
12	Stat. 936 et seq.), adult and dislocated workers, including Alaska Natives, in urban
13	and rural Alaska in the skills required to construct and operate an Alaska gas
14	pipeline system; and
15	(2) implement the plan developed pursuant to paragraph (1).
16	(b) REQUIREMENTS FOR PLANNING GRANTS.—The Secretary may make a grant
17	under subsection (a)(1) only if—
18	(1) the Governor of Alaska certifies in writing to the Secretary that there is a
19	reasonable expectation that construction of an Alaska gas pipeline will commence
20	within 3 years after the date of such certification; and
21	(2) the Secretary of the Interior concurs in writing to the Secretary with the
22	certification made under paragraph (1).
23	(c) REQUIREMENTS FOR IMPLEMENTATION GRANTS.—The Secretary may make a
24	grant under subsection (a)(2) only if—
25	(1) the Secretary has approved a plan developed pursuant to subsection
26	(a)(1);
27	(2) the Governor of Alaska requests the grant funds and certifies in writing
28	to the Secretary that there is a reasonable expectation that the construction of an
29	Alaska gas pipeline system will commence within 2 years after the date of such

1	certification; and
2	(3) the Secretary of the Interior concurs in writing to the Secretary with the
3	certification made under paragraph (2) after considering—
4	(A) the status of necessary State and Federal permits;
5	(B) the availability of financing for the pipeline project; and
6	(C) other relevant factors and circumstances.
7	(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated
8	to the Secretary such sums as may be necessary, but not to exceed \$20,000,000, to carry
9	out this section.
10	TITLE II—COAL
11	Subtitle A—Coal Energy Research, Development and
12	Demonstration
13	SEC. 201. COAL AND RELATED TECHNOLOGIES PROGRAMS.
14	(a) Definitions.—For the purposes of this section.—
15	(1) The term "cost and performance goals" means the cost and performance
16	goals established under subsection b of this subsection.
17	(2) The term "Secretary" means the Secretary of Energy.
18	(b) Cost and Performance Goals.—The Secretary shall perform an assessment
19	that identifies cost and performance goals of technologies that would permit the continued
20	cost-competitive use of coal for electricity generation, as chemical feedstocks, and as
21	transportation fuel. In establishing the cost and performance goals, the Secretary shall—
22	(1) consider activities and studies undertaken to date by industry in
23	cooperation with the Department of Energy in support of such assessment;
24	(2) consult with interested entities, including coal producers, industries
25	using coal, organizations to promote coal and advanced coal technologies,
26	environmental organizations and organizations representing workers;
27	(3) issue a set of draft cost and performance goals for public comment, no

1	later than 120 days after the date of enactment of this Act; and
2	(4) submit to Congress the final cost and performance goals, no later than
3	180 days after the date of enactment of this Act, after taking into consideration any
4	public comments received.
5	(c) Study.—
6	(1) No later than 1 year after the date of enactment of this Act, and once
7	every 2 years thereafter through 2016, the Secretary, in cooperation with other
8	appropriate federal agencies, shall conduct a study to—
9	(A) identify technologies that, by themselves or in combination with
10	other technologies, may be capable of achieving the cost and performance
11	goals;
12	(B) assess the costs that would be incurred by, and the period of time
13	that would be required for, the development and demonstration of
14	technologies that, by themselves or in combination with other technologies,
15	contribute to the achievement of the cost and performance goals;
16	(C) develop recommendations for technology development
17	programs, which the Department of Energy could carry out in cooperation
18	with industry, to develop and demonstrate technologies that, by themselves
19	or in combination with other technologies, achieve the cost and performance
20	goals, and
21	(D) develop recommendations for additional authorities required to
22	achieve the cost and performance goals, and review and recommend
23	changes, if any, to those cost and performance goals if the Secretary
24	determines that such changes are necessary as a result of ongoing research,
25	development and demonstration of technologies.
26	(2) In carrying out this section, the Secretary shall give due weight to the
27	expert advice of representatives of the entities described in section 201(b)(2).
28	SEC 202. PRODUCTION AND GENERATION OF COAL-BASED POWER.
29	(a) In General.—The Secretary shall carry out a technology research,

1	development and demonstration program to facilitate production and generation of
2	coal-based power through methods and equipment under this Title; the Federal Nonnuclear
3	Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.); the Energy
4	Reorganization Act of 1974 (42 U.S.C. 5801 et seq.); and title XVI of the Energy Policy
5	Act of 1992 (42 U.S.C. 13381 et seq.).
6	(b) CONDITIONS—The program described in subsection (a) shall be designed to
7	achieve the cost and performance goals required by section 201(b).
8	SEC. 203. AUTHORIZATION OF APPROPRIATIONS.
9	(a) In General.—There are authorized to be appropriated to the Secretary
10	\$200,000,000 for fiscal year 2004, \$210,000,000 for fiscal year 2005, and \$220,500,000
11	for fiscal year 2006, to remain available until expended, for coal and related technologies
12	research and development programs, which shall include—
13	(1) innovations for existing plants;
14	(2) integrated gasification combined cycle;
15	(3) advanced combustion systems;
16	(4) turbines for synthesis gas derived from coal;
17	(5) carbon capture and sequestration research and development;
18	(6) coal-derived transportation fuels and chemicals;
19	(7) solid fuels and feedstocks; and
20	(8) advanced coal-related research.
21	(b)(1) LIMIT ON USE OF FUNDS.—Prior to the use of funds authorized by this
22	section, the Secretary shall transmit to the Congress a report describing the proposed use of
23	funds and containing a plan that includes—
24	(A) a detailed description of how proposals will be solicited and evaluated,
25	including a list of all activities expected to be undertaken;
26	(B) a detailed list of technical milestones for each coal and related
27	technology that will be pursued; and
28	(C) a description of how the programs authorized in this section will be
29	carried out so as to complement and not duplicate activities authorized under the

1	Clean Coal Power Initiative authorized under subtitle B.
2	(2) Thirty days shall elapse from receipt of the report after which the Secretary may
3	then use the authorization of appropriations provided by this section.
4	Subtitle B—Clean Coal Power Initiative
5	SEC. 211. AUTHORIZATION OF APPROPRIATIONS.
6	CLEAN COAL POWER INITIATIVE.— There are authorized to be appropriated to the
7	Secretary to carry out the activities authorized by this subtitle \$200,000,000 for each of the
8	fiscal years 2003 through 2011, to remain available until expended.
9	SEC. 212. PROJECT CRITERIA.
10	(a) In General.—The Secretary shall not provide funding under this title for any
11	project that does not advance efficiency, environmental performance, and cost
12	competitiveness well beyond the level of technologies that are in operation or have been
13	demonstrated as of the date of the enactment of this Act.
14	(b) TECHNICAL CRITERIA FOR GASIFICATION.—In allocating the funds made
15	available under section 211(a), the Secretary shall ensure that funds are used for coal-based
16	gasification technologies, coal based projects that include the separation and capture of
17	carbon dioxide, or coal based projects that include gasification combined cycle,
18	gasification fuel cells, gasification coproduction, or hybrid gasification/combustion. The
19	Secretary shall set technical milestones specifying emissions levels that coal gasification
20	projects must be designed to and reasonably expected to achieve. The milestones shall get
21	more restrictive through the life of the program. The milestones shall be designed to
22	achieve by 2020 coal gasification projects able to—
23	(1) remove 99 percent of sulfur dioxide;
24	(2) emit no more than .05 lbs of NOx per million BTU;
25	(3) achieve substantial reductions in mercury emissions; and
26	(4) achieve a thermal efficiency of —
27	(A) 60 percent for coal of more than 9,000 Btu;
28	(B) 59 percent for coal of 7,000 to 9,000 Btu; and
29	(C) 57 percent for coal of less than 7,000 Btu.

1	(c) Technical Criteria for Other Projects.— For projects not described in
2	subsection (b), the Secretary shall set technical milestones specifying emissions levels that
3	the projects must be designed to and reasonably expected to achieve. The milestones shall
4	get more restrictive through the life of the program. The milestones shall be designed to
5	achieve by 2010 projects able to—
6	(1) remove 97 percent of sulfur dioxide;
7	(2) emit no more than .08 lbs of NO _x per million BTU;
8	(3) achieve substantial reductions in mercury emissions; and
9	(4) achieve a thermal efficiency of—
10	(A) 45 percent for coal of more than 9,000 Btu;
11	(B) 44 percent for coal of 7,000 to 9,000 Btu; and
12	(C) 42 percent for coal of less than 7,000 Btu.
13	(d) EXISTING UNITS.—In the case of projects at existing units, in lieu of the thermal
14	efficiency requirements set forth in paragraphs (b)(4) and (c)(4), the projects shall be
15	designed to achieve an overall thermal design efficiency improvement compared to the
16	efficiency of the unit as operated, of not less than—
17	(A) 7 percent for coal of more than 9,000 Btu;
18	(B) 6 percent for coal of 7,000 to 9,000 Btu; or
19	(C) 4 percent for coal of less than 7,000 Btu.
20	(e) CONSULTATION.—Before setting the technical milestones under subsections (b)
21	and (c), the Secretary shall consult with the Administrator of the Environmental Protection
22	Agency and interested entities, including coal producers, industries using coal,
23	organizations to promote coal or advanced coal technologies, environmental organizations,
24	and organizations representing workers.
25	(f) FINANCIAL CRITERIA.—The Secretary shall not provide a funding award under
26	this title unless the recipient has documented to the satisfaction of the Secretary that—
27	(1) the award recipient is financially viable without the receipt of additional
28	Federal funding;
29	(2) the recipient will provide sufficient information to the Secretary for the

1	Secretary to ensure that the award funds are spent efficiently and effectively; and
2	(3) a market exists for the technology being demonstrated or applied, as
3	evidenced by statements of interest in writing from potential purchasers of the
4	technology.
5	(g) FINANCIAL ASSISTANCE.—The Secretary shall provide financial assistance to
6	projects that meet the requirements of this section and are likely to—
7	(1) achieve overall cost reductions in the utilization of coal to generate
8	useful forms of energy;
9	(2) improve the competitiveness of coal among various forms of energy; and
10	(3) demonstrate methods and equipment that are applicable to 25 percent of
11	the electricity generating facilities that use coal as the primary feedstock as of the
12	date of the enactment of this Act.
13	(h) FEDERAL SHARE.—The Federal share of the cost of a coal or related technology
14	project funded by the Secretary shall not exceed 50 percent, to be repaid over a reasonable
15	agreed upon, period of time.
16	(i) APPLICABILITY.—No technology, or level of emission reduction, shall be treated
17	as adequately demonstrated for purposes of section 111 of the Clean Air Act, achievable
18	for purposes of section 169 of that Act, or achievable in practice for purposes of section
19	171 of that Act solely by reason of the use of such technology, or the achievement of such
20	emission reduction, by one or more facilities receiving assistance under this title.
21	SEC. 213. REPORT.
22	(a) Not later than 1 year after the date of the enactment of this Act, and once every
23	2 years thereafter through 2011, the Secretary, in consultation with other appropriate
24	Federal agencies, shall transmit to the Speaker of the House of Representatives and to the
25	President of the Senate, a report describing—
26	(1) the technical milestones set forth in section 212 and how those
27	milestones ensure progress toward meeting the requirements of subsections (b)and
28	(c)of section 212; and
29	(2) the status of projects funded under this title.

1 SEC. 214. CLEAN COAL CENTERS OF EXCELLENCE. 2 As part of the program authorized in section 211, the Secretary shall award 3 competitive, merit-based grants to universities for the establishment of Centers of 4 Excellence for Energy Systems of the Future. The Secretary shall provide grants to 5 universities that can show the greatest potential for advancing new clean coal technologies. 6 **Subtitle C—Federal Coal Leases** 7 8 SEC. 221. REPEAL OF THE 160-ACRE LIMITATION FOR COAL LEASES. 9 Section 3 of the Mineral Leasing Act (30 U.S.C. 203) is amended in the first 10 sentence by striking "such lease," and all that follows through the end of the sentence and 11 inserting "such lease.". 12 SEC. 222. MINING PLANS. Section 2(d)(2) of the Mineral Leasing Act (30 U.S.C. 202a(2)) is amended— 13 (1) by inserting "(A)" after "(2)"; and 14 15 (2) by adding at the end the following: 16 "(B) The Secretary may establish a period of more than forty years if the Secretary 17 determines that the longer period will ensure the maximum economic recovery of a coal 18 deposit, or the longer period is in the interest of the orderly, efficient, or economic 19 development of a coal resource.". SEC. 223, PAYMENT OF ADVANCE ROYALTIES UNDER COAL LEASES. 20 21 (a) IN GENERAL.—Section 7(b) of the Mineral Leasing Act of 1920 (30 U.S.C. 22 207(b)) is amended to read as follows: 23 "(b)(1) Each lease shall be subjected to the conditions of diligent development and 24 continued operation of the mine or mines, except where operations under the lease are 25 interrupted by strikes, the elements, or casualties not attributable to the lessee. 26 "(2)(A) The Secretary of the Interior, upon determining that the public interest will 27 be served thereby, may suspend the condition of continued operation upon the payment of 28 advance royalties. 29 "(B) Such advance royalties shall be computed based on the average price for coal

1	sold in the spot market from the same region during the last month of each applicable
2	continued operation year.
3	"(C) The aggregate number of years during the initial and any extended term of any
4	lease for which advance royalties may be accepted in lieu of the condition of continued
5	operation shall not exceed 20.
6	"(3) The amount of any production royalty paid for any year shall be reduced (but
7	not below zero) by the amount of any advance royalties paid under such lease to the extent
8	that such advance royalties have not been used to reduce production royalties for a prior
9	year.
10	"(4) This subsection shall be applicable to any lease or logical mining unit in
11	existence on the date of the enactment of this Act or issued or approved after such date.
12	"(5) Nothing in this subsection shall be construed to affect the requirement
13	contained in the second sentence of subsection (a) relating to commencement of production
14	at the end of 10 years.".
15	(b) AUTHORITY TO WAIVE, SUSPEND, OR REDUCE ADVANCE ROYALTIES.—Section
16	39 of the Mineral Leasing Act (30 U.S.C. 209) is amended by striking the last sentence.
17	SEC. 224. ELIMINATION OF DEADLINE FOR SUBMISSION OF COAL LEASE OPERATION
18	AND RECLAMATION PLAN.
19	Section 7(c) of the Mineral Leasing Act (30 U.S.C. 207(c)) is amended by striking
20	"and not later than three years after a lease is issued,".
21	SEC. 225. AMENDMENTS RELATING TO FINANCIAL ASSURANCES WITH RESPECT TO
22	BONUS BIDS.
23	(a) PROHIBITION ON REQUIRING SURETY BONDS.— Section 2(a) of the Mineral
24	Leasing Act (30 U.S.C. 201(a)) is amended by adding at the end the following:
25	"(4) The Secretary shall not require a surety bond or any other financial assurance
26	to guarantee payment of deferred bonus bid installments with respect to any coal lease
27	issued based upon a cash bonus bid.
28	"(5) Notwithstanding any other provision of law, if the lessee under a coal lease
29	fails to pay any installment of a deferred cash bonus bid within 10 days after the Secretary

1	provides written notice that payment of such installment is past due—
2	"(A) such lease shall automatically terminate;
3	"(B) any deferred bonus payments that have not been paid to the United
4	States with respect to such lease shall no longer be owed to the United States; and
5	"(C) any bonus payments already made to the United States with respect to
6	such lease shall not be returned to the lessee or credited in any future lease sale.".
7	(b) Conforming Amendment.—Section 2(a)(1) of the Mineral Leasing Act (30
8	U.S.C. 201(a)(1)) is amended by striking "Upon default or cancellation of any coal lease
9	for which bonus payments are due, any unpaid remainder of the bid shall be immediately
10	payable to the United States.".
11	SEC. 226. INVENTORY REQUIREMENT.
12	(a) Definitions.—For purposes of this section—
13	(1) the term "compliant coal" means coal that contains not less than 1.0 and
14	not more than 1.2 pounds of sulfur dioxide per million Btu; and
15	(2) the term "supercompliant coal" means coal that contains less than 1.0
16	pounds of sulfur dioxide per million Btu.
17	(b) REVIEW OF ASSESSMENTS.—The Secretary of the Interior, in consultation with
18	the Secretary of Agriculture and the Secretary of Energy, shall review coal assessments and
19	other available data to identify—
20	(1) public lands with coal resources;
21	(2) the extent and nature of any restrictions or impediments to the
22	development of coal resources on public lands identified under paragraph (1); and
23	(3) with respect to areas of such lands for which sufficient data exists,
24	resources of compliant coal and supercompliant coal.
25	(c) Completion and Updating of the Inventory.—The Secretary shall
26	complete the inventory under subsection (a) not later than 2 years after the date of the
27	enactment of this Act, and update the inventory as the availability of data and
28	developments in technology warrant.
29	(d) REPORT.—The Secretary shall submit to the Speaker of the House of

1	Representatives and the President of the Senate and make publicly available, by not later
2	than 2 years after the enactment of this Act, a report containing the inventory under this
3	section and each update of such inventory.
4	SEC. 227. APPLICATION OF AMENDMENTS.
5	The amendments made by this Act apply with respect to any coal lease issued
6	before, on, or after the date of the enactment of this Act.
7	Subtitle D—Powder River Basin Shared Mineral Estates
8	SEC. 231. SHORT TITLE.
9	This Act may be cited as the "Powder River Basin Resource Development Act".
10	SEC. 232. DEFINITIONS.
11	In this Act:
12	(1) The term "coalbed methane" has the meaning given that term in section
13	1339(p)(2) of the Energy Policy Act of 1992 (42 U.S.C. 13368(p)(2)).
14	(2) The term "common area" means an area in the Basin in which all or a
15	portion of a Federal coal lease (including any area of State or private coal within a
16	logical mining unit with the Federal coal lease) overlaps all or a portion of an oil
17	and gas lease or right to develop.
18	(3) The terms "Federal coal lease" and "Federal oil and gas lease" mean a
19	lease in the Basin issued pursuant to the Mineral Leasing Act (30 U.S.C. 181 et
20	seq.) or the Mineral Leasing Act for Acquired Lands (30 U.S.C. 351 et seq.).
21	(4) The term "Federal coal lessee" means the holder of a Federal coal lease.
22	(5) The term "non-Federal oil and gas lease or right to develop" means a
23	lease for or right to develop oil and gas in the Basin provided by a State or private
24	owner of the resources.
25	(6) The term "oil and gas developer" means the holder of an oil and gas
26	lease or right to develop.
27	(7) The term "oil and gas lease or right to develop" means a Federal oil and
28	gas lease in the Basin or non-Federal oil and gas lease or right to develop in the
29	Basin.

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- (8) The term "owners of any interest in the oil and gas lease or right to develop" means persons who own the working interest, lease interest, operating interest, mineral interest, royalty interest, or any other interest in the oil and gas lease or right to develop, and any other persons who might receive compensation for unavoidable fixed expenses under an order concerning the oil and gas lease or right to develop issued pursuant to section 239(d).
- (9) The term "Powder River Basin" or "Basin" means the area in the State of Wyoming designated as the "Dispute Resolution Area" on maps entitled "Powder River Basin, Dispute Resolution Area", dated September 10, 2001, and on file in the Wyoming State Office of the Bureau of Land Management.
- (10) The term "Secretary" means the Secretary of the Interior.

SEC. 233. PARTIES ENCOURAGED TO ENTER INTO WRITTEN AGREEMENT.

In any common area, the Federal coal lessee and oil and gas developer, subject to applicable Federal and State laws, regulations, and lease terms, are encouraged to enter into a written agreement that details operations and assigns or assesses costs or compensation for the concurrent or sequential development of those resources.

SEC. 234. NEGOTIATIONS CONCERNING DEVELOPMENT PRIORITY FOR CERTAIN OPERATIONS IN THE BASIN.

- (a) OBLIGATION TO PROVIDE WRITTEN NOTICE OF CONFLICT.—Whenever a Federal coal lessee or an oil and gas developer determines that its Federal coal lease (or a logical mining unit including the Federal coal lease) or its oil and gas lease or right to develop is located in a common area, and, pursuant to a mining plan approved by, or submitted for the approval of, the Secretary, mining operations or facilities in support of mining for coal on the Federal coal lease or the logical mining unit will be located within the common area, the Federal coal lessee or the oil and gas developer shall deliver written notice of the determination to the other party and the Secretary no later than 240 days before the date on which the mining operations or construction of the mine support facilities is projected by the approved or proposed mining plan to commence in the common area.
 - (b) OBLIGATION TO NEGOTIATE.—Promptly after providing the notice referred to in

subsection (a), the party that provided the notice shall seek to negotiate a written agreement with the other party that resolves any conflict between the development of gas or oil and development of coal in the common area.

SEC. 235. PETITION FOR RELIEF.

- (a) SUBMISSION OF PETITION.—If notice is submitted timely pursuant to section 234(a) and the Federal coal lessee and the oil and gas developer seek to engage in negotiations, but fail to reach agreement, pursuant to section 234(b), the Federal coal lessee or the oil and gas developer may file a petition for relief in the United States district court for the district of Wyoming and serve the other party on any date which is not less than 180 days before the date on which the mining operations or construction of the mine support facilities is projected by the approved or proposed mining plan to commence in the common area. The Secretary, by regulation, shall establish the requirements for the information to be submitted with the petition.
- (b) JOINDER OF PARTIES.—All owners of any interest in the oil and gas lease or right to develop and in the Federal coal lease or logical mining unit, including the Secretary, identified by the petitioner, the Secretary, or themselves shall be joined in the proceedings established pursuant to this Act. Failure to timely join a party shall not extend deadlines imposed by this Act, but the court shall take all necessary steps to insure that no party is prejudiced by late joinder.
- (c) Parties' Response to Petition.—The non-Federal respondent or respondents may provide to the Secretary a response to the petition within 30 days after the date of filing of the petition for relief pursuant to subsection (a). The Secretary may require the petitioner and the non-Federal respondent or respondents to submit such documents or provide such testimony, or both, as the Secretary deems appropriate within 60 days of such date of filing.

SEC. 236. SECRETARY'S RESPONSE TO PETITION.

- (a) IN GENERAL.—Within 90 days after the date of filing of the petition for relief pursuant to section 235(a), the Secretary shall take the actions required by this section.
 - (b) Initial Determinations.—The Secretary shall determine, with petitioner

1	having the burden of proof—
2	(1) whether a common area exists; and
3	(2) whether the approved or proposed mining plan provides for mining
4	operations to occur, or mine support facilities to be constructed, in any portion of
5	the common area.
6	(c) Lease Suspension.—If the Secretary makes affirmative determinations
7	pursuant to paragraphs (1) and (2) of subsection (b), the Secretary shall suspend all or any
8	portion of any Federal oil and gas lease, including the application of such a lease to any
9	geographical area or zone or reservoir, to accommodate development of the coal resource
10	in the common area during the period beginning on a date no later than the commencement
11	date referred to in section 235(a) and ending on the effective date of an order issued
12	pursuant to section 239(d).
13	(d) SECRETARIAL REPORT.— The Secretary shall—
14	(1) not delegate the making of determinations pursuant to this section;
15	(2) report the determinations made pursuant to this section and any
16	suspension made pursuant to subsection (c), including the administrative record
17	therefor, to the court in which the petition for relief is filed pursuant to section
18	235(a); and
19	(3) provide the petitioner and respondents with copies of the report and
20	record.
21	SEC. 237. COURT'S INITIAL RESPONSE TO PETITION.
22	(a) RECEIPT OF SECRETARIAL REPORT.—The court in which the petition is filed
23	pursuant to section 235(a) shall have exclusive jurisdiction to receive and review the report
24	of the Secretary required by section 236(d), and the determinations made and any action
25	taken by the Secretary pursuant to section 236.
26	(b) Parties' Objections to Report.—
27	(1) The petitioner and respondents shall have 30 days after the date on
28	which the report of the Secretary is filed with the court pursuant to section 236(d)
29	in which to file with the court any objection to any determination of the Secretary

1	required by section 236.
2	(2) If any objection is filed pursuant to paragraph (1), the court shall, within
3	60 days after receipt of the report of the Secretary pursuant to section 236(d), make
4	the determination that is the subject of the objection on the basis of the
5	administrative record filed with the report and in accordance with the applicable
6	requirements of section 236.
7	(3) If no objection is filed pursuant to paragraph (1), the determinations of
8	the Secretary required by section 236 shall be final and approved by the court in the
9	order issued pursuant to subsection (c) or subsection (d).
10	(c) COURT ORDER.—Within 90 days after the date of receipt of the report of the
11	Secretary pursuant to section 236(d), the court, except as provided in subsection (d), shall
12	issue an order, to expire on the effective date of an order issued pursuant to section 239(d),
13	that—
14	(1) suspends all or any part of any non-Federal oil and gas lease or right to
15	develop, including the application of such a lease or right to any geographical area
16	or reservoir, in the common area in accordance with the determination of the
17	Secretary pursuant to section 236 or in accordance with the determination of the
18	court pursuant to subsection (b)(2) of this section; and
19	(2) if required by a determination of the court pursuant to subsection (b)(2),
20	terminates a Federal oil and gas lease suspension imposed by the Secretary pursuant
21	to section 236, or imposes a suspension of a Federal oil and gas lease, or both, in
22	accordance with the determination; and
23	(3) fixes the date upon which the Federal coal lessee may commence mining
24	operations or construction of mine support facilities in the common area, which
25	may be no later than the commencement date referred to in section 235(a).
26	(d) TERMINATION OF PROCEEDING.—If the Secretary makes a negative
27	determination pursuant to section 236(b), or if the court makes a negative determination
28	pursuant to an objection under subsection (b)(2) of this section to affirmative
29	determinations of the Secretary under section 236(b), the court shall issue an order

1	terminating the proceeding under this Act.
2	SEC. 238. EXPERTS' APPOINTMENT AND REPORT; COURT REVIEW AND HEARING.
3	(a) APPOINTMENT PROCEDURE.—Within 30 days after the date of issuance of an
4	order pursuant to section 237(c), to assist the court in making the determinations pursuant
5	to section 239—
6	(1) the Federal coal lessee and the oil and gas developer shall each appoint a
7	person who is an expert in appraising the value of, and right to develop, gas or oil;
8	and
9	(2)(A) persons appointed under paragraph (1) shall agree upon and appoint a
10	third person with such expertise; or
11	(B) if no agreement is reached on a third person by the end of such period,
12	the court shall appoint such person.
13	(b) COMPENSATION.—The Federal coal lessee and the oil and gas developer shall
14	each be responsible for payment of one-half of the compensation for and costs of the
15	experts in the performance of their duties under this Act.
16	(c) Information and Data.—
17	(1) The Federal coal lessee, the oil and gas developer, and the Secretary—
18	(A) shall each submit to the experts, within 30 days after the date of
19	completion of their appointment pursuant to subsection (a), all information
20	and data in the possession of such party that is pertinent to the
21	determinations to be made pursuant to section 239; and
22	(B) shall each submit to the experts thereafter any additional
23	pertinent information and data in the possession of such party that the
24	experts request, in writing, from such party.
25	(2) Except as provided in paragraph (3), the court shall ensure that any
26	information and data submitted to the experts pursuant to paragraph (1) shall have
27	the protection against disclosure that is applicable to them by law and the Federal
28	rules of civil procedure and evidence.
29	(3) All information and data submitted to the experts pursuant to paragraph

1	(1) shall be available for review by all parties unless otherwise ordered by the court.
2	(d) Submission of Briefs and Hearing.—
3	(1) Within 45 days after the date of completion of appointment of the
4	experts pursuant to subsection (a), all parties may submit to the court briefs
5	concerning the determinations to be made pursuant to section 239.
6	(2) Within 60 days after the date of completion of appointment of the
7	experts pursuant to subsection (a), the experts may, or if requested by the petitioner
8	or a respondent shall, receive testimony from all parties concerning the
9	determinations to be made pursuant to section 239.
10	(e) EXPERTS' REPORT.—Within 120 days after the date of completion of
11	appointment of the experts pursuant to subsection (a), the experts shall submit to the court
12	a written report providing in detail their recommendations on the determinations to be
13	made pursuant to section 239.
14	(f) REVIEW OF EXPERTS' REPORT.—The court shall make the determinations
15	required by section 239 after reviewing the report of the experts submitted pursuant to
16	subsection (e) and after holding a hearing in which the parties to the proceeding shall have
17	the opportunity to examine the experts and provide to the court evidence or arguments to
18	support or contravene the recommendations of the report.
19	SEC. 239. COURT'S FINAL RESPONSE TO PETITION: VALUATION CONCERNING
20	ECONOMICALLY RECOVERABLE OIL OR GAS RESOURCES LOST OR DELAYED,
21	SUSPENSION OR TERMINATION, AND PAYMENT ORDER.
22	(a) IN GENERAL.—Within 210 days after the date of issuance of an order pursuant
23	to section 237(c), the court shall take the actions required by this section.
24	(b) Suspension or Termination Determination.—
25	(1) The court shall determine that, as a result of the order or any action of
26	the Secretary, all or any part of the oil and gas lease or right to develop, or the
27	application of such lease or right to any geographical area or zone or reservoir,
28	should be—
29	(A) suspended during any remaining period in which mining

1	operations or support facilities exist in the common area; or
2	(B) terminated.
3	(2) Any determination to suspend pursuant to paragraph (1) shall, wherever
4	possible or appropriate, limit the suspension or phase the suspension to permit the
5	optimum development of the oil or gas prior to the time at which the mining
6	operations would reach the location within the common area that is subject to the
7	suspension or particular phase of the suspension.
8	(3) Any determination to terminate pursuant to paragraph (1) shall be made
9	only if the court finds that—
10	(A) the economically recoverable oil and gas resources subject to
11	compensation pursuant to subsection (c) would be entirely lost or rendered
12	impracticable to produce as a consequence of the mining operations in the
13	common area; and
14	(B) such resources constitute all of the economically recoverable
15	resources subject to the oil and gas lease or right to develop.
16	(c) Compensation Determination.—
17	(1) If the court makes a determination to suspend pursuant to subsection (b)
18	the court shall determine the following:
19	(A) The amount of any net income that will not be realized due to
20	delay in development of economically recoverable resources of oil or gas,
21	other than coalbed methane, from the common area, whether or not such
22	development has commenced.
23	(B) The amount of any net income that will not be realized, whether
24	or not development of coalbed methane has commenced, due to-
25	(i) delay in development of economically recoverable
26	resources of coalbed methane in the common area;
27	(ii) the loss of any economically recoverable resources of
28	coalbed methane from the coal to be extracted by the mining
29	operations in the common area; and

1	(iii) the loss of any economically recoverable resources of
2	coalbed methane underlying any area that is subject to the oil and
3	gas lease and right to develop associated with the common area and
4	that extends outward from each exposed coal face of the mining
5	operations for a distance from which drainage of such resources is
6	established to the satisfaction of the court.
7	(C) Any of the following damages that will be incurred by the
8	owners of any interest in the oil and gas lease or right to develop as a
9	consequence of the suspension:
10	(i) Any unavoidable fixed expenses of shutting in production
11	from, maintenance of, and testing of an existing well.
12	(ii) Any unavoidable fixed expenses necessary to achieve
13	postsuspension recovery of all or certain economically recoverable
14	resources of oil or gas in the common area (including expenses of
15	relaying pipeline and all other expenses reasonably related to
16	reestablishing any existing oil or gas production), except that if the
17	court determines that such unavoidable fixed expenses will exceed
18	the net income to be derived from the resources, the court shall
19	determine the amount of such net income and lost royalties on oil or
20	gas not produced.
21	(iii) Expenses associated with stranded costs of drilling
22	equipment and facilities.
23	(iv) Any lost royalties on oil or gas not produced by the oil
24	and gas developer.
25	(v) Any lost income associated with temporarily shutting in
26	production from wells outside of the common area as needed for
27	reconnection to a gathering system or pipeline to market.
28	(2) The determinations made pursuant to paragraph (1) shall not
29	include any decrease in net income or damages resulting from loss of any oil

1	or gas resources that occurred before the date of the determinations and is
2	caused by mining within or outside of the common area on the Federal coal
3	lease or logical mining unit that is the subject of the common area
4	determination made pursuant to section 236(b)(1) or section 237(b)(2).
5	(3) If the court makes a determination to terminate pursuant to
6	subsection (b), the court shall determine the amount of any net income that
7	will not be realized and any damages due to the loss of, or impracticability
8	to produce, the economically recoverable resources of oil or gas subject to
9	the oil and gas lease or right to develop in the same manner as provided in
10	paragraph (1).
11	(4) In determining the amount of net income that will not be realized
12	pursuant to paragraph (1) or paragraph (3) and the sum of money to be
13	awarded pursuant to subsection (d), the court shall ensure to the best of its
14	ability that the Federal coal lessee is not required to pay for the same gas or
15	oil lost, delayed in development, or rendered impracticable to develop to
16	more than one oil and gas developer or the owners of any interest in more
17	than one oil and gas lease or right to develop.
18	(d) COURT ORDER.—The court shall issue an order that—
19	(1) suspends all or any part of, suspends in phases parts of, or terminates the
20	oil and gas lease or right to develop, including any applicable payment or production
21	obligations, in accordance with the determination made pursuant to subsection (b);
22	and
23	(2) awards to the oil and gas developer and all other owners of any interest
24	in the oil and gas lease or right to develop, as their interests may appear, a sum of
25	money from the Federal coal lessee equal to the net income amount and damages
26	determined pursuant subsection (c).
27	SEC. 240. DISBURSEMENT OF PAYMENTS TO OIL AND GAS DEVELOPERS.
28	(a) PAYMENT ALTERNATIVES.—At the election of the oil and gas developer, the
29	sum of money awarded by the court pursuant to section 239(d)(2) shall be-

1	(1) paid in full within 60 days after the date of issuance of the order
2	pursuant to section 239(d); or
3	(2) divided into the number of tons of recoverable coal in the common area
4	and paid in per ton increments as the coal is mined, in accordance with subsections
5	(b) and (c).
6	(b) PAYMENT SCHEDULE.—The Federal coal lessee shall make the payments
7	required by subsection (a)(2) on a quarterly basis in advance based on the Federal coal
8	lessee's estimate of the number of tons of coal to be mined in the common area during the
9	following quarter, and shall add or subtract an amount to or from the advance payment for
10	the next quarter to reflect the coal mined from the common area that is actually sold or
11	transferred.
12	(c) FINAL PAYMENT.—If the mining necessary to make full payment of the sum of
13	money awarded by the court in accordance with subsection (a)(2) does not occur within the
14	5-year period beginning on the date of issuance of the court order pursuant to section
15	239(d), the unpaid balance shall be paid within 60 days after the expiration of such period.
16	SEC. 241. TERMINATION OF OIL AND GAS LEASE SUSPENSION.
17	(a) NOTIFICATION OF COURT.—If the court issues an order to suspend all or any part
18	of the oil and gas lease or right to develop pursuant to section 239(d)—
19	(1) the Federal coal lessee shall notify the court and the oil and gas
20	developer when the portion of the common area subject to the order issued pursuant
21	to section 239(d) is no longer required for mining operations or support facilities;
22	and
23	(2) within 120 days after the date of receipt by the court of the notification
24	pursuant to paragraph (1), or within 60 days prior to the date on which the period
25	established by the court in the order issued pursuant to section 239(d) concludes,
26	the oil and gas developer may petition the court for an order that terminates the
27	suspension and fixes the date and terms on which the oil and gas developer may
28	resume operations within the portion of the common area subject to the order issued

pursuant to section 239(d).

1	(b) Court order to Terminate Suspension of Lease or Right to
2	DEVELOP.—The court shall issue the order sought under subsection (a)(2) within 30 days
3	after the date of receipt of the petition pursuant to subsection (a)(2).
4	(c) TERMINATION OF LEASE OR RIGHT O DEVELOP—
5	(1) If the oil and gas developer determines that, as a consequence of the
6	order of the court issued pursuant to section 237(c) and an order to suspend all or
7	any part of the oil and gas lease or right to develop pursuant to section 239(d), the
8	conditions described in section 239(b)(3) exist, the oil and gas developer may
9	petition the court to terminate the oil and gas lease or right to develop.
10	(2) The petition referred to in paragraph (1) may be filed any time after
11	issuance of the order of the court pursuant to section 239(d), but not later than 120
12	days after the date of receipt by the court of the notification pursuant to subsection
13	(a)(1).
14	(3) Upon receipt of a petition pursuant to paragraph (1), the court shall make
15	a determination whether to issue an order to terminate the oil and gas lease or right
16	to develop and award an additional amount from the Federal coal lessee to the oil
17	and gas developer and all other owners of any interest in the oil and gas lease or
18	right to develop, as their interests may appear, in accordance with the procedures
19	and deadlines established in section 235(a) and sections 238 through 240.
20	SEC. 242. SUPPLEMENTAL PETITION FOR RELIEF.
21	(a) Petition Submittal.—
22	(1) If, at any time after the issuance of an order pursuant to section 239(d),
23	the mining plan that is the basis of the order is altered in a manner that may warrant
24	suspension of an additional part or all of, or termination of, the oil and gas lease or
25	right to develop, or an increase in the sum of money that was awarded under the
26	order, or both, either the Federal coal lessee or the oil and gas developer may, if
27	necessary after compliance with the requirements of section 234, file a
28	supplemental petition for relief with the court to amend the order.
29	(2) The requirements of section 235(a) and sections 236 through 240 shall

1	apply to the supplemental petition submitted pursuant to paragraph (1).
2	(b) Court Order.—
3	(1) Upon completion of the process required by subsection (a)(2), the court
4	shall make a determination whether to—
5	(A) suspend an additional part or all of, or terminate, the oil and gas
6	lease or right to develop as described in section 239; and
7	(B) award an additional sum of money calculated in accordance with
8	section 239.
9	(2) The court shall issue any order resulting from the determinations made
10	pursuant to paragraph (1) within 90 days after the date of filing of the supplemental
11	petition for relief.
12	SEC. 243. APPEAL OF COURT ORDERS.
13	(a) Non-appealable Orders.—Any order issued pursuant to section 237(c),
14	section 237(d), section 239(d)(1), or section 242(b)(1)(A)] is final and may not be
15	appealed.
16	(b) APPEALABLE ORDERS.—Any order issued pursuant to section 239(d)(2), section
17	241(b), section 241(c)(3), or section 242(b)(1)(B) may be appealed, but the appeal, and an
18	disposition thereof, may not affect any order referred to in subsection (a).
19	SEC. 244. SUSPENSION TERMS.
20	(a) FEDERAL LEASE SUSPENSION TERMS.—If all or any part of any Federal oil and
21	gas lease is suspended in whole or in part by the Secretary or the court under this Act-
22	(1) the lessee shall not be required to pay any rental for the lease for the
23	period of the suspension; and
24	(2)(A) if the lease is in the primary term, the term of the lease shall be
25	extended by the length of the period of the suspension plus one year; or
26	(B) the lease shall not terminate due to lack of production for the period of
27	the suspension plus one year.
28	(b) Non-federal Lease Suspension Terms.—If any non-Federal oil and gas
29	lease or right to develop is suspended in whole or in part by the court under this Act, the

court shall establish terms for the suspension comparable to the terms set forth in subsection (a).

SEC. 245. LIABILITY LIMITATION.

Except as provided in a written agreement reached pursuant to section 234(b), or reached on or after September 1, 1999, and before the date of enactment of this Act and approved by the Bureau of Land Management, or as provided by an order of the court pursuant to this Act, neither the Federal coal lessee subject to the agreement or order nor the United States shall be liable to the oil and gas developer of, or any owner of an interest in, any oil and gas lease or right to develop subject to the agreement or order for any decrease in or depletion of, or any impairment of the ability to recover, any gas or oil subject to the oil and gas lease or right to develop that may result from the development of any coal on the Federal coal leasehold or within a logical mining unit that includes the Federal coal lease.

SEC. 246. CREDIT AGAINST ROYALTIES.

- (a) In General.—If a Federal coal lessee is required by a written agreement reached pursuant to section 234(b), or reached on or after September 1, 1999, and before the date of the enactment of this Act and approved by the Bureau of Land Management, or by a court order issued pursuant to section 239(d), section 241(c)(3), or section 242(b)(2)(B), to pay an amount for loss of economically recoverable Federal coalbed methane resources due to mining operations or for suspension of all or part of, or termination of, a Federal oil and gas lease for coalbed methane located within the lands designated as 'Dispute Resolution Area' on the maps referred to in section 232(9), any amount so paid after the date of enactment of this Act shall be credited against any royalties on production otherwise due from the Federal coal lessee or any affiliate thereof under section 7(a) of the Mineral Leasing Act (30 U.S.C. 207(a)) for any lease of Federal coal issued under that Act, or under the Mineral Leasing Act for Acquired Lands (30 U.S.C. 351 et seq.) for any lease of Federal coal that is subject to that Act.
- (b) TREATMENT OF ROYALTIES TO THE STATE.—The Secretary shall pay to the State of Wyoming 50 percent of the amount of any credit against royalties provided under

1	subsection (a)—
2	(1) in the same manner as if the credit against royalties had been paid in
3	money as royalties and distributed under section 35(a) of the Mineral Leasing Act
4	(30 U.S.C. 193(a)); and
5	(2) from amounts received as royalties, rentals, or bonuses derived from
6	leases issued under this Act that otherwise would be deposited as miscellaneous
7	receipts under section 35(a) of the Mineral Leasing Act (30 U.S.C. 193(a)).
8	SEC. 247. DENIAL OF USE AS PRECEDENT.
9	Nothing in this Act shall be applicable to any lease under the Mineral Leasing Act
10	or the Mineral Leasing Act for Acquired Lands for any mineral, or shall be applicable to,
11	or supersede any statutory or common law otherwise applicable in, any proceeding in any
12	Federal or State court involving development of any mineral outside of any common area
13	and within or outside of the Powder River Basin.
14	SEC. 248. REGULATIONS.
15	The Secretary shall promulgate any regulations necessary to implement this Act by
16	not later than 120 days after the date of enactment of this Act.
17	TITLE III — INDIAN ENERGY
18	SEC. 301. SHORT TITLE.
19	This title may be cited as the "Native American Energy Development and Self-
20	Determination Act of 2003".
21	SEC. 302. INDIAN ENERGY.
22	(a) In General.—Title XXVI of the Energy Policy Act of 1992 (25 U.S.C. 3501 et
23	seq.) is amended to read as follows:
24	"TITLE XXVI—INDIAN ENERGY
25	"SEC. 2601. DEFINITIONS.
26	"In this title:
27	"(1) The term 'Commission' means the Indian Energy Resource
28	Commission established by section 2605.
29	"(2) The term 'Director' means the Director of the Office of Indian Energy

1	Policy and Programs.
2	"(3) The term 'Indian' means an individual member of an Indian tribe who
3	owns land or an interest in land, the title to which land-
4	"(A) is held in trust by the United States; or
5	"(B) is subject to a restriction against alienation imposed by the
6	United States.
7	"(4) The term 'Indian land' means—
8	"(A) any land located within the boundaries of an Indian reservation,
9	pueblo, or rancheria;
10	"(B) any land not located within the boundaries of an Indian
11	reservation, pueblo, or rancheria, the title to which is held-
12	"(i) in trust by the United States for the benefit of an Indian
13	tribe;
14	"(ii) by an Indian tribe, subject to restriction by the United
15	States against alienation; or
16	"(iii) by a dependent Indian community; and
17	"(C) land conveyed to a Native Corporation under the Alaska Native
18	Claims Settlement Act (43 U.S.C. 1601 et seq.).
19	"(5) The term 'Indian tribe' has the meaning given the term in section 4 of
20	the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).
21	"(6) The term 'Indian reservation' includes—
22	"(A) an Indian reservation in existence as of the date of enactment of
23	this paragraph;
24	"(B) a public domain Indian allotment;
25	"(C) a former reservation in the State of Oklahoma;
26	"(D) a parcel of land owned by a Native Corporation under the
27	Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.); and
28	"(E) a dependent Indian community located within the borders of the
29	United States, regardless of whether the community is located—

1	"(i) on original or acquired territory of the community; or
2	"(ii) within or outside the boundaries of any particular State
3	"(7) The term 'Native Corporation' has the meaning given the term in
4	section 3 of the Alaska Native Claims Settlement Act
5	(43 UC. 1602).
6	"(8) The term 'Program' means the Indian energy resource development
7	program established under section 2603(a).
8	"(9) The term 'Secretary' means the Secretary of Energy.
9	"(10) The term 'tribal consortium' means an organization that—
10	"(A) consists of at least 2 Indian tribes and at least 2 other entities;
11	and
12	"(B) is organized for the purpose of developing energy resources.
13	"(11) The term 'vertical integration' means a project or activity that
14	promotes the location and operation of facilities on Indian land to process, refine,
15	generate electricity from or otherwise use energy resources developed on Indian
16	land, including transportation or transmission.
17	"SEC. 2602. INDIAN ENERGY RESOURCE DEVELOPMENT ASSISTANCE.
18	"(a) Grants and Loans.—To assist Indian tribes and tribal consortia in the
19	management and development of energy resources, the Secretary may —
20	"(1) provide grants to assist in developing or obtaining the managerial and
21	technical capacity needed to develop energy resources located on Indian land;
22	"(2) provide grants to assist in carrying out projects to promote the vertical
23	integration of energy resources located on Indian land, and to process, use, or
24	develop those energy resources; and
25	"(3) provide low-interest loans to Indian tribes and tribal consortia to
26	promote energy resource development and vertical integration of energy resources
27	located on Indian land.
28	"(b) TECHNICAL AND OTHER ASSISTANCE.—The Secretary may provide to Indian
29	tribes and tribal consortia, on an annual basis, grants for use in the development and

maintenance of an inventory of energy resources, preparation of feasibility and engineering studies, training of employees, and developing, administering, implementing, and enforcing tribal laws (including regulations) governing the development and management of energy resources on Indian land. The Secretary of the Interior, the Attorney General of the United States and the heads of other federal agencies and departments shall provide on a reimbursable or to the extent otherwise authorized on a non-reimbursable basis such technical or other assistance as may be requested by an Indian Tribe in implementing the provisions of this title and in obtaining the necessary expertise to develop, operate, and maintain vertical integration of energy resources either directly, through joint ventures or other commercial enterprises, or by lease or contract.

"SEC. 2603, LEASES INVOLVING ENERGY DEVELOPMENT OR TRANSMISSION.

- "(a) In General.—Notwithstanding any other provision of law and subject to the provisions of this title, an Indian or Indian tribe may
 - "(1) enter into a lease for the purpose of energy development, including exploration, extraction, processing, or other development of energy resources; "(2) grant a right-of-way for a pipeline or electric transmission or

distribution line; and

"(3) renew or extend a lease or right-of way.

"(b) VALIDITY.—No lease or right-of-way under this section shall be valid unless the lease or right-of-way is authorized in accordance with tribal regulations adopted pursuant to section 2604. A lease or right-of-way granted under approved tribal regulations shall not require the specific approval of the Secretary under section 2103 of the Revised Statutes (25 U.S.C. 81).

"SEC. 2604. TRIBAL REGULATIONS.

"(a) SUBMISSION AND APPROVAL OR DISAPPROVAL OF TRIBAL REGULATIONS.—An Indian tribe may submit to the Secretary for approval tribal regulations governing leases and rights-of-way under this section. Not later than 120 days after the date on which the Secretary receives tribal regulations, the Secretary shall approve or disapprove the regulations unless a later date is agreed to by the tribe and the Secretary. If the Secretary

1	disapproves tribal regulations the Secretary notify the Indian tribe in writing of the basis
2	for the disapproval, identify what changes or other actions are required to address the
3	concerns of the Secretary; and provide the Indian tribe with an opportunity to revise and
4	resubmit the regulations.
5	"(b) REQUIREMENTS.—Prior to approving any regulations, the Secretary shall be
6	satisfied that the Indian tribe has, or will obtain, the ability to administer and enforce the
7	provisions of this title and that the regulations contain provisions to—
8	"(1) ensure the acquisition of necessary information from the applicant for
9	the lease or right-of-way;
10	"(2) limit the term of the lease or conveyance of the right-of-way to thirty
11	years or less;
12	"(3) include procedures for enforcement of the provisions of any lease or
13	right-of-way as well as for termination, suspension, relinquishment, amendments
14	and renewals;
15	"(4) address consideration, including in the case of tribal regulations or a
16	lease or right-of-way that permit payment to be made directly to the Indian tribe,
17	documentation of those payments sufficient to enable the Secretary to discharge the
18	trust responsibility of the United States as appropriate under applicable law;
19	"(5) establish requirements for environmental review in accordance with
20	subsection (c) and ensure compliance with all applicable environmental laws;
21	"(6) identify final approval authority;
22	"(7) provide for public notification of final approvals, including providing
23	the Secretary with a copy of the lease or right-of-way document (including all
24	amendments to and renewals of the document); and
25	"(8) establish a process for consultation with any affected States concerning
26	potential off-reservation impacts associated with the lease or right-of-way.
27	"(c) Environmental Review Process.—Tribal regulations shall establish, and
28	include provisions to ensure compliance with, an environmental review process that
29	identifies and evaluates significant environmental effects as well as mitigation alternatives

1	and provides a process for public information and opportunity to comment on any proposed
2	lease or right-of-way before tribal approval of the lease or right-of-way (or any amendment
3	to or renewal of a lease or right-of-way);
4	"(d) PUBLIC COMMENT.—The Secretary may provide notice and opportunity for
5	public comment on tribal regulations prior to approval or disapproval.
6	"(e) No United States Liability.—The United States shall not be liable for any
7	loss or injury sustained by any party (including an Indian tribe or any member of an Indian
8	tribe) to a lease or right-of-way executed in accordance with tribal regulations approved
9	under this subsection.
10	"(f) Procedures for Review of Compliance with Regulations.—Any person
11	may petition the Secretary for review of compliance by an Indian tribe with approved
12	regulations. The Secretary shall issue regulations setting forth procedures for submission
13	of petitions, review and comment by the Indian tribe and other interested parties,
14	determination by the Secretary, and appeals from the determination. The regulations shall
15	require that any petition be filed in a timely manner and only after tribal remedies are
16	exhausted. The Secretary shall make a determination on a petition within 60 days of the
17	date when the petition is filed. If the Secretary determines that an Indian tribe is not in
18	compliance with tribal regulations, the Secretary shall notify the Indian tribe in writing of
19	the nature of the violation and the actions that the Indian tribe would need to take to
20	comply with the regulations. In the event that the Indian tribe does not take such action,
21	the Secretary may rescind or suspend a lease or right-of-way or revoke the approval of the
22	tribal regulations.
23	"(g) No Effect on Other Law.—Nothing in this section affects the application of
24	any provision of—
25	"(1) the Act of May 11, 1938 (commonly known as the "Indian Mineral
26	Leasing Act of 1938'') (25 U.S.C. 396a et seq.);
27	"(2) the Indian Mineral Development Act of 1982 (25 U.S.C. 2101 et seq.);
28	"(3) the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C.
29	1201 et seq.); or

1	"(4) any Federal environmental law.
2	"SEC. 2605. INDIAN ENERGY RESOURCE COMMISSION.
3	"(a) Establishment.—There is established a commission to be known as the
4	'Indian Energy Resource Commission'.
5	"(b) Members.—The Commission shall consist of 17 Members appointed by the
6	Secretary of the Interior who will designate one as Chair—
7	"(1) 8 members based on recommendations submitted by Indian tribes with
8	energy resources, at least 4 of whom shall be elected tribal leaders;
9	"(2) 3 members based on recommendations submitted by the Governors of
10	States with Indian land with energy resources:
11	"(3) 2 members from the private sector with expertise in tribal and State
12	taxation of energy resources;
13	"(4) 2 members with expertise in oil and gas royalty management
14	administration, including auditing and accounting; and
15	"(5) 2 members from the private sector with expertise in energy
16	development.
17	"(c) COMPENSATION.—A member of the Commission who is not an officer or
18	employee of the Federal Government shall be compensated at a rate equal to the daily
19	equivalent of the annual rate of basic pay prescribed for level IV of the Executive Schedule
20	under section 5315 of title 5, United States Code, for each day (including travel time)
21	during which the member is engaged in the performance of the duties of the Commission.
22	A member of the Commission who is an officer or employee of the Federal Government
23	shall serve without compensation in addition to the compensation received for the services
24	of the member as an officer or employee of the Federal Government.
25	"(d) Travel Expenses.—A member of the Commission shall be allowed travel
26	expenses, including per diem in lieu of subsistence, at rates authorized for an employee of
27	an agency under subchapter I of chapter 57 of title 5, United States Code, while away from
28	the home or regular place of business of the member in the performance of the duties of the
29	Commission.

1	"(e) STAFF AND ADMINISTRATIVE EXPENSES.—The Secretary of Interior and the
2	Secretary of Energy shall enter into a memorandum of understanding to provide for all
3	staff, office, and administrative requirements of the Commission.
4	"(f) Duties of Commission.—The Commission shall—
5	"(1) develop proposals to address dual taxation by Indian tribes and States
6	of the extraction of energy minerals on Indian land;
7	"(2) make recommendations to improve the management, administration,
8	accounting, and auditing of royalties associated with the production of energy
9	minerals on Indian land;
10	"(3) develop alternatives for the collection and distribution of royalties
11	associated with the production of energy minerals on Indian land;
12	"(4) develop proposals for incentives to foster the development of energy
13	resources on Indian land;
14	"(5) identify barriers or obstacles to the development of energy resources on
15	Indian land, and make recommendations designed to foster the development of
16	energy resources on Indian land, in order to promote economic development;
17	"(6) develop proposals for the promotion of vertical integration of energy
18	resources on Indian land; and
19	"(7) develop proposals on taxation incentives to foster the development of
20	energy resources on Indian land, including consideration of investment tax credits
21	and enterprise zone credits.
22	"(g) REPORT.—Not later than 2 years after funds are made available for the
23	Commission, the Commission shall submit to the President of the United States, the
24	Speaker of the United States House of Representatives, and the President of the United
25	States Senate, a report that describes the proposals, recommendations, and alternatives
26	adopted by the Commission. Before submitting the report, the Chair of the Commission
27	shall provide to each interested Indian tribe and each State with Indian land with energy
28	resources, a draft of the report for review and comment.
29	"(h) TERMINATION.—The Commission shall terminate 30 days after the date when

the report is submitted.

"SEC, 2606. ENERGY EFFICIENCY AND STRUCTURES ON INDIAN LAND.

"(a) TECHNICAL ASSISTANCE.—The Secretary of Housing and Urban Development, in cooperation with Indian tribes or tribally-designated housing entities of Indian tribes, shall provide technical assistance to initiate and expand the use of energy-saving technologies in new home construction and housing rehabilitation on Indian land to nonprofit and community organizations.

"(b) REVIEW.—The Secretary of Housing and Urban Development and the Secretary of the Interior, in consultation with Indian tribes or tribally-designated housing entities of Indian tribes, shall review regulations promulgated by the Secretary of Housing and Urban Development and the Secretary of the Interior to identify measures to promote greater use of energy efficient technologies in housing for which Federal assistance is provided under the Native American Housing Assistance and Self-Determination Act of 1996 (25 U.S.C. 4101 et seq.) and develop energy efficiency and conservation measures for use in connection with housing located on Indian land.

"SEC. 2607, INDIAN MINERAL DEVELOPMENT REVIEW BY SECRETARY OF THE INTERIOR.

"The Secretary of the Interior, in consultation with the Secretary of Energy, shall review all activities being conducted under the Indian Mineral Development Act of 1982 (25 U.S.C. 2101 et seq.) and not later than January 1, 2005 shall submit to the House of Representatives of the United States and the United States Senate a report that includes the results of the review and any recommendations to ensure that Indian tribes have the opportunity to develop Indian energy resources, including an analysis of barriers to the development of energy resources on Indian land (including legal, fiscal, market, and other barriers) and any recommendations to remove those barriers.

"SEC. 2608. CONSULTATION WITH INDIAN TRIBES.

"In carrying out this title, the Secretary and the Secretary of Interior shall, as appropriate and to the maximum extent practicable, involve and consult with Indian tribes in a manner consistent with the Federal trust and the government-to-government

1	relationships between Indian tribes and the Federal Government.".
2	
3	"SEC. 2609. TECHNICAL AMENDMENT.
4	"Section 202(2) of the Native American Housing and Self-Determination Act of
5	1996 (25 U.S.C. 4132(2)) is amended by inserting "improvement to achieve greater energy
6	efficiency," after "planning,".
7	TITLE IV— NUCLEAR MATTERS
8	Subtitle A-Price-Anderson Act Amendments
9	SEC. 401. SHORT TITLE
10	This subtitle may be cited as the "Price-Anderson Amendments Act of 2003".
11	SEC. 402. EXTENSION OF INDEMNIFICATION AUTHORITY.
12	(a) Indemnification of Nuclear Regulatory Commission
13	LICENSEES.—Section 170c. of the Atomic Energy Act of 1954 (42 U.S.C. 2210(c)) is
14	amended—
15	(1) in the subsection heading, by striking "LICENSES" and inserting
16	"Licensees";
17	(2) by striking "licenses issued between August 30, 1954, and December 31
18	2003" and inserting "licenses issued after August 30, 1954"; and
19	(3) by striking "With respect to any production or utilization facility for
20	which a construction permit is issued between August 30, 1954, and December 31,
21	2003, the requirements of this subsection shall apply to any license issued for such
22	facility subsequent to December 31, 2003."
23	(b) Indemnification of Department of Energy Contractors.—Section
24	170d.(1)(A) of the Atomic Energy Act of 1954 (42 U.S.C. 2210(d)(1)(A)) is amended by
25	striking ", until December 31, 2004,".
26	(c) Indemnification of Nonprofit Educational Institutions.—Section
27	170k.of the Atomic Energy Act of 1954 (42 U.S.C. 2210(k)) is amended—
28	(1) by striking "licenses issued between August 30,1954, and August 1,

1	2002" and replacing it with "licenses issued after August 30, 1954"; and
2	(2) by striking "With respect to any production or utilization facility for
3	which a construction permit is issued between August 30, 1954, and August 1,
4	2002, the requirements of this subsection shall apply to any license issued for such
5	facility subsequent to August 1, 2002."
6	SEC. 403. MAXIMUM ASSESSMENT.
7	Section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) is amended—
8	(1) in the second proviso of the third sentence of subsection b.(1)—
9	(A) by striking "\$63,000,000" and inserting "\$94,000,000"; and
10	(B) by striking "\$10,000,000 in any 1 year" and inserting
11	"\$15,000,000 in any 1 year (subject to adjustment for inflation under
12	subsection t."); and
13	(2) in subsection t.(1)—
14	(A) by inserting "total and annual" after "amount of the maximum";
15	(B) by striking "the date of the enactment of the Price-Anderson
16	Amendments Act of 1988" and inserting "July 1, 2003"; and
17	(C) by striking "such date of enactment" and inserting "July 1,
18	2003".
19	SEC. 404. DEPARTMENT OF ENERGY LIABILITY LIMIT.
20	(a) Indemnification of Department of Energy Contractors.—Section 170d
21	of the Atomic Energy Act of 1954 (42 U.S.C. 2210(d)) is amended by striking paragraph
22	(2) and inserting the following:
23	"(2) In an agreement of indemnification entered into under paragraph (1),
24	the Secretary—
25	"(A) may require the contractor to provide and maintain financial
26	protection of such a type and in such amounts as the Secretary shall
27	determine to be appropriate to cover public liability arising out of or in
28	connection with the contractual activity; and
29	"(B) shall indemnify the persons indemnified against such liability

1	above the amount of the financial protection required, in the amount of
2	\$10,000,000,000 (subject to adjustment for inflation under subsection t.), in
3	the aggregate, for all persons indemnified in connection with the contract
4	and for each nuclear incident, including such legal costs of the contractor as
5	are approved by the Secretary.".
6	(b) Contract Amendments.—Section 170d. of the Atomic Energy Act of 1954
7	(42 U.S.C. 2210(d)) is further amended by striking paragraph (3) and inserting the
8	following—
9	"(3) All agreements of indemnification under which the Department of
10	Energy (or its predecessor agencies) may be required to indemnify any person
11	under this section shall be deemed to be amended, on the date of enactment of the
12	Price-Anderson Amendments Act of 2003, to reflect the amount of indemnity for
13	public liability and any applicable financial protection required of the contractor
14	under this subsection.".
15	(c) Liability Limit.—Section 170e.(1)(B) of the Atomic Energy Act of 1954 (42
16	U.S.C. 2210(e)(1)(B)) is amended by:
17	(1) striking "the maximum amount of financial protection required under
18	subsection b. or"; and
19	(2) striking "paragraph (3) of subsection d., whichever amount is more" and
20	inserting "paragraph (2) of subsection d.".
21	SEC. 405. INCIDENTS OUTSIDE THE UNITED STATES.
22	(a) Amount of Indemnification.—Section 170d.(5) of the Atomic Energy Act of
23	1954 (42 U.S.C. 2210(d)(5)) is amended by striking "\$100,000,000" and inserting
24	"\$500,000,000".
25	(b) Liability Limit.—Section 170e.(4) of the Atomic Energy Act of 1954 (42
26	U.S.C. 2210(e)(4)) is amended by striking "\$100,000,000" and inserting "\$500,000,000".
27	SEC. 406. REPORTS.
28	Section 170p. of the Atomic Energy Act of 1954 (42 U.S.C. 2210(p)) is amended
29	by striking "August 1, 1998" and inserting "August 1, 2013".

1	SEC. 407. INFLATION ADJUSTMENT.
2	Section 170t. of the Atomic Energy Act of 1954 (42 U.S.C. 2210(t)) is amended—
3	(1) by redesignating paragraph (2) as paragraph (3); and
4	(2) by adding after paragraph (1) the following:
5	"(2) The Secretary shall adjust the amount of indemnification provided under an
6	agreement of indemnification under subsection d. not less than once during each 5-year
7	period following July 1, 2003, in accordance with the aggregate percentage change in the
8	Consumer Price Index since—
9	"(A) that date, in the case of the first adjustment under this paragraph; or
10	"(B) the previous adjustment under this paragraph.".
11	SEC. 408. TREATMENT OF MODULAR REACTORS.
12	Section 170 b. of the Atomic Energy Act of 1954 (42 U.S.C. 2210(b)) is amended
13	by adding at the end the following:
14	"(5)(A) For purposes of this section only, the Commission shall consider a
15	combination of facilities described in subparagraph (B) to be a single facility having a
16	rated capacity of 100,000 electrical kilowatts or more.
17	"(B) A combination of facilities referred to in subparagraph (A) is 2 or more
18	facilities located at a single site, each of which has a rated capacity of 100,000 electrical
19	kilowatts or more but not more than 300,000 electrical kilowatts, with a combined rated
20	capacity of not more than 1,300,000 electrical kilowatts.".
21	SEC. 409. APPLICABILITY.
22	The amendments made by sections 403, 404, and 405 do not apply to a nuclear
23	incident that occurs before the date of the enactment of this Act.
24	SEC. 410. CIVIL PENALTIES.
25	(a) REPEAL OF AUTOMATIC REMISSION.—Section 234Ab.(2) of the Atomic Energy
26	Act of 1954 (42 U.S.C. 2282a(b)(2)) is amended by striking the last sentence.
27	(b) LIMITATION FOR NOT-FOR-PROFIT INSTITUTIONS.—Subsection d. of section
28	234A of the Atomic Energy Act of 1954 (42 U.S.C. 2282a(d)) is amended to read as
29	follows:

1	"d.(1) Notwithstanding subsection a., in the case of any not-for-profit contractor,
2	subcontractor, or supplier, the total amount of civil penalties paid under subsection a. may
3	not exceed the total amount of fees paid within any one-year period (as determined by the
4	Secretary) under the contract under which the violation occurs.
5	"(2) For purposes of this section, the term "not-for-profit" means that no part of the
6	net earnings of the contractor, subcontractor, or supplier inures, or may lawfully inure, to
7	the benefit of any natural person or for-profit artificial person.".
8	(c) Effective Date.—The amendments made by this section shall not apply to
9	any violation of the Atomic Energy Act of 1954 occurring under a contract entered into
10	before the date of enactment of this section.
11	Subtitle B—Deployment of New Nuclear Plants
12	SEC. 421. SHORT TITLE.
13	This subtitle may be cited as the "Nuclear Energy Finance Act of 2003."
14	SEC. 422. DEFINITIONS.
15	For purposes of this subtitle:
16	(a) The term "eligible project costs" means all costs incurred by a project developer
17	that are reasonably related to the development and construction of a project under this
18	subtitle, including costs resulting from regulatory or licensing delays.
19	(b) The term "financial assistance" means a line of credit, loan guarantee, purchase
20	agreement, secured loan, or any combination of the foregoing.
21	(c) The term "line of credit" means an agreement by the Secretary to provide a
22	direct loan to a project developer at a future date upon the occurrence of certain events
23	designated in the agreement.
24	(d) The term "loan guarantee" means any guarantee or other pledge by the
25	Secretary to pay all or part of the principal and interest on a loan or other debt obligation
26	issued by a project developer and funded by a lender.
27	(e)The term "project" means any commercial nuclear power facility using uranium
28	or mixed oxide fuel as a source of heat for the production of electricity from a single
29	reactor, or multiple modular reactors with total electricity generation capacity at or below

1	1,300,000 kilowatts.
2	(f) The term "project developer" means an individual, corporation, partnership,
3	joint venture, trust, or other entity that is primarily liable for payment of a project's eligible
4	costs.
5	(g) The term "purchase agreement" means a contract to purchase the electric energy
6	produced by a project under this subtitle.
7	(h) The term "Secretary" means the Secretary of Energy.
8	(i) The term "secured loan" means a direct loan or other debt obligation funded by
9	the Secretary with repayment secured by the value of a project developed under this
10	subtitle.
11	SEC. 423. RESPONSIBILITIES OF THE SECRETARY.
12	(a) FINANCIAL ASSISTANCE.—The Secretary may, in accordance with this subtitle,
13	make available to project developers for eligible project costs such financial assistance as
14	the Secretary determines is necessary to supplement private-sector financing for new
15	nuclear power plants if he determines that such plants are needed to contribute to energy
16	security, fuel and technology diversity, or clean air attainment goals. The Secretary shall
17	prescribe such terms and conditions for financial assistance as the Secretary deems
18	necessary or appropriate to protect the interests of the United States.
19	(b) REQUIREMENTS.—Approval criteria for financial assistance shall include:
20	(1) the creditworthiness of the project;
21	(2) the extent to which financial assistance would encourage public-private
22	partnerships and attract private-sector investment;
23	(3) the likelihood that financial assistance would hasten commencement of
24	the project; and,
25	(4) any other criteria the Secretary deems necessary or appropriate.
26	(c) LIMITATION.—The total financial assistance per project provided by this
27	subtitle shall not exceed fifty percent of eligible project costs.
28	(d) CONFIDENTIALITY.—The Secretary shall protect the confidentiality of any
29	information that is certified by a project developer to be commercially sensitive.

1	(e) Full Faith and Credit.—All financial assistance provided by the Secretary
2	under this subtitle shall be general obligations of the United States backed by its full faith
3	and credit.
4	SEC. 424. REGULATIONS
5	Not later than 12 months from the date of enactment of this Act, the Secretary shall
6	issue regulations to implement this subtitle.
7	Subtitle C—Advanced Reactor Hydrogen
8	Co-Generation Project
9	SEC. 431. PROJECT ESTABLISHMENT.
10	The Secretary is directed to establish an Advanced Reactor Hydrogen Co-
11	Generation Project.
12	SEC. 432. PROJECT DEFINITION.
13	The project shall conduct the research, development, design, construction, and
14	operation of a hydrogen production co-generation system that, relative to the current
15	commercial reactors, enhances safety features, reduces waste production, enhances thermal
16	efficiencies, increases proliferation resistance, and has the potential for improved
17	economics and physical security in reactor siting.
18	SEC. 433. PROJECT MANAGEMENT.
19	(a) The project shall be managed within the Department by the Office of Nuclear
20	Energy Science and Technology.
21	(b) The lead laboratory for the program, providing the site for the reactor
22	construction, shall be the Idaho National Engineering and Environmental Laboratory
23	("INEEL").
24	(c) The Secretary shall establish a national steering committee with membership
25	from the national laboratories, universities, and industry to provide advice to the Secretary
26	and the Director of the Office of Nuclear Energy, Science and Technology on technical and
27	program management aspects of the project.

(d) Project activities shall be conducted at INEEL, other national laboratories,

28

1	universities, domestic industry, and international partners.
2	SEC. 434. PROJECT REQUIREMENTS
3	(a) The project shall include planning, research and development, design, and
4	construction of an advanced, next-generation, nuclear energy system for the co-generation
5	of electricity and hydrogen.
6	(1) The project shall utilize, where appropriate, extensive reactor test
7	capabilities resident at INEEL.
8	(2) The project shall be designed to explore technical, environmental, and
9	economic feasibility of alternative approaches for reactor-based hydrogen
10	production.
11	(3) The industrial lead for the project must be a United States-based
12	company.
13	(b) The Secretary shall seek international cooperation, participation, and financial
14	contribution in this program.
15	(1) The project may contract for assistance from specialists or facilities from
16	member countries of the Generation IV International Forum, the Russian
17	Federation, or other international partners where such specialists or facilities
18	provide access to cost-effective and relevant skills or test capabilities.
19	(2) International activities shall be coordinated with the Generation IV
20	International Forum.
21	(3) The Secretary may combine this project with the Generation IV Nuclear
22	Energy Systems Program.
23	(c) The overall project, which may involve demonstration of selected project
24	objectives in a partner nation, must demonstrate both electricity and hydrogen production
25	and may provide flexibility, where technically and economically feasible in the design and
26	construction, to enable tests of alternative reactor core and cooling configurations.
27	(d) The Secretary shall establish cost-shared partnerships with domestic industry or
28	international participants for the research, development, design, construction and operation
29	of the demonstration facility, and preference in determining the final project structure shall

1	be given to an overall project which retains United States leadership while maximizing cost
2	sharing opportunities and minimizing federal funding responsibilities.
3	(e) The Secretary shall select technologies and develop the project to provide initial
4	testing of either hydrogen production or electricity generation by 2010 or provide a report
5	to Congress why this date is not feasible.
6	(f) The Secretary is authorized to conduct the Advanced Reactor Hydrogen Co-
7	Generation Project without the constraints of DOE Order 413.3 as deemed necessary to
8	meet the specified operational date.
9	(g) The Secretary may fund up to two teams for up to one year to develop detailed
10	proposals for competitive evaluation and selection of a single proposal and concept for
11	further progress. The Secretary shall define the format of the competitive evaluation of
12	proposals.
13	(h) Research facilities in industry, national laboratories, or universities either within
14	the United States or with cooperating international partners may be used to develop the
15	enabling technologies for the demonstration facility. Utilization of domestic
16	university-based testbeds shall be encouraged to provide educational opportunities for
17	student development.
18	(i) The Secretary shall seek active participation of the Nuclear Regulatory
19	Commission throughout the project to develop risk-based criteria for any future
20	commercial development of a similar reactor architecture.
21	(j) A comprehensive project plan shall be developed no later than April 30, 2004.
22	The project plan shall be updated annually with each annual budget submission.
23	SEC. 435. AUTHORIZATION OF APPROPRIATIONS.
24	(a) RESEARCH, DEVELOPMENT AND DESIGN PROGRAMS.— The following sums are
25	authorized to be appropriated to the Secretary for all activities under this subtitle except for
26	reactor construction:
27	(1) For fiscal year 2004, \$35,000,000;
28	(2) For each of fiscal years 2005-2008, \$150,000,000; and
29	(3) For fiscal years beyond 2008, such funds as are needed are authorized t

(3) For fiscal years beyond 2008, such funds as are needed are authorized to

1	be appropriated.
2	(b) REACTOR CONSTRUCTION.—The following sum is authorized to be appropriated
3	to the Secretary for all project-related construction activities, to be available until
4	expended, \$500,000,000.
5	Subtitle D—Miscellaneous Matters
6	SEC. 441. EMISSION-FREE CONTROL MEASURES UNDER A STATE IMPLEMENTATION
7	PLAN.
8	(a) Definitions.—In this subtitle—
9	(1) The term "criteria air pollutant" means a pollutant listed under section
10	108(a) of the Clean Air Act (42 U.S.C. 7408(a)).
11	(2) The term "emission-free electricity source" means—
12	(A) a facility that generates electricity without emitting criteria
13	pollutants as a result of onsite operations of the facility; and
14	(B) a facility that generates electricity using nuclear fuel that meets
15	all applicable standards for radiological emissions under section 112 of the
16	Clean Air Act (42 U.S.C. 7412).
17	(3) The term "hazardous pollutant" has the meaning given the term in
18	section 112(a) of the Clean Air Act (42 U.S.C. 7412(a)).
19	(4) The term "improvement in availability" means an increase in the amount
20	of electricity produced by an emission-free electricity source that provides, or has
21	the potential to provide, a commensurate reduction in output from emitting sources.
22	(5) The term "increased emission-free capacity project" means a project to
23	construct an emission-free electricity source or increase the rated capacity of an
24	existing emission-free electricity source.
25	(b) Treatment of Certain State Actions as Control Measures.—An action
26	taken by a State to support the continued operation of an emission-free electricity source or
27	to support an improvement in availability or an increased emission-free capacity project
28	shall be considered to be a control measure for the purposes of section 110(a) of the Clean
29	Air Act (42 U.S.C. 7410(a)).

1	(c) ECONOMIC INCENTIVE PROGRAMS.—Emissions of criteria air pollutants or
2	hazardous pollutants prevented or avoided by an improvement in availability or the
3	operation of increased emission-free capacity shall be eligible for, and may not be excluded
4	from, incentive programs used as control measures, including programs authorizing
5	emission trades, revolving loan funds, tax benefits, and special financing programs.
6	SEC. 442. URANIUM SALES AND TRANSFERS.
7	Section 3112 of the USEC Privatization Act (42 U.S.C. 2297h-10) is amended by
8	striking subsections (d) and (e) and inserting the following:
9	"(d)(1)(A) The aggregate annual deliveries of uranium in any form (including
10	natural uranium concentrates, natural uranium hexafluoride, enriched uranium, and
11	depleted uranium) sold or transferred for commercial nuclear power end uses by the United
12	States Government shall not exceed 3,000,000 pounds U_3O_8 equivalent per year through
13	calendar year 2009. Such aggregate annual deliveries shall not exceed 5,000,000 pounds
14	$\rm U_3O_8$ equivalent per year in calendar years 2010 and 2011. Such aggregate annual
15	deliveries shall not exceed 7,000,000 pounds U_3O_8 equivalent in calendar year 2012. Such
16	aggregate annual deliveries shall not exceed 10,000,000 pounds U_3O_8 equivalent per year
17	in calendar year 2013 and each year thereafter. Any sales or transfers by the United States
18	Government to commercial end users shall be limited to long-term contracts of no less than
19	3 years duration.
20	"(B) The recovery and extraction of the uranium component from contaminated
21	uranium bearing materials from United States Government sites by commercial entities
22	shall be the preferred method of making uranium available under this subsection. The
23	uranium component contained in such contaminated materials shall be counted against the
24	annual maximum deliveries set forth in this section, provided that uranium is sold to end
25	users.
26	"(C) Sales or transfers of uranium by the United States Government for the
27	following purposes are exempt from the provisions of this subsection—
28	"(i) sales or transfers provided for under existing law for use by the
29	Tennessee Valley Authority in relation to the Department of Energy's high-enriched

1	uranium or tritium programs;
2	"(ii) sales or transfers to the Department of Energy research reactor sales
3	program;
4	"(iii) the transfer of up to 3,293 metric tons of uranium to the United States
5	Enrichment Corporation to replace uranium that the Secretary transferred, prior to
6	privatization of the United States Enrichment Corporation in July 1998, to the
7	Corporation on or about June 30, 1993, April 20, 1998, and May 18, 1998, and that
8	does not meet commercial specifications;
9	"(iv) the sale or transfer of any natural uranium for emergency purposes in
10	the event of a disruption in supply to end users in the United States;
11	"(v) the sale or transfer of any natural uranium in fulfillment of the United
12	States Government's obligations to provide security of supply with respect to
13	implementation of the Russian HEU Agreement; and
14	"(vi) the sale or transfer of any enriched uranium for use in an advanced
15	commercial nuclear power plant in the United States with nonstandard fuel
16	requirements.
17	"(D) The Secretary may transfer or sell enriched uranium to any person for national
18	security purposes, as determined by the Secretary.
19	"(2) Except as provided in subsections (b) and (c), and in paragraph (1)(B) and (C)
20	of this subsection, no sale or transfer of uranium in any form shall be made by the United
21	States Government unless—
22	"(A) the President determines that the material is not necessary for national
23	security needs;
24	"(B) the price paid to the Secretary will not be less than the fair market
25	value of the material, as determined at the time that such material is contracted for
26	sale;
27	"(C) prior to any sale or transfer, the Secretary solicits the written views of
28	the Department of State and the National Security Council with regard to whether
29	such sale or transfer would have any adverse effect on national security interests of

1	the United States, including interests related to the implementation of the Russian
2	HEU Agreement; and
3	"(D) neither the Department of State nor the National Security Council
4	objects to such sale or transfer.
5	The Secretary shall endeavor to determine whether a sale or transfer is permitted under this
6	paragraph within 30 days. The Secretary's determinations pursuant to this paragraph shall
7	be made available to interested members of the public prior to authorizing any such sale or
8	transfer.
9	"(3) Within 1 year after the date of enactment of this subsection and annually
10	thereafter the Secretary shall undertake an assessment for the purpose of reviewing
11	available excess Government uranium inventories, and determining, consistent with the
12	procedures and limitations established in this subsection, the level of inventory to be sold
13	or transferred to end users.
14	"(4) Within 5 years after the date of enactment of this subsection and biennially
15	thereafter the Secretary shall report to the Congress on the implementation of this
16	subsection. The report shall include a discussion of all sales or transfers made by the
17	United States Government, the impact of such sales or transfers on the domestic uranium
18	industry, the spot market uranium price, and the national security interests of the United
19	States, and any steps taken to remediate any adverse impacts of such sales or transfers.
20	"(5) For purposes of this subsection, the term 'United States Government' does not
21	include the Tennessee Valley Authority.".
22	TITLE V—RENEWABLE ENERGY
23	Subtitle A—General Provisions
24	SEC. 501. ASSESSMENT OF RENEWABLE ENERGY RESOURCES.
25	(a) RESOURCE ASSESSMENT.—Not later than 6 months after the date of enactment
26	of this title, and each year thereafter, the Secretary of Energy shall review the available
27	assessments of renewable energy resources within the United States, including solar, wind,
28	biomass, ocean, geothermal, and hydroelectric energy resources, and undertake new

1	assessments as necessary, taking into account changes in market conditions, available
2	technologies, and other relevant factors.
3	(b) CONTENTS OF REPORTS.—Not later than 1 year after the date of enactment of
4	this title, and each year thereafter, the Secretary shall publish a report based on the
5	assessment under subsection (a). The report shall contain—
6	(1) a detailed inventory describing the available amount and characteristics
7	of the renewable energy resources; and
8	(2) such other information as the Secretary believes would be useful in
9	developing such renewable energy resources, including descriptions of surrounding
10	terrain, population and load centers, nearby energy infrastructure, location of
11	energy and water resources, and available estimates of the costs needed to develop
12	each resource, together with an identification of any barriers to providing adequate
13	transmission for remote sources of renewable energy resources to current and
14	emerging markets, recommendations for removing or addressing such barriers, and
15	ways to provide access to the grid that do not unfairly disadvantage renewable or
16	other energy producers.
17	(c) AUTHORIZATION OF APPROPRIATIONS.— For the purposes of this section, there
18	are authorized to be appropriated to the Secretary of Energy \$20,000,000 for each of fiscal
19	years 2004 through 2008.
20	SEC. 502. RENEWABLE ENERGY PRODUCTION INCENTIVE.
21	Section 1212 of the Energy Policy Act of 1992 (42 U.S.C. 13317) is amended as
22	follows:
23	(1) in subsection (a) by striking "and which satisfies" and all that follows
24	through "Secretary shall establish" and inserting ". The Secretary shall establish
25	other procedures necessary for efficient administration of the program. The
26	Secretary shall not establish any criteria or procedures that have the effect of
27	assigning to proposals a higher or lower priority for eligibility or allocation of
28	appropriated funds on the basis of the energy source proposed.";
29	(2) in subsection (b) —

1	(A) by striking "a State or any political" and all that follows through
2	"nonprofit electrical cooperative" and inserting "an electricity-generating
3	cooperative exempt from taxation under section 501(c)(12) or section
4	1381(a)(2)(C) of the Internal Revenue Code of 1986, a public utility
5	described in section 115 of such Code, a State, Commonwealth, territory, or
6	possession of the United States or the District of Columbia, or a political
7	subdivision thereof, or an Indian tribal government or sub-division
8	thereof,"; and
9	(B) by inserting "landfill gas," after "wind, biomass,";
10	(3) in subsection (c), by striking "during the 10-fiscal year period beginning
11	with the first full fiscal year occurring after the enactment of this section" and
12	inserting "before October 1, 2013";
13	(4) in subsection (d), by inserting "or in which the Secretary finds that all
14	necessary Federal and State authorizations have been obtained to begin construction
15	of the facility" after "eligible for such payments";
16	(5) in subsection (e)(1), by inserting "landfill gas," after "wind, biomass,";
17	(6) in subsection (f), by striking "the expiration of" and all that follows
18	through "of this section" and inserting "September 30, 2023"; and
19	(7) in subsection (g) —
20	(A) by striking "1993, 1994, and 1995" and inserting "2003 through
21	2023"; and
22	(B) by inserting "Funds may be appropriated pursuant to this
23	subsection to remain available until expended." after "purposes of this
24	section."
25	SEC. 503. RENEWABLE ENERGY ON FEDERAL LANDS.
26	(a) REPORT.—Within 24 months after the date of enactment of this Act, the
27	Secretary of the Interior, in cooperation with the Secretary of Agriculture, shall develop
28	and report to the Congress recommendations on opportunities to develop renewable energy
29	on public lands under the jurisdiction of the Secretary of the Interior and National Forest

1	System lands under the jurisdiction of the Secretary of Agriculture. The report shall
2	include—
3	(1) 5-year plans developed by the Secretary of the Interior and the Secretary
4	of Agriculture, respectively, for encouraging the development of renewable energy
5	consistent with applicable law and management plans; and
6	(2) an analysis of—
7	(A) the use of rights-of-way, leases, or other methods to develop
8	wind and solar energy on such lands;
9	(B) the anticipated benefits of grants, loans, tax credits, or other
10	provisions to promote wind and solar energy development on such lands;
11	and
12	(C) any issues that the Secretary of the Interior or the Secretary of
13	Agriculture have encountered in managing renewable energy projects on
14	such lands, or believe are likely to arise in relation to the development of
15	renewable energy on such lands;
16	(3) a list, developed in consultation with the Secretary of Energy and the
17	Secretary of Defense, of lands under the jurisdiction of the Department of Energy
18	or Defense that would be suitable for development for renewable energy, and any
19	recommended statutory and regulatory mechanisms for such development; and
20	(4) any recommendations pertaining to the issues addressed in the report.
21	(b) National Academy of Sciences Study.—
22	(1) Not later than 90 days after the date of the enactment of this section, the
23	Secretary of the Interior shall contract with the National Academy of Sciences to—
24	(A) study the potential for the development of wind, solar, and ocean
25	energy on the Outer Continental Shelf;
26	(B) assess existing Federal authorities for the development of such
27	resources; and
28	(C) recommend statutory and regulatory mechanisms for such
29	development.

1	(2) The results of the study shall be transmitted to the Congress within 24
2	months after the date of the enactment of this section.
3	SEC. 504. FEDERAL PURCHASE REQUIREMENT.
4	(a) REQUIREMENT.— The President, acting through the Secretary of Energy, shall
5	seek to ensure that, to the extent economically feasible and technically practicable, of the
6	total amount of electric energy the Federal Government consumes during any fiscal year,
7	the following amounts shall be renewable energy—
8	(1) not less than 3 percent in fiscal years 2005 through 2007,
9	(2) not less than 5 percent in fiscal years 2008 through 2010, and
10	(3) not less than 7.5 percent in fiscal year 2011 and each fiscal year
11	thereafter,
12	(b) Definition.— For purposes of this section, the term "renewable energy" means
13	electric energy generated from solar, wind, biomass, geothermal, municipal solid waste, or
14	additional hydroelectric generation capacity achieved from increased efficiency or
15	additions of new capacity.
16	(c) CALCULATION.— For purposes of determining compliance with the requirement
17	of this section, the amount of renewable energy shall be doubled if —
18	(1) the renewable energy is produced and used on-site at a Federal facility;
19	(2) the renewable energy is produced on Federal lands and used at a Federa
20	facility; or
21	(3) the renewable energy is produced on Indian land as defined in Title
22	XXVI of the Energy Policy Act of 1992 (25 U.S.C. 3501 et. seq.) and used at a
23	Federal facility.
24	(d) REPORT.— Not later than April 15, 2005, and every 2 years thereafter, the
25	Secretary of Energy shall provide a report to the Congress on the progress of the Federal
26	Government in meeting the goals established by this section.
27	Subtitle B—Hydroelectric Licensing
28	SEC. 511. ALTERNATIVE CONDITIONS AND FISHWAYS.
29	(a) FEDERAL RESERVATIONS.—Section 4(e) of the Federal Power Act (16 U.S.C.

1	797(e)) is amended by inserting after "adequate protection and utilization of such
2	reservation." at the end of the first proviso the following:
3	"The license applicant shall be entitled to a determination on the record,
4	after opportunity for an agency trial-type hearing of any disputed issues of material
5	fact, with respect to such conditions.".
6	(b) FISHWAYS.—Section 18 of the Federal Power Act (16 U.S.C. 811) is amended
7	by inserting after "and such fishways as may be prescribed by the Secretary of Commerce."
8	the following: "The license applicant shall be entitled to a determination on the record,
9	after opportunity for an agency trial-type hearing of any disputed issues of material fact,
10	with respect to such fishways.".
11	(c) ALTERNATIVE CONDITIONS AND PRESCRIPTIONS.—Part I of the Federal Power
12	Act (16 U.S.C. 791a et seq.) is amended by adding the following new section at the end
13	thereof:
14	"SEC. 33. ALTERNATIVE CONDITIONS AND PRESCRIPTIONS.
15	"(a) Alternative Conditions.—
16	"(1) Whenever any person applies for a license for any project works within
17	any reservation of the United States, and the Secretary of the Department under
18	whose supervision such reservation falls (referred to in this subsection as 'the
19	Secretary') deems a condition to such license to be necessary under the first proviso
20	of section 4(e), the license applicant may propose an alternative condition.
21	"(2) Notwithstanding the first proviso of section 4(e), the Secretary shall
22	accept the proposed alternative condition referred to in paragraph (1), and the
23	Commission shall include in the license such alternative condition, if the Secretary
24	determines, based on substantial evidence provided by the license applicant or
25	otherwise available to the Secretary, that such alternative condition -
26	"(A) provides for the adequate protection and utilization of the reservation;
27	and
28	"(B) will either—
29	"(i) cost less to implement; or

"(ii) result in improved operation of the project works for electricity production, as compared to the condition initially deemed necessary by the Secretary.

"(3) The Secretary concerned shall submit into the public record of the Commission proceeding with any condition under section 4(e) or alternative condition it accepts under this section, a written statement explaining the basis for such condition, and reason for not accepting any alternative condition under this section. The written statement must demonstrate that the Secretary gave equal consideration to the effects of the condition adopted and alternatives not accepted on energy supply, distribution, cost, and use; flood control; navigation; water supply; and air quality (in addition to the preservation of other aspects of environmental quality); based on such information as may be available to the Secretary, 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.
- "(b) ALTERNATIVE PRESCRIPTIONS.—

1	(1) Whenever the Secretary of the Interior or the Secretary of Commerce
2	prescribes a fishway under section 18, the license applicant or licensee may propose
3	an alternative to such prescription to construct, maintain, or operate a fishway. The
4	alternative may include a fishway or an alternative to a fishway.
5	"(2) Notwithstanding section 18, the Secretary of the Interior or the
6	Secretary of Commerce, as appropriate, shall accept and prescribe, and the
7	Commission shall require, the proposed alternative referred to in paragraph (1), if
8	the Secretary of the appropriate department determines, based on substantial
9	evidence provided by the licensee or otherwise available to the Secretary, that such
10	alternative—
11	"(A) will be no less protective of the fish resources than the fishway
12	initially prescribed by the Secretary; and
13	"(B) will either—
14	"(i) cost less to implement; or
15	"(ii) result in improved operation of the project works for
16	electricity production, as compared to the fishway initially deemed
17	necessary by the Secretary.
18	"(3) The Secretary concerned shall submit into the public record of the
19	Commission proceeding with any prescription under section 18 or alternative
20	prescription it accepts under this section, a written statement explaining the basis
21	for such prescription, and reason for not accepting any alternative prescription
22	under this section. The written statement must demonstrate that the Secretary gave
23	equal consideration to the effects of the condition adopted and alternatives not
24	accepted on energy supply, distribution, cost, and use; flood control; navigation;
25	water supply; and air quality (in addition to the preservation of other aspects of
26	environmental quality); based on such information as may be available to the
27	Secretary, including information voluntarily provided in a timely manner by the
28	applicant and others. The Secretary shall also submit, together with the
29	aforementioned written statement, all studies, data, and other factual information

1	available to the Secretary and relevant to the Secretary's decision.
2	"(4) Nothing in this section shall prohibit other interested parties from
3	proposing alternative prescriptions.
4	"(5) If the Secretary concerned does not accept an applicant's alternative
5	prescription under this section, and the Commission finds that the Secretary's
6	prescription would be inconsistent with the purposes of this part, or other applicable
7	law, the Commission may refer the dispute to the Commission's Dispute Resolution
8	Service. The Dispute Resolution Service shall consult with the Secretary and the
9	Commission and issue a non-binding advisory within 90 days. The Secretary may
10	accept the Dispute Resolution Service advisory unless the Secretary finds that the
11	recommendation will not adequately protect the fish resources. The Secretary shall
12	submit the advisory and the Secretary's final written determination into the record
13	of the Commission's proceeding.".
14	Subtitle C—Geothermal Energy
15	SEC. 521. COMPETITIVE LEASE SALE REQUIREMENTS.
16	(a) In General.— Section 4 of the Geothermal Steam Act of 1970 (30 U.S.C.
17	1003) is amended by adding at the end the following:
18	"(g) NOMINATIONS.—The Secretary shall accept nominations at any time
19	from qualified companies and individuals of areas to be leased under this Act.
20	"(h) Competitive Lease Sale Required.— The Secretary shall hold a
21	competitive lease sale at least once every 2 years for lands in a State in which there
22	are nominations pending under subsection (g).
23	"(i) Noncompetitive Leasing.—The Secretary shall make available for a
24	period of 2 years for noncompetitive leasing any tract for which a competitive lease
25	sale is held, but for which the Secretary does not receive any bids in the competitive
26	lease sale.".
27	(b) PENDING LEASE APPLICATIONS.— It shall be a priority for the Secretary of the
28	Interior and, with respect to National Forest lands, the Secretary of Agriculture, to insure

1 timely completion of administrative actions necessary to conduct competitive lease sales 2 for areas with pending applications for geothermal leasing as of the date of enactment of 3 this section. 4 SEC. 522. GEOTHERMAL LEASING AND PERMITTING ON FEDERAL LANDS. 5 (a) IN GENERAL.—Not later than 180 days after the date of the enactment of this section, the Secretary of the Interior and the Secretary of Agriculture shall enter into and 6 7 submit to the Congress a memorandum of understanding in accordance with this section 8 regarding leasing and permitting for geothermal development of public lands under their 9 respective jurisdictions. 10 (b) Lease and Permit Applications.—The memorandum of understanding shall— 11 (1) identify known geothermal areas on public lands within the National 12 13 Forest System and, when necessary, require review of management plans to 14 consider leasing under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) 15 as a land use: (2) provide that the Secretary receiving a lease application shall within 30 16 17 days provide written notice to the lease applicant regarding the status of the 18 application, including an estimate of the time that will be required to complete 19 action on the application; and 20 (3) establish an administrative procedure for processing geothermal lease 21 applications, including lines of authority, steps in application processing, and time 22 limits for application processing. 23 (c) DATA RETRIEVAL SYSTEM.— The memorandum of understanding shall 24 establish a joint data retrieval system that is capable of tracking lease and permit 25 applications and providing to the applicant information as to their status within the 26 Departments of the Interior and Agriculture, including an estimate of the time required for 27 administrative action. 28 SEC. 523. LEASING AND PERMITTING ON FEDERAL LANDS WITHDRAWN FOR MILITARY

PURPOSES.

29

1	Not later than 1 year after the date of the enactment of this Act, the Secretary of the
2	Interior and the Secretary of Defense, in consultation with interested states, counties and
3	representatives of the geothermal industry, shall jointly submit to the Congress a report
4	concerning leasing and permitting activities for geothermal energy on Federal lands
5	withdrawn for military purposes. Such report shall —
6	(1) describe any differences, including differences in royalty structure and
7	revenue sharing with states and counties, between—
8	(A) the implementation of the Geothermal Steam Act of 1970 (30
9	U.S.C. 1001 et seq.) and other applicable Federal law by the Secretary of the
10	Interior; and
11	(B) the administration of geothermal leasing under Section 2689 of
12	title 10, United States Code, by the Secretary of Defense;
13	(2) identify procedures for interagency coordination to ensure efficient
14	processing and administration of leases or contracts for geothermal energy on
15	federal lands withdrawn for military purposes, consistent with the defense purposes
16	of such withdrawals; and
17	(3) provide recommendations for legislative or administrative actions that
18	could facilitate program administration, including a common royalty structure.
19	SEC. 524. REINSTATEMENT OF LEASES TERMINATED FOR FAILURE TO PAY RENT.
20	(a) Lease Reinstatement.—Section 5(c) of the Geothermal Steam Act of 1970
21	(30 U.S.C. 1004), is amended in the last sentence by inserting "or was inadvertent," after
22	"reasonable diligence,".
23	(b) EFFECTIVE DATE.—This statute, as amended, shall be applicable retroactively to
24	any geothermal lease with a rental payment due after October 1, 2002.
25	SEC. 525. REVIEW AND REPORT TO CONGRESS.
26	Not later than 1 year after the date of enactment of this section, the Secretary of the
27	Interior shall promptly review and report to the Congress on the status of all moratoria on
28	and withdrawals from leasing under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et
29	seq.) of known geothermal resources areas (as that term is defined in section 2 of that Act

1	(30 U.S.C. 1001), specifying for each such area whether the basis for such moratoria or
2	withdrawal still applies.
3	SEC. 526. ROYALTY REDUCTION AND RELIEF.
4	(a) ROYALTY REDUCTION.— Section 5(a) of the Geothermal Steam Act of 1970 (30
5	U.S.C. 1004(a)) is amended by striking "not less than 10 per centum or more than 15 per
6	centum" and inserting "not more than 8 per centum".
7	(b) ROYALTY RELIEF.— Notwithstanding section 5 of the Geothermal Steam Act of
8	1970 (30 U.S.C. 1004(a)) and any provision of any lease under that Act, no royalty is
9	required to be paid —
10	(1) under any qualified geothermal energy lease with respect to the first
11	three years of commercial production of heat or energy from a facility that begins
12	such production within 5 years after the date of the enactment of this subtitle; or
13	(2) on qualified expansion geothermal energy.
14	(c) Effective Date.— The provisions of this section shall apply only to royalties
15	paid after the date of enactment of this section with respect to any lease executed under the
16	Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) before, on, or after the date of
17	enactment of this section.
18	(d) Definitions.—In this section:
19	(1) The term "qualified expansion geothermal energy" means geothermal
20	energy produced from a generation facility for which the rated capacity is increased
21	by more than 10 percent as a result of expansion of the facility carried out in the
22	5-year period beginning on the date of the enactment of this subtitle but does not
23	include the rated capacity of the generation facility on the date of the enactment of
24	this section.
25	(2) The term "qualified geothermal energy lease" means a lease under the
26	Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) that is executed within 5
27	years after the date of the enactment of this subtitle, and under which no
28	commercial production of any form of heat or energy occurred before the date of
29	the enactment of this subtitle.

1	SEC. 527. ROYALTY EXEMPTION FOR DIRECT USE OF LOW TEMPERATURE
2	GEOTHERMAL ENERGY RESOURCES.
3	(a) ROYALTY EXEMPTION.—Section 5 of the Geothermal Steam Act of 1970 (30
4	U.S.C. 1004) is amended—
5	(1) in paragraph (c), by redesignating subparagraphs (1) and (2) as
6	subparagraphs (A) and (B);
7	(2) by redesignating paragraphs (a) through (d) in order as paragraphs (1)
8	through (4);
9	(3) by inserting '(a) IN GENERAL.—' after 'SEC. 5.'; and
10	(4) by adding at the end the following new subsection:
11	"(b) Exemption for Use of Low Temperature Resources.—
12	"(1) In General.—In lieu of any royalty or rental under
13	subsection (a), a lease for qualified development and direct
14	utilization of low temperature geothermal resources shall provide for
15	payment by the lessee of an annual fee of not less than \$100, and not
16	more than \$1,000, in accordance with the schedule issued under
17	paragraph (2).
18	"(2) SCHEDULE.—The Secretary shall issue a schedule of
19	fees under this section under which a fee is based on the scale of
20	development and utilization to which the fee applies.
21	"(3) DEFINITIONS.—In this subsection:
22	"(A) Low Temperature Geothermal
23	RESOURCES.—The term 'low temperature geothermal
24	resources' means geothermal steam and associated
25	geothermal resources having a temperature of less than 195
26	degrees Fahrenheit.
27	"(B) Qualified Development and Direct
28	UTILIZATION.—The term 'qualified development and direct
29	utilization' means development and utilization in which all
	1

1	products of geothermal resources, other than any heat
2	utilized, are returned to the geothermal formation from which
3	they are produced.".
4	Subtitle D —Biomass Energy
5	SEC. 531. DEFINITIONS.
6	For the purposes of this subtitle:
7	(1) The term "eligible operation" means a facility that is located within the
8	boundaries of an eligible community and uses biomass as a raw material to produce
9	electric energy, sensible heat, transportation fuels, or substitutes for
10	petroleum-based products.
11	(2) The term "biomass" means trees and woody plants, including limbs,
12	tops, needles, and other woody parts, and byproducts of preventive treatment such
13	as wood, brush, thinnings, chips, slash, or other non-merchantable material, that are
14	removed to reduce hazardous fuels, reduce the risk of disease or insect infestation,
15	contain disease or insect infestation, or reduce stand density.
16	(3) The term "green ton" means 2,000 pounds of biomass that has not been
17	mechanically or artificially dried.
18	(4) The term "Secretary" means —
19	(A) with respect to lands within the National Forest System, the
20	Secretary of Agriculture; or
21	(B) with respect to Federal lands under the jurisdiction of the
22	Secretary of the Interior and Indian lands, the Secretary of the Interior.
23	(5) The term "eligible community" means any county, town, township,
24	municipality, or other similar unit of local government that has a population of not
25	more than 50,000 individuals and is determined by the Secretary to be located near
26	an area which is at significant risk of catastrophic wildfire, disease, or insect
27	infestation or which suffers from disease or insect infestation.
28	(6) The term "Indian tribe" has the meaning given the term in section 4(e) of

1	the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b(e)).
2	(7) The term "person" includes —
3	(A) an individual;
4	(B) an eligible community;
5	(C) an Indian tribe;
6	(D) a small business or a corporation that is incorporated in the
7	United States; or
8	(E) a nonprofit organization.
9	SEC. 532. BIOMASS COMMERCIAL UTILIZATION GRANT PROGRAM.
10	(a) In General.—The Secretary may make grants to any person that owns or
11	operates an eligible operation to offset the costs incurred to purchase biomass for use by
12	such eligible operation.
13	(b) LIMITATION.—No grant provided under this subsection shall be paid at a rate
14	that exceeds \$20 per green ton of biomass delivered.
15	(c) RECORDS.— Each grant recipient shall keep such records as the Secretary may
16	require to fully and correctly disclose the use of the grant funds and all transactions
17	involved in the purchase of biomass. Upon notice by the Secretary, the grant recipient
18	shall provide the Secretary reasonable access to examine the inventory and records of any
19	facility that purchases or uses biomass and is operated or owned by the grant recipient.
20	(d) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there
21	are authorized to be appropriated \$12,500,000 each to the Secretary of Interior and the
22	Secretary of Agriculture for each fiscal year from 2004 through 2008, to remain available
23	until expended.
24	SEC. 533. IMPROVED BIOMASS UTILIZATION GRANT PROGRAM.
25	(a) In General.—The Secretary may make grants to persons in eligible
26	communities to offset the costs of developing or researching proposals to improve the use
27	of biomass or add value to biomass utilization.
28	(b) SELECTION.—Grant recipients shall be selected based on the potential for the
29	proposal to –

1	(1) develop affordable thermal or electric energy resources for the benefit of
2	an eligible community;
3	(2) provide opportunities for the creation or expansion of small businesses
4	within an eligible community; and
5	(3) create new job opportunities within an eligible community.
6	(c) LIMITATION.—No grant awarded under this subsection shall exceed \$100,000.
7	(d) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there
8	are authorized to be appropriated \$12,500,000 each to the Secretary of Interior and the
9	Secretary of Agriculture for each fiscal year from 2004 through 2008, to remain available
10	until expended.
11	SEC. 534. REPORT.
12	Not later than 3 years after the date of enactment of this subtitle, the Secretary of
13	the Interior and the Secretary of Agriculture shall jointly submit to the Congress a report
14	that describes the interim results of the programs authorized under this subtitle. Such report
15	shall include identification of the size, type, and the use of biomass by persons that receive
16	grants under this subtitle, including a description of all eligible operations and communities
17	that participate and identification of the economic benefits that result from the grants
18	awarded under this subtitle.
19	TITLE VI — ENERGY EFFICIENCY
20	Subtitle A – Federal Programs
21	SEC. 601. ENERGY MANAGEMENT REQUIREMENTS.
22	(a) ENERGY REDUCTION GOALS.—Section 543(a)(1) of the National Energy
23	Conservation Policy Act (42 U.S.C. 8253(a)(1)) is amended by striking "its Federal
24	buildings so that" and all that follows through the end and inserting "the Federal buildings
25	of the agency (including each industrial or laboratory facility) so that the energy
26	consumption per gross square foot of the Federal buildings of the agency in fiscal years
27	2004 through 2013 is reduced, as compared with the energy consumption per gross square
28	foot of the Federal buildings of the agency in fiscal year 2000, by the percentage specified

1	in the following table:
2	"Fiscal Year Percentage reduction
3	2004
4	20054
5	20066
6	2007 8
7	2008
8	2009
9 10	2010
11	2012
12	2013
13	(b) Effective Date.— The energy reduction goals and baseline established in
14	paragraph (1) of section 543(a) of the National Energy Conservation Policy Act, as
15	amended by subsection (a) of this section, supersede all previous goals and baselines under
16	such paragraph, and related reporting requirements.
17	(c) REVIEW OF ENERGY PERFORMANCE REQUIREMENTS.—Section 543(a) of the
18	National Energy Conservation Policy Act (42 U.S.C. 8253(a)) is further amended by
19	adding at the end the following:
20	"(3) Not later than December 31, 2011, the Secretary shall review the results
21	of the implementation of the energy performance requirement established under
22	paragraph (1) and submit to Congress recommendations concerning energy
23	performance requirements for fiscal years 2014 through 2022.".
24	(d) Exclusions.—Section 543(c)(1) of the National Energy Conservation Policy
25	Act (42 U.S.C. 8253(c)(1)) is amended by striking "An agency may exclude" and all that
26	follows through the end and inserting—
27	"(A) An agency may exclude, from the energy performance requirement for
28	a fiscal year established under subsection (a) and the energy management
29	requirement established under subsection (b), any Federal building or collection of
30	Federal buildings, if the head of the agency finds that—
31	"(i) compliance with those requirements would be impracticable;

1	"(ii) the agency has completed and submitted all federally required
2	energy management reports;
3	"(iii) the agency has achieved compliance with the energy efficiency
4	requirements of this Act, the Energy Policy Act of 1992, Executive Orders,
5	and other Federal law; and
6	"(iv) the agency has implemented all practicable, life-cycle cost-
7	effective projects with respect to the Federal building or collection of
8	Federal buildings to be excluded.
9	"(B) A finding of impracticability under subparagraph (A)(i) shall be based
10	on—
11	"(i) the energy intensiveness of activities carried out in the Federal
12	building or collection of Federal buildings; or
13	"(ii) the fact that the Federal building or collection of Federal
14	buildings is used in the performance of a national security function.".
15	(e) REVIEW BY SECRETARY.—Section 543(c)(2) of the National Energy
16	Conservation Policy Act (42 U.S.C. 8253(c)(2)) is amended—
17	(1) by striking "impracticability standards" and inserting "standards for
18	exclusion"; and
19	(2) by striking "a finding of impracticability" and inserting "the exclusion".
20	(f) Criteria.—Section 543(c) of the National Energy Conservation Policy Act (42
21	U.S.C. 8253(c)) is further amended by adding at the end the following:
22	"(3) Not later than 180 days after the date of enactment of this paragraph,
23	the Secretary shall issue guidelines that establish criteria for exclusions under
24	paragraph (1).".
25	(g) RETENTION OF ENERGY SAVINGS.—Section 546 of the National Energy
26	Conservation Policy Act (42 U.S.C. 8256) is amended by adding at the end the following
27	new subsection:
28	"(e) RETENTION OF ENERGY SAVINGS.—An agency may retain any funds
29	appropriated to that agency for energy expenditures, at buildings subject to the

1	requirements of section 543(a) and (b), that are not made because of energy
2	savings. Except as otherwise provided by law, such funds may be used only for
3	energy efficiency or unconventional and renewable energy resources projects.".
4	(h) REPORTS.—Section 548(b) of the National Energy Conservation Policy Act (42
5	U.S.C. 8258(b)) is amended—
6	(1) in the subsection heading, by inserting "THE PRESIDENT AND"
7	before "CONGRESS"; and
8	(2) by inserting "President and" before "Congress".
9	(i) CONFORMING AMENDMENT.—Section 550(d) of the National Energy
10	Conservation Policy Act (42 U.S.C. 8258b(d)) is amended in the second sentence by
11	striking "the 20 percent reduction goal established under section 543(a) of the National
12	Energy Conservation Policy Act (42 U.S.C. 8253(a))." and inserting "each of the energy
13	reduction goals established under section 543(a).".
14	SEC. 602. ENERGY USE MEASUREMENT AND ACCOUNTABILITY.
15	Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is
16	further amended by adding at the end the following:
17	"(e) Metering of Energy Use.—
18	"(1) DEADLINE.—By October 1, 2010, in accordance with guidelines
19	established by the Secretary under paragraph (2), all Federal buildings shall, for the
20	purposes of efficient use of energy and reduction in the cost of electricity used in
21	such buildings, be metered or submetered. Each agency shall use, to the maximum
22	extent practicable, advanced meters or advanced metering devices that provide data
23	at least daily and that measure at least hourly consumption of electricity in the
24	Federal buildings of the agency. Such data shall be incorporated into existing
25	Federal energy tracking systems and made available to Federal facility energy
26	managers.
27	"(2) Guidelines.—
28	"(A) In General.—Not later than 180 days after the date of
29	enactment of this subsection, the Secretary, in consultation with the

1	Department of Defense, the General Services Administration,
2	representatives from the metering industry, utility industry, energy services
3	industry, energy efficiency industry, national laboratories, universities, and
4	Federal facility energy managers, shall establish guidelines for agencies to
5	carry out paragraph (1).
6	"(B) REQUIREMENTS FOR GUIDELINES.— The guidelines shall—
7	"(i) take into consideration—
8	"(I) the cost of metering and submetering and the
9	reduced cost of operation and maintenance expected to result
10	from metering and submetering;
11	"(II) the extent to which metering and submetering
12	are expected to result in increased potential for energy
13	management, increased potential for energy savings and
14	energy efficiency improvement, and cost and energy savings
15	due to utility contract aggregation; and
16	"(III) the measurement and verification protocols of
17	the Department of Energy;
18	"(ii) include recommendations concerning the amount of
19	funds and the number of trained personnel necessary to gather and
20	use the metering information to track and reduce energy use;
21	"(iii) establish priorities for types and locations of buildings
22	to be metered and submetered based on cost effectiveness and a
23	schedule of one or more dates, not later than 1 year after the date of
24	issuance of the guidelines, on which the requirements specified in
25	paragraph (1) shall take effect; and
26	"(iv) establish exclusions from the requirements specified in
27	paragraph (1) based on the de minimis quantity of energy use of a
28	Federal building, industrial process, or structure.
29	"(3) PLAN.—No later than 6 months after the date guidelines are established

1	under paragraph (2), in a report submitted by the agency under section 548(a), each
2	agency shall submit to the Secretary a plan describing how the agency will
3	implement the requirements of paragraph (1), including—
4	"(A) how the agency will designate personnel primarily responsible
5	for achieving the requirements; and
6	"(B) demonstration by the agency, complete with documentation, of
7	any finding that advanced meters or advanced metering devices, as defined
8	in paragraph (1), are not practicable.".
9	SEC. 603. FEDERAL BUILDING PERFORMANCE STANDARDS.
10	Section 305(a) of the Energy Conservation and Production Act (42 U.S.C. 6834(a))
11	is amended—
12	(a) in paragraph (2)(A), by striking "CABO Model Energy Code, 1992" and
13	inserting "the 2000 International Energy Conservation Code"; and
14	(b) by adding at the end the following:
15	"(3) Revised Federal Building Energy Efficiency Performance
16	Standards.—
17	"(A) In GENERAL.—Not later than 1 year after the date of enactment of this
18	paragraph, the Secretary of Energy shall establish, by rule, revised Federal building
19	energy efficiency performance standards that require that, if cost-effective, for new
20	Federal buildings—
21	"(i) such buildings be designed so as to achieve energy consumption
22	levels at least 30 percent below those of the most recent version of the
23	International Energy Conservation Code, as appropriate; and
24	"(ii) sustainable design principles are applied to the siting, design,
25	and construction of all new and replacement buildings.
26	"(B) ADDITIONAL REVISIONS.—Not later than 1 year after the date of
27	approval of amendments to ASHRAE Standard 90.1 or the 2000 International
28	Energy Conservation Code, the Secretary of Energy shall determine, based on the
29	cost-effectiveness of the requirements under the amendments, whether the revised

1	standards established under this paragraph should be updated to reflect the
2	amendments.
3	"(C) STATEMENT ON COMPLIANCE OF NEW BUILDINGS.—In the budget
4	request of the Federal agency for each fiscal year and each report submitted by the
5	Federal agency under section 548(a) of the National Energy Conservation Policy
6	Act (42 U.S.C. 8258(a)), the head of each Federal agency shall include—
7	"(i) a list of all new Federal buildings owned, operated, or controlled
8	by the Federal agency; and
9	"(ii) a statement concerning whether the Federal buildings meet or
10	exceed the revised standards established under this paragraph.".
11	SEC. 604. ENERGY SAVINGS PERFORMANCE CONTRACTS.
12	(a) PERMANENT EXTENSION.—Section 801(c) of the National Energy Conservation
13	Policy Act (42 U.S.C. 8287(c)) is repealed.
14	(b) REPLACEMENT FACILITIES.—Section 801(a) of the National Energy
15	Conservation Policy Act (42 U.S.C. 8287(a)) is amended by adding at the end the
16	following new paragraph:
17	"(3)(A) In the case of an energy savings contract or energy savings
18	performance contract providing for energy savings through the construction and
19	operation of one or more buildings or facilities to replace one or more existing
20	buildings or facilities, benefits ancillary to the purpose of such contract under
21	paragraph (1) may include savings resulting from reduced costs of operation and
22	maintenance at such replacement buildings or facilities when compared with costs
23	of operation and maintenance at the buildings or facilities being replaced,
24	established through a methodology set forth in the contract.
25	"(B) Notwithstanding paragraph (2)(B), aggregate annual payments by an
26	agency under an energy savings contract or energy savings performance contract
27	referred to in subparagraph (A) may take into account (through the procedures
28	developed pursuant to this section) savings resulting from reduced costs of
29	operation and maintenance as described in that subparagraph.".

1	(c) Energy Savings.—Section 804(2) of the National Energy Conservation Policy
2	Act (42 U.S.C. 8287c(2)) is amended to read as follows:
3	"(2) The term 'energy savings' means—
4	"(A) a reduction in the cost of energy or water, from a base cost
5	established through a methodology set forth in the contract, used in an
6	existing federally owned building or buildings or other federally owned
7	facilities as a result of—
8	"(i) the lease or purchase of operating equipment,
9	improvements, altered operation and maintenance, or technical
10	services;
11	"(ii) the increased efficient use of existing energy sources by
12	co-generation or heat recovery, excluding any co-generation process
13	for other than a federally owned building or buildings or other
14	federally owned facilities; or
15	"(iii) the increased efficient use of existing water sources; or
16	"(B) in the case of a replacement building or facility described in
17	section 801(a)(3), a reduction in the cost of energy, from a base cost
18	established through a methodology set forth in the contract, that would
19	otherwise be utilized in one or more existing federally owned buildings or
20	other federally owned facilities by reason of the construction and operation
21	of the replacement building or facility.".
22	(d) Energy Savings Contract.—Section 804(3) of the National Energy
23	Conservation Policy Act (42 U.S.C. 8287c(3)) is amended to read as follows:
24	"(3) The terms 'energy savings contract' and 'energy savings performance
25	contract' mean a contract which provides for-
26	"(A) the performance of services for the design, acquisition,
27	installation, testing, operation, and, where appropriate, maintenance and
28	repair, of an identified energy or water conservation measure or series of
29	measures at one or more locations; or

1	"(B) energy savings through the construction and operation of one or
2	more buildings or facilities to replace one or more existing buildings or
3	facilities. Such contracts shall, with respect to an agency facility that is a
4	public building as such term is defined in section 13(1) of the Public
5	Buildings Act of 1959 (40 U.S.C. 612(1)), be in compliance with the
6	prospectus requirements and procedures of section 7 of the Public Buildings
7	Act of 1959 (40 U.S.C. 606).".
8	(e) Energy or Water Conservation Measure.—Section 804(4) of the National
9	Energy Conservation Policy Act (42 U.S.C. 8287c(4)) is amended to read as follows:
10	"(4) The term 'energy or water conservation measure' means—
11	"(A) an energy conservation measure, as defined in section 551(4)
12	(42 U.S.C. 8259(4)); or
13	"(B) a water conservation measure that improves water efficiency, is
14	life-cycle cost-effective, and involves water conservation, water recycling or
15	reuse, more efficient treatment of wastewater or stormwater, improvements
16	in operation or maintenance efficiencies, retrofit activities, or other related
17	activities, not at a Federal hydroelectric facility.".
18	(f) PILOT PROGRAM FOR NON-BUILDING APPLICATIONS.—
19	(1) The Secretary of Defense, and the heads of other interested Federal
20	agencies, are authorized to enter into up to 10 energy savings performance contracts
21	under Title VIII of the National Energy Conservation Policy Act (42 U.S.C. 8287 et
22	seq.) for the purpose of achieving energy or water savings, secondary savings, and
23	benefits incidental to those purposes, in non-building applications.
24	(2) The Secretary of Energy, in consultation with the Secretary of Defense
25	and the heads of other interested Federal agencies, shall select projects that
26	demonstrate the applicability and benefits of energy savings performance
27	contracting to a range of non-building applications.
28	(3) For the purposes of this subsection:
29	(A) the term "non-building application" means —

1	(1) any class of vehicles, devices, or equipment that is
2	transportable under its own power by land, sea, or air that consumes
3	energy from any fuel source for the purpose of such transportability,
4	or to maintain a controlled environment within such vehicle, device,
5	or equipment; or
6	(ii) any Federally owned equipment used to generate
7	electricity or transport water.
8	(B) the term "secondary savings", means additional energy or cost
9	savings that are a direct consequence of the energy or water savings that
10	result from the financing and implementation of the energy savings
11	performance contract, including, but not limited to, energy or cost savings
12	that result from a reduction in the need for fuel delivery and logistical
13	support, or the increased efficiency in the production of electricity.
14	(4) Not later than 3 years after the date of enactment of this section, the
15	Secretary of Energy shall report to the Congress on the progress and results of the
16	projects funded pursuant to this section. Such report shall include a description of
17	projects undertaken; the energy, water and cost savings, secondary savings and
18	other benefits that resulted from such projects; and recommendations on whether
19	the pilot program should be extended, expanded, or authorized permanently as a
20	part of the program authorized under Title VIII of the National Energy
21	Conservation Policy act (42 U.S.C. 8287 et seq.).
22	(5) Section 546(c)(3) of the National Energy Conservation Policy Act (42
23	U.S.C. 8256) is amended by striking the word "facilities", and inserting the words
24	"facilities, equipment and vehicles", in lieu thereof.
25	(g) REVIEW.—Within 180 days after the date of the enactment of this section, the
26	Secretary of Energy shall complete a review of the Energy Savings Performance Contract
27	program to identify statutory, regulatory, and administrative obstacles that prevent Federal
28	agencies from fully utilizing the program. In addition, this review shall identify all areas
29	for increasing program flexibility and effectiveness, including audit and measurement

1	verification requirements, accounting for energy use in determining savings, contracting
2	requirements, and energy efficiency services covered. The Secretary shall report these
3	findings to the Committee on Energy and Commerce of the House of Representatives and
4	the Committee on Energy and Natural Resources of the Senate, and shall implement
5	identified administrative and regulatory changes to increase program flexibility and
6	effectiveness to the extent that such changes are consistent with statutory authority.
7	SEC. 605. PROCUREMENT OF ENERGY EFFICIENT PRODUCTS.
8	Part 3 of title V of the National Energy Conservation Policy Act is amended by
9	adding at the end the following:
10	"SEC. 552. FEDERAL PROCUREMENT OF ENERGY EFFICIENT PRODUCTS.
11	"(a) Definitions.—In this section:
12	"(1) The term 'Energy Star product' means a product that is rated for energy
13	efficiency under an Energy Star program.
14	"(2) The term 'Energy Star program' means the program established by
15	section 324A of the Energy Policy and Conservation Act.
16	"(3) The term 'executive agency' has the meaning given the term in section
17	4 of the Office of Federal Procurement Policy Act (41 U.S.C. 403).
18	"(4) The term 'FEMP designated product' means a product that is
19	designated under the Federal Energy Management Program of the Department of
20	Energy as being among the highest 25 percent of equivalent products for energy
21	efficiency.
22	"(b) Procurement of Energy Efficient Products.—
23	"(1) REQUIREMENT.—To meet the requirements of an executive agency for
24	an energy consuming product, the head of the executive agency shall, except as
25	provided in paragraph (2), procure an Energy Star product or a FEMP designated
26	product.
27	"(2) EXCEPTIONS.—The head of an executive agency is not required to
28	procure an Energy Star product or FEMP designated product under paragraph (1) if
29	the head of the executive agency finds in writing that—

1	"(A) an Energy Star product or FEMP designated product is not
2	cost-effective over the life of the product taking energy cost savings into
3	account; or
4	"(B) no Energy Star product or FEMP designated product is
5	reasonably available that meets the functional requirements of the executive
6	agency.
7	"(3) PROCUREMENT PLANNING.—The head of an executive agency shall
8	incorporate into the specifications for all procurements involving energy consuming
9	products and systems, including guide specifications, project specifications, and
10	construction, renovation, and services contracts that include provision of energy
11	consuming products and systems, and into the factors for the evaluation of offers
12	received for the procurement, criteria for energy efficiency that are consistent with
13	the criteria used for rating Energy Star products and for rating FEMP designated
14	products.
15	"(c) Listing of Energy Efficient Products in Federal Catalogs.—Energy
16	Star products and FEMP designated products shall be clearly identified and prominently
17	displayed in any inventory or listing of products by the General Services Administration or
18	the Defense Logistics Agency. The General Services Administration or the Defense
19	Logistics Agency shall supply only Energy Star products or FEMP designated products for
20	all product categories covered by the Energy Star program or the Federal Energy
21	Management Program, except in cases where the agency ordering a product specifies in
22	writing that no Energy Star product or FEMP designated product is available to meet the
23	buyer's functional requirements, or that no Energy Star product or FEMP designated
24	product is cost-effective for the intended application over the life of the product, taking
25	energy cost savings into account.
26	"(d) DESIGNATION OF ELECTRIC MOTORS.—In the case of electric motors of 1 to
27	500 horsepower, agencies shall select only premium efficient motors that meet a standard
28	designated by the Secretary. The Secretary shall designate such a standard within 120 days
20	after the date of the enactment of this section, after considering the recommendations of

1	associated electric motor manufacturers and energy efficiency groups.
2	"(e) REGULATIONS.—Not later than 180 days after the date of the enactment of this
3	section, the Secretary shall issue guidelines to carry out this section.".
4	(b) CONFORMING AMENDMENT.—The table of contents in section 1(b) of the
5	National Energy Conservation Policy Act (42 U.S.C. 8201 note) is amended by inserting
6	after the item relating to the end of the items relating to part 3 of title V the following:
7	"Sec. 552. Federal procurement of energy efficient products.".
8	SEC. 606. CONGRESSIONAL BUILDING EFFICIENCY.
9	(a) In General.—Part 3 of title V of the National Energy Conservation Policy Act
10	is further amended by adding at the end:
11	"SEC. 553. CONGRESSIONAL BUILDING EFFICIENCY.
12	"(a) IN GENERAL.—The Architect of the Capitol—
13	"(1) shall develop, update, and implement a cost-effective energy
14	conservation and management plan (referred to in this section as the 'plan') for all
15	facilities administered by the Congress (referred to in this section as 'congressional
16	buildings') to meet the energy performance requirements for Federal buildings
17	established under section 543(a)(1); and
18	"(2) shall submit the plan to Congress, not later than 180 days after the date
19	of enactment of this section.
20	"(b) Plan Requirements.—The plan shall include—
21	"(1) a description of the life-cycle cost analysis used to determine the cost-
22	effectiveness of proposed energy efficiency projects;
23	"(2) a schedule of energy surveys to ensure complete surveys of all
24	congressional buildings every 5 years to determine the cost and payback period of
25	energy and water conservation measures;
26	"(3) a strategy for installation of life-cycle cost-effective energy and water
27	conservation measures;
28	"(4) the results of a study of the costs and benefits of installation of
29	submetering in congressional buildings; and

1	"(5) information packages and 'how-to' guides for each Member and
2	employing authority of Congress that detail simple, cost-effective methods to save
3	energy and taxpayer dollars in the workplace.
4	"(c) Annual Report.—The Architect shall submit to Congress annually a report
5	on congressional energy management and conservation programs required under this
6	section that describes in detail—
7	"(1) energy expenditures and savings estimates for each facility;
8	"(2) energy management and conservation projects; and
9	"(3) future priorities to ensure compliance with this section.".
10	(b) Table of Contents Amendment.—The table of contents in section 1(b) of the
11	National Energy Conservation Policy Act is amended by adding at the end of the items
12	relating to part 3 of title V the following new item:
13	"Sec. 553. Energy and water savings measures in congressional buildings.".
14	(c) Repeal.—Section 310 of the Legislative Branch Appropriations Act, 1999 (40
15	U.S.C. 166i), is repealed.
16	(d) ENERGY INFRASTRUCTURE.—The Architect of the Capitol, building on the
17	Master Plan Study completed in July 2000, shall commission a study to evaluate the energy
18	infrastructure of the Capital Complex to determine how the infrastructure could be
19	augmented to become more energy efficient, using unconventional and renewable energy
20	resources, in a way that would enable the Complex to have reliable utility service in the
21	event of power fluctuations, shortages, or outages.
22	(e) AUTHORIZATION.—There are authorized to be appropriated to the Architect of
23	the Capitol to carry out subsection (d), not more than \$2,000,000 for fiscal year 2004.
24	SEC. 607. INCREASED USE OF RECOVERED MINERAL COMPONENT IN FEDERALLY
25	FUNDED PROJECTS INVOLVING PROCUREMENT OF CEMENT OR CONCRETE.
26	(a) AMENDMENT.—Subtitle F of the Solid Waste Disposal Act (42 U.S.C. 6961 et
27	seq.) is amended by adding at the end the following new section:
28	"SEC. 6005. INCREASED USE OF RECOVERED MINERAL COMPONENT IN FEDERALLY
29	FUNDED PROJECTS INVOLVING PROCUREMENT OF CEMENT OR CONCRETE.
30	"(a) Definitions.—In this section:

1	"(1) AGENCY HEAD.—The term 'agency head' means—
2	"(A) the Secretary of Transportation; and
3	"(B) the head of each other Federal agency that on a regular basis
4	procures, or provides Federal funds to pay or assist in paying the cost of
5	procuring, material for cement or concrete projects.
6	"(2) CEMENT OR CONCRETE PROJECT.—The term 'cement or concrete
7	project' means a project for the construction or maintenance of a highway or
8	other transportation facility or a Federal, State, or local government building or
9	other public facility that—
10	"(A) involves the procurement of cement or concrete; and
11	"(B) is carried out in whole or in part using Federal funds.
12	"(3) RECOVERED MINERAL COMPONENT.—The term 'recovered mineral
13	component' means—
14	"(A) ground granulated blast furnace slag;
15	"(B) coal combustion fly ash; and
16	"(C) any other waste material or byproduct recovered or diverted
17	from solid waste that the Administrator, in consultation with an agency
18	head, determines should be treated as recovered mineral component under
19	this section for use in cement or concrete projects paid for, in whole or in
20	part, by the agency head.
21	"(b) Implementation of Requirements.—
22	"(1) IN GENERAL.—Not later than 1 year after the date of enactment of this
23	section, the Administrator and each agency head shall take such actions as are
24	necessary to implement fully all procurement requirements and incentives in effect
25	as of the date of enactment of this section (including guidelines under section 6002)
26	that provide for the use of cement and concrete incorporating recovered mineral
27	component in cement or concrete projects.
28	"(2) Priority.—In carrying out paragraph (1) an agency head shall give
29	priority to achieving greater use of recovered mineral component in cement or

1	concrete projects for which recovered mineral components historically have not
2	been used or have been used only minimally.
3	"(3) Conformance.—The Administrator and each agency head shall carry
4	out this subsection in accordance with section 6002.
5	"(c) Full Implementation Study.—
6	"(1) IN GENERAL.—The Administrator, in cooperation with the Secretary of
7	Transportation and the Secretary of Energy, shall conduct a study to determine the
8	extent to which current procurement requirements, when fully implemented in
9	accordance with subsection (b), may realize energy savings and environmental
10	benefits attainable with substitution of recovered mineral component in cement
11	used in cement or concrete projects.
12	"(2) Matters to Be Addressed.—The study shall—
13	"(A) quantify the extent to which recovered mineral components are
14	being substituted for Portland cement, particularly as a result of current
15	procurement requirements, and the energy savings and environmental
16	benefits associated with that substitution;
17	"(B) identify all barriers in procurement requirements to fuller
18	realization of energy savings and environmental benefits, including barriers
19	resulting from exceptions from current law; and
20	"(C) (i) identify potential mechanisms to achieve greater substitution
21	of recovered mineral component in types of cement or concrete
22	projects for which recovered mineral components historically have
23	not been used or have been used only minimally;
24	"(ii) evaluate the feasibility of establishing guidelines or
25	standards for optimized substitution rates of recovered mineral
26	component in those cement or concrete projects; and
27	"(iii) identify any potential environmental or economic
28	effects that may result from greater substitution of recovered mineral
29	component in those cement or concrete projects.

1	"(3) REPORT.—Not later than 30 months after the date of enactment of this
2	section, the Administrator shall submit to the Committee on Appropriations and
3	Committee on Environment and Public Works of the Senate and the Committee or
4	Appropriations, Committee on Energy and Commerce, and Committee on
5	Transportation and Infrastructure of the House of Representatives a report on the
6	study.
7	"(d) Additional Procurement Requirements.— Unless the study conducted
8	under subsection (c) identifies any effects or other problems described in subsection
9	(c)(2)(C)(iii) that warrant further review or delay, the Administrator and each agency head
10	shall, within 1 year of the release of the report in accordance with subsection (c)(3), take
11	additional actions authorized under this section to establish procurement requirements and
12	incentives that provide for the use of cement and concrete with increased substitution of
13	recovered mineral component in the construction and maintenance of cement or concrete
14	projects, so as to—
15	"(1) realize more fully the energy savings and environmental benefits
16	associated with increased substitution; and
17	"(2) eliminate barriers identified under subsection (c).
18	"(e) Effect of Section.—Nothing in this section affects the requirements of
19	section 6002 (including the guidelines and specifications for implementing those
20	requirements).".
21	(b) TABLE OF CONTENTS AMENDMENT.—The table of contents of the Solid Waste
22	Disposal Act is amended by adding after the item relating to section 6004 the following
23	new item:
24	"Sec. 6005. Increased use of recovered mineral component in federally funded projects
25	involving procurement of cement or concrete.".
26	Subtitle B—State and Local Programs
27	SEC. 611. LOW INCOME COMMUNITY ENERGY EFFICIENCY PILOT PROGRAM.
28	(a) GRANTS.—The Secretary of Energy is authorized to make grants to units of
29	local government, private, non-profit community development organizations, and Indian

1	tribe economic development entities to improve energy emciency, identity and develop	
2	alternative, renewable and distributed energy supplies, and increase energy conservation in	
3	low income rural and urban communities.	
4	(b) Purpose of Grants.—The Secretary may make grants on a competitive basis	
5	for—	
6	(1) investments that develop alternative, renewable and distributed energy	
7	supplies;	
8	(2) energy efficiency projects and energy conservation programs;	
9	(3) studies and other activities that improve energy efficiency in low income	
10	rural and urban communities;	
11	(4) planning and development assistance for increasing the energy	
12	efficiency of buildings and facilities; and	
13	(5) technical and financial assistance to local government and private	
14	entities on developing new renewable and distributed sources of power or combined	
15	heat and power generation.	
16	(c) Definition.—For purposes of this section, the term "Indian tribe" means any	
17	Indian tribe, band, nation, or other organized group or community, including any Alaskan	
18	Native village or regional or village corporation as defined in or established pursuant to the	
19	Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.), which is recognized as	
20	eligible for the special programs and services provided by the United States to Indians	
21	because of their status as Indians.	
22	(d) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section there	
23	are authorized to be appropriated to the Secretary of Energy \$20,000,000 for fiscal year	
24	2003 and each fiscal year thereafter through fiscal year 2005.	
25	SEC. 612. ENERGY EFFICIENT PUBLIC BUILDINGS.	
26	(a) GRANTS.—The Secretary of Energy may make grants to the State agency	
27	responsible for developing State energy conservation plans under section 362 of the Energy	
28	Policy and Conservation Act (42 U.S.C. 6322), or, if no such agency exists, a State agency	
29	designated by the Governor of the State, to assist units of local government in the State in	

1	improving the energy efficiency of public buildings and facilities—
2	(1) through construction of new energy efficient public buildings that use at
3	least 30 percent less energy than a comparable public building constructed in
4	compliance with standards prescribed in chapter 8 of the 2000 International Energy
5	Conservation Code, or a similar State code intended to achieve substantially
6	equivalent efficiency levels; or
7	(2) through renovation of existing public buildings to achieve reductions in
8	energy use of at least 30 percent as compared to the baseline energy use in such
9	buildings prior to renovation, assuming a 3-year, weather-normalized average for
10	calculating such baseline.
11	(b) ADMINISTRATION.—State energy offices receiving grants under this section
12	shall—
13	(1) maintain such records and evidence of compliance as the Secretary may
14	require; and
15	(2) develop and distribute information and materials and conduct programs
16	to provide technical services and assistance to encourage planning, financing, and
17	design of energy efficient public buildings by units of local government.
18	(c) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there
19	are authorized to be appropriated to the Secretary of Energy such sums as may be
20	necessary for each of fiscal years 2003 through 2012. Not more than 30 percent of
21	appropriated funds shall be used for administration.
22	SEC. 613. ENERGY EFFICIENT APPLIANCE REBATE PROGRAMS.
23	(a) Definitions.—In this section:
24	(1) The term "eligible State" means a State that meets the requirements of
25	subsection (b).
26	(2) The term "Energy Star program" means the program established by
27	section 324A of the Energy Policy and Conservation Act.
28	(3) The term "residential Energy Star product" means a product for a
29	residence that is rated for energy efficiency under the Energy Star program.

1	(4) The term "State energy office" means the State agency responsible for
2	developing State energy conservation plans under section 362 of the Energy Policy
3	and Conservation Act (42 U.S.C. 6322).
4	(5) The term "State program" means a State energy efficient appliance
5	rebate program described in subsection (b)(1).
6	(b) ELIGIBLE STATES.—A State shall be eligible to receive an allocation under
7	subsection (c) if the State—
8	(1) establishes (or has established) a State energy efficient appliance rebate
9	program to provide rebates to residential consumers for the purchase of residential
10	Energy Star products to replace used appliances of the same type;
11	(2) submits an application for the allocation at such time, in such form, and
12	containing such information as the Secretary may require; and
13	(3) provides assurances satisfactory to the Secretary that the State will use
14	the allocation to supplement, but not supplant, funds made available to carry out the
15	State program.
16	(c) Amount of Allocations.—
17	(1) Subject to paragraph (2), for each fiscal year, the Secretary shall allocate
18	to the State energy office of each eligible State to carry out subsection (d) an
19	amount equal to the product obtained by multiplying the amount made available
20	under subsection (f) for the fiscal year by the ratio that the population of the State in
21	the most recent calendar year for which data are available bears to the total
22	population of all eligible States in that calendar year.
23	(2) For each fiscal year, the amounts allocated under this subsection shall be
24	adjusted proportionately so that no eligible State is allocated a sum that is less than
25	an amount determined by the Secretary.
26	(d) Use of Allocated Funds.—The allocation to a State energy office under
27	subsection (c) may be used to pay up to 50 percent of the cost of establishing and carrying
28	out a State program.
20	(e) ISSUANCE OF REPATES —Rebates may be provided to residential consumers that

1	meet the requirements of the State program. The amount of a rebate shall be determined by
2	the State energy office, taking into consideration—
3	(1) the amount of the allocation to the State energy office under subsection
4	(c);
5	(2) the amount of any Federal or State tax incentive available for the
6	purchase of the residential Energy Star product; and
7	(3) the difference between the cost of the residential Energy Star product
8	and the cost of an appliance that is not a residential Energy Star product, but is of
9	the same type as, and is the nearest capacity, performance, and other relevant
10	characteristics (as determined by the State energy office) to the residential Energy
11	Star product.
12	(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated
13	to carry out this section \$50,000,000 for each of the fiscal years 2004 through 2008.
14	Subtitle C—Consumer Products
15	SEC. 621. ENERGY CONSERVATION STANDARDS FOR ADDITIONAL PRODUCTS.
16	(a) Definitions.—Section 321 of the Energy Policy and Conservation Act (42
17	U.S.C. 6291) is amended by adding at the end the following:
18	"(32) The term 'battery charger' means a device that charges batteries for
19	consumer products.
20	"(33) The term 'commercial refrigerator, freezer and refrigerator-freezer'
21	means a refrigerator, freezer or refrigerator-freezer that—
22	"(A) is not a consumer product regulated under this Act; and
23	"(B) incorporates most components involved in the vapor-
24	compression cycle and the refrigerated compartment in a single package.
25	"(34) The term 'external power supply' means an external power supply
26	circuit that is used to convert household electric current into either DC current or
27	lower-voltage AC current to operate a consumer product.
28	"(35) The term 'illuminated exit sign' means a sign that—
29	"(A) is designed to be permanently fixed in place to identify an exit;

1	and
2	"(B) consists of an electrically powered integral light source that
3	illuminates the legend 'EXIT' and any directional indicators and provides
4	contrast between the legend, any directional indicators, and the background.
5	"(36)(A) Except as provided in subparagraph (B), the term 'low-voltage
6	dry-type transformer' means a transformer that—
7	"(i) has an input voltage of 600 volts or less;
8	"(ii) is air-cooled;
9	"(iii) does not use oil as a coolant; and
10	"(iv) is rated for operation at a frequency of 60 Hertz.
11	"(B) The term 'low-voltage dry-type transformer' does not include—
12	"(i) transformers with multiple voltage taps, with the highest voltage
13	tap equaling at least 20 percent more than the lowest voltage tap;
14	"(ii) transformers, such as those commonly known as drive
15	transformers, rectifier transformers, auto-transformers, Uninterruptible
16	Power System transformers, impedance transformers, harmonic
17	transformers, regulating transformers, sealed and nonventilating
18	transformers, machine tool transformers, welding transformers, grounding
19	transformers, or testing transformers, that are designed to be used in a
20	special purpose application and are unlikely to be used in general purpose
21	applications; or
22	"(iii) any transformer not listed in clause (ii) that is excluded by the
23	Secretary by rule because the transformer is designed for a special
24	application and the application of standards to the transformer would not
25	result in significant energy savings.
26	"(37)(A) Except as provided in subsection (B), the term 'distribution
27	transformer' means a transformer that —
28	"(i) has an input voltage of 34.5 kilovolts or less;
29	"(ii) has an output voltage of 600 volts or less; and

1	"(iii) is rated for operation at a frequency of 60 Hertz.
2	"(B) The term 'distribution transformer' does not include —
3	"(i) transformers with multiple voltage taps, with the highest voltage
4	tap equaling at least 15 percent more than the lowest voltage tap;
5	"(ii) transformers, such as those commonly known as drive
6	transformers, rectifier transformers, autotransformers, Uninterruptible
7	Power System transformers, impedance transformers, harmonic
8	transformers, regulating transformers, sealed and nonventilating
9	transformers, machine tool transformers, welding transformers, grounding
10	transformers, or testing transformers, that are designed to be used in a
11	special purpose application, and are unlikely to be used in general purpose
12	applications; or
13	"(iii) any transformer not listed in clause (ii) that is excluded by the
14	Secretary by rule because the transformer is designed for a special
15	application, is unlikely to be used in general purpose applications, and the
16	application of standards to the transformer would not result in significant
17	energy savings.
18	"(38) The term 'standby mode' means the lowest amount of electric power
19	used by a household appliance when not performing its active functions, as defined
20	on an individual product basis by the Secretary.
21	"(39) The term 'torchiere' means a portable electric lamp with a reflector
22	bowl that directs light upward so as to give indirect illumination.
23	"(40) The term 'transformer' means a device consisting of two or more coils
24	of insulated wire that transfers alternating current by electromagnetic induction
25	from one coil to another to change the original voltage or current value.
26	"(41) The term 'unit heater' means a self-contained fan-type heater designed
27	to be installed within the heated space, except that such term does not include a
28	warm air furnace.
29	"(42) The term 'traffic signal module' means a standard 8-inch (200mm) or

1	12-inch (300mm) traffic signal indication, consisting of a light source, a lens, and
2	all other parts necessary for operation, that communicates movement messages to
3	drivers through red, amber, and green colors.".
4	(b) Test Procedures.—Section 323 of the Energy Policy and Conservation Act
5	(42 U.S.C. 6293) is amended—
6	(1) in subsection (b), by adding at the end the following:
7	"(9) Test procedures for illuminated exit signs shall be based on the
8	test method used under Version 2.0 of the Energy Star program of the
9	Environmental Protection Agency for illuminated exit signs.
10	"(10) Test procedures for low voltage dry-type distribution
11	transformers shall be based on the 'Standard Test Method for Measuring the
12	Energy Consumption of Distribution Transformers' prescribed by the
13	National Electrical Manufacturers Association (NEMA TP 2-1998). The
14	Secretary may review and revise this test procedure based on future
15	revisions to such standard test method.
16	"(11) Test procedures for traffic signal modules shall be based on the
17	test method used under the Energy Star program of the Environmental
18	Protection Agency for traffic signal modules, as in effect on the date of
19	enactment of this paragraph."; and
20	(2) by adding at the end the following:
21	"(f) Additional Consumer and Commercial Products.—The
22	Secretary shall within 24 months after the date of enactment of this
23	subsection prescribe testing requirements for suspended ceiling fans,
24	refrigerated bottled or canned beverage vending machines, commercial unit
25	heaters, and commercial refrigerators, freezers and refrigerator-freezers.
26	Such testing requirements shall be based on existing test procedures used in
27	industry to the extent practical and reasonable. In the case of suspended
28	ceiling fans, such test procedures shall include efficiency at both maximum
29	output and at an output no more than 50 percent of the maximum output.".

1	(c) New Standards.—Section 325 of the Energy Policy and Conservation Act (42
2	U.S.C. 6295) is amended by adding at the end the following:
3	"(u) Standby Mode Electric Energy Consumption.—
4	"(1) Initial Rulemaking.—
5	"(A) The Secretary shall, within 18 months after the date of
6	enactment of this subsection, prescribe by notice and comment, definitions
7	of standby mode and test procedures for the standby mode power use of
8	battery chargers and external power supplies. In establishing these test
9	procedures, the Secretary shall consider, among other factors, existing test
10	procedures used for measuring energy consumption in standby mode and
11	assess the current and projected future market for battery chargers and
12	external power supplies. This assessment shall include estimates of the
13	significance of potential energy savings from technical improvements to
14	these products and suggested product classes for standards. Prior to the end
15	of this time period, the Secretary shall hold a scoping workshop to discuss
16	and receive comments on plans for developing energy conservation
17	standards for standby mode energy use for these products.
18	"(B) The Secretary shall, within 3 years after the date of enactment
19	of this subsection, issue a final rule that determines whether energy
20	conservation standards shall be promulgated for battery chargers and
21	external power supplies or classes thereof. For each product class, any such
22	standards shall be set at the lowest level of standby energy use that—
23	"(i) meets the criteria of subsections (o), (p), (q), (r), (s) and
24	(t); and
25	"(ii) will result in significant overall annual energy savings,
26	considering both standby mode and other operating modes.
27	"(2) Designation of Additional Covered Products.—
28	"(A) Not later than 180 days after the date of enactment of this
29	subsection, the Secretary shall publish for public comment and public

1	hearing a notice to determine whether any non-covered products should be
2	designated as covered products for the purpose of instituting a rulemaking
3	under this section to determine whether an energy conservation standard
4	restricting standby mode energy consumption, should be promulgated;
5	except that any restriction on standby mode energy consumption shall be
6	limited to major sources of such consumption.
7	"(B) In making the determinations pursuant to subparagraph (A) of
8	whether to designate new covered products and institute rulemakings, the
9	Secretary shall, among other relevant factors and in addition to the criteria
10	in section 322(b), consider—
11	"(i) standby mode power consumption compared to overall
12	product energy consumption; and
13	"(ii) the priority and energy savings potential of standards
14	which may be promulgated under this subsection compared to other
15	required rulemakings under this section and the available resources
16	of the Department to conduct such rulemakings.
17	"(C) Not later than 1 year after the date of enactment of this
18	subsection, the Secretary shall issue a determination of any new covered
19	products for which he intends to institute rulemakings on standby mode
20	pursuant to this section and he shall state the dates by which he intends to
21	initiate those rulemakings.
22	"(3) REVIEW OF STANDBY ENERGY USE IN COVERED PRODUCTS.—In
23	determining pursuant to section 323 whether test procedures and energy
24	conservation standards pursuant to this section should be revised, the Secretary
25	shall consider for covered products which are major sources of standby mode
26	energy consumption whether to incorporate standby mode into such test procedures
27	and energy conservation standards, taking into account, among other relevant
28	factors, the criteria for non-covered products in subparagraph (B) of paragraph (2)
29	of this subsection.

1	"(4) Rulemaking.—
2	"(A) Any rulemaking instituted under this subsection or for covered
3	products under this section which restricts standby mode power
4	consumption shall be subject to the criteria and procedures for issuing
5	energy conservation standards set forth in this section and the criteria set
6	forth in subparagraph (B) of paragraph (2) of this subsection.
7	"(B) No standard can be proposed for new covered products or
8	covered products in a standby mode unless the Secretary has promulgated
9	applicable test procedures for each product pursuant to section 323.
10	"(C) The provisions of section 327 shall apply to new covered
11	products which are subject to the rulemakings for standby mode after a final
12	rule has been issued.
13	"(5) Effective Date.—Any standard promulgated under this subsection
14	shall be applicable to products manufactured or imported 3 years after the date of
15	promulgation.
16	"(6) VOLUNTARY PROGRAMS.—The Secretary and the Administrator shall
17	collaborate and develop programs, including programs pursuant to section 324A
18	(relating to Energy Star Programs) and other voluntary industry agreements or
19	codes of conduct, which are designed to reduce standby mode energy use.
20	"(v) Suspended Ceiling Fans, Vending Machines, Unit Heaters, and
21	COMMERCIAL REFRIGERATORS, FREEZERS AND REFRIGERATOR-FREEZERS.—The Secretary
22	shall within 24 months after the date on which testing requirements are prescribed by the
23	Secretary pursuant to section 323(f), prescribe, by rule, energy conservation standards for
24	suspended ceiling fans, refrigerated bottled or canned beverage vending machines, unit
25	heaters, and commercial refrigerators, freezers and refrigerator-freezers. In establishing
26	standards under this subsection, the Secretary shall use the criteria and procedures
27	contained in subsections (l) and (m). Any standard prescribed under this subsection shall
28	apply to products manufactured 3 years after the date of publication of a final rule
29	establishing such standard.

1	"(w) ILLUMINATED EXIT SIGNS.—Illuminated exit signs manufactured on or after
2	January 1, 2005 shall meet the Version 2.0 Energy Star Program performance requirements
3	for illuminated exit signs prescribed by the Environmental Protection Agency.
4	"(x) Torchieres manufactured on or after January 1, 2005 —
5	"(1) shall consume not more than 190 watts of power; and
6	"(2) shall not be capable of operating with lamps that total more than 190
7	watts.
8	"(y) DISTRIBUTION TRANSFORMERS.—The efficiency of low voltage dry-type
9	transformers manufactured on or after January 1, 2005 shall be the Class I Efficiency
10	Levels for distribution transformers specified in Table 4–2 of the 'Guide for Determining
11	Energy Efficiency for Distribution Transformers' published by the National Electrical
12	Manufacturers Association (NEMA TP-1-2002).
13	"(z) Traffic Signal Modules.—Traffic signal modules manufactured on or after
14	January 1, 2006 shall meet the performance requirements used under the Energy Star
15	program of the Environmental Protection Agency for traffic signals, as in effect on the date
16	of enactment of this paragraph, and shall be installed with compatible, electrically-
17	connected signal control interface devices and conflict monitoring systems.".
18	SEC. 622. ENERGY LABELING.
19	(a) RULEMAKING ON EFFECTIVENESS OF CONSUMER PRODUCT
20	LABELING.—Paragraph (2) of section 324(a) of the Energy Policy and Conservation Act
21	(42 U.S.C. 6294(a)(2)) is amended by adding at the end the following:
22	"(F) Not later than 3 months after the date of enactment of this subparagraph, the
23	Commission shall initiate a rulemaking to consider the effectiveness of the current
24	consumer products labeling program in assisting consumers in making purchasing
25	decisions and improving energy efficiency and to consider changes to the labeling rules
26	that would improve the effectiveness of consumer product labels. Such rulemaking shall be
27	completed within 2 years after the date of enactment of this subparagraph.".
28	(b) RULEMAKING ON LABELING FOR ADDITIONAL PRODUCTS.—Section 324(a) of
29	the Energy Policy and Conservation Act (42 U.S.C. 6294(a)) is further amended by adding

[at the end the following:
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"(5) The Secretary or the Commission, as appropriate, may for covered products referred to in subsections (u) through (z) of section 325, prescribe, by rule, pursuant to this section, labeling requirements for such products after a test procedure has been set pursuant to section 323. In the case of products to which TP-1 standards under section 325(y) apply, labeling requirements shall be based on the "Standard for the Labeling of Distribution Transformer Efficiency" prescribed by the National Electrical Manufacturers Association (NEMA TP-3) as in effect upon the date of enactment of this Act.".

SEC. 623. ENERGY STAR PROGRAM.

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

"SEC. 324A. ENERGY STAR PROGRAM.

"There is established at the Department of Energy and the Environmental Protection Agency a program to identify and promote energy-efficient products and buildings in order to reduce energy consumption, improve energy security, and reduce pollution through labeling of and other forms of communication about products and buildings that meet the highest energy efficiency standards.

Responsibilities under the program shall be divided between the Department of Energy and the Environmental Protection Agency consistent with the terms of agreements between the two agencies. The Administrator and the Secretary shall—

"(1) promote Energy Star compliant technologies as the preferred

- technologies in the marketplace for achieving energy efficiency and to reduce pollution;
- "(2) work to enhance public awareness of the Energy Star label, including special outreach to small businesses;
 - "(3) preserve the integrity of the Energy Star label; and
- "(4) solicit the comments of interested parties in establishing a new Energy Star product category or in revising a product category, and upon adoption of a new or revised product category provide an explanation of the

11	Secretary shall, within 180 days of the date of enactment of this subsection, carry out a
12	program to educate homeowners and small business owners concerning the energy savings
13	resulting from properly conducted maintenance of air conditioning, heating, and ventilating
14	systems. The Secretary shall carry out the program in cooperation with the Administrator
15	of the Environmental Protection Agency and such other entities as the Secretary considers
16	appropriate, including industry trade associations, industry members, and energy efficiency
17	organizations.
18	"(d) SMALL BUSINESS EDUCATION AND ASSISTANCE.—The Administrator of the
19	Small Business Administration, in consultation with the Secretary of Energy and the
20	Administrator of the Environmental Protection Agency, shall develop and coordinate a
21	Government-wide program, building on the existing Energy Star for Small Business
22	Program, to assist small business to become more energy efficient, understand the cost
23	savings obtainable through efficiencies, and identify financing options for energy
24	efficiency upgrades. The Secretary and the Administrator shall make the program
25	information available directly to small businesses and through other Federal agencies,
26	including the Federal Emergency Management Program, and the Department of
27	Agriculture.".
28	Subtitle D—Public Housing
29	SEC. 631. CAPACITY BUILDING FOR ENERGY-EFFICIENT, AFFORDABLE HOUSING.

1	Section 4(b) of the HUD Demonstration Act of 1993 (42 U.S.C. 9816 note) is
2	amended—
3	(a) in paragraph (1), by inserting before the semicolon at the end the following: ",
4	including capabilities regarding the provision of energy efficient, affordable housing and
5	residential energy conservation measures"; and
6	(b) in paragraph (2), by inserting before the semicolon the following: ", including
7	such activities relating to the provision of energy efficient, affordable housing and
8	residential energy conservation measures that benefit low-income families".
9	SEC. 632. INCREASE OF CDBG PUBLIC SERVICES CAP FOR ENERGY CONSERVATION AND
10	EFFICIENCY ACTIVITIES.
11	Section 105(a)(8) of the Housing and Community Development Act of 1974 (42
12	U.S.C. 5305(a)(8)) is amended—
13	(a) by inserting "or efficiency" after "energy conservation";
14	(b) by striking ", and except that" and inserting "; except that"; and
15	(c) by inserting before the semicolon at the end the following: "; and except that
16	each percentage limitation under this paragraph on the amount of assistance provided under
17	this title that may be used for the provision of public services is hereby increased by 10
18	percent, but such percentage increase may be used only for the provision of public services
19	concerning energy conservation or efficiency".
20	SEC. 633. FHA MORTGAGE INSURANCE INCENTIVES FOR ENERGY EFFICIENT HOUSING.
21	(a) SINGLE FAMILY HOUSING MORTGAGE INSURANCE.—Section 203(b)(2) of the
22	National Housing Act (12 U.S.C. 1709(b)(2)) is amended, in the first undesignated and
23	indented paragraph beginning after subparagraph (B)(iii) (relating to solar energy
24	systems)—
25	(1) by inserting "or paragraph (10)" before the first comma; and
26	(2) by striking "20 percent" and inserting "30 percent".
27	(b) Multifamily Housing Mortgage Insurance.—Section 207(c) of the
28	National Housing Act (12 U.S.C. 1713(c)) is amended, in the second undesignated
29	paragraph beginning after paragraph (3) (relating to solar energy systems and residential

1	energy conservation measures), by striking "20 percent" and inserting "30 percent".
2	(c) Cooperative Housing Mortgage Insurance.—Section 213(p) of the
3	National Housing Act (12 U.S.C. 1715e(p)) is amended by striking "20 per centum" and
4	inserting "30 percent".
5	(d) Rehabilitation and Neighborhood Conservation Housing Mortgage
6	Insurance.—Section 220(d)(3)(B)(iii) of the National Housing Act (12 U.S.C.
7	1715k(d)(3)(B)(iii)) is amended by striking "20 per centum" and inserting "30 percent".
8	(e) LOW-INCOME MULTIFAMILY HOUSING MORTGAGE INSURANCE.—Section 221(k)
9	of the National Housing Act (12 U.S.C. 1715l(k)) is amended by striking "20 per centum"
10	and inserting "30 percent".
11	(f) ELDERLY HOUSING MORTGAGE INSURANCE.—The proviso at the end of section
12	231(c)(2) of the National Housing Act (12 U.S.C. 1715v(c)(2)) is amended by striking "20
13	per centum" and inserting "30 percent".
14	(g) CONDOMINIUM HOUSING MORTGAGE INSURANCE.—Section 234(j) of the
15	National Housing Act (12 U.S.C. 1715y(j)) is amended by striking "20 per centum" and
16	inserting "30 percent".
17	SEC. 634. PUBLIC HOUSING CAPITAL FUND.
18	Section 9 of the United States Housing Act of 1937 (42 U.S.C. 1437g) is
19	amended—
20	(a) in subsection (d)(1)—
21	(1) in subparagraph (I), by striking "and" at the end;
22	(2) in subparagraph (J), by striking the period at the end and inserting a
23	semicolon; and
24	(3) by adding at the end the following new subparagraphs:
25	"(K) improvement of energy and water-use efficiency by installing
26	fixtures and fittings that conform to the American Society of Mechanical
27	Engineers/American National Standards Institute standards A112.19.2-1998
28	and A112.18.1-2000, or any revision thereto, applicable at the time of
29	installation, and by increasing energy efficiency and water conservation by
30	such other means as the Secretary determines are appropriate; and

1	"(L) integrated utility management and capital planning to maximize
2	energy conservation and efficiency measures."; and
3	(b) in subsection (e)(2)(C)—
4	(1) by striking "The" and inserting the following:
5	"(i) IN GENERAL.—The"; and
6	(2) by adding at the end the following:
7	"(ii) THIRD PARTY CONTRACTS.—Contracts described in clause (i)
8	may include contracts for equipment conversions to less costly utility
9	sources, projects with resident-paid utilities, and adjustments to frozen base
10	year consumption, including systems repaired to meet applicable building
11	and safety codes and adjustments for occupancy rates increased by
12	rehabilitation.
13	"(iii) TERM OF CONTRACT.—The total term of a contract described in
14	clause (i) shall not exceed 20 years to allow longer payback periods for
15	retrofits, including windows, heating system replacements, wall insulation,
16	site-based generations, advanced energy savings technologies, including
17	renewable energy generation, and other such retrofits.".
18	SEC. 635. GRANTS FOR ENERGY-CONSERVING IMPROVEMENTS FOR ASSISTED HOUSING.
19	Section 251(b)(1) of the National Energy Conservation Policy Act (42 U.S.C.
20	8231(1)) is amended—
21	(a) by striking "financed with loans" and inserting "assisted";
22	(b) by inserting after "1959," the following: "which are eligible multifamily
23	housing projects (as such term is defined in section 512 of the Multi-family Assisted
24	Housing Reform and Affordability Act of 1997 (42 U.S.C. 1437f note)) and are subject to
25	mortgage restructuring and rental assistance sufficiency plans under such Act,"; and
26	(c) by inserting after the period at the end of the first sentence the following new
27	sentence: "Such improvements may also include the installation of energy and water
28	conserving fixtures and fittings that conform to the American Society of Mechanical
29	Engineers/American National Standards Institute standards A112.19.2-1998 and
30	A112.18.1-2000, or any revision thereto, applicable at the time of installation.".

1 SEC. 636, NORTH AMERICAN DEVELOPMENT BANK. 2 Part 2 of subtitle D of title V of the North American Free Trade Agreement Implementation Act (22 U.S.C. 290m–290m-3) is amended by adding at the end the 3 4 following: 5 "SEC. 545. SUPPORT FOR CERTAIN ENERGY POLICIES. "Consistent with the focus of the Bank's Charter on environmental 6 7 infrastructure projects, the Board members representing the United States should 8 use their voice and vote to encourage the Bank to finance projects related to clean 9 and efficient energy, including energy conservation, that prevent, control, or reduce 10 environmental pollutants or contaminants.". 11 SEC. 637. ENERGY-EFFICIENT APPLIANCES. 12 In purchasing appliances, a public housing agency shall purchase energy-efficient 13 appliances that are Energy Star products or FEMP-designated products, as such terms are 14 defined in section 553 of the National Energy Policy and Conservation Act (as amended by this Act), unless the purchase of energy-efficient appliances is not cost-effective to the 15 16 agency. 17 SEC. 638. ENERGY EFFICIENCY STANDARDS. Section 109 of the Cranston-Gonzalez National Affordable Housing Act (42 U.S.C. 18 19 12709) is amended— 20 (1) in subsection (a)— 21 (A) in paragraph (1)— (i) by striking "1 year after the date of the enactment of the 22 23 Energy Policy Act of 1992" and inserting "September 30, 2003"; 24 (ii) in subparagraph (A), by striking "and" at the end; 25 (iii) in subparagraph (B), by striking the period at the end and 26 inserting "; and"; and 27 (iv) by adding at the end the following: 28 "(C) rehabilitation and new construction of public and 29 assisted housing funded by HOPE VI revitalization grants under 30 section 24 of the United States Housing Act of 1937 (42

1	U.S.C.1437v), where such standards are determined to be cost
2	effective by the Secretary of Housing and Urban Development.";
3	and
4	(B) in paragraph (2), by striking "Council of American" and all that
5	follows through "90.1-1989")" and inserting "2000 International Energy
6	Conservation Code";
7	(2) in subsection (b)—
8	(A) by striking "1 year after the date of the enactment of the Energy
9	Policy Act of 1992" and inserting "September 30, 2003"; and
10	(B) by striking "CABO" and all that follows through "1989" and
11	inserting "the 2000 International Energy Conservation Code"; and
12	(3) in subsection (c)—
13	(A) in the heading, by striking "MODEL ENERGY CODE" and
14	inserting "INTERNATIONAL ENERGY CONSERVATION CODE"; and
15	(B) by striking "CABO" and all that follows through "1989" and
16	inserting "the 2000 International Energy Conservation Code".
17	SEC. 639. ENERGY STRATEGY FOR HUD.
18	The Secretary of Housing and Urban Development shall develop and implement an
19	integrated strategy to reduce utility expenses through cost-effective energy conservation
20	and efficiency measures and energy efficient design and construction of public and assisted
21	housing. The energy strategy shall include the development of energy reduction goals and
22	incentives for public housing agencies. The Secretary shall submit a report to Congress, not
23	later than one year after the date of the enactment of this Act, on the energy strategy and
24	the actions taken by the Department of Housing and Urban Development to monitor the
25	energy usage of public housing agencies and shall submit an update every two years
26	thereafter on progress in implementing the strategy.
27	TITLE VII—TRANSPORTATION FUELS
28	Subtitle A—Alternative Fuel Programs
29	SEC. 701. USE OF ALTERNATIVE FUELS BY DUAL-FUELED VEHICLES.

1	Section 400AA(a)(3)(E) of the Energy Policy and Conservation Act (42 U.S.C.
2	6374(a)(3)(E)) is amended to read as follows:
3	"(E)(i) Dual fueled vehicles acquired pursuant to this section shall be operated on
4	alternative fuels unless the Secretary determines that an agency qualifies for a waiver of
5	such requirement for vehicles operated by the agency in a particular geographic area
6	where—
7	"(I) the alternative fuel otherwise required to be used in the vehicle is not
8	reasonably available to retail purchasers of the fuel, as certified to the Secretary by
9	the head of the agency; or
10	"(II) the cost of the alternative fuel otherwise required to be used in the
11	vehicle is unreasonably more expensive compared to gasoline, as certified to the
12	Secretary by the head of the agency.
13	"(ii) The Secretary shall monitor compliance with this subparagraph by all such
14	fleets and shall report annually to the Congress on the extent to which the requirements of
15	this subparagraph are being achieved. The report shall include information on annual
16	reductions achieved from the use of petroleum-based fuels and the problems, if any,
17	encountered in acquiring alternative fuels.".
18	SEC. 702. FUEL USE CREDITS.
19	(a) In General.— Section 312 of the Energy Policy Act of 1992 (42 U.S.C.
20	13220) is amended to read as follows:
21	"SEC. 312. FUEL USE CREDITS.
22	"(a) Allocation.—
23	"(1) The Secretary shall allocate one credit under this section to a
24	fleet or covered person for each qualifying volume of alternative fuel or
25	biodiesel purchased for use in a vehicle operated by the fleet.
26	"(2) No credits shall be allocated under this section for purchase of
27	an alternative fuel or biodiesel that is required by Federal or State law.
28	"(3) A fleet or covered person seeking a credit under this section
29	shall provide written documentation to the Secretary supporting the

1	allocation of a credit to such fleet or covered person under this section.
2	"(b) Use.—At the request of a fleet or covered person allocated a credit
3	under subsection (a), the Secretary shall, for the year in which the purchase of a
4	qualifying volume is made, treat that purchase as the acquisition of one alternative
5	fueled vehicle the fleet or covered person is required to acquire under this title, title
6	IV, or title V.
7	"(c) Treatment.—A credit provided to a fleet or covered person under thi
8	section shall be considered a credit under section 508.
9	"(d) Issuance of Rule.—Not later than 6 months after the date of
10	enactment of this section, the Secretary shall issue a rule establishing procedures
11	for the implementation of this section.
12	"(e) Definitions.—For the purposes of this section—
13	"(1) the term "biodiesel" means a diesel fuel substitute produced
14	from non-petroleum renewable resources that meets the registration
15	requirements for fuels and fuel additives established by the Environmental
16	Protection Agency under section 211 of the Clean Air Act; and
17	"(2) the term "qualifying volume" means—
18	"(A) in the case of biodiesel, when used as a component of
19	fuel containing at least 20 percent biodiesel by volume, 450 gallons,
20	or if the Secretary determines by rule that the average annual
21	alternative fuel use in light duty vehicles by fleets and covered
22	persons exceeds 450 gallons or gallon equivalents, the amount of
23	such average annual alternative fuel use; or
24	"(B) in the case of an alternative fuel, the amount of such
25	fuel determined by the Secretary to have an equivalent energy
26	content to the amount of biodiesel defined as a qualifying volume
27	pursuant to subparagraph (A)."
28	(b) TABLE OF CONTENTS AMENDMENT.—The table of contents of the Energy Policy
29	Act of 1992 is amended by adding at the end of the items relating to title III the following

1	new item:
2	"Sec. 312. Fuel use credits."
3	SEC. 703. NEIGHBORHOOD ELECTRIC VEHICLES.
4	Section 301 of the Energy Policy Act of 1992 (42 U.S.C. 13211) is amended—
5	(1) in paragraph (3), by striking "or a dual fueled vehicle" and inserting ", a
6	dual fueled vehicle, or a neighborhood electric vehicle";
7	(2) by striking "and" at the end of paragraph (13);
8	(3) by striking the period at the end of paragraph (14) and inserting "; and";
9	and
10	(4) by adding at the end the following:
11	"(15) the term 'neighborhood electric vehicle' means a motor vehicle that
12	qualifies as both—
13	"(A) a low-speed vehicle, as such term is defined in section 571.3(b)
14	of title 49, Code of Federal Regulations; and
15	"(B) a zero-emission vehicle, as such term is defined in section
16	86.1702–99 of title 40, Code of Federal Regulations.".
17	SEC. 704. SUBSTANTIAL CONTRIBUTION TOWARDS NONCOVERED FLEETS.
18	Section 507 of the Energy Policy Act of 1992 (42 U.S.C. 13258) is further amended
19	by adding at the end the following:
20	"(p) Credit for Substantial Contribution Towards Use of Dedicated
21	Vehicles in Noncovered Fleets.—
22	"(1) DEFINITIONS.—In this subsection:
23	"(A) The term 'medium duty vehicle' means a dedicated vehicle that
24	has a gross vehicle weight rating of more than 8,500 pounds but not more
25	than 14,000 pounds.
26	"(B) The term 'heavy duty vehicle' means a dedicated vehicle that
27	has a gross vehicle weight rating of more than 14,000 pounds.
28	"(C) The term 'substantial contribution' means not less than \$15,000
29	in cash or in kind services, as determined by the Secretary.
30	"(2) Substantial Contribution.—The Secretary shall issue a credit to a

1	fleet or covered person under this title if the fleet or person makes a substantial
2	contribution toward the acquisition and use of dedicated vehicles by a person that
3	owns, operates, leases, or otherwise controls a fleet that is not covered by this title.
4	"(3) MEDIUM OR HEAVY DUTY VEHICLE.—The Secretary shall issue 2 full
5	credits to a fleet or covered person under this title if the fleet or person acquires a
6	medium duty dedicated vehicle or a heavy duty dedicated vehicle.
7	"(4) Use of Credits.—At the request of a fleet or covered person allocated
8	a credit under this subsection, the Secretary shall, for the year in which the
9	acquisition of the dedicated vehicle is made, treat that credit as the acquisition of 1
10	alternative fueled vehicle that the fleet or covered person is required to acquire
11	under this title.
12	"(5) LIMITATION.—Per vehicle credits acquired under this subsection shall
13	not exceed the per vehicle credits allowed under this section to a fleet for qualifying
14	vehicles in each of the weight categories (light, medium, or heavy duty)."
15	SEC. 705. ALTERNATIVE FUEL INFRASTRUCTURE.
16	Section 507 of the Energy Policy Act of 1992 (42 U.S.C. 13258) is further amended
17	by adding at the end the following:
18	"(q) Credit for Investment in Alternative Fuel Infrastructure.—
19	"(1) DEFINITIONS.— In this subsection, the term 'qualifying infrastructure'
20	means—
21	"(A) equipment required to refuel or recharge alternative fueled
22	vehicles;
23	"(B) facilities or equipment required to maintain, repair, or operate
24	alternative fueled vehicles;
25	"(C) training programs, educational materials, or other activities
26	necessary to provide information regarding the operation, maintenance, or
27	benefits associated with alternative fueled vehicles; and
28	"(D) such other activities the Secretary considers to constitute an
29	appropriate expenditure in support of the operation, maintenance, or further
30	widespread adoption of or utilization of alternative fueled vehicles.

1	"(2) ISSUANCE OF CREDITS.—The Secretary shall issue a credit to a fleet or
2	covered person under this title for investment in qualifying infrastructure if the
3	qualifying infrastructure is open to the general public during regular business hours.
4	"(3) AMOUNT.—For the purposes of credits under this subsection—
5	"(A) 1 credit shall be equal to a minimum investment of \$25,000 in
6	cash or in kind services, as determined by the Secretary; and
7	"(B) except in the case of a Federal or State fleet, no part of the
8	investment may be provided by Federal or State funds.
9	"(4) Use of Credits—At the request of a fleet or covered person allocated
10	a credit under this subsection, the Secretary shall, for the year in which the
11	investment is made, treat that credit as the acquisition of 1 alternative fueled vehicle
12	that the fleet or covered person is required to acquire under this title.".
13	SEC. 706. REVIEW OF ALTERNATIVE FUEL PROGRAMS.
14	(a) IN GENERAL.—Not later than 60 days after the date of enactment of this section,
15	the Secretary shall conduct a study to determine the effect that titles III, IV and V of the
16	Energy Policy Act of 1992 (42 U.S.C. 13211 et seq.) have had on the development of
17	alternative fueled vehicle technology, its availability in the market, and the cost of light
18	duty motor vehicles that are alternative fueled vehicles.
19	(b) TOPICS.—As part of such study, the Secretary shall specifically identify—
20	(1) the number of alternative fueled vehicles acquired by fleets or covered
21	persons required to acquire alternative fueled vehicles;
22	(2) the amount, by type, of alternative fuel actually used in alternative
23	fueled vehicles acquired by fleets or covered persons;
24	(3) the amount of petroleum displaced by the use of alternative fuels in
25	alternative fueled vehicles acquired by fleets or covered persons;
26	(4) the cost of compliance with vehicle acquisition requirements by fleets or
27	covered persons; and
28	(5) the existence of obstacles preventing compliance with vehicle
29	acquisition requirements and increased use of alternative fuel in alternative fueled
30	vehicles acquired by fleets or covered persons.

1	(c) REPORT.—Not later than 1 year after the date of enactment of this section, the
2	Secretary shall submit to the Congress a report that describes the results of the study
3	conducted under this section and includes any recommendations of the Secretary for
4	legislative or administrative changes concerning the alternative fueled vehicle requirements
5	under titles III, IV and V of the Energy Policy Act of 1992 (42 U.S.C. 13211 et seq.). Such
6	study shall be updated on a regular basis as deemed necessary by the Secretary.
7	SEC. 707. HIGH OCCUPANCY VEHICLE EXCEPTION.
8	Notwithstanding section 102(a)(1) of title 23, United States Code, a State may
9	permit a vehicle with fewer than 2 occupants to operate in high occupancy vehicle lanes if
10	such vehicle is a dedicated vehicle (as defined in section 301 of the Energy Policy Act of
11	1992 (42 U.S.C. 13211)).
12	Subtitle B—Automobile Fuel Economy
13	SEC. 711. AUTOMOBILE FUEL ECONOMY STANDARDS.
14	(a) TITLE 49 AMENDMENT.—Section 32902(f) of title 49, United States Code, is
15	amended to read as follows:
16	"(f) Considerations.—When deciding maximum feasible average fuel economy
17	under this section, the Secretary of Transportation shall consider the following matters:
18	"(1) technological feasibility;
19	"(2) economic practicability;
20	"(3) the effect of other motor vehicle standards of the Government on fuel
21	economy;
22	"(4) the need of the United States to conserve energy;
23	"(5) the effects of fuel economy standards on motor vehicle and passenger
24	safety; and
25	"(6) the effects of compliance with average fuel economy standards on
26	levels of employment in the United States.".
27	(b) CLARIFICATION OF AUTHORITY.—Section 32902(b) of title 49, United States
28	Code, is amended by inserting before the period at the end the following: "or such other
29	number as the Secretary prescribes under subsection (c)".

1	(c) Environmental Assessment.—When issuing final regulations setting forth
2	increased average fuel economy standards under section 32902(a)(2) of title 49, United
3	States Code, as amended by subsection (a) of this section, the Secretary of Transportation
4	shall also issue an environmental assessment of the effects of the increased standards on
5	the environment under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et
6	seq.).
7	(d) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there
8	are authorized to be appropriated to the Secretary of Transportation \$5,000,000 for each of
9	fiscal years 2004 through 2008.
10	SEC. 712. DUAL-FUELED AUTOMOBILES.
11	(a) Manufacturing Incentives.—Section 32905 of title 49, United States Code,
12	is amended —
13	(1) in subsections (b) and (d), by striking "1993-2004" and inserting
14	"1993–2008";
15	(2) in subsection (f), by striking "2001" and inserting "2005".
16	(3) in subsection (f)(1), by striking "2004" and inserting "2008";
17	(4) in subsection (g), by striking "September 30, 2000" and inserting
18	"September 30, 2004".
19	(b) MAXIMUM FUEL ECONOMY INCREASE.— Subsection (a)(1) of section 32906 of
20	title 49, United States Code, is amended—
21	(1) in subparagraph (A), by striking "the model years 1993-2004" and
22	inserting "model years 1993-2008"; and
23	(2) in subparagraph (B), by striking "the model years 2005–2008" and
24	inserting "model years 2009–2012".
25	SEC. 713. FEDERAL FLEET FUEL ECONOMY.
26	Section 32917 of title 49, United States Code, is amended to read as follows:
27	"§ 32917. Standards for executive agency automobiles.
28	"(a) BASELINE AVERAGE FUEL ECONOMY.—The head of each executive
29	agency shall determine, for all automobiles in the agency's fleet of automobiles that
30	were leased or bought as a new vehicle in fiscal year 1999, the average fuel

1	economy for such automobiles. For the purposes of this section, the average fuel
2	economy so determined shall be the baseline average fuel economy for the agency's
3	fleet of automobiles.
4	"(b) Increase of Average Fuel Economy.—The head of an executive
5	agency shall manage the procurement of automobiles for that agency in such a
6	manner that—
7	"(1) not later than September 30, 2004, the average fuel economy of
8	the new automobiles in the agency's fleet of automobiles is not less than 1
9	mile per gallon higher than the baseline average fuel economy determined
10	under subsection (a) for that fleet; and
11	"(2) not later than September 30, 2006, the average fuel economy of
12	the new automobiles in the agency's fleet of automobiles is not less than 3
13	miles per gallon higher than the baseline average fuel economy determined
14	under subsection (a) for that fleet.
15	"(c) CALCULATION OF AVERAGE FUEL ECONOMY.—Average fuel economy
16	shall be calculated for the purposes of this section in accordance with guidance
17	which the Secretary of Transportation shall prescribe for the implementation of this
18	section.
19	"(d) Definitions.—In this section:
20	"(1) The term 'automobile' does not include any vehicle designed
21	for combat-related missions, law enforcement work, or emergency rescue
22	work.
23	"(2) The term 'executive agency' has the meaning given that term in
24	section 105 of title 5.
25	"(3) The term 'new automobile', with respect to the fleet of
26	automobiles of an executive agency, means an automobile that is leased for
27	at least 60 consecutive days or bought, by or for the agency, after September
28	30, 1999.".
29	SEC. 714. RAILROAD EFFICIENCY.
30	(a) ESTABLISHMENT.—The Secretary of Energy, in cooperation with the Secretary

1	of Transportation, shall establish a public-private research partnership to develop and
2	demonstrate railroad locomotive technologies that increase fuel economy, reduce
3	emissions, and lower costs of operation. Such partnership shall involve the Federal
4	Government, railroad carriers, locomotive manufacturers and equipment suppliers, and the
5	Association of American Railroads.
6	(b) AUTHORIZATION OF APPROPRIATIONS.— For the purposes of this section, there
7	are authorized to be appropriated to the Secretary of Energy \$25,000,000 for fiscal year
8	2004, \$35,000,000 for fiscal year 2005, and \$50,000,000 for fiscal year 2006.
9	SEC. 715. REDUCTION OF ENGINE IDLING IN HEAVY-DUTY VEHICLES.
10	(a) IDENTIFICATION.—Not later than 6 months after the date of enactment of this
11	section, the Secretary of Energy, in consultation with the Secretary of Transportation and
12	the Administrator of the Environmental Protection Agency, shall commence a study to
13	analyze the potential fuel savings and emissions reductions resulting from use of idling
14	reduction technologies as they are applied to heavy-duty vehicles. Upon completion of the
15	study, the Secretary of Energy shall, by rule, certify those idling reduction technologies
16	with the greatest economic or technical feasibility and the greatest potential for fuel
17	savings and emissions reductions, and publish a list of such certified technologies in the
18	Federal Register.
19	(b) Vehicle Weight Exemption.—Section 127(a) of Title 23, United States Code
20	is amended by adding at the end the following:
21	"In order to promote reduction of fuel use and emissions due to engine idling, the
22	maximum gross vehicle weight limit and the axle weight limit for any motor vehicle
23	equipped with an idling reduction technology certified by the U.S. Department of Energy
24	will be increased by an amount necessary to compensate for the additional weight of the
25	idling reduction system, provided that the weight increase shall be no greater than 400
26	pounds."
27	(c) Definitions.—For the purposes of this section:
28	(1) The term "idling reduction technology" means a device or system of
29	devices utilized to reduce long-duration idling of a vehicle.
30	(2) The term "heavy-duty vehicle" means a vehicle that has a gross vehicle

1	weight rating greater than 8,500 pounds and is powered by a diesel engine.
2	(3) The term "long-duration idling" means the operation of a main drive
3	engine, for a period greater than 30 consecutive minutes, where the main drive
4	engine is not engaged in gear. Such term does not apply to routine stoppages
5	associated with traffic movement or congestion.
6	
7	TITLE VIII—HYDROGEN
8	Subtitle A—Basic Research Programs
9	SEC. 801. SHORT TITLE.
10	This subtitle may be cited as the "George E. Brown, Jr. and Robert S. Walker
11	Hydrogen Future Act of 2003".
12	SEC. 802. MATSUNAGA ACT AMENDMENT.
13	The Spark M. Matsunaga Hydrogen Research, Development, and Demonstration
14	Act of 1990 (42 U.S.C. 12401 et seq.) is amended by striking sections 102 through 109 and
15	inserting the following:
16	"SEC. 102. FINDING, PURPOSES, AND DEFINITIONS.
17	"(a) FINDING.—Congress finds that it is in the national interest to accelerate
18	efforts to develop a domestic capability to economically produce hydrogen in
19	quantities that will make a significant contribution toward reducing the Nation's
20	dependence on conventional fuels.
21	"(b) Purposes.—The purposes of this Act are—
22	"(1) to promote a research, development, and demonstration
23	program leading to the economical and environmentally sound production,
24	storage, transport, and use of hydrogen as an energy source for industrial,
25	commercial, residential, transportation, and utility applications; and
26	"(2) to promote and coordinate activities in technology transfer,
27	education, and other information transfer among Federal, State, and local
28	agencies; members of the energy, transportation, and other industries;
29	foreign nations; and other entities.

1	"(c) Definitions.—As used in this Act, the term—
2	"(1) 'advisory committee' means the advisory committee established
3	under section 108;
4	"(2) 'critical technology' or 'critical technical issue' means a
5	technology or issue that, in the opinion of the Secretary, requires
6	understanding and development in order to take the next step needed in the
7	development of hydrogen as an economic fuel or storage medium;
8	"(3) 'Department' means the Department of Energy; and
9	"(4) 'Secretary' means the Secretary of Energy.
10	"SEC. 103. PLAN; REPORT.
11	"(a) COORDINATION PLAN.—The Secretary, in consultation with other
12	Federal agencies, shall prepare a comprehensive coordination plan for activities
13	under this Act and under title II of the Hydrogen Future Act of 1996. The Secretary
14	shall take into account any plan under section 202(b) of the Hydrogen Future Act of
15	1996.
16	"(b) Report.—
17	"(1) REQUIREMENT.—Not later than 1 year after the date of
18	enactment of the George E. Brown, Jr. and Robert S. Walker Hydrogen
19	Future Act of 2003, and biennially thereafter, the Secretary shall transmit to
20	Congress a detailed report, based on the plan prepared under subsection (a),
21	on the status and progress of the programs authorized under this Act.
22	"(2) CONTENTS.—A report under paragraph (1) shall include, in
23	addition to any views and recommendations of the Secretary-
24	"(A) an assessment of the effectiveness of the programs
25	authorized under this Act and of the extent to which they are
26	meeting the purposes specified in section 102(b);
27	"(B) recommendations of the advisory committee for any
28	improvements in the program that are needed, including
29	recommendations for additional legislation; and

1	"(C) to the extent practicable, an analysis of Federal, State,
2	local, and private sector hydrogen-related research, development,
3	and demonstration activities to identify productive areas for
4	increased intergovernmental and private-public sector collaboration.
5	"SEC. 104. HYDROGEN RESEARCH AND DEVELOPMENT.
6	"(a) Program—The Secretary shall conduct a research and development
7	program relating to the production, storage, transportation, and use of hydrogen as
8	an energy source, with the goal of enabling the private sector to demonstrate the
9	technical feasibility of using hydrogen for industrial, commercial, residential,
10	transportation, and utility applications.
11	"(b) ELEMENTS.—In conducting the program authorized by this section, the
12	Secretary shall—
13	"(1) initiate or accelerate research and development in critical
14	technical issues that will contribute to the development of more economical
15	and environmentally sound hydrogen energy systems, including critical
16	technical issues with respect to—
17	"(A) production, with consideration of cost-effective
18	production from renewable energy sources and hydrogen-carrier
19	fuels;
20	"(B) liquefaction, transmission, and distribution;
21	"(C) storage, including storage of hydrogen in surface
22	transportation; and
23	"(D) use, including use in—
24	"(i) surface transportation;
25	"(ii) isolated villages, islands, and communities in
26	which other energy sources are not available or are very
27	expensive;
28	"(iii) fuel cells and components, including proton
29	exchange membrane technologies; and
30	"(iv) foreign markets, particularly where an energy

1	infrastructure is not well developed;
2	"(2) give particular attention to resolving critical technical issues
3	preventing the introduction of hydrogen as an energy source into the
4	marketplace, so as to enable the development of voluntary consensus
5	technical standards; and
6	"(3) survey private sector hydrogen energy research and
7	development activities worldwide and take steps to ensure that research and
8	development activities under this section do not—
9	"(A) unnecessarily duplicate any available research and
10	development; or
11	"(B) displace or compete with the privately funded hydrogen
12	energy research and development activities of United States
13	industry.
14	"(c) RESEARCH AND DEVELOPMENT SUPPORT.—The Secretary is authorized to
15	arrange for tests and demonstrations and to disseminate to researchers and developers
16	information, data, and other materials necessary to support the research and development
17	activities authorized under this section and other efforts authorized under this Act,
18	consistent with section 106.
19	"(d) FEDERAL FUNDING.—The Secretary shall carry out the research and
20	development activities authorized under this section using a competitive merit review
21	process.
22	"(e) Cost Sharing.—
23	"(1) IN GENERAL.—The Secretary shall require a commitment from
24	non-Federal sources of at least 20 percent of the cost of proposed research and
25	development projects under this section.
26	"(2) Modification.—The Secretary may reduce or eliminate the cost
27	sharing requirement under paragraph (1)—
28	"(A) if the Secretary determines that the research and development is
29	of a basic or fundamental nature; or

1	"(B) for technical analyses, outreach activities, and educational
2	programs that the Secretary does not expect to result in a marketable
3	product.
4	"SEC. 105. DEMONSTRATIONS.
5	"(a) REQUIREMENT.—The Secretary shall conduct demonstrations of critical
6	technologies so that technical and nontechnical parameters can be evaluated to best
7	determine commercial applicability of such technologies. Demonstrations under
8	this section shall include fuel cells and fuel cell components, including proton
9	exchange membrane technologies, for commercial, residential, and transportation
10	applications, using improved manufacturing production and processes.
11	"(b) Demonstrations with Research and Development Activities.—
12	Concurrently with activities conducted pursuant to section 104, the Secretary shall
13	conduct small-scale demonstrations of hydrogen energy technology at
14	self-contained sites.
15	"(c) Cost Sharing.—
16	"(1) In General.—The Secretary shall require a commitment from
17	non-Federal sources of at least 50 percent of the costs directly relating to a
18	demonstration project under this section.
19	"(2) REDUCTION.—The Secretary may reduce the non-Federal
20	requirement under paragraph (1) if the Secretary determines that the
21	reduction is appropriate considering the technological risks involved in the
22	project.
23	"SEC. 106. TECHNOLOGY ASSESSMENT AND TRANSFER.
24	"(a) Program.—
25	"(1) In General.—The Secretary shall conduct a program designed
26	to transfer critical technologies to the private sector, including application in
27	foreign countries to increase the global market for the technologies and
28	foster global development without harmful environmental effects.
29	"(2) ADVICE AND ASSISTANCE.—The Secretary shall direct the

1	program authorized by this subsection with the advice and assistance of the
2	advisory committee.
3	"(b) Information.—
4	"(1) In General.—The Secretary, in carrying out the program
5	authorized by subsection (a), shall—
6	"(A) undertake an update of the inventory and assessment of
7	hydrogen energy technologies and their commercial capability to
8	economically produce, store, transport, and use hydrogen as an
9	energy source in the industrial, commercial, residential,
10	transportation, and utility sectors; and
11	"(B) develop with the National Aeronautics and Space
12	Administration, other Federal agencies as appropriate, and industry,
13	an information exchange program to improve technology transfer for
14	hydrogen energy technologies.
15	"(2) ACTIVITIES.—The information exchange program may consist
16	of workshops, publications, conferences, and a database for the use by the
17	public and private sectors. The Secretary shall also foster the exchange of
18	generic, nonproprietary information and technology, developed pursuant to
19	this Act, among industry, academia, and the Federal Government, to help
20	the United States economy attain the economic benefits of this information
21	and technology.
22	"SEC. 107. COORDINATION AND CONSULTATION.
23	"(a) In General.—The Secretary shall have overall management
24	responsibility for carrying out programs under this Act. In carrying out such
25	programs, the Secretary, consistent with such overall management responsibility—
26	"(1) shall establish a central point for the coordination of all
27	hydrogen energy research, development, and demonstration activities of the
28	Department; and
29	"(2) may use the expertise of any other Federal agency in accordance

1	with subsection (b) in carrying out any activities under this Act, to the
2	extent that the Secretary determines that any such agency has capabilities
3	which would allow such agency to contribute to the purposes of this Act.
4	"(b) Assistance.—The Secretary may, in accordance with subsection (a),
5	obtain the assistance of any Federal agency upon written request, on a reimbursable
6	basis or otherwise and with the consent of such agency. Each such request shall
7	identify the assistance the Secretary considers necessary to carry out any duty under
8	this Act.
9	"(c) Consultation.—The Secretary shall consult with other Federal
10	agencies as appropriate, and the advisory committee, in carrying out the Secretary's
11	authorities pursuant to this Act.
12	"SEC. 108. ADVISORY COMMITTEE.
13	"(a) ESTABLISHMENT.—There is hereby established the Hydrogen Technical
14	Advisory Committee to advise the Secretary on the programs under this Act and
15	under title II of the Hydrogen Future Act of 1996, to remain in existence for the
16	duration of such programs.
17	"(b) Membership.—
18	"(1) In General.—The advisory committee shall be comprised of
19	not fewer than 9 nor more than 15 members appointed by the Secretary, and
20	shall be comprised of such representatives from domestic industry,
21	universities, professional societies, Government laboratories, and financial,
22	environmental, and other organizations as the Secretary considers
23	appropriate based on the Secretary's assessment of the technical and other
24	qualifications of such representatives.
25	"(2) Terms.—
26	"(A) IN GENERAL.—The term of a member of the advisory
27	committee shall not be more than three years.
28	"(B) STAGGERED TERMS.—The Secretary may appoint
29	members of the advisory committee in a manner that allows the

1	terms of the members serving at any time to expire at spaced
2	intervals so as to ensure continuity in the functioning of the advisory
3	committee.
4	"(C) REAPPOINTMENT.—A member of the advisory
5	committee whose term expires may be reappointed.
6	"(3) CHAIRPERSON.—The advisory committee shall have a
7	chairperson, who shall be elected by the members from among their
8	number.
9	"(c) COOPERATION.—The heads of Federal agencies shall cooperate with
10	the advisory committee in carrying out the requirements of this section and shall
11	furnish to the advisory committee such information as the advisory committee
12	considers necessary to carry out this section.
13	"(d) REVIEW.—The advisory committee shall review and make any
14	necessary recommendations to the Secretary on—
15	"(1) the implementation and conduct of programs under this Act;
16	"(2) the economic, technological, and environmental consequences
17	of the deployment of technologies for the production, storage,
18	transportation, and use of hydrogen as an energy source; and
19	"(3) the coordination plan prepared by the Secretary under section
20	103 and the plan developed by the interagency task force under section
21	202(b) of the Hydrogen Future Act of 1996.
22	"(e) RECOMMENDATIONS.—The Secretary shall consider, but need not
23	adopt, any recommendations of the advisory committee under subsection (d). The
24	Secretary shall either describe the implementation, or provide an explanation of the
25	reasons that any such recommendations will not be implemented, in the report to
26	Congress under section 103(b).
27	"(f) SUPPORT.—The Secretary shall provide such staff, funds, and other
28	support as may be necessary to enable the advisory committee to carry out its
29	functions.

1	SEC, 109, NATIONAL ACADEMY OF SCIENCES REVIEW.
2	"Beginning 2 years after the date of the enactment of this section, and every
3	4 years thereafter, the National Academy of Sciences shall perform a review of the
4	progress made through the programs and activities authorized under this Act and
5	title II of the Hydrogen Future Act of 1996, and shall report to the Congress on the
6	results of such reviews.
7	"SEC. 110. AUTHORIZATION OF APPROPRIATIONS.
8	"There are authorized to be appropriated to carry out the purposes of this
9	Act (in addition to any amounts made available for such purposes under other
10	Acts)—
11	"(1) \$3,000,000 for fiscal year 1992;
12	"(2) \$7,000,000 for fiscal year 1993;
13	"(3) \$10,000,000 for fiscal year 1994;
14	"(4) \$14,500,000 for fiscal year 1996;
15	"(5) \$20,000,000 for fiscal year 1997;
16	"(6) \$25,000,000 for fiscal year 1998;
17	"(7) \$30,000,000 for fiscal year 1999;
18	"(8) \$35,000,000 for fiscal year 2000;
19	"(9) \$40,000,000 for fiscal year 2001;
20	"(10) \$45,000,000 for fiscal year 2002;
21	"(11) \$50,000,000 for fiscal year 2003;
22	"(12) \$55,000,000 for fiscal year 2004;
23	"(13) \$60,000,000 for fiscal year 2005;
24	"(14) \$65,000,000 for fiscal year 2006;
25	"(15) \$70,000,000 for fiscal year 2007; and
26	"(16) \$75,000,000 for fiscal year 2008.".
27	SEC. 803. HYDROGEN FUTURE ACT AMENDMENT.
28	Title II of the Hydrogen Future Act of 1996 (42 U.S.C. 12403 note) is amended to
29	read as follows:

1	"TITLE II—FUEL CELLS
2	"SEC. 201. INTEGRATION OF FUEL CELLS WITH HYDROGEN SYSTEMS.
3	"(a) In General.—The Secretary shall solicit proposals for projects
4	demonstrating hydrogen technologies needed to use fuel cells in Federal, State, and
5	local government stationary and transportation applications.
6	"(b) COMPETITIVE EVALUATION.—Each proposal submitted in response to
7	the solicitation under this section shall be evaluated on a competitive basis using
8	peer review. The Secretary is not required to make an award under this section in
9	the absence of a meritorious proposal.
10	"(c) Preference.—The Secretary shall give preference, in making an
11	award under this section, to proposals that—
12	"(1) are submitted jointly from consortia including academic
13	institutions, industry, State or local governments, and Federal laboratories;
14	and
15	"(2) reflect proven experience and capability with technologies
16	relevant to the projects proposed.
17	"(d) Non-federal Share.—
18	"(1) In General.—Except as provided in paragraph (2), the
19	Secretary shall require a commitment from non-Federal sources of at least
20	50 percent of the costs directly relating to a demonstration project under this
21	section.
22	"(2) REDUCTION.—The Secretary may reduce the non-Federal
23	requirement under paragraph (1) if the Secretary determines that the
24	reduction is appropriate considering the technological risks involved in the
25	project.
26	"SEC. 202. INTERAGENCY TASK FORCE.
27	"(a) ESTABLISHMENT.—Not later than 120 days after the date of enactment of the
28	George E. Brown, Jr. and Robert S. Walker Hydrogen Future Act of 2003, the Secretary
29	shall establish an interagency task force led by the Secretary's designee and comprised of

1	representatives of—
2	"(1) the Office of Science and Technology Policy;
3	"(2) the Department of Transportation;
4	"(3) the Department of Defense;
5	"(4) the Department of Commerce (including the National Institute of
6	Standards and Technology);
7	"(5) the Environmental Protection Agency;
8	"(6) the National Aeronautics and Space Administration; and
9	"(7) other Federal agencies as appropriate.
10	"(b) Duties.—
11	"(1) DEVELOPMENT OF PLAN.—The task force shall develop a plan for
12	carrying out this title.
13	"(2) FOCUS OF PLAN.—The plan shall focus on development and
14	demonstration of integrated systems and components for-
15	"(A) the production, storage, transport, and use of hydrogen as an
16	energy source for Federal, State, and local government stationary and
17	transportation applications;
18	"(B) hydrogen-based infrastructure for buses and other fleet
19	transportation systems that include zero-emission vehicles; and
20	"(C) hydrogen-based distributed power generation, including the
21	generation of combined heat, power, and hydrogen.
22	"SEC. 203. COOPERATIVE AND COST-SHARING AGREEMENTS.
23	"The Secretary shall enter into cooperative and cost-sharing agreements
24	with Federal, State, and local agencies for participation by the agencies in
25	demonstrations at facilities administered by the agencies, with the aim of
26	integrating high-efficiency hydrogen systems using fuel cells into the facilities to
27	provide near-term benefits and promote a smooth transition to hydrogen as an
28	energy source.
29	"SEC. 204. INTEGRATION AND DISSEMINATION OF TECHNICAL INFORMATION.

1	"The Secretary shall —
2	"(a) integrate all the technical information available as a result of
3	development and demonstration projects under this title;
4	"(b) make the information available to all interested persons; and
5	"(c) foster the exchange of generic, nonproprietary information and
6	technology developed under this title among industry, academia, and
7	Federal, State, and local governments, to help the United States economy
8	attain the economic benefits of the information and technology.
9	"SEC. 205. AUTHORIZATION OF APPROPRIATIONS.
10	"There are authorized to be appropriated to the Secretary, for activities
11	under this title—
12	"(a) \$5,000,000 for fiscal year 2003;
13	"(b) \$25,000,000 for fiscal year 2004;
14	"(c) \$30,000,000 for fiscal year 2005;
15	"(d) \$35,000,000 for fiscal year 2006;
16	"(e) \$40,000,000 for fiscal year 2007; and
17	"(f) \$50,000,000 for fiscal year 2008.".
18	Subtitle B – Transportation Fuel Programs
19	SEC. 811. HYDROGEN TRANSPORTATION FUEL INITIATIVE.
20	(a) In General.—The Secretary of Energy, in partnership with the private sector,
21	shall conduct a research and development program designed to accelerate the use of
22	hydrogen and related technologies in transportation applications. Such program shall have
23	as its goal the potential introduction of hydrogen-based transportation vehicles into
24	commerce by 2015.
25	(b) RESEARCH AREAS.—The program authorized under this section shall address—
26	(1) production of hydrogen from diverse energy resources, including—
27	(A) fossil fuels, in conjunction with carbon capture and
28	sequestration;
29	(B) hydrogen-carrier fuels;

1	(C) renewable energy resources; and
2	(D) nuclear energy;
3	(2) delivery of hydrogen or hydrogen-carrier fuels, including—
4	(A) transmission by pipeline and other distribution methods; and
5	(B) safe, convenient, and economic refueling of vehicles, either at
6	central refueling stations or through distributed on-site generation;
7	(3) storage of hydrogen or hydrogen-carrier fuels, including development of
8	materials for safe and economic storage in gaseous, liquid or solid forms at
9	refueling facilities or onboard vehicles;
10	(4) development of advanced vehicle technologies, such as efficient fuel
11	cells and direct hydrogen combustion engines, and related component technologies
12	such as advanced materials and control systems; and
13	(5) development of necessary codes, standards, and safety practices to
14	accompany the production, distribution, storage and use of hydrogen or hydrogen-
15	carrier fuels in transportation.
16	(c) Advisory Committee.—The Hydrogen Technical Advisory Committee
17	authorized under section 108 of the Spark M. Matsunaga Hydrogen Research,
18	Development, and Demonstration Act of 1990 (42 U.S.C. 12401 et seq.), as amended in
19	this title, shall also advise the Secretary on the programs and activities carried out under
20	this section, and shall ensure that such programs and activities are consistent with
21	technology roadmaps and plans, such as the National Hydrogen Energy Roadmap
22	published by the Department of Energy in November 2002, that are developed in
23	consultation with stakeholders through workshops or other public processes.
24	(d) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there
25	are authorized to be appropriated to the Secretary—
26	(1) \$273,500,000 for fiscal year 2004;
27	(2) \$325,000,000 for fiscal year 2005;
28	(3) \$375,000,000 for fiscal year 2006;
29	(4) \$400,000,000 for fiscal year 2007; and

1	(5) \$425,000,000 for fiscal year 2008.
2	SEC. 812. HYDROGEN VEHICLE DEMONSTRATION PROGRAM.
3	(a) In General.—The Secretary of Energy, in consultation with the Secretary of
4	Transportation and the private sector, shall establish a pilot program for awarding grants on
5	a peer-reviewed, competitive basis for the integrated demonstration and deployment of
6	hydrogen vehicles and associated infrastructure to support such vehicles.
7	(b) Solicitation.—Not later than 6 months after the date of the enactment of this
8	section, the Secretary shall establish procedures for implementation of the grant program
9	and publish in the Federal Register a solicitation for proposals for grants to be awarded
10	under this section.
11	(c) ELIGIBILITY.—Grants shall be awarded under this section only to proposals
12	that—
13	(1) address all aspects of the hydrogen energy system, including production,
14	delivery, storage, conversion and actual use in transportation applications; and
15	(2) include two or more participants from the private sector (including
16	technology developers, fuel suppliers, auto manufacturers, and transportation
17	industries), National Laboratories, local or State governments, colleges and
18	universities, or other interested stakeholders;
19	(3) include programs and activities to provide for education and outreach to
20	potential consumers of hydrogen-based transportation technologies; and
21	(4) include programs and activities that aid in the development of codes and
22	standards to ensure safe use of hydrogen for transportation applications.
23	(d) Cost Sharing.—
24	(1) The Secretary shall require a commitment from non-Federal sources of
25	at least 50 percent of the cost of proposed demonstration and deployment projects
26	under this section.
27	(2) The Secretary may reduce or eliminate the cost sharing requirement
28	under paragraph (1) for technical analyses, outreach activities, and educational
29	programs that the Secretary does not expect to result in a marketable product.
30	(e) Not later than 2 years after the date of enactment of this section, the Secretary

1	shall provide to Congress a report that describes the projects and grants funded under this
2	section and the interim results of such projects and grants, as well as recommendations for
3	any legislative or administrative changes that may be needed to improve the effectiveness
4	of the projects and grants funded under this section.
5	(f) For the purposes of this section, there is authorized to be appropriated to the
6	Secretary \$100,000,000 for each of fiscal years 2004 through 2008, to remain available
7	until expended, provided that not more than \$20,000,000 of which can be provided to a
8	single grant award in each calendar year.
9	TITLE IX — RESEARCH AND DEVELOPMENT
10	SEC. 901. SHORT TITLE.
11	This Title may be cited as the "Energy Research, Development, Demonstration, and
12	Commercial Application Act of 2003".
13	SEC. 902. GOALS.
14	(a) In General.—In order to achieve the purposes of this title, the Secretary shall
15	conduct a balanced set of programs of energy research, development, demonstration, and
16	commercial application, focused on—
17	(1) increasing the efficiency of all energy intensive sectors through
18	conservation and improved technologies,
19	(2) promoting diversity of energy supply,
20	(3) decreasing the nation's dependence on foreign energy supplies, and
21	(4) decreasing the environmental impact of energy-related activities.
22	(b) GOALS.—The Secretary shall publish goals with each annual budget submission
23	in at least the following areas:
24	(1) Energy efficiency for buildings, energy-consuming industries, and
25	vehicles,
26	(2) Electric energy generation (including distributed generation),
27	transmission, and storage,
28	(3) Renewable energy technologies including wind power, photovoltaics,
29	solar thermal systems, geothermal energy, hydrogen-fueled systems, biomass-based

1	power systems, biofuels, and hydropower,
2	(4) fossil energy including power generation, onshore and offshore oil and
3	gas resource recovery, transportation,
4	(5) nuclear energy including programs for existing and advanced reactors,
5	and education of future specialists.
6	(c) PUBLIC COMMENT.—The Secretary shall provide mechanisms for input on the
7	annually published goals from industry, university, and other public sources.
8	(d) EFFECT OF GOALS.—Nothing in subsection (a) or the annually published goals
9	creates any new authority for any Federal agency, or may be used by a Federal agency to
10	support the establishment of regulatory standards or regulatory requirements.
11	SEC. 903. DEFINITIONS.
12	For purposes of this title:
13	(1) The term "Department" means the Department of Energy.
14	(2) The term "departmental mission" means any of the functions vested in
15	the Secretary of Energy by the Department of Energy Organization Act (42 U.S.C.
16	7101 et seq.) or other law.
17	(3) The term "institution of higher education" has the meaning given that
18	term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).
19	(4) The term "joint venture" has the meaning given that term under section 2
20	of the National Cooperative Research and Production Act of 1993 (15 U.S.C.
21	4301).
22	(5) The term "National Laboratory" means any of the following laboratories
23	owned by the Department:
24	(A) Ames National Laboratory.
25	(B) Argonne National Laboratory.
26	(C) Brookhaven National Laboratory.
27	(D) Fermi National Laboratory.
28	(E) Idaho National Engineering and Environmental Laboratory.
29	(F) Lawrence Berkeley National Laboratory.
30	(G) Lawrence Livermore National Laboratory.

1	(H) Los Alamos National Laboratory.
2	(I) National Energy Technology Laboratory.
3	(J) National Renewable Energy Laboratory.
4	(K) Oak Ridge National Laboratory.
5	(L) Pacific Northwest National Laboratory.
6	(M) Princeton Plasma Physics Laboratory.
7	(N) Sandia National Laboratories.
8	(O) Thomas Jefferson National Accelerator Facility.
9	(6) The term "nonmilitary energy laboratory" means the following
10	laboratories listed in (6): A-D, F, I, J, K, L, M, and O.
11	(7) The term "Secretary" means the Secretary of Energy.
12	(8) The term "single-purpose research facility" means any of the primarily
13	single-purpose entities owned by the Department or any other organization of the
14	Department designated by the Secretary.
15	Subtitle A—Energy Efficiency
16	SEC. 911. ENERGY EFFICIENCY.
17	(a) In General.—The following sums are authorized to be appropriated to the
18	Secretary for energy efficiency and conservation research, development, demonstration,
19	and commercial application activities, including activities authorized under this subtitle:
20	(1) For fiscal year 2004, \$616,000,000;
21	(2) For fiscal year 2005, \$695,000,000;
22	(3) For fiscal year 2006, \$772,000,000;
23	(4) For fiscal year 2007, \$865,000,000; and
24	(5) For fiscal year 2008, \$920,000,000.
25	(b) ALLOCATIONS.—From amounts authorized under subsection (a), the following
26	sums are authorized:
27	(1) For activities under section 912—
28	(A) \$20,000,000 for fiscal year 2004; and
29	(B) \$30,000,000 for each of fiscal years 2005 through 2008.

1	(2) For activities under section 914—
2	(A) for fiscal year 2004, \$4,000,000; and
3	(B) for each of fiscal years 2005 through 2008, \$7,000,000.
4	(3) For activities under section 915—
5	(A) for fiscal year 2004, \$20,000,000;
6	(B) for fiscal year 2005, \$25,000,000;
7	(C) for fiscal year 2006, \$30,000,000;
8	(D) for fiscal year 2007, \$35,000,000; and
9	(E) for fiscal year 2008, \$40,000,000.
10	(c) EXTENDED AUTHORIZATION.—There are authorized to be appropriated to the
11	Secretary for activities under section 912, \$50,000,000 for each of fiscal years 2008
12	through 2012.
13	(d) None of the funds authorized to be appropriated under this section may be used
14	for—
15	(1) the promulgation and implementation of energy efficiency regulations;
16	(2) the Weatherization Assistance Program under part A of title IV of the
17	Energy Conservation and Production Act;
18	(3) the State Energy Program under part D of title III of the Energy Policy
19	and Conservation Act; or
20	(4) the Federal Energy Management Program under part 3 of title V of the
21	National Energy Conservation Policy Act.
22	SEC. 912. NEXT GENERATION LIGHTING INITIATIVE.
23	(a) In General.—The Secretary shall carry out a Next Generation Lighting
24	Initiative in accordance with this section to support research, development, demonstration,
25	and commercial application activities related to advanced solid-state lighting technologies
26	based on white light emitting diodes.
27	(b) OBJECTIVES.—The objectives of the initiative shall be to develop advanced
28	solid-state organic and inorganic lighting technologies based on white light emitting diodes
29	that, compared to incandescent and fluorescent lighting technologies, are longer lasting,
30	more energy-efficient; and cost-competitive

1	(C) FUNDAMENTAL RESEARCH.—
2	(1) The Secretary shall carry out the fundamental research activities of the
3	Next Generation Lighting Initiative through a private consortium (which may
4	include private firms, trade associations and institutions of higher education), which
5	the Secretary shall select through a competitive process.
6	(2) The consortium shall be structured as a joint venture among the
7	participants of the consortium. The Secretary shall serve on the governing council
8	of the consortium.
9	(3) To be eligible to be selected as the consortium under paragraph (1), an
10	applicant must be broadly representative of United States solid-state lighting
11	research, development, and manufacturing expertise as a whole.
12	(4) The Secretary shall establish procedures for awarding grants, which shall
13	be matched by the consortium pursuant to section 992.
14	(5) National Laboratories may participate in the research described in this
15	section, and may receive funds from the consortium.
16	(6) Participants in the consortium and the Federal Government shall have
17	royalty-free nonexclusive rights to use intellectual property derived from research
18	funded pursuant to this subsection.
19	(d) DEVELOPMENT, DEMONSTRATION, AND COMMERCIAL APPLICATION.—The
20	Secretary shall carry out the development, demonstration, and commercial application
21	activities of the Next Generation Lighting Initiative through awards to private firms, trade
22	associations, and institutions of higher education. In selecting awardees, the Secretary may
23	give preference to members of the consortium selected pursuant to subsection (c).
24	(e) Plans and Assessments.—
25	(1) The consortium shall formulate an annual operating plan which shall
26	include research priorities, technical milestones, and plans for technology transfer,
27	and which shall be subject to approval by the Secretary.
28	(2) The Secretary shall enter into an arrangement with the National
29	Academy of Sciences to conduct periodic reviews of the Next Generation Lighting

1	Initiative and shall consider the results of such reviews in evaluating the plans
2	submitted under paragraph (1).
3	(f) AUDIT.—The Secretary shall retain an independent, commercial auditor to
4	perform an audit of the consortium to determine the extent to which the funds authorized
5	by this section have been expended in a manner consistent with the purposes of this
6	section. The auditor shall transmit a report annually to the Secretary, who shall transmit the
7	report to Congress, along with a plan to remedy any deficiencies cited in the report.
8	(g) SUNSET.—The Next Generation Lighting Initiative shall terminate no later than
9	September 30, 2013.
10	(h) DEFINITIONS.—As used in this section:
11	(1) The term "advanced solid-state lighting" means a semiconducting device
12	package and delivery system that produces white light using externally applied
13	voltage.
14	(2) The term "fundamental research" includes basic research on both solid-
15	state materials and manufacturing processes.
16	(3) The term "white light emitting diode" means a semiconducting package
17	that produces white light using externally applied voltage.
18	SEC. 913. NATIONAL BUILDING PERFORMANCE INITIATIVE.
19	(a) Interagency Group.—Not later than 3 months after the date of enactment of
20	this Act, the Director of the Office of Science and Technology Policy shall establish an
21	interagency group to develop, in coordination with the advisory committee established
22	under subsection (e), a National Building Performance Initiative (in this section referred to
23	as the "Initiative"). The interagency group shall be cochaired by appropriate officials of the
24	Department and the Department of Commerce, who shall jointly arrange for the provision
25	of necessary administrative support to the group.
26	(b) INTEGRATION OF EFFORTS.—The Initiative shall integrate Federal, State, and
27	voluntary private sector efforts to reduce the costs of construction, operation, maintenance,
28	and renovation of commercial, industrial, institutional, and residential buildings.
29	(c) PLAN.—Not later than 1 year after the date of enactment of this Act, the
30	interagency group shall submit to Congress a plan for carrying out the appropriate Federal

1	role in the Initiative. The plan shall include—
2	(1) research, development, demonstration, and commercial application of
3	systems and materials for new construction and retrofit relating to the building
4	envelope and building system components; and
5	(2) the collection, analysis, and dissemination of research results and other
6	pertinent information on enhancing building performance to industry, government
7	entities, and the public.
8	(d) DEPARTMENT OF ENERGY ROLE.—Within the Federal portion of the Initiative,
9	the Department shall be the lead agency for all aspects of building performance related to
10	use and conservation of energy.
11	(e) ADVISORY COMMITTEE.—The Director of the Office of Science and Technology
12	Policy shall establish an advisory committee to—
13	(1) analyze and provide recommendations on potential private sector roles
14	and participation in the Initiative; and
15	(2) review and provide recommendations on the plan described in
16	subsection (c).
17	(f) CONSTRUCTION.—Nothing in this section provides any Federal agency with new
18	authority to regulate building performance.
19	SEC. 914. SECONDARY ELECTRIC VEHICLE BATTERY USE PROGRAM.
20	(a) Definitions.—For purposes of this part, the term—
21	(1) "battery" means an energy storage device that previously has been used
22	to provide motive power in a vehicle powered in whole or in part by electricity; and
23	(2) "associated equipment" means equipment located where the batteries
24	will be used that is necessary to enable the use of the energy stored in the batteries.
25	(b) PROGRAM.—The Secretary shall establish and conduct a research, development
26	demonstration, and commercial application program for the secondary use of batteries.
27	Such program shall be—
28	(1) designed to demonstrate the use of batteries in secondary application,
29	including utility and commercial power storage and power quality;
30	(2) structured to evaluate the performance, including useful service life and
	•

1	costs, of such batteries in field operations, and evaluate the necessary supporting
2	infrastructure, including reuse and disposal of batteries; and
3	(3) coordinated with ongoing secondary battery use programs at the
4	National Laboratories and in industry.
5	(c) Solicitation.—Not later than 6 months after the date of the enactment of this
6	Act, the Secretary shall solicit proposals to demonstrate the secondary use of batteries and
7	associated equipment and supporting infrastructure in geographic locations throughout the
8	United States. The Secretary may make additional solicitations for proposals if the
9	Secretary determines that such solicitations are necessary to carry out this section.
10	(d) SELECTION OF PROPOSALS.—
11	(1) The Secretary shall, not later than 3 months after the closing date
12	established by the Secretary for receipt of proposals under subsection (b), select up
13	to 5 proposals which may receive financial assistance under this section once the
14	Department is in receipt of appropriated funds.
15	(2) In selecting proposals, the Secretary shall consider diversity of battery
16	type, geographic and climatic diversity, and life-cycle environmental effects of the
17	approaches.
18	(3) No one project selected under this section shall receive more than 25
19	percent of the funds authorized for this Program.
20	(4) The Secretary shall consider the extent of involvement of State or local
21	government and other persons in the demonstration project to optimize use of
22	federal resources.
23	(5) The Secretary may consider such other criteria as the Secretary considers
24	appropriate.
25	(e) Conditions.—
26	(1) The Secretary shall require that relevant information be provided to the
27	Department, the users of the batteries, the proposers, and the battery manufacturers.
28	(2) the proposer provide at least 50 percent of the costs associated with the
29	proposal.

1	SEC. 915. ENERGY EFFICIENCY SCIENCE INITIATIVE.
2	(a) ESTABLISHMENT.—The Secretary shall establish an Energy Efficiency Science
3	Initiative to be managed by the Assistant Secretary in the Department with responsibility
4	for energy conservation under section 203(a)(9) of the Department of Energy Organization
5	Act (42 U.S.C. 7133(a)(9)), in consultation with the Director of the Office of Science, for
6	grants to be competitively awarded and subject to peer review for research relating to
7	energy efficiency.
8	(b) REPORT.—The Secretary shall submit to the Congress, along with the
9	President's annual budget request under section 1105(a) of title 31, United States Code, a
10	report on the activities of the Energy Efficiency Science Initiative, including a description
11	of the process used to award the funds and an explanation of how the research relates to
12	energy efficiency.
13	Subtitle B—Distributed Energy
14	and Electric Energy Systems
15	SEC. 921. DISTRIBUTED ENERGY AND ELECTRIC ENERGY SYSTEMS.
16	(a) In General.—
17	(1) The following sums are authorized to be appropriated to the Secretary
18	for distributed energy and electric energy systems activities, including activities
19	authorized under this subtitle:
20	(A) For fiscal year 2004, \$190,000,000;
21	(B) For fiscal year 2005, \$200,000,000;
22	(C) For fiscal year 2006, \$220,000,000;
23	(D) For fiscal year 2007, \$240,000,000; and
24	(E) For fiscal year 2008, \$260,000,000.
25	(2) For the Initiative in subsection 926(d), there are authorized to be
26	appropriated:
27	(A) \$15,000,000 for fiscal year 2004;
28	(B) \$20,000,000 in fiscal year 2005;
29	(C) \$30,000,000 in fiscal year 2006;

1	(D) \$35,000,000 in fiscal year 2007; and
2	(E) \$40,000,000 in fiscal year 2008.
3	(b) MICRO-COGENERATION ENERGY TECHNOLOGY.—From amounts authorized
4	under subsection (a), \$20,000,000 for each of fiscal years 2004 and 2005 shall be available
5	for activities under section 924.
6	SEC. 922. HYBRID DISTRIBUTED POWER SYSTEMS.
7	Not later than 1 year after the date of enactment of this Act, the Secretary shall
8	develop and transmit to the Congress a strategy for a comprehensive research,
9	development, demonstration, and commercial application program to develop hybrid
10	distributed power systems that combine—
11	(1) one or more renewable electric power generation technologies of 10
12	megawatts or less located near the site of electric energy use; and
13	(2) nonintermittent electric power generation technologies suitable for use
14	in a distributed power system.
15	SEC. 923. HIGH POWER DENSITY INDUSTRY PROGRAM.
16	The Secretary shall establish a comprehensive research, development,
17	demonstration, and commercial application program to improve energy efficiency of high
18	power density facilities, including data centers, server farms, and telecommunications
19	facilities. Such program shall consider technologies that provide significant improvement
20	in thermal controls, metering, load management, peak load reduction, or the efficient
21	cooling of electronics.
22	SEC. 924. MICRO-COGENERATION ENERGY TECHNOLOGY.
23	The Secretary shall make competitive, merit-based grants to consortia for the
24	development of micro-cogeneration energy technology. The consortia shall explore the use
25	of small-scale combined heat and power in residential heating appliances.
26	SEC. 925. OFFICE OF ELECTRIC TRANSMISSION AND DISTRIBUTION.
27	(a) Creation of an Office of Electric Transmission and
28	DISTRIBUTION.—Title II of the Department of Energy Organization Act is amended by
29	inserting the following after section 217 (42 U.S.C. 7144d):
30	"OFFICE OF ELECTRIC TRANSMISSION AND DISTRIBUTION.

1	"SEC. 218. (a) There is established within the Department an Office of Electric
2	Transmission and Distribution. This Office shall be headed by a Director, who shall be
3	appointed by the Secretary. The Director shall be compensated at the annual rate
4	prescribed for level IV of the Executive Schedule under section 5315 of title 5, United
5	States Code."
6	"(b) The Director shall –
7	"(1) coordinate and develop a comprehensive, multi-year strategy to
8	improve the Nation's electricity transmission;
9	"(2) ensure that the recommendations of the Secretary's National
10	Transmission Grid Study are implemented;
11	"(3) carry out the research, development, and demonstration functions;
12	"(4) grant authorizations for electricity import and export; and
13	"(5) perform other electricity transmission-related functions assigned by the
14	Secretary."
15	(b) Conforming Amendments.—
16	(1) The Table of Contents of the Department of Energy Act is amended by
17	inserting after the item relating to section 217 the following new item:
18	"218. Office of Electric Transmission and Distribution.".
19	(2) Section 5315 of title 5, United States Code, is amended by inserting
20	"Director, Office of Electric Transmission and Distribution, Department of
21	Energy." after "Director, Office of Science, Department of Energy.".
22	SECTION 926. ELECTRIC TRANSMISSION AND DISTRIBUTION PROGRAMS.
23	(a) DEMONSTRATION PROGRAM.—The Secretary, acting through the Director of the
24	Office of Electric Transmission and Distribution, shall establish a comprehensive research,
25	development, and demonstration program to ensure the reliability, efficiency, and
26	environmental integrity of electrical transmission systems. This program shall include—
27	(1) advanced energy technologies, materials, and systems;
28	(2) advanced grid reliability and efficiency technology development;
29	(3) technologies contributing to significant load reductions;

1	(4) advanced metering, load management, and control technologies;
2	(5) technologies to enhance existing grid components;
3	(6) the development and use of high-temperature superconductors to
4	(A) enhance the reliability, operational flexibility, or power-carrying
5	capability of electric transmission or distribution systems; or
6	(B) increase the efficiency of electric energy generation,
7	transmission, distribution, or storage systems;
8	(7) integration of power systems, including systems to deliver high-quality
9	electric power, electric power reliability, and combined heat and power;
10	(8) any other infrastructure technologies, as appropriate; and
11	(9) technology transfer and education.
12	(b) PROGRAM PLAN.—Not later than 1 year after the date of the enactment of this
13	legislation, the Secretary, in consultation with other appropriate Federal agencies, shall
14	prepare and transmit to Congress a 5-year program plan to guide activities under this
15	section. In preparing the program plan, the Secretary shall consult with utilities, energy
16	services providers, manufacturers, institutions of higher education, other appropriate State
17	and local agencies, environmental organizations, professional and technical societies, and
18	any other persons the Secretary considers appropriate.
19	(c) REPORT.—Not later than 2 years after the transmittal of the plan under
20	subsection (b), the Secretary shall transmit a report to Congress describing the progress
21	made under this section and identifying any additional resources needed to continue the
22	development and commercial application of transmission infrastructure technologies.
23	(d) Power Delivery Research Initiative.—The Secretary shall establish a
24	research, development and demonstration initiative specifically focused on power delivery
25	research utilizing components incorporating high temperature superconductivity. Goals of
26	this Initiative shall be to—
27	(1) establish world class facilities to develop high temperature
28	superconductivity power applications in partnership with manufacturers and
29	utilities;

1	(2) provide technical leadership for establishing reliability for high
2	temperature superconductivity power applications including suitable modeling and
3	analysis; and
4	(3) facilitate commercial transition toward direct current power
5	transmission, storage, and use for high power systems utilizing high temperature
6	superconductivity.
7	(e) The Initiative in (d) shall use—
8	(A) feasibility analysis, planning, research, and design to construct
9	demonstrations of superconducting links in a high power, direct current
10	transmission system;
11	(B) public-private partnerships to demonstrate deployment of high
12	temperature superconducting cable into testbeds simulating a realistic
13	transmission grid; and
14	(C) testbeds developed in cooperation with national laboratories,
15	industries, and universities to demonstrate these technologies, prepare the
16	technologies for commercial introduction, and address cost or performance
17	roadblocks to successful commercial use.
18	Subtitle C—Renewable Energy
19	SEC. 931. RENEWABLE ENERGY.
20	(a) In General.—The following sums are authorized to be appropriated to the
21	Secretary for renewable energy research, development, demonstration, and commercial
22	application activities, including activities authorized under this subtitle:
23	(1) For fiscal year 2003, \$390,000,000;
24	(2) For fiscal year 2004, \$480,000,000;
25	(3) For fiscal year 2005, \$550,000,000;
26	(4) For fiscal year 2006, \$610,000,000; and
27	(5) For fiscal year 2007, \$659,000,000.
28	(b) BIOENERGY.—From the amounts authorized under subsection (a), the following
29	sums are authorized to be appropriated to carry out section 932:

1	(1) For fiscal year 2003, \$117,800,000;
2	(2) For fiscal year 2004, \$135,425,000;
3	(3) For fiscal year 2005, \$155,600,000;
4	(4) For fiscal year 2006, \$167,650,000; and
5	(5) For fiscal year 2007, \$180,000,000.
6	(c) CONCENTRATING SOLAR POWER.—From amounts authorized under subsection
7	(a), the following sums are authorized to be appropriated to carry out section 933:
8	(1) For fiscal year 2004, \$20,000,000
9	(2) for fiscal year 2005, \$40,000,000,
10	(2) For each of fiscal years 2006, 2007 and 2008, \$50,000,000,
11	(d) Limits on Use of Funds.—
12	(1) None of the funds authorized to be appropriated under this section may
13	be used for Renewable Support and Implementation.
14	(2) Of the funds authorized under subsection (b), not less than \$5,000,000
15	for each fiscal year shall be made available for grants to Historically Black
16	Colleges and Universities, Tribal Colleges, and Hispanic-Serving Institutions.
17	(3) In carrying out this section, the Secretary, in consultation with the
18	Secretary of Agriculture, shall demonstrate the use of advanced wind power
19	technology, biomass, geothermal energy systems, and other renewable energy
20	technologies to assist in delivering electricity to rural and remote locations.
21	SEC. 932. BIOENERGY PROGRAMS.
22	The Secretary shall conduct a program of research, development, demonstration,
23	and commercial application for bioenergy, including—
24	(1) biopower energy systems;
25	(2) biofuels;
26	(3) integrated applications of both biopower and biofuels;
27	(4) cross-cutting research and development in feedstocks; and
28	(5) economic analysis.
29	SEC. 933. CONCENTRATING SOLAR POWER RESEARCH PROGRAM.
30	(a) In General.—The Secretary shall conduct a program of research and

(b) Assessment.—In carrying out the program under this section, the Secretary is directed to assess conflicting guidance on the economic potential of concentrating solar power for electricity production received from the National Research Council report entitled "Renewable Power Pathways: A Review of the U.S. Department of Energy's Renewable Energy Programs" in 2000 and subsequent DOE-funded reviews of that report and provide an assessment of the potential impact of this technology before, or concurrent with, submission of the FY2005 budget. (c) Report.—Not later than 5 years after the date of enactment of this section, the Secretary shall provide a report to Congress on the economic and technical potential for hydrogen production, with or without co-generation of electricity, with concentrating solar power, including the economic and technical feasibility of potential construction of a pilot demonstration facility suitable for commercial production of hydrogen from concentrating solar power. SEC. 934 MISCELLANEOUS PROJECTS. The Secretary shall conduct research, development, demonstration, and commercial application programs for— (1) ocean energy, including wave energy; and (2) the combined use of renewable energy technologies with one another	1	development to evaluate the potential of concentrating solar power for hydrogen
(1) development of optimized core technologies that are common to both electricity and hydrogen production; (2) evaluation of thermo-chemical cycles for hydrogen production at the temperatures attainable with concentrating solar power; (3) evaluation of materials issues for the thermo-chemical cycles in (1); (4) system architectures and economics studies; and (5) coordination with activities in the Advanced Reactor Hydrogen Cogeneration Project on high temperature materials and thermo-chemical cycle issues (b) ASSESSMENT.—In carrying out the program under this section, the Secretary is directed to assess conflicting guidance on the economic potential of concentrating solar power for electricity production received from the National Research Council report entitled "Renewable Power Pathways: A Review of the U.S. Department of Energy's Renewable Energy Programs" in 2000 and subsequent DOE-funded reviews of that report and provide an assessment of the potential impact of this technology before, or concurrent with, submission of the FY2005 budget. (c) Report.—Not later than 5 years after the date of enactment of this section, the Secretary shall provide a report to Congress on the economic and technical potential for hydrogen production, with or without co-generation of electricity, with concentrating solar power, including the economic and technical feasibility of potential construction of a pilot demonstration facility suitable for commercial production of hydrogen from concentrating solar power, including the economic and technical feasibility of potential construction of a pilot demonstration facility suitable for commercial production of hydrogen from concentrating solar power, including the economic and technical feasibility of potential construction of a pilot demonstration facility suitable for commercial production of hydrogen from concentrating solar power. SEC. 934 MISCELLANEOUS PROJECTS. The Secretary shall conduct research, development, demonstration, and commercial application programs for— (1	2	production, including co-generation approaches for both hydrogen and electricity. Such
electricity and hydrogen production; (2) evaluation of thermo-chemical cycles for hydrogen production at the temperatures attainable with concentrating solar power; (3) evaluation of materials issues for the thermo-chemical cycles in (1); (4) system architectures and economics studies; and (5) coordination with activities in the Advanced Reactor Hydrogen Cogeneration Project on high temperature materials and thermo-chemical cycle issues (b) ASSESSMENT.—In carrying out the program under this section, the Secretary is directed to assess conflicting guidance on the economic potential of concentrating solar power for electricity production received from the National Research Council report entitled "Renewable Power Pathways: A Review of the U.S. Department of Energy's Renewable Energy Programs" in 2000 and subsequent DOE-funded reviews of that report and provide an assessment of the potential impact of this technology before, or concurrent with, submission of the FY2005 budget. (c) REPORT.—Not later than 5 years after the date of enactment of this section, the Secretary shall provide a report to Congress on the economic and technical potential for hydrogen production, with or without co-generation of electricity, with concentrating solar power, including the economic and technical feasibility of potential construction of a pilot demonstration facility suitable for commercial production of hydrogen from concentrating solar power. SEC. 934 MISCELLANEOUS PROJECTS. The Secretary shall conduct research, development, demonstration, and commercial application programs for— (1) ocean energy, including wave energy; and (2) the combined use of renewable energy technologies with one another	3	program shall include—
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10 (5) coordination with activities in the Advanced Reactor Hydrogen Co- 11 generation Project on high temperature materials and thermo-chemical cycle issues 12 (b) ASSESSMENT.—In carrying out the program under this section, the Secretary is 13 directed to assess conflicting guidance on the economic potential of concentrating solar 14 power for electricity production received from the National Research Council report 15 entitled "Renewable Power Pathways: A Review of the U.S. Department of Energy's 16 Renewable Energy Programs" in 2000 and subsequent DOE-funded reviews of that report 17 and provide an assessment of the potential impact of this technology before, or concurrent 18 with, submission of the FY2005 budget. 19 (c) REPORT.—Not later than 5 years after the date of enactment of this section, the 20 Secretary shall provide a report to Congress on the economic and technical potential for 21 hydrogen production, with or without co-generation of electricity, with concentrating solar 22 power, including the economic and technical feasibility of potential construction of a pilot 23 demonstration facility suitable for commercial production of hydrogen from concentrating 24 solar power. 25 SEC. 934 MISCELLANEOUS PROJECTS. 26 The Secretary shall conduct research, development, demonstration, and commerci 27 application programs for— 28 (1) ocean energy, including wave energy; and 29 (2) the combined use of renewable energy technologies with one another	8	(3) evaluation of materials issues for the thermo-chemical cycles in (1);
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The Secretary shall conduct research, development, demonstration, and commerci application programs for— (1) ocean energy, including wave energy; and (2) the combined use of renewable energy technologies with one another	24	solar power.
27 application programs for— 28 (1) ocean energy, including wave energy; and 29 (2) the combined use of renewable energy technologies with one another	25	SEC. 934 MISCELLANEOUS PROJECTS.
28 (1) ocean energy, including wave energy; and 29 (2) the combined use of renewable energy technologies with one another	26	The Secretary shall conduct research, development, demonstration, and commercial
29 (2) the combined use of renewable energy technologies with one another	27	application programs for—
	28	(1) ocean energy, including wave energy; and
and with other energy technologies, including the combined use of wind power and	29	(2) the combined use of renewable energy technologies with one another
	30	and with other energy technologies, including the combined use of wind power and

1 coal gasification technologies. **Subtitle D—Nuclear Energy** 2 3 SEC. 941. NUCLEAR ENERGY. 4 (a) CORE PROGRAMS.—The following sums are authorized to be appropriated to the 5 Secretary for nuclear energy research, development, demonstration, and commercial application activities, including activities authorized under this subtitle, other than those 6 7 described in subsection (b): 8 (1) For fiscal year 2004, \$233,000,000; 9 (2) For fiscal year 2005, \$266,000,000; (3) For fiscal year 2006, \$300,000,000; 10 (4) For fiscal year 2007, \$334,000,000; and 11 (5) For fiscal year 2008, \$370,000,000. 12 (b) NUCLEAR INFRASTRUCTURE SUPPORT.—The following sums are authorized to 13 14 be appropriated to the Secretary for activities under section 942(f): (1) For fiscal year 2004, \$125,000,000; 15 (2) For fiscal year 2005, \$130,000,000; 16 17 (3) For fiscal year 2006, \$135,000,000; (4) For fiscal year 2007, \$140,000,000; and 18 19 (5) For fiscal year 2008, \$145,000,000. 20 (c) ALLOCATIONS.—From amounts authorized under subsection (a), the following 21 sums are authorized: (1) For activities under section 943— 22 23 (A) for fiscal year 2004, \$100,000,000; 24 (B) for fiscal year 2005, \$106,000,000; 25 (C) for fiscal year 2006, \$120,000,000; (D) for fiscal year 2007, \$134,000,000; 26 (E) for fiscal year 2008, \$150,000,000. 27 (2) For activities under section 944— 28

(A) for fiscal year 2004, \$33,000,000;

29

1	(B) for fiscal year 2005, \$37,900,000;
2	(C) for fiscal year 2006, \$43,600,000;
3	(D) for fiscal year 2007, \$50,100,000; and
4	(E) for fiscal year 2008, \$56,000,000.
5	(d) None of the funds authorized under this section may be used for
6	decommissioning the Fast Flux Test Facility.
7	SEC. 942. NUCLEAR ENERGY RESEARCH PROGRAMS.
8	(a) NUCLEAR ENERGY RESEARCH INITIATIVE.—The Secretary shall carry out a
9	Nuclear Energy Research Initiative for research and development related to nuclear energy.
10	(b) NUCLEAR ENERGY PLANT OPTIMIZATION PROGRAM.—The Secretary shall carry
11	out a Nuclear Energy Plant Optimization Program to support research and development
12	activities addressing reliability, availability, productivity, and component aging in existing
13	nuclear power plants.
14	(c) Nuclear Power 2010 Program.—The Secretary shall carry out a Nuclear
15	Power 2010 Program, consistent with recommendations in the October 2001 report entitled
16	"A Roadmap to Deploy New Nuclear Power Plants in the United States by 2010" issued by
17	the Nuclear Energy Research Advisory Committee of the Department. The Program
18	shall—
19	(1) rely on the expertise and capabilities of the National Laboratories in the
20	areas of advanced nuclear fuels cycles and fuels testing;
21	(2) pursue an approach that considers a variety of reactor designs suitable
22	for both developed and developing nations;
23	(3) include participation of international collaborators in research,
24	development, and design efforts as appropriate; and
25	(4) encourage university and industry participation.
26	(d) GENERATION IV NUCLEAR ENERGY SYSTEMS INITIATIVE.—The Secretary shall
27	carry out a Generation IV Nuclear Energy Systems Initiative to develop an overall
28	technology plan and to support research and development necessary to make an informed
29	technical decision about the most promising candidates for eventual commercial
30	application. The Initiative shall examine advanced proliferation-resistant and passively safe

1	reactor designs, including designs that—
2	(1) are economically competitive with other electric power generation
3	plants;
4	(2) have higher efficiency, lower cost, and improved safety compared to
5	reactors in operation on the date of enactment of this Act;
6	(3) use fuels that are proliferation resistant and have substantially reduced
7	production of high-level waste per unit of output; and
8	(4) utilize improved instrumentation.
9	(e) REACTOR PRODUCTION OF HYDROGEN.—The Secretary shall carry out research
10	to examine designs for high-temperature reactors capable of producing large-scale
11	quantities of hydrogen using thermochemical processes.
12	(f) Nuclear Infrastructure Support.—The Secretary shall develop and
13	implement a strategy for the facilities of the Office of Nuclear Energy, Science, and
14	Technology and shall transmit a report containing the strategy along with the President's
15	budget request to the Congress for fiscal year 2005. Such strategy shall provide a cost-
16	effective means for—
17	(1) maintaining existing facilities and infrastructure, as needed;
18	(2) closing unneeded facilities;
19	(3) making facility upgrades and modifications; and
20	(4) building new facilities.
21	SEC. 943. ADVANCED FUEL CYCLE INITIATIVE.
22	(a) In General.—The Secretary, through the Director of the Office of Nuclear
23	Energy, Science and Technology, shall conduct an advanced fuel recycling technology
24	research and development program to evaluate proliferation-resistant fuel recycling and
25	transmutation technologies which minimize environmental or public health and safety
26	impacts as an alternative to aqueous reprocessing technologies deployed as of the date of
27	enactment of this Act in support of evaluation of alternative national strategies for spent
28	nuclear fuel and the Generation IV advanced reactor concepts, subject to annual review by
29	the Secretary's Nuclear Energy Research Advisory Committee or other independent entity,
30	as appropriate. Opportunities to enhance progress of this program through international

1	cooperation should be sought.
2	(b) REPORTS.—The Secretary shall report on the activities of the advanced fuel
3	recycling technology research and development program, as part of the Department's
4	annual budget submission.
5	SEC. 944. UNIVERSITY NUCLEAR SCIENCE AND ENGINEERING SUPPORT.
6	(a) ESTABLISHMENT.—The Secretary shall support a program to invest in human
7	resources and infrastructure in the nuclear sciences and engineering and related fields
8	(including health physics and nuclear and radiochemistry), consistent with departmental
9	missions related to civilian nuclear research and development.
10	(b) DUTIES.—In carrying out the program under this section, the Secretary shall
11	establish fellowship and faculty assistance programs, as well as provide support for
12	fundamental research and encourage collaborative research among industry, national
13	laboratories, and universities through the Nuclear Energy Research Initiative. The
14	Secretary shall support communication and outreach related to nuclear science and
15	engineering.
16	(c) Maintaining University Research and Training Reactors and
17	ASSOCIATED INFRASTRUCTURE.—Activities under this section may include—
18	(1) converting research reactors currently using high-enrichment fuels to
19	low-enrichment fuels, upgrading operational instrumentation, and sharing of
20	reactors among institutions of higher education;
21	(2) providing technical assistance, in collaboration with the United States
22	nuclear industry, in relicensing and upgrading training reactors as part of a student
23	training program; and
24	(3) providing funding for reactor improvements as part of a focused effort
25	that emphasizes research, training, and education.
26	(d) University–National Laboratory Interactions.—The Secretary shall
27	develop sabbatical fellowship and visiting scientist programs to encourage sharing of
28	personnel between national laboratories and universities.
29	(e) OPERATING AND MAINTENANCE COSTS.—Funding for a research project

1	provided under this section may be used to offset a portion of the operating and
2	maintenance costs of a research reactor at an institution of higher education used in the
3	research project.
4	Subtitle E—Fossil Energy
5	SEC. 951. FOSSIL ENERGY.
6	(a) IN GENERAL.—The following sums are authorized to be appropriated to the
7	Secretary for fossil energy research, development, demonstration, and commercial
8	application activities, including activities authorized under this subtitle, other than those
9	described in subsection (b):
10	(1) For fiscal year 2004, \$523,000,000;
11	(2) For fiscal year 2005, \$542,000,000;
12	(3) For fiscal year 2006, \$558,000,000;
13	(4) For fiscal year 2007, \$585,000,000; and
14	(5) For fiscal year 2008, \$600,000,000.
15	(b) ALLOCATIONS.—From amounts authorized under subsection (a), the following
16	sums are authorized:
17	(1) For activities under section 952(c)(2), \$28,000,000 for each of the fiscal
18	years 2003 through 2007.
19	(2) For activities under section 953:
20	(A) for fiscal year 2004, \$12,000,000; and
21	(B) for fiscal year 2005, \$15,000,000.
22	(3) For the Office of Arctic Energy under section 3197 of the Floyd D.
23	Spence National Defense Authorization Act for Fiscal Year 2001 (Public Law 106-
24	398), \$25,000,000 for each of fiscal years 2004 through 2008.
25	(c) EXTENDED AUTHORIZATION.—There are authorized to be appropriated to the
26	Secretary for the Office of Arctic Energy under section 3197 of the Floyd D. Spence
27	National Defense Authorization Act for Fiscal Year 2001 (Public Law 106-398),
28	\$25,000,000 for each of fiscal years 2009 through 2012.

1	(d) Limits on Use of Funds.—
2	(1) None of the funds authorized under this section may be used for—
3	(A) Fossil Energy Environmental Restoration; or
4	(B) Import/Export Authorization.
5	(2) Of the funds authorized under subsection (b)(2), not less than 20 percent
6	of the funds appropriated for each fiscal year shall be dedicated to research and
7	development carried out at institutions of higher education.
8	SEC. 952. FOSSIL ENERGY RESEARCH PROGRAMS.
9	(a) Coal Research.—
10	(1) In addition to the Clean Coal Power Initiative authorized under Title II,
11	the Secretary shall conduct a program of research, development, demonstration, and
12	commercial application for coal and power systems, including—
13	(A) central systems;
14	(B) sequestration research and development;
15	(C) fuels;
16	(D) advanced research; and
17	(E) advanced separation technologies.
18	(2) No funds may be used to carry out the activities authorized by paragraph
19	(1) after September 30, 2003, unless one month has elapsed since the Secretary has
20	transmitted to the Congress a report providing—
21	(A) a detailed description of how proposals will be solicited and
22	evaluated;
23	(B) a list of activities and technical milestones; and
24	(C) a description of how these activities will complement and not
25	duplicate the Clean Coal Power Initiative authorized under Title II.
26	(b) OIL AND GAS RESEARCH.—The Secretary shall conduct a program of research,
27	development, demonstration, and commercial application on oil and gas, including—
28	(1) exploration and production;
29	(2) gas hydrates;

1	(3) reservoir life and extension;
2	(4) transportation and distribution infrastructure;
3	(5) ultraclean fuels;
4	(6) heavy oil and oil shale; and
5	(7) environmental research.
6	(c) Fuel Cells.—
7	(1) The Secretary shall conduct a program of research, development,
8	demonstration, and commercial application on fuel cells for low-cost, high-
9	efficiency, fuel-flexible, modular power systems.
10	(2) The demonstrations shall include fuel cell proton exchange membrane
11	technology for commercial, residential, and transportation applications, and
12	distributed generation systems, utilizing improved manufacturing production and
13	processes.
14	(d) NATURAL GAS AND OIL DEPOSITS REPORT.—Not later than 2 years after the
15	date of the enactment of this Act, and at 2-year intervals thereafter, the Secretary of the
16	Interior, in consultation with other appropriate Federal agencies, shall transmit a report to
17	the Congress of the latest estimates of natural gas and oil reserves, reserves growth, and
18	undiscovered resources in Federal and State waters off the coast of Louisiana and Texas.
19	SEC. 953. RESEARCH AND DEVELOPMENT FOR COAL MINING TECHNOLOGIES.
20	(a) Establishment.—The Secretary shall carry out a program of research and
21	development on coal mining technologies. The Secretary shall cooperate with appropriate
22	Federal agencies, coal producers, trade associations, equipment manufacturers, institutions
23	of higher education with mining engineering departments, and other relevant entities.
24	(b) PROGRAM.—The research and development activities carried out under this
25	section shall—
26	(1) be guided by the mining research and development priorities identified
27	by the Mining Industry of the Future Program and in the recommendations from
28	relevant reports of the National Academy of Sciences on mining technologies;
29	(2) include activities exploring minimization of contaminants in mined coal

1	that contribute to environmental concerns including development and
2	demonstration of electromagnetic wave imaging ahead of mining operations;
3	(3) develop and demonstrate coal bed electromagnetic wave imaging and
4	radar techniques for horizontal drilling in order to increase methane recovery
5	efficiency, prevent spoilage of domestic coal reserves and minimize water disposal
6	associated with methane extraction; and
7	(4) expand mining research capabilities at institutions of higher education
8	Subtitle F—Science
9	SEC. 961. SCIENCE.
10	(a) In GENERAL.—The following sums are authorized to be appropriated to the
11	Secretary for research, development, demonstration, and commercial application activities
12	of the Office of Science, including activities authorized under this subtitle, including the
13	amounts authorized under the amendment made by section 967(c)(2)(D), and including
14	basic energy sciences, advanced scientific and computing research, biological and
15	environmental research, fusion energy sciences, high energy physics, nuclear physics, and
16	research analysis and infrastructure support:
17	(1) For fiscal year 2004, \$3,785,000,000;
18	(2) For fiscal year 2005, \$4,153,000,000;
19	(3) For fiscal year 2006, \$4,586,000,000
20	(4) For fiscal year 2007, \$5,000,000,000; and
21	(5) For fiscal year 2008, \$5,400,000,000.
22	(b) ALLOCATIONS.—From amounts authorized under subsection (a), the following
23	sums are authorized:
24	(1) For activities of the Fusion Energy Sciences Program, including
25	activities under section 962—
26	(A) for fiscal year 2004, \$335,000,000;
27	(B) for fiscal year 2005, \$349,000,000;
28	(C) for fiscal year 2006, \$362,000,000;

1	(D) for fiscal year 2007, \$377,000,000;
2	(E) for fiscal year 2008, \$393,000,000.
3	(2) For the Spallation Neutron Source—
4	(A) for construction in fiscal year 2004, \$124,600,000;
5	(B) for construction in fiscal year 2005, \$79,800,000; and
6	(C) for completion of construction in fiscal year 2006, \$41,100,000.
7	(D) For other project costs (including research and development
8	necessary to complete the project, preoperations costs, and capital
9	equipment related to construction) of the Spallation Neutron Source,
10	\$103,279,000 for the period encompassing fiscal years 2003 through 2006,
11	to remain available until expended through September 30, 2006.
12	(3) For Nanoscale Science and Engineering Research activities under
13	section 966—
14	(A) for fiscal year 2004, \$270,000,000;
15	(B) for fiscal year 2005, \$290,000,000;
16	(C) for fiscal year 2006, \$310,000,000;
17	(D) for fiscal year 2007, \$330,000,000; and
18	(E) for fiscal year 2008, \$375,000,000.
19	(4) For activities under subsection 966(c), from the amounts authorized
20	under subparagraph (3)—
21	(A) for fiscal year 2004, \$135,000,000;
22	(B) for fiscal year 2005, \$150,000,000;
23	(C) for fiscal year 2006, \$120,000,000;
24	(D) for fiscal year 2007, \$100,000,000; and
25	(E) for fiscal year 2008, \$125,000,000.
26	(5) For activities in the Genomes to Life Program under section 968—
27	(A) \$100,000,000 for fiscal year 2004;
28	(B) \$170,000,000 for fiscal year 2005;
29	(C) \$325,000,000 for fiscal year 2006;

1	(D) \$415,000,000 for fiscal year 2007; and
2	(E) \$455,000,000 for fiscal year 2008.
3	(6) For construction and ancillary equipment of the Genomes to Life User
4	Facilities under section 968(d), of funds authorized under (5)—
5	(A) \$16,000,000 for fiscal year 2004;
6	(B) \$70,000,000 for fiscal year 2005;
7	(C) \$175,000,000 for fiscal year 2006;
8	(D) \$215,000,000 for fiscal year 2007; and
9	(E) \$205,000,000 for fiscal year 2008.
10	(7) For activities in the Water Supply Technologies Program under section
11	970, \$20,000,000 for each of fiscal years 2004 through 2008.
12	(c) In addition to the funds authorized under subsection (b)(1), the following sums
13	are authorized for participation in the ITER project under section 962—
14	(1) for fiscal year 2004, \$12,000,000;
15	(2) for fiscal year 2005, \$20,000,000;
16	(3) for fiscal year 2006, \$50,000,000;
17	(4) for fiscal year 2007, \$75,000,000; and
18	(5) for fiscal year 2008, \$115,000,000.
19	SEC. 962. UNITED STATES PARTICIPATION IN ITER.
20	(a)(1) The Secretary of Energy is authorized to undertake full scientific and
21	technological cooperation in the international burning plasma project referred to as
22	"ITER"; or
23	(2) In the event that ITER fails to go forward within a reasonable period of time, the
24	Secretary shall send to Congress a plan, including costs and schedules, for implementing
25	the domestic burning plasma experiment known as FIRE. Such a plan shall be developed
26	with full consultation with the Fusion Energy Sciences Advisory Committee and be
27	reviewed by the National Research Council.
28	(3) It is the intent of Congress that such sums shall be largely for work performed in
29	the United States and that such work contributes the maximum amount possible to the U.S.

1	scientific and technological base.
2	(b)(1) Within 180 days of the date of enactment of this act, the Secretary shall
3	present to Congress a plan, with proposed cost estimates, budgets and potential
4	international partners, for the implementation of the goals of this section. The plan shall
5	ensure that—
6	(A) existing fusion research facilities are more fully utilized;
7	(B) fusion science, technology, theory, advanced computation, modeling
8	and simulation are strengthened;
9	(C) new magnetic and inertial fusion research facilities are selected based
10	on scientific innovation, cost effectiveness, and their potential to advance the goal
11	of practical fusion energy at the earliest date possible, and those that are selected
12	are funded at a cost-effective rate;
13	(D) communication of scientific results and methods between the fusion
14	energy science community and the broader scientific and technology communities
15	is improved;
16	(E) inertial confinement fusion facilities are utilized to the extent practicable
17	for the purpose of inertial fusion energy research and development; and
18	(F) attractive alternative inertial and magnetic fusion energy approaches
19	are more fully explored.
20	(2) Such plan shall also address the status of and, to the degree possible, costs and
21	schedules for the following—
22	(A) in coordination with the program in section 969, the design and
23	implementation of international or national facilities for the testing of fusion
24	materials; and
25	(B) the design and implementation of international or national facilities
26	for the testing and development of key fusion technologies.
27	SEC. 963. SPALLATION NEUTRON SOURCE.
28	(a) Definition.—For the purposes of this section, the term "Spallation Neutron
29	Source" means Department Project 9909E 09334, Oak Ridge National Laboratory, Oak

1	Ridge, Tennessee.
2	(b) REPORT.—The Secretary shall report on the Spallation Neutron Source as part
3	of the Department's annual budget submission, including a description of the achievement
4	of milestones, a comparison of actual costs to estimated costs, and any changes in
5	estimated project costs or schedule.
6	(c) AUTHORIZATION OF APPROPRIATIONS.—The total amount obligated by the
7	Department, including prior year appropriations, for the Spallation Neutron Source may
8	not exceed—
9	(1) \$1,192,700,000 for costs of construction;
10	(2) \$219,000,000 for other project costs; and
11	(3) \$1,411,700,000 for total project cost.
12	SEC. 964. FACILITY AND INFRASTRUCTURE SUPPORT FOR NONMILITARY ENERGY
13	LABORATORIES.
14	(a) FACILITY POLICY.—The Secretary shall develop and implement a strategy for
15	the nonmilitary energy laboratories and facilities of the Office of Science. Such strategy
16	shall provide a cost-effective means for—
17	(1) maintaining existing facilities and infrastructure, as needed;
18	(2) closing unneeded facilities;
19	(3) making facility modifications; and
20	(4) building new facilities.
21	(b) Report.—
22	(1) The Secretary shall prepare and transmit, along with the President's
23	budget request to the Congress for fiscal year 2005, a report containing the strategy
24	developed under subsection (a).
25	(2) For each nonmilitary energy laboratory and facility, such report shall
26	contain—
27	(A) the current priority list of proposed facilities and infrastructure
28	projects, including cost and schedule requirements;
29	(B) a current ten-year plan that demonstrates the reconfiguration of

1	its facilities and infrastructure to meet its missions and to address its long-
2	term operational costs and return on investment;
3	(C) the total current budget for all facilities and infrastructure
4	funding; and
5	(D) the current status of each facilities and infrastructure project
6	compared to the original baseline cost, schedule, and scope.
7	SEC. 965. RESEARCH REGARDING PRECIOUS METAL CATALYSIS.
8	From the amounts authorized to be appropriated to the Secretary under section 961,
9	such sums as may be necessary for each of the fiscal years 2003, 2004, and 2005 may be
10	used to carry out research in the use of precious metals (excluding platinum, palladium,
11	and rhodium) in catalysis.
12	SEC. 966. NANOSCALE SCIENCE AND ENGINEERING RESEARCH.
13	(a) ESTABLISHMENT.—The Secretary, acting through the Office of Science, shall
14	support a program of research, development, demonstration, and commercial application in
15	nanoscience and nanoengineering. The program shall include efforts to further the
16	understanding of the chemistry, physics, materials science, and engineering of phenomena
17	on the scale of 1 to 100 nanometers and to apply this knowledge to the Department's
18	mission areas.
19	(b) Duties of the Office of Science.—In carrying out the program under this
20	section, the Office of Science shall—
21	(1) support both individual investigators and teams of investigators,
22	including multidisciplinary teams;
23	(2) carry out activities under subsection (c);
24	(3) support technology transfer activities to benefit industry and other users
25	of nanoscience and nanoengineering; and
26	(4) coordinate research and development activities with industry and other
27	Federal agencies.
28	(c) Nanoscience and Nanoengineering Research Centers and Major
29	Instrumentation.—

1	(1) The Secretary shall carry out projects to develop, plan, construct,
2	acquire, operate, or support special equipment, instrumentation, or facilities for
3	investigators conducting research and development in nanoscience and
4	nanoengineering.
5	(2) Projects under paragraph (1) may include the measurement of properties
6	at the scale of 1 to 100 nanometers, manipulation at such scales, and the integration
7	of technologies based on nanoscience or nanoengineering into bulk materials or
8	other technologies.
9	(3) Facilities under paragraph (1) may include electron
10	microcharacterization facilities, microlithography facilities, scanning probe
11	facilities, and related instrumentation.
12	(4) The Secretary shall encourage collaborations among institutions of
13	higher education, laboratories, and industry at facilities under this subsection.
14	SEC. 967. ADVANCED SCIENTIFIC COMPUTING FOR ENERGY MISSIONS.
15	(a) IN GENERAL.—The Secretary, acting through the Office of Science, shall
16	support a program to advance the Nation's computing capability across a diverse set of
17	grand challenge computationally based science problems related to departmental missions.
18	(b) Duties of the Office of Science.—In carrying out the program under this
19	section, the Office of Science shall—
20	(1) advance basic science through computation by developing software to
21	solve grand challenge science problems on new generations of computing
22	platforms;
23	(2) enhance the foundations for scientific computing by developing the
24	basic mathematical and computing systems software needed to take full advantage
25	of the computing capabilities of computers with peak speeds of 100 teraflops or
26	more, some of which may be unique to the scientific problem of interest;
27	(3) enhance national collaboratory and networking capabilities by
28	developing software to integrate geographically separated researchers into effective
29	research teams and to facilitate access to and movement and analysis of large

1	(petabyte) data sets;
2	(4) maintain a robust scientific computing hardware infrastructure to ensure
3	that the computing resources needed to address departmental missions are
4	available; and
5	(5) explore new computing approaches and technologies that promise to
6	advance scientific computing including developments in quantum computing.
7	(c) High-Performance Computing Act of 1991 Amendments.—The High-
8	Performance Computing Act of 1991 is amended—
9	(1) in section 4 (15 U.S.C. 5503)—
10	(A) in paragraph (3) by striking "means" and inserting "and
11	'networking and information technology' mean", and by striking
12	"(including vector supercomputers and large scale parallel systems)"; and
13	(B) in paragraph (4), by striking "packet switched".
14	(2) in section 203 (15 U.S.C. 5523)—
15	(A) in subsection (a), by striking all after "As part of the" and
16	inserting
17	"Networking and Information Technology Research and
18	Development Program, the Secretary of Energy shall conduct basic and
19	applied research in networking and information technology, with emphasis
20	on supporting fundamental research in the physical sciences and
21	engineering, and energy applications; providing supercomputer access and
22	advanced communication capabilities and facilities to scientific researchers;
23	and developing tools for distributed scientific collaboration.";
24	(B) in subsection (b), by striking "Program" and inserting
25	"Networking and Information Technology Research and Development
26	Program"; and
27	(C) in subsection (e), by striking "(1)";
28	(D) in subsection (e), by striking "the Program" and all that follows
29	through "fiscal year 1996" and inserting "carrying out this section

1	\$285,000,000 for fiscal year 2003, \$300,000,000 for fiscal year 2004,
2	\$310,000,000 for fiscal year 2005, and \$320,000,000 for fiscal year 2006";
3	and
4	(E) in subsection (e), by striking paragraph (2).
5	(d) COORDINATION.—The Secretary shall ensure that the program under this section
6	is integrated and consistent with—
7	(1) the Accelerated Strategic Computing Initiative of the National Nuclear
8	Security Administration; and
9	(2) other national efforts related to advanced scientific computing for
10	science and engineering.
11	(e) Report.—
12	(1) Before undertaking any new initiative to develop a new advanced
13	architecture for high-speed computing, the Secretary, through the Director of the
14	Office of Science, shall transmit a report to the Congress describing—
15	(A) the expected duration and cost of the initiative;
16	(B) the technical milestones the initiative is designed to achieve;
17	(C) how institutions of higher education and private firms will
18	participate in the initiative; and
19	(D) why the goals of the initiative could not be achieved through
20	existing programs.
21	(2) No funds may be expended on any initiative described in paragraph (1)
22	until 30 days after the report required by that paragraph is transmitted to the
23	Congress.
24	SEC. 968. GENOMES TO LIFE PROGRAM
25	(a) ESTABLISHMENT.—The Secretary shall carry out a program of research,
26	development, demonstration, and commercial application, to be known as the Genomes to
27	Life Program, in systems biology and proteomics consistent with the Department's
28	statutory authorities.
29	(b) Planning.—

1	(1) The Secretary shall prepare a program plan describing how knowledge
2	and capabilities would be developed by the program and applied to Department
3	missions relating to energy, environmental cleanup, national security, and
4	mitigation of global climate change.
5	(2) The program plan will be developed in consultation with other relevant
6	Department technology programs.
7	(3) The program plan shall focus science and technology on long-term goals
8	including—
9	(A) contributing to U.S. independence from foreign energy sources
10	(B) stabilizing atmospheric levels of carbon dioxide to counter
11	global warming,
12	(C) advancing environmental cleanup, and
13	(D) providing the science and technology basis for new industries in
14	biotechnology.
15	(4) The program plan shall identify appropriate research, development,
16	demonstration, and commercial application activities to address the following
17	issues within the next decade—
18	(A) identifying new biological sources of fuels and electricity, with
19	particular emphasis on creating biological technologies for the production
20	and utilization of hydrogen;
21	(B) understanding the Earth's natural carbon cycle and create
22	strategies to stabilize atmospheric carbon dioxide;
23	(C) developing a knowledge and capability base for exploring more
24	cost effective cleanup strategies for Department sites; and
25	(D) capturing key biological processes in engineered systems not
26	requiring living cells.
27	(c) PROGRAM EXECUTION.—In carrying out the program under this Act, the
28	Secretary shall—
29	(1) support individual investigators and multidisciplinary teams of

1	investigators;
2	(2) subject to subsection (d), develop, plan, construct, acquire, or operate
3	special equipment or facilities for the use of investigators conducting research,
4	development, demonstration, or commercial application in systems biology and
5	proteomics;
6	(3) support technology transfer activities to benefit industry and other users
7	of systems biology and proteomics; and
8	(4) coordinate activities by the Department with industry and other federal
9	agencies; and
10	(5) award funds authorized under this Act only after an impartial review of
11	the scientific and technical merit of the proposals for such awards has been carried
12	out by or for the Department.
13	(d) Genomes to Life User Facilities and Ancillary Equipment.—
14	(1) Within the funds authorized to be appropriated pursuant to this Act, the
15	amounts specified under section 961(b)(6) shall, subject to appropriations, be
16	available for projects to develop, plan, construct, acquire, or operate special
17	equipment, instrumentation, or facilities for investigators conducting research,
18	development, demonstration, and commercial application in systems biology and
19	proteomics and associated biological disciplines.
20	(2) Projects under paragraph (1) may include—
21	(A) the identification and characterization of multiprotein
22	complexes;
23	(B) characterization of gene regulatory networks; characterization of
24	the functional repertoire of complex microbial communities in their natural
25	environments at the molecular level; and
26	(C) development of computational methods and capabilities to
27	advance understanding of complex biological systems and predict their
28	behavior.
29	(3) Facilities under paragraph (1) may include facilities for—

1	(A) the production and characterization of proteins;
2	(B) whole proteome analysis;
3	(C) characterization and imaging of molecular machines; and
4	(D) analysis and modeling of cellular systems.
5	(4) The Secretary shall encourage collaborations among universities,
6	laboratories and industry at facilities under this subsection. All facilities under this
7	subsection shall have a specific mission of technology transfer to other institutions.
8	SEC. 969. FISSION AND FUSION ENERGY MATERIALS RESEARCH PROGRAM
9	(a) The Secretary shall establish a research and development program on material
10	science issues presented by advanced fission reactors and Department's fusion program.
11	(b) The program shall—
12	(1) develop a catalog of material properties required for these applications,
13	(2) develop theoretical models for materials possessing the required
14	properties,
15	(3) benchmark models against existing data,
16	(4) develop a roadmap to guide further research and development in this
17	area.
18	(c) The Secretary shall propose a program with the FY2005 budget to address these
19	issues.
20	SEC. 970. WATER SUPPLY TECHNOLOGIES PROGRAM.
21	(a) ESTABLISHMENT.—There is established within the Office of Science, Office of
22	Biological and Environmental Research, the "Water Supply Technologies Program," to
23	study energy-related issues associated with water resources and municipal waterworks.
24	(b) Definitions.—
25	(1) The term "Consortium" means the Consortium for Environmental
26	Education and Technology Development.
27	(2) The term "Foundation" means the American Water Works Association
28	Research Foundation.
29	(3) The term "Indian tribe" has the meaning given the term in section 4 of

1	the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).
2	(4) The term 'Program' means the Water Supply Technologies Program
3	established by section 970(a).
4	(c) PROGRAM AREAS.—The program shall include—
5	(1) arsenic removal under subsection (d),
6	(2) desalination program under subsection (e),
7	(3) the water and energy sustainability program under subsection (f),
8	(4) other energy-intensive water supply and treatment technologies selected
9	by the Secretary.
10	(d) Arsenic Removal Program.—
11	(1) As soon as practicable after the date of enactment of this Act, the
12	Secretary shall enter into a contract with the Foundation under which the
13	Foundation shall carry out a research program to develop and demonstrate
14	innovative arsenic removal technologies.
15	(2) In carrying out the arsenic removal program, the Foundation shall, to the
16	maximum extent practicable, conduct research on means of—
17	(A) reducing energy costs incurred in using arsenic removal
18	technologies;
19	(B) minimizing materials costs, operating costs, and maintenance
20	costs incurred in using arsenic removal technologies; and
21	(C) minimizing any quantities of waste (especially hazardous waste)
22	that result from use of arsenic removal technologies.
23	(3) In carrying out the arsenic removal program, the Foundation shall carry
24	out peer-reviewed projects (including research projects and cost-shared
25	demonstration projects with municipal water systems) to develop and demonstrate
26	water purification technologies.
27	(4)(A) In carrying out the arsenic removal program, the Foundation shall
28	carry out demonstration projects to demonstrate the applicability of innovative
29	arsenic removal technologies in areas with different water chemistries

1	representative of areas with arsenic levels near or exceeding EPA guidelines.
2	(B) Not less than 40 percent of the funds of the Department used for
3	demonstration projects under the arsenic removal program shall be expended in
4	partnership with rural communities or Indian tribes.
5	(5) The Consortium shall assist the Foundation in evaluations of cost
6	effectiveness of arsenic removal technologies used in the program and in
7	development of an education, training, and technology transfer component of the
8	program.
9	(6) The Secretary, in conjunction with the Administrator of the
10	Environmental Protection Agency, shall ensure that activities under the arsenic
11	removal program are coordinated with appropriate programs of the Environmental
12	Protection Agency.
13	(7) Not later than 1 year after the date of commencement of the arsenic
14	removal program, and annually thereafter, the Secretary shall submit to Congress a
15	report on the results of the arsenic removal program.
16	(e) Desalination Program.—
17	(1) The Secretary, in cooperation with the Commissioner of Reclamation,
18	shall carry out a desalination program in accordance with the desalination
19	technology progress plan developed in title II of the Energy and Water
20	Development Appropriations Act, 2002 (115 Stat. 498), and described in Senate
21	Report 107-39 under the heading 'WATER AND RELATED RESOURCES' in the
22	'BUREAU OF RECLAMATION' section.
23	(2)(A) The desalination program shall draw on the national laboratory
24	partnership established with the Bureau of Reclamation to develop the January
25	2003 national Desalination and Water Purification Technology Roadmap for
26	next-generation desalination technology.
27	(B) This research shall focus on research relating to, and development and
28	demonstration of, technologies that are appropriate for use in desalinating brackish
29	groundwater and other saline water supplies; and consider the use of renewable

1	energy sources.
2	(3) Under the desalination program, funds made available may be used for
3	construction projects, including completion of the National Desalination Research
4	Center.
5	(4) The Secretary and the Commissioner of Reclamation shall jointly
6	establish a steering committee for the desalination program. The steering committee
7	shall be jointly chaired by 1 representative from this Program and 1 representative
8	from the Bureau of Reclamation.
9	(f) Water and Energy Sustainability Program.—
10	(1) The Secretary shall carry out a program to help ensure that sufficient
11	quantities of water are available for the energy sector through development of
12	modeling and analysis tools to assess and manage—
13	(A) competing demands for water by the energy sector and other
14	categories of water users, including agriculture, industry, domestic users,
15	and the environment; and
16	(B) the impacts of energy production on the availability of water.
17	(2) Under the water and energy sustainability program, the Secretary shall—
18	(A) in accordance with paragraph (3), develop a coordinated strategy
19	to identify technology development and improved modeling capabilities
20	needed to achieve the goal of water and energy sustainability;
21	(B) in accordance with paragraph (4), develop such advanced
22	modeling and decision analysis tools as are necessary to assess and manage
23	competing demands for water by various categories of water users specified
24	in paragraph (1)(A); and
25	(C) in accordance with paragraph (5), carry out demonstration
26	projects to test the models and tools developed under subparagraph (B).
27	(3) In developing the strategy under paragraph (2)(A), the Secretary shall—
28	(A) collaborate with water management agencies, universities,
29	industry, and stakeholder groups to define issues and needs; and

1	(B) develop a coordinated science and technology strategy to support
2	future water use decisions that include issues of energy sustainability.
3	(4) Modeling and decision analysis tools developed under paragraph (2)(B)
4	shall—
5	(A) address water and energy availability issues both physically, on
6	the scale of river basins; and temporally, on scales ranging from seasons to
7	decades;
8	(B) be coordinated with global climate modeling capabilities
9	supported by the Federal Government;
10	(C) for modeling tools, include tools for modeling the effects of
11	atmospheric, surface, and subsurface phenomena; rural and urban
12	populations and land use changes; energy, agriculture, and other industrial
13	demands; energy impacts on water quality and quantity; and changing
14	marketplace behaviors and other economic forces; and
15	(D) for decision analysis tools, include tools to support water and
16	energy resources planning through provision of direct support for policy and
17	planning decisions; optimization of water use for the energy sector and other
18	categories of water users specified in paragraph (1)(A); and assessment of
19	the potential benefits of new technologies to improve water and energy
20	sustainability.
21	(5) Demonstration projects carried out under paragraph (2)(C) shall—
22	(A) test water and energy modeling and decision analysis tools for 3
23	river basins, at least 1 of which includes an international border;
24	(B) focus on assessing water resources and managing competing
25	demands for, and impacts on, water by the energy sector and other
26	categories of water users specified in paragraph (1)(A); and
27	(C) be conducted in collaboration with water resources management
28	organizations in the basins described in subparagraph (A).
29	(6) Not later than 1 year after the date of enactment of this Act, the

1	Secretary shall submit to Congress a report on the water and energy sustainability
2	program that describes the elements required under paragraph (2), and makes
3	recommendations for a management structure and research and development plan
4	for the water and energy sustainability program that optimizes use of Federal
5	resources and programs.
6	(g) Cost Sharing.—
7	(1) Except as provided in paragraph (2), each demonstration project carried
8	out under the Program shall be carried out on a cost-shared basis, as determined by
9	the Secretary.
10	(2) With respect to a demonstration project, the Secretary may accept
11	in-kind contributions, and waive the cost-sharing requirement in appropriate
12	circumstances.
13	Subtitle G—Energy and Environment
14	SEC. 971. UNITED STATES-MEXICO ENERGY TECHNOLOGY COOPERATION.
15	(a) PROGRAM.—The Secretary shall establish a research, development,
16	demonstration, and commercial application program to be carried out in collaboration with
17	entities in Mexico and the United States to promote energy efficient, environmentally
18	sound economic development along the United States-Mexico border which minimizes
19	public health risks from industrial activities in the border region.
20	(b) PROGRAM MANAGEMENT.—The program under subsection (a) shall be managed
21	by the Department of Energy Carlsbad Environmental Management Field Office.
22	(c) TECHNOLOGY TRANSFER.—In carrying out projects and activities under this
23	section, the Secretary shall assess the applicability of technology developed under the
24	Environmental Management Science Program of the Department.
25	(d) INTELLECTUAL PROPERTY.—In carrying out this section, the Secretary shall
26	comply with the requirements of any agreement entered into between the United States and
27	Mexico regarding intellectual property protection.

1	(e) AUTHORIZATION OF APPROPRIATIONS.—The following sums are authorized to	
2	be appropriated to the Secretary to carry out activities under this section:	
3	(1) For each of fiscal years 2004 and 2005, \$5,000,000; and	
4	(2) For each of fiscal years 2006, 2007, and 2008, \$6,000,000.	
5	SEC. 972. COAL TECHNOLOGY LOAN.	
6	There are authorized to be appropriated to the Secretary \$125,000,000 to provide a	
7	loan to the owner of the experimental plant constructed under United States Department of	
8	Energy cooperative agreement number DE09FC22 0991PC99544 on such terms and	
9	conditions as the Secretary determines, including interest rates and upfront payments.	
10	Subtitle H—Management	
11	SEC. 981. AVAILABILITY OF FUNDS.	
12	Funds authorized to be appropriated to the Department under this title shall remain	
13	available until expended.	
14	SEC. 982. COST SHARING.	
15	(a) RESEARCH AND DEVELOPMENT.—Except as otherwise provided in this title, for	
16	research and development programs carried out under this title, the Secretary shall require	
17	a commitment from non-Federal sources of at least 20 percent of the cost of the project.	
18	The Secretary may reduce or eliminate the non-Federal requirement under this subsection	
19	if the Secretary determines that the research and development is of a basic or fundamental	
20	nature.	
21	(b) Demonstration and Commercial Application.—Except as otherwise	
22	provided in this subtitle, the Secretary shall require at least 50 percent of the costs directly	
23	and specifically related to any demonstration or commercial application project under this	
24	subtitle to be provided from non-Federal sources. The Secretary may reduce the non-	
25	Federal requirement under this subsection if the Secretary determines that the reduction is	
26	necessary and appropriate considering the technological risks involved in the project and is	

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

SEC. 983. MERIT REVIEW OF PROPOSALS.

Awards of funds authorized under this title shall be made only after an impartial review of the scientific and technical merit of the proposals for such awards has been carried out by or for the Department.

SEC. 984. EXTERNAL TECHNICAL REVIEW OF DEPARTMENTAL PROGRAMS.

- (a) NATIONAL ENERGY RESEARCH AND DEVELOPMENT ADVISORY BOARDS.—
- (1) The Secretary shall establish one or more advisory boards to review Department research, development, demonstration, and commercial application programs in energy efficiency, renewable energy, nuclear energy, and fossil energy.
- (2) The Secretary may designate an existing advisory board within the Department to fulfill the responsibilities of an advisory board under this subsection, and may enter into appropriate arrangements with the National Academy of Sciences to establish such an advisory board.
- (b) UTILIZATION OF EXISTING COMMITTEES.—The Secretary shall continue to use the scientific program advisory committees chartered under the Federal Advisory Committee Act by the Office of Science to oversee research and development programs under that Office.
- (c) Membership.—Each advisory board under this section shall consist of persons with appropriate expertise representing a diverse range of interests.
- (d) MEETINGS AND PURPOSES.—Each advisory board under this section shall meet at least semi-annually to review and advise on the progress made by the respective research, development, demonstration, and commercial application program or programs. The advisory board shall also review the measurable cost and performance-based goals for

such programs as established under section 902, and the progress on meeting such goals.

(e) Periodic Reviews and Assessments.—The Secretary shall enter into appropriate arrangements with the National Academy of Sciences to conduct periodic reviews and assessments of the programs authorized by this title, the measurable cost and performance-based goals for such programs as established under section 902, if any, and the progress on meeting such goals. Such reviews and assessments shall be conducted every 5 years, or more often as the Secretary considers necessary, and the Secretary shall transmit to the Congress reports containing the results of all such reviews and assessments.

SEC. 985. IMPROVED COORDINATION OF TECHNOLOGY TRANSFER ACTIVITIES.

- (a) TECHNOLOGY TRANSFER COORDINATOR.—The Secretary shall designate a Technology Transfer Coordinator to perform oversight of and policy development for technology transfer activities at the Department. The Technology Transfer Coordinator shall coordinate the activities of the Technology Transfer Working Group, and shall oversee the expenditure of funds allocated to the Technology Transfer Working Group, and shall coordinate with each technology partnership ombudsman appointed under section 11 of the Technology Transfer Commercialization Act of 2000 (42 U.S.C. 7261c).
- (b) TECHNOLOGY TRANSFER WORKING GROUP.—The Secretary shall establish a Technology Transfer Working Group, which shall consist of representatives of the National Laboratories and single-purpose research facilities, to—
 - coordinate technology transfer activities occurring at National Laboratories and single-purpose research facilities;
 - (2) exchange information about technology transfer practices, including alternative approaches to resolution of disputes involving intellectual property rights and other technology transfer matters; and
 - (3) develop and disseminate to the public and prospective technology partners information about opportunities and procedures for technology transfer with the Department, including those related to alternative approaches to resolution

1	of disputes involving intellectual property rights and other technology transfer
2	matters.
3	(c) TECHNOLOGY TRANSFER RESPONSIBILITY.—Nothing in this section shall affect
4	the technology transfer responsibilities of Federal employees under the Stevenson-Wydler
5	Technology Innovation Act of 1980.
6	SEC. 986. TECHNOLOGY INFRASTRUCTURE PROGRAM.
7	(a) ESTABLISHMENT.—The Secretary shall establish a Technology Infrastructure
8	Program in accordance with this section.
9	(b) Purpose.—The purpose of the Technology Infrastructure Program shall be to
10	improve the ability of National Laboratories and single-purpose research facilities to
11	support departmental missions by—
12	(1) stimulating the development of technology clusters that can support
13	departmental missions at the National Laboratories or single-purpose research
14	facilities;
15	(2) improving the ability of National Laboratories and single-purpose
16	research facilities to leverage and benefit from commercial research, technology,
17	products, processes, and services; and
18	(3) encouraging the exchange of scientific and technological expertise
19	between National Laboratories or single-purpose research facilities and entities that
20	can support departmental missions at the National Laboratories or single-purpose
21	research facilities, such as institutions of higher education; technology-related
22	business concerns; nonprofit institutions; and agencies of State, tribal, or local
23	governments,
24	(c) PROJECTS.—The Secretary shall authorize the Director of each National
25	Laboratory or single-purpose research facility to implement the Technology Infrastructure
26	Program at such National Laboratory or facility through projects that meet the
27	requirements of subsections (d) and (e).

1	(d) PROGRAM REQUIREMENTS.—Each project funded under this section shall meet
2	the following requirements:
3	(1) Each project shall include at least one of each of the following entities: a
4	business; an institution of higher education; a nonprofit institution; and an agency
5	of a State, local, or tribal government.
6	(2) Not less than 50 percent of the costs of each project funded under this
7	section shall be provided from non-Federal sources. The calculation of costs paid
8	by the non-Federal sources to a project shall include cash, personnel, services,
9	equipment, and other resources expended on the project after start of the project.
10	Independent research and development expenses of Government contractors that
11	qualify for reimbursement under section 3109205 0918(e) of the Federal
12	Acquisition Regulations issued pursuant to section 25(c)(1) of the Office of Federal
13	Procurement Policy Act (41 U.S.C. 421(c)(1)) may be credited towards costs paid
14	by non-Federal sources to a project, if the expenses meet the other requirements of
15	this section.
16	(3) All projects under this section shall be competitively selected using
17	procedures determined by the Secretary.
18	(4) Any participant that receives funds under this section may use generally
19	accepted accounting principles for maintaining accounts, books, and records
20	relating to the project.
21	(5) No Federal funds shall be made available under this section for
22	construction or any project for more than 5 years.
23	(e) Selection Criteria.—
24	(1) The Secretary shall allocate funds under this section only if the Director
25	of the National Laboratory or single-purpose research facility managing the project
26	determines that the project is likely to improve the ability of the National
27	Laboratory or single-purpose research facility to achieve technical success in

1	meeting departmental missions.
2	(2) The Secretary shall consider the following criteria in selecting a project
3	to receive Federal funds—
4	(A) the potential of the project to promote the development of a
5	commercially sustainable technology cluster, which will derive most of the
6	demand for its products or services from the private sector, and which will
7	support departmental missions at the participating National Laboratory or
8	single-purpose research facility;
9	(B) the potential of the project to promote the use of commercial
10	research, technology, products, processes, and services by the participating
11	National Laboratory or single-purpose research facility to achieve its
12	departmental mission or the commercial development of technological
13	innovations made at the participating National Laboratory or single-purpose
14	research facility;
15	(C) the extent to which the project involves a wide variety and
16	number of institutions of higher education, nonprofit institutions, and
17	technology-related business concerns that can support the missions of the
18	participating National Laboratory or single-purpose research facility and
19	that will make substantive contributions to achieving the goals of the
20	project;
21	(D) the extent to which the project focuses on promoting the
22	development of technology-related business concerns that are small
23	businesses or involves such small businesses substantively in the project;
24	and
25	(E) such other criteria as the Secretary determines to be appropriate.
26	(f) ALLOCATION.—In allocating funds for projects approved under this section, the
27	Secretary shall provide—

1	(1) the Federal share of the project costs; and
2	(2) additional funds to the National Laboratory or single-purpose research
3	facility managing the project to permit the National Laboratory or single-purpose
4	research facility to carry out activities relating to the project, and to coordinate such
5	activities with the project.
6	(g) REPORT TO CONGRESS.—Not later than January 1, 2006, the Secretary shall
7	report to Congress on whether the Technology Infrastructure Program should be continued
8	and, if so, how the program should be managed.
9	(h) DEFINITIONS.—In this section:
10	(1) The term "technology cluster" means a concentration of technology-
11	related business concerns, institutions of higher education, or other nonprofit
12	institutions, that reinforce each other's performance in the areas of technology
13	development through formal or informal relationships.
14	(2) The term "technology-related business concern" means a for-profit
15	corporation, company, association, firm, partnership, or small business concern that
16	conducts scientific or engineering research; develops new technologies;
17	manufactures products based on new technologies; or performs technological
18	services.
19	(i) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated
20	to the Secretary for activities under this section \$10,000,000 for each of fiscal years 2004
21	and 2005.
22	SEC. 987. SMALL BUSINESS ADVOCACY AND ASSISTANCE.
23	(a) SMALL BUSINESS ADVOCATE.—The Secretary shall require the Director of each
24	National Laboratory, and may require the Director of a single-purpose research facility, to
25	designate a small business advocate to—
26	(1) increase the participation of small business concerns, including socially
27	and economically disadvantaged small business concerns, in procurement,

3 4 res 5 pro	(2) report to the Director of the National Laboratory or single-purpose search facility; (2) report to the Director of the National Laboratory or single-purpose search facility on the actual participation of small business concerns in ocurement and collaborative research along with recommendations, if propriate, on how to improve participation; (3) make available to small businesses training, mentoring, and information
4 res 5 pro	search facility on the actual participation of small business concerns in ocurement and collaborative research along with recommendations, if propriate, on how to improve participation; (3) make available to small businesses training, mentoring, and information
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8 on	how to participate in procurement and collaborative research activities;
9	(4) increase the awareness inside the National Laboratory or single-purpose
10 res	earch facility of the capabilities and opportunities presented by small business
11 con	ncerns; and
12	(5) establish guidelines for the program under subsection (b) and report on
13 the	e effectiveness of such program to the Director of the National Laboratory or
14 sin	gle-purpose research facility.
15 (b)	ESTABLISHMENT OF SMALL BUSINESS ASSISTANCE PROGRAM.—The Secretary
shall require	re the Director of each National Laboratory, and may require the Director of a
17 single-purp	pose research facility, to establish a program to provide small business
18 concerns—	_
19	(1) assistance directed at making them more effective and efficient
20 sul	bcontractors or suppliers to the National Laboratory or single-purpose research
21 fac	cility; or
22	(2) general technical assistance, the cost of which shall not exceed \$10,000
23 per	r instance of assistance, to improve the small business concern's products or
24 ser	vices.
25 (c)	Use of Funds.—None of the funds expended under subsection (b) may be used
26 for direct g	grants to the small business concerns.
27 (d)	DEFINITIONS.—In this section:

1	(1) The term "small business concern" has the meaning given such term in
2	section 3 of the Small Business Act (15 U.S.C. 632).
3	(2) The term "socially and economically disadvantaged small business
4	concerns" has the meaning given such term in section 8(a)(4) of the Small Business
5	Act (15 U.S.C. 637(a)(4)).
6	(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated
7	to the Secretary for activities under this section \$5,000,000 for each of fiscal years 2004
8	through 2008.
9	SEC. 988. MOBILITY OF SCIENTIFIC AND TECHNICAL PERSONNEL.
10	Not later than 2 years after the date of enactment of this section, the Secretary shall
11	transmit a report to the Congress identifying any policies or procedures of a contractor
12	operating a National Laboratory or single-purpose research facility that create disincentives
13	to the temporary transfer of scientific and technical personnel among the contractor-
14	operated National Laboratories or contractor-operated single-purpose research facilities.
15	SEC. 989. NATIONAL ACADEMY OF SCIENCES REPORT.
16	Within 90 days after the date of enactment of this Act, the Secretary shall enter into
17	an arrangement with the National Academy of Sciences for the Academy to-
18	(1) conduct a study on—
19	(A) the obstacles to accelerating the research, development,
20	demonstration, and commercial application cycle for energy technology;
21	and
22	(B) the adequacy of Department policies and procedures for, and
23	oversight of, technology transfer-related disputes between contractors of the
24	Department and the private sector; and
25	(2) report to the Congress on recommendations developed as a result of the
26	study.

SEC. 990. OUTREACH.

The Secretary shall ensure that each program authorized by this title includes an outreach component to provide information, as appropriate, to manufacturers, consumers, engineers, architects, builders, energy service companies, institutions of higher education, facility planners and managers, State and local governments, and other entities.

SEC. 991. COMPETITIVE AWARD OF MANAGEMENT CONTRACTS.

- (a) Competitive Procedure Requirement.—None of the funds authorized to be appropriated to the Secretary by this title may be used to award a management and operating contract for a nonmilitary energy laboratory of the Department unless such contract is competitively awarded or the Secretary grants, on a case-by-case basis, a waiver to allow for such a deviation. The Secretary may not delegate the authority to grant such a waiver.
- (b) Congressional Notice.—At least 2 months before a contract award for which the Secretary intends to grant such a waiver, the Secretary shall submit to the Congress a report notifying the Congress of the waiver and setting forth the reasons for the waiver.

SEC. 992. REPROGRAMMING.

(a) DISTRIBUTION REPORT.—Not later than 60 days 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) shall be reprogrammed if such reprogramming would result in an obligation which changes an individual distribution required to be reported under subsection (a) by more than 5 percent unless the Secretary has transmitted to the appropriate authorizing committees of the Congress a report described in subsection (c) and a period of 30 days has elapsed after such committees receive the report.

1	(2) In the computation of the 30-day period described in paragraph (1), there
2	shall be excluded any day on which either House of Congress is not in session
3	because of an adjournment of more than 3 days to a day certain.
4	(c) Reprogramming Report.—A report referred to in subsection (b)(1) shall
5	contain a full and complete statement of the action proposed to be taken and the facts and
6	circumstances relied on in support of the proposed action.
7	SEC. 993. CONSTRUCTION WITH OTHER LAWS.
8	Except as otherwise provided in this title, the Secretary shall carry out the research,
9	development, demonstration, and commercial application programs, projects, and activities
10	authorized by this title in accordance with the applicable provisions of the Atomic Energy
11	Act of 1954 (42 U.S.C. et seq.), the Federal Nonnuclear Research and Development Act of
12	1974 (42 U.S.C. 5901 et seq.), the Energy Policy Act of 1992 (42 U.S.C. 13201 et seq.),
13	the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.),
14	chapter 18 of title 35, United States Code (commonly referred to as the Bayh-Dole Act),
15	and any other Act under which the Secretary is authorized to carry out such activities.
16	SEC. 994. IMPROVED COORDINATION AND MANAGEMENT OF CIVILIAN SCIENCE AND
17	TECHNOLOGY PROGRAMS.
18	(a) RECONFIGURATION OF POSITION OF DIRECTOR OF THE OFFICE OF
19	SCIENCE.—Section 209 of the Department of Energy Organization Act (41 U.S.C. 7139) is
20	amended to read as follows:
21	"office of science
22	"Sec. 209. (a) There shall be within the Department an Office of Science, to be
23	headed by an Assistant Secretary of Science, who shall be appointed by the President, by
24	and with the advice and consent of the Senate, and who shall be compensated at the rate
25	provided for level IV of the Executive Schedule under section 5315 of title 5, United States
26	Code.
27	"(b) The Assistant Secretary of Science shall be in addition to the Assistant

1	Secretaries provided for under section 203 of this Act.
2	"(c) It shall be the duty and responsibility of the Assistant Secretary of Science to
3	carry out the fundamental science and engineering research functions of the Department,
4	including the responsibility for policy and management of such research, as well as other
5	functions vested in the Secretary which he may assign to the Assistant Secretary.".
6	(b) Additional Assistant Secretary Position to Enable Improved
7	Management of Nuclear Energy Issues.—
8	(1) Section 203(a) of the Department of Energy Organization Act (42
9	U.S.C. 7133(a)) is amended by striking "There shall be in the Department six
10	Assistant Secretaries" and inserting "Except as provided in section 209, there shall
11	be in the Department seven Assistant Secretaries".
12	(2) It is the sense of the Congress that the leadership for departmental
13	missions in nuclear energy should be at the Assistant Secretary level.
14	(c) TECHNICAL AND CONFORMING AMENDMENTS.—
15	(1) Section 5315 of title 5, United States Code, is amended by—
16	(A) striking "Director, Office of Science, Department of Energy.";
17	and
18	(B) striking "Assistant Secretaries of Energy (6)" and inserting
19	"Assistant Secretaries of Energy (8)".
20	(2) The table of contents for the Department of Energy Organization Act (42
21	U.S.C. 7101 note) is amended—
22	(A) by striking "Section 209" and inserting "Sec. 209";
23	(B) by striking "213." and inserting "Sec. 213.";
24	(C) by striking "214." and inserting "Sec. 214.";
25	(D) by striking "215." and inserting "Sec. 215."; and

l	(E) by striking "216."	and inserting "Sec. 216."
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TITLE X— PERSONNEL AND TRAINING

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(2) 1	ADDECORCE IDENING
(a) v	ORKFORCE TRENDS.—

- (1) The Secretary of Energy (in this title referred to as the "Secretary"), in consultation with the Secretary of Labor and utilizing statistical data collected by the Secretary of Labor, shall monitor trends in the workforce of skilled technical personnel supporting energy technology industries, including renewable energy industries, companies developing and commercializing devices to increase energy efficiency, the oil and gas industry, the nuclear power industry, the coal industry, and other industrial sectors as the Secretary may deem appropriate.
- (2) The Secretary shall report to the Congress whenever the Secretary determines that significant national shortfalls of skilled technical personnel in one or more energy industry segments are forecast or have occurred.
- (B) Traineeship Grants for Skilled Technical Personnel.—The Secretary, in consultation with the Secretary of Labor, may establish grant programs in the appropriate offices of the Department of Energy to enhance training of skilled technical personnel for which a shortfall is determined under subsection (a).
- (c) Definition.—For purposes of this section, the term "skilled technical personnel" means journey and apprentice level workers who are enrolled in or have completed a State or federally recognized apprenticeship program and other skilled workers in energy technology industries.
- (d) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there are authorized to be appropriated to the Secretary \$20,000,000 for each of fiscal years 2004 through 2008, to remain available until expended.
- SEC. 1002. RESEARCH FELLOWSHIPS IN ENERGY RESEARCH.

1	(a) POSTDOCTORAL FELLOWSHIPS.—The Secretary shall establish a program of
2	fellowships to encourage outstanding young scientists and engineers to pursue postdoctoral
3	research appointments in energy research and development at institutions of higher
4	education of their choice.
5	(b) DISTINGUISHED SENIOR RESEARCH FELLOWSHIPS —The Secretary shall

- (b) DISTINGUISHED SENIOR RESEARCH FELLOWSHIPS.—The Secretary shall establish a program of fellowships to allow outstanding senior researchers in energy research and development and their research groups to explore research and development topics of their choosing for a fixed period of time. Awards under this program shall be made on the basis of past scientific or technical accomplishment and promise for continued accomplishment during the period of support, which shall not be less than 3 years.
- (c) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there are authorized to be appropriated to the Secretary \$40,000,000 for each of fiscal years 2004 through 2008, to remain available until expended.

SEC. 1003. TRAINING GUIDELINES FOR ELECTRIC ENERGY INDUSTRY PERSONNEL.

The Secretary of Labor, in consultation with the Secretary of Energy and jointly with the electric industry and recognized employee representatives, shall develop model personnel training guidelines to support electric system reliability and safety. The training guidelines shall, at a minimum—

- (1) include training requirements for workers engaged in the construction, operation, inspection, and maintenance of electric generation, transmission, and distribution, including competency and certification requirements, and assessment requirements that include initial and ongoing evaluation of workers, recertification assessment procedures, and methods for examining or testing the qualification of individuals performing covered tasks; and
- (2) consolidate existing training guidelines on the construction, operation, maintenance, and inspection of electric generation, transmission, and distribution facilities, such as those established by the National Electric Safety Code and other

1	industry consensus standards.
2	SEC. 1004. NATIONAL CENTER ON ENERGY MANAGEMENT AND BUILDING
3	TECHNOLOGIES.
4	The Secretary shall support the establishment of a National Center on Energy
5	Management and Building Technologies, to carry out research, education, and training
6	activities to facilitate the improvement of energy efficiency and indoor air quality in
7	industrial, commercial, and residential buildings. The National Center shall be established
8	by—
9	(1) recognized representatives of employees in the heating, ventilation, and
10	air-conditioning industry;
11	(2) contractors that install and maintain heating, ventilation, and air-
12	conditioning systems and equipment;
13	(3) manufacturers of heating, ventilation, and air-conditioning systems and
14	equipment;
15	(4) representatives of the advanced building envelope industry, including
16	design, windows, lighting, and insulation industries; and
17	(5) other entities as the Secretary may deem appropriate.
18	SEC. 1005. IMPROVED ACCESS TO ENERGY-RELATED SCIENTIFIC AND TECHNICAL
19	CAREERS.
20	(a) Department of Energy Science Education Programs.—Section 3164 of
21	the Department of Energy Science Education Enhancement Act (42 U.S.C. 7381a) is
22	amended by adding at the end the following:
23	"(c) Programs for Students from Under-Represented Groups.—In carrying
24	out a program under subsection (a), the Secretary shall give priority to activities that are
25	designed to encourage students from under-represented groups to pursue scientific and
26	technical careers.".
27	(b) Partnerships with Historically Black Colleges and Universities,
	March 25, 2003 (6:45 pm)

I	HISPANIC-SERVICING INSTITUTIONS, AND TRIBAL COLLEGES.—The Department of Energy
2	Science Education Enhancement Act (42 U.S.C. 7381 et seq.) is amended—
3	(1) by redesignating sections 3167 and 3168 as sections 3168 and 3169,
4	respectively; and
5	(2) by inserting after section 3166 the following:
6	"SEC. 3167. PARTNERSHIPS WITH HISTORICALLY BLACK COLLEGES AND
7	UNIVERSITIES, HISPANIC-SERVING INSTITUTIONS, AND TRIBAL
8	COLLEGES.
9	"(a) Definitions.—In this section:
10	"(1) HISPANIC-SERVING INSTITUTION.—The term 'Hispanic-
11	serving institution' has the meaning given that term in section 502(a)
12	of the Higher Education Act of 1965 (20 U.S.C. 1101a(a)).
13	"(2) HISTORICALLY BLACK COLLEGE OR UNIVERSITY.— The
14	term 'historically Black college or university' has the meaning given
15	the term 'part B institution' in section 322 of the Higher Education
16	Act of 1965 (20 U.S.C. 1061).
17	"(3) NATIONAL LABORATORY.—The term 'National
18	Laboratory' has the meaning given that term in section 903(5) of the
19	Clean and Secure Energy Act.
20	"(4) Science Facility.—The term 'science facility' has the
21	meaning given the term 'single-purpose research facility' in section
22	903(8) of the Clean and Secure Energy Act.
23	"(5) Tribal College.—The term 'tribal college' has the
24	meaning given the term 'tribally controlled college or university' in
25	section 2(a) of the Tribally Controlled College or University
26	Assistance Act of 1978 (25 U.S.C. 1801(a)).
27	"(b) EDUCATION PARTNERSHIP.— The Secretary shall direct the

1	Director of each National Laboratory, and may direct the head of any
2	science facility, to increase the participation of historically Black colleges or
3	universities, Hispanic-serving institutions, or tribal colleges in activities that
4	increase the capacity of the historically Black colleges or universities,
5	Hispanic-serving institutions, or tribal colleges to train personnel in science
6	or engineering.
7	"(c) ACTIVITIES.—An activity under subsection (b) may include —
8	"(1) collaborative research;
9	"(2) equipment transfer;
10	"(3) training activities conducted at a National Laboratory or
11	science facility; and
12	"(4) mentoring activities conducted at a National Laboratory
13	or science facility.
14	"(d) REPORT.—Not later than 2 years after the date of enactment of
15	this section, the Secretary shall submit to the Congress a report on the
16	activities carried out under this section.".
17	SEC. 1006. NATIONAL POWER PLANT OPERATIONS TECHNOLOGY AND EDUCATION
18	CENTER.
19	(a) Establishment.—The Secretary shall support the establishment of a National
20	Power Plant Operations Technology and Education Center (in this section referred to as the
21	"Center"), to address the need for training and educating certified operators for electric
22	power generation plants.
23	(b) ROLE.—The Center shall provide both training and continuing education
24	relating to electric power generation plant technologies and operations. The Center shall
25	conduct training and education activities on site and through Internet-based information
26	technologies that allow for learning at remote sites.
27	(c) Criteria for competitive selection.—The Secretary shall support the
	March 25, 2003 (6:45 pm)

establishment of the Center at an institution of higher education with expertise in power plant technology and operation and with the ability to provide on-site as well as Internet-based training.

SEC. 1007. FEDERAL MINE INSPECTORS.

In light of projected retirements of Federal mine inspectors and the need for additional personnel, the Secretary of Labor shall hire, train, and deploy such additional skilled Federal mine inspectors as necessary to ensure the availability of skilled and experienced individuals and to maintain the number of Federal mine inspectors at or above the levels authorized by law or established by regulation.

TITLE XI—CLIMATE CHANGE

SEC. 1101. DEFINITIONS.

In this title:

- (1) The term "Administrator" means the Administrator of the Energy Information Administration:
- (2) The term "Annual Report" means the report submitted on an annual basis to the Congress by the President pursuant to section 1114.
- (3) The term "Director" means the Director of Climate Change Policy designated pursuant to section 1112.
- (4) The term "entity" means a public person, a Federal, interstate, State, or local governmental agency, department, corporation, or other publicly owned organization;
- (5) The term "facility" means those buildings, structures, installations, or plants (including units thereof) that are on contiguous or adjacent land, are under common control of the same person or entity and are a source of emissions of greenhouse gases in excess for emission purposes of a threshold as recognized by the guidelines issued under this title;

1	(6) The term "greenhouse gas" means an anthropogenic gaseous constituent
2	of the atmosphere (including carbon dioxide, methane, nitrous oxide,
3	chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride,
4	and tropospheric ozone) that absorbs and re-emits infrared radiation and influences
5	climate;
6	(7) The term "Interagency Task Force" means the Interagency Task Force
7	on Climate Change Policy established under section 1113.
8	(8) The term "Office" means the Office of Climate Change Policy
9	designated pursuant to section 1112.
10	(9) The term "person" means an individual, corporation, association, joint
11	venture, cooperative, or partnership;
12	(10) The term "reductions" means actions, projects or measures taken,
13	whether in the United States or internationally, by a person or entity to reduce,
14	avoid or sequester, directly or indirectly, emissions of one or more greenhouse
15	gases;
16	(11) The term "Secretary" means the Secretary of Energy;
17	(12) The term "Strategy" means the national climate change strategy
18	developed pursuant to section 1111.
19	Subtitle A—National Strategy
20	SEC. 1111. NATIONAL CLIMATE CHANGE STRATEGY.
21	(a) IN GENERAL.—The President, through the Interagency Task Force and the
22	Director, and in consultation with the Congress, shall develop and implement a national
23	Strategy to manage the risks posed by potential climate change.
24	(b) ELEMENTS.—Such Strategy should contain the following elements—
25	(1) definition of interim greenhouse gas emission intensity goals that, over
26	time, will stabilize and ultimately reduce net U.S. emissions of greenhouse gases

1	consistent with the aims of the United Nations Framework Convention on Climate
2	Change, in a manner than does not result in serious harm to the U.S. economy;
3	(2) specific mitigation programs that, taken collectively, will achieve such
4	interim emissions intensity goals;
5	(3) expanded climate-related technology research, development,
6	demonstration and deployment activities, including—
7	(A) a national commitment to increase energy research and
8	development by the United States public and private sectors; and
9	(B) domestic and international demonstration and deployment
10	programs that employ bold, breakthrough technologies that will make
11	possible a profound transformation of the energy, transportation, industrial
12	agricultural, and building sectors of the United States;
13	(4) climate adaptation research that—
14	(A) assesses the sensitivity, adaptive capacity, and vulnerability of
15	natural and human systems to natural climate variability, climate change,
16	and its potential impacts; and
17	(B) identifies potential strategies and actions that can reduce
18	vulnerability to natural climate variability and climate change and damage
19	resulting from impacts of climate change;
20	(5) climate science research that—
21	(A) continually builds on existing scientific understanding of the
22	climate system; and
23	(B) focuses on resolving the remaining scientific, technical, and
24	economic uncertainties with respect to observation, analysis, detection and
25	attribution of the causes of and impacts from climate change.
26	(c) REPORT.—Not later than 1 year after the date of enactment of this section, the

1	President, through the Interagency Task Force and the Director, shall submit to Congress a
2	report that includes—
3	(1) a description of the Strategy and its goals, including how the Strategy
4	addresses each of the elements outlined in subsection (b);
5	(2) an inventory and evaluation of Federal programs and activities intended
6	to carry out the Strategy;
7	(3) a description of how the Strategy will serve as a framework of climate
8	change response actions by all Federal agencies, including a description of
9	coordination mechanisms and interagency activities;
10	(4) demonstrated evidence that the Strategy in consistent with other energy,
11	transportation, industrial, agricultural, forestry, environmental, economic, and other
12	relevant policies of the United States;
13	(5) a description of safeguards to ensure that the Strategy minimizes any
14	adverse short-term and long-term social, economic, national security, and
15	environmental impacts, including ensuring that the Strategy is developed in an
16	economically and environmentally sound manner;
17	(6) demonstrated evidence that the Strategy has been developed in a manner
18	that provides for participation by, and consultation among, Federal, State, tribal,
19	and local government agencies, non-governmental organizations, academia,
20	scientific bodies, industry, the public, and other interested parties;
21	(7) a description of Federal activities that promote, to the maximum extent
22	practicable, public awareness, outreach, and information-sharing to further the
23	understanding of the full range of climate change-related issues; and
24	(8) recommendations for legislative or administrative changes to Federal
25	programs or activities implemented to carry out this Strategy, in light of new
26	knowledge of climate change and its impacts and costs or benefits, or technological
27	capacity to improve mitigation or adaptation activities.

1	(d) UPDATE.—Not later than 4 years after the date of submission of the initial report
2	on the Strategy developed pursuant to this section, and at the end of each 4-year period
3	thereafter, the President shall submit to Congress an updated version of the Strategy
4	described in subsection (c).
5	(e) CONFORMING AMENDMENT.—Section 1103(b) of the Global Climate Protection
6	Act of 1987 (P.L. 100-204) is amended by inserting ", the Department of Energy, and other
7	Federal agencies as appropriate" after "Environmental Protection Agency".
8	SEC. 1112. OFFICE OF CLIMATE CHANGE POLICY.
9	(a) DESIGNATION.—The President shall designate a qualified individual within the
10	Executive Office of the President to serve as the Director of Climate Change Policy.
11	(b) DUTIES.—The Director shall be solely dedicated to climate change policy
12	activities and shall—
13	(1) coordinate of the development and periodic revision of the Strategy;
14	(2) facilitate the work of the Interagency Task Force and serve as the
15	primary liaison between Federal agencies in developing and implementing the
16	Strategy;
17	(3) coordinate the submission of Federal agency budget requests as needed
18	to carry out interagency programs and policies necessary to meet the goals of the
19	Strategy;
20	(4) advise the President concerning—
21	(A) necessary changes in organization, management, budgeting, and
22	personnel allocation of Federal agencies involved in climate change
23	activities;
24	(B) the extent to which existing or newly-created tax, trade, or
25	foreign policies and energy, transportation, industrial, agricultural, forestry,
26	building, and other relevant sectoral programs are capable of achieving the

1	Strategy individually or in combination;
2	(C) through the Secretary of State, analyze any proposed
3	international treaties or components of treaties that have an influence on
4	activities that effect greenhouse gas emissions and review such treaties or
5	components of treaties for consistency with the Strategy;
6	(5) establish and maintain a process to ensure the participation of Federal,
7	State, tribal, and local government agencies, non-governmental organizations,
8	academia, scientific bodies, industry, the public, and other interested parties in the
9	formulation of climate change-related advice to be provided to the President; and
10	(6) promote public awareness, outreach, and information sharing to further
11	the understanding of climate change-related issues.
12	(c) Appearance Before the Congress.—
13	(1) The Director shall appear before Congress at annual hearings to provide
14	testimony on
15	(A) the Strategy;
16	(B) the Annual Report;
17	(C) other efforts, activities, objectives, and plans within the Federal
18	government regarding climate change; and
19	(D) the economic and environmental impacts of such efforts,
20	activities, objectives and plans.
21	(2) The Director shall appear by request—
22	(A) within 45 days of the submission of the Annual Report to the
23	Congress before a hearing or joint hearing of –
24	(1) the Committee on Energy and Natural Resources of the
25	United States Senate;
26	(2) the Committee on Environment and Public Works of the

1	United States Senate;
2	(3) the Committee on Commerce, Science and Transportation
3	of the United States Senate;
4	(4) the Committee on Energy and Commerce of the United
5	States House of Representatives;
6	(5) the Committee on Science of the United States House of
7	Representatives; and
8	(B) within 45 days of the submission of the Annual Report to the
9	Congress before a hearing of—
10	(1) the Committee on Appropriations of the United States
11	Senate; and
12	(2) the Committee on Appropriations of the United States
13	House of Representatives.
14	(3) The Director may be accompanied by members of the Interagency Task
15	Force or others deemed appropriate by the Director.
16	(d) Personnel.—
17	(1) The Director may employ a professional staff of not more than 10
18	individuals to carry out the responsibilities and duties of this section.
19	(2) The Director may use the authority provided by the Intergovernmental
20	Personnel Act of 1970 (42 U.S.C. 4701 et seq.) and subchapter VI of chapter 33 of
21	title 5, United States Code to obtain staff from Federal agencies and national
22	laboratories for appointments of a limited term.
23	(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated
24	to the Executive Office of the President such sums as may be necessary to fulfill the
25	obligations of this section.
26	SEC. 1113, INTERAGENCY TASK FORCE ON CLIMATE CHANGE.

1	(a) IN GENERAL.—The President shall establish an Interagency Task Force on
2	Climate Change to coordinate Federal climate change activities and programs carried out in
3	furtherance of the Strategy.
4	(b) Composition.—The Interagency Task Force shall be composed of—
5	(1) the Director, who shall serve as Chair;
6	(2) the Secretary of State;
7	(3) the Secretary of Energy;
8	(4) the Secretary of Commerce;
9	(5) the Secretary of Transportation;
10	(6) the Secretary of Agriculture;
11	(7) the Administrator of the Environmental Protection Agency;
12	(8) the Chairman of the Council of Economic Advisers;
13	(9) the Chairman of the Council on Environmental Quality;
14	(10) the Director of the Office of Science and Technology Policy;
15	(11) such other agencies and departments of the United States as the
16	President considers appropriate.
17	(c) STRATEGY.—The Interagency Task Force shall serve as the primary forum
18	through which the Federal agencies and offices represented on the Interagency Task Force
19	jointly advise the President on—
20	(1) the development and periodic update of the Strategy; and
21	(2) the implementation of interagency and agency programs to carry out
22	activities in furtherance of the goals and objectives of the Strategy.
23	(d) WORKING GROUPS.—The members of the Interagency Task Force may establish
24	such topical working groups as may be necessary to carry out the duties of the Interagency
25	Task Force and implement the Strategy, taking into consideration the elements of the

1	Strategy as outlined in this title. Such working groups may be comprised of members of the
2	Interagency Task Force or their designees.
3	(e) STAFF.—The Federal agencies represented on the Interagency Task Force may
4	provide staff from the agencies to support information, data collection, and analyses
5	required by the Interagency Task Force.
6	(f) HEARINGS.—Upon the request of the Director, the Interagency Task Force may
7	hold such hearings, meet and act at such times and places, take such testimony, and receive
8	such evidence and the Interagency Task Force considers to be appropriate.
9	SEC. 1114. ANNUAL REPORT.
10	The Director shall, in consultation with the Interagency Task Force and other
11	interested parties, prepare an annual report for submission by the President to the Congress
12	on or about February 15 of each calendar year that includes—
13	(1) a description of the Strategy and its goals;
14	(2) an inventory of Federal programs and activities intended to carry out the
15	Strategy;
16	(3) an evaluation of such Federal programs and activities implemented as
17	part of this strategy against the goals outlined in the Strategy;
18	(4) a description of changes to Federal programs or activities implemented
19	to carry out the Strategy, in light of new knowledge of climate change and its
20	impacts and costs or benefits, or technological capacity to improve mitigation or
21	adaptation activities;
22	(5) a description of all Federal spending on climate change for the current
23	fiscal year and each of the five years previous; categorized by Federal agency and
24	program function (including scientific research, energy research and development,
25	regulation, education, and other activities), and a recommendation for Federal
26	spending on climate change for the next fiscal year;

1	(6) an estimate of the budgetary impact for the current fiscal year and each
2	of the five years previous of any Federal tax credits, tax deductions or other
3	incentives claimed by taxpayers that are directly or indirectly attributable to
4	greenhouse gas emissions reduction activities;
5	(7) an estimate of the amount, in metric tons, of greenhouse gas emissions
6	reduced, avoided, or sequestered directly or indirectly as a result of the
7	implementation of the Strategy; and
8	(8) recommendations for legislative or administrative actions or adjustments
9	that will accelerate progress towards meeting the near-term and long-term
10	emissions intensity goals contained in the Strategy.
11	Subtitle B—Greenhouse Gas Emissions Registry
12	SEC. 1121. ESTABLISHMENT.
13	(a) In General.—Not later than 1 year after the enactment of this title, the
14	President shall, in consultation with the Interagency Task Force, establish a National
15	Greenhouse Gas Registry to be administered by the Secretary through the Administrator in
16	accordance with the applicable provisions of this title, section 205 of the Department of
17	Energy Act (42 U.S.C. 7135) and other applicable provisions of that Act (42 U.S.C. 7101
18	et seq.).
19	(b) Designation.—Upon establishment of the registry and issuance of the
20	guidelines pursuant to this title, such registry shall thereafter be the depository for the
21	United States of data on greenhouse gas emissions and emissions reductions collected from
22	and reported by persons or entities with facilities or operations in the United States,
23	pursuant to the guidelines issued under this title.
24	(c) PARTICIPATION.—Any person or entity conducting business or activities in the
25	United States may, in accordance with the guidelines established pursuant to this title,
26	voluntarily report its total emissions levels and register its certified emissions reductions
27	with such registry, provided that such reports—

1	(1) represent a complete and accurate inventory of emissions from facilities
2	and operations within the United States and any domestic or international reduction
3	activities; and
4	(2) have been verified as accurate by an independent person certified
5	pursuant to guidelines developed pursuant to this title, or other means.
6	(d) Confidentiality of Reports.—Trade secret and commercial or financial
7	information that is privileged and confidential submitted pursuant to activities under this
8	title shall be protected as provided in section 552(b)(4) of title 5, United States Code.
9	SEC. 1122. IMPLEMENTATION.
10	(a) GUIDELINES.—Not later than 1 year after the date of establishment of the
11	registry pursuant to this title, the Secretary shall, in consultation with the Interagency Task
12	Force, issue guidelines establishing procedures for the administration of the national
13	registry. Such guidelines shall include—
14	(1) means and methods for persons or entities to determine, quantify, and
15	report by appropriate and credible means their baseline emissions levels on an
16	annual basis, taking into consideration any reports made by such participants under
17	past Federal programs;
18	(2) procedures for the use of an independent third-party or other effective
19	verification process for reports on emissions levels and emissions reductions, using
20	the authorities available to the Secretary under this and other provisions of law and
21	taking into account, to the extent possible, costs, risks, the voluntary nature of the
22	registry, and other relevant factors;
23	(3) a range of reference cases for reporting of project-based reductions in
24	various sectors, and the inclusion of benchmark and default methodologies and
25	practices for use as reference cases for eligible projects;
26	(4) safeguards to prevent and address reporting, inadvertently or otherwise,
27	of some or all of the same greenhouse gas emissions or reductions by more than one

1	reporting person or entity and to make corrections and adjustments in data where
2	necessary;
3	(5) procedures and criteria for the review and registration of ownership or
4	holding of all or part of any reported and independently verified emission reduction
5	projects, actions and measures relative to such reported baseline emissions level;
6	(6) measures or a process for providing to such persons or entities
7	transferable credits with unique serial numbers for such verified emissions
8	reductions; and
9	(7) accounting provisions needed to allow for changes in registration and
10	transfer of ownership of such credits resulting from a voluntary private transaction
11	between persons or entities, provided that the Secretary is notified of any such
12	transfer within 30 days of the transfer having been effected either by private
13	contract or market mechanism.
14	(b) CONSIDERATION.—In developing such guidelines, the Secretary shall take into
	consideration—
15	consideration—
1516	(1) the existing guidelines for voluntary emissions reporting issued under
16	(1) the existing guidelines for voluntary emissions reporting issued under
16 17	(1) the existing guidelines for voluntary emissions reporting issued under section 1605(b) of the Energy Policy Act of 1992 (42 U.S.C. 13385(b)), experience
16 17 18	(1) the existing guidelines for voluntary emissions reporting issued under section 1605(b) of the Energy Policy Act of 1992 (42 U.S.C. 13385(b)), experience in applying such guidelines, and any revisions thereof initiated by the Secretary
16 17 18 19	(1) the existing guidelines for voluntary emissions reporting issued under section 1605(b) of the Energy Policy Act of 1992 (42 U.S.C. 13385(b)), experience in applying such guidelines, and any revisions thereof initiated by the Secretary pursuant to direction of the President issued prior to the enactment of this title;
16 17 18 19 20	(1) the existing guidelines for voluntary emissions reporting issued under section 1605(b) of the Energy Policy Act of 1992 (42 U.S.C. 13385(b)), experience in applying such guidelines, and any revisions thereof initiated by the Secretary pursuant to direction of the President issued prior to the enactment of this title; (2) protocols and guidelines developed under any Federal, State, local, or
16 17 18 19 20 21	 (1) the existing guidelines for voluntary emissions reporting issued under section 1605(b) of the Energy Policy Act of 1992 (42 U.S.C. 13385(b)), experience in applying such guidelines, and any revisions thereof initiated by the Secretary pursuant to direction of the President issued prior to the enactment of this title; (2) protocols and guidelines developed under any Federal, State, local, or private voluntary greenhouse gas emissions reporting or reduction programs;
16 17 18 19 20 21 22	(1) the existing guidelines for voluntary emissions reporting issued under section 1605(b) of the Energy Policy Act of 1992 (42 U.S.C. 13385(b)), experience in applying such guidelines, and any revisions thereof initiated by the Secretary pursuant to direction of the President issued prior to the enactment of this title; (2) protocols and guidelines developed under any Federal, State, local, or private voluntary greenhouse gas emissions reporting or reduction programs; (3) the various differences and potential uniqueness of the facilities,
16 17 18 19 20 21 22 23	(1) the existing guidelines for voluntary emissions reporting issued under section 1605(b) of the Energy Policy Act of 1992 (42 U.S.C. 13385(b)), experience in applying such guidelines, and any revisions thereof initiated by the Secretary pursuant to direction of the President issued prior to the enactment of this title; (2) protocols and guidelines developed under any Federal, State, local, or private voluntary greenhouse gas emissions reporting or reduction programs; (3) the various differences and potential uniqueness of the facilities, operations and business and other relevant practices of persons and entities in the
16 17 18 19 20 21 22 23 24	(1) the existing guidelines for voluntary emissions reporting issued under section 1605(b) of the Energy Policy Act of 1992 (42 U.S.C. 13385(b)), experience in applying such guidelines, and any revisions thereof initiated by the Secretary pursuant to direction of the President issued prior to the enactment of this title; (2) protocols and guidelines developed under any Federal, State, local, or private voluntary greenhouse gas emissions reporting or reduction programs; (3) the various differences and potential uniqueness of the facilities, operations and business and other relevant practices of persons and entities in the private and public sectors that may be expected to participate in the registry;
16 17 18 19 20 21 22 23 24 25	(1) the existing guidelines for voluntary emissions reporting issued under section 1605(b) of the Energy Policy Act of 1992 (42 U.S.C. 13385(b)), experience in applying such guidelines, and any revisions thereof initiated by the Secretary pursuant to direction of the President issued prior to the enactment of this title; (2) protocols and guidelines developed under any Federal, State, local, or private voluntary greenhouse gas emissions reporting or reduction programs; (3) the various differences and potential uniqueness of the facilities, operations and business and other relevant practices of persons and entities in the private and public sectors that may be expected to participate in the registry; (4) issues, such as comparability, that are associated with the reporting of

1	activity of a person or entity that may be reasonably and cost effectively identified,
2	measured and reported voluntarily, taking into consideration different types of
3	facilities and activities and the de minimis nature of some emissions and their
4	sources; and
5	(6) any other consideration the Secretary may deem appropriate.
6	(c) EXPERTS AND CONSULTANTS.—The Secretary, and any member of the
7	Interagency Task Force, may secure the services of experts and consultants in the private
8	and non-profit sectors in accordance with the provisions of section 3109 of title 5, United
9	States Code, in the areas of greenhouse gas measurement, certification, and emissions
10	trading. In securing such services, any grant, contract, cooperative agreement, or other
11	arrangement authorized by law and already available to the Secretary or the member of the
12	Interagency Task Force securing such services may be used.
13	(d) TRANSFERABILITY OF PRIOR REPORTS.—Emissions reports and reductions that
14	have been made by a person or entity pursuant to section 1605(b) of the Energy Policy Act
15	of 1992 (42 U.S.C. 13385(b)) or under other Federal or State voluntary greenhouse gas
16	reduction programs may be independently verified and registered with the registry using
17	the same guidelines developed by the Secretary pursuant to this section.
18	(e) PUBLIC COMMENT.—The Secretary shall make such guidelines available in draft
19	form for public notice and opportunity for comment for a period of at least 90 days, and
20	thereafter shall adopt them for use in implementation of the registry established pursuant to
21	this title.
22	(f) REVIEW AND REVISION.—The Secretary, through the Interagency Task Force,
23	shall periodically thereafter review the guidelines and, as needed, revise them in the same
24	manner as provided for in this section.
25	SEC. 1123. VOLUNTARY AGREEMENTS.
26	(a) In General.—In furtherance of the purposes of this title, any person or entity,
27	and the Secretary, may voluntarily enter into an agreement to provide that—

1	(1) such person or entity (and successors thereto) shall report annually to the
2	registry on emissions and sources of greenhouse gases from applicable facilities
3	and operations which generate net emissions above any de minimis thresholds
4	specified in the guidelines issued by the Secretary pursuant to this title;
5	(2) such person or entity (and successors thereto) shall commit to report and
6	participate in the registry for a period of at least 5 calendar years, provided that
7	such agreements may be renewed by mutual consent;
8	(3) for purposes of measuring performance under the agreement, such
9	person or entity (and successors thereto) shall determine, by mutual agreement with
10	the Secretary—
11	(A) pursuant to the guidelines issued under this title, a baseline
12	emissions level for a representative period preceding the effective date of
13	the agreement; and
14	(B) emissions reduction goals, taking into consideration the baseline
15	emissions level determined under subparagraph (A) and any relevant
16	economic and operational factors that may affect such baseline emissions
17	level over the duration of the agreement; and
18	(4) for certified emissions reductions made relative to the baseline emissions
19	level, the Secretary shall provide, at the request of the person or entity, transferable
20	credits (with unique assigned serial numbers) to the person or entity (and successors
21	thereto) which, inter alia,—
22	(A) can be used by such person or entity towards meeting emissions
23	reductions goals set forth under the agreement;
24	(B) can be transferred to other persons or entities through a
25	voluntary private transaction between persons or entities; or
26	(C) may be applicable towards any incentive, market-based, or
27	regulatory programs determined by the Congress in a future enactment to be

1	necessary and feasible to reduce the risk of climate change and its impacts.
2	(b) Public Notice and Comment.—At least 30 days before any agreement is
3	final, the Secretary shall give notice thereof in the Federal Register and provide an
4	opportunity for public written comment. After reviewing such comments, the Secretary
5	may withdraw the agreement or the parties thereto may mutually agree to revise it or
6	finalize it without substantive change. Such agreement shall be retained in the national
7	registry and be available to the public.
8	(c) Emissions in Excess.—In the event that a person or entity fails to certify that
9	emissions from applicable facilities and operations are less than the emissions reduction
10	goals contained in the agreement, such person or entity shall take actions as necessary to
11	reduce such excess emissions, including—
12	(1) redemption of transferable credits acquired in previous years if owned
13	by the person or entity;
14	(2) acquisition of transferable credits from other persons or entities
15	participating in the registry through their own agreements; or
16	(3) the undertaking of additional emissions reductions activities in
17	subsequent years as may be determined by agreement with the Secretary.
18	(d) No New Authority.—This section shall not be construed as providing any
19	regulatory or mandate authority regarding reporting of such emissions or reductions.
20	SEC. 1124. MEASUREMENT AND VERIFICATION.
21	(a) In General.—The Secretary of Commerce, through the National Institute of
22	Standards and Technology and in consultation with the Secretary of Energy, shall develop
23	and propose standards and practices for accurate measurement and verification of
24	greenhouse gas emissions and emissions reductions. Such standards and best practices shall
25	address the need for—
26	(1) standardized measurement and verification practices for reports made by
27	all persons or entities participating in the registry, taking into account—

1	(A) existing protocols and standards already in use by persons or
2	entities desiring to participate in the registry;
3	(B) boundary issues such as leakage and shifted utilization;
4	(C) avoidance of double-counting of greenhouse gas emissions and
5	emissions reductions; and
6	(D) such other factors as the panel determines to be appropriate;
7	(2) measurement and verification of actions taken to reduce, avoid or
8	sequester greenhouse gas emissions;
9	(3) in coordination with the Secretary of Agriculture, measurement of the
10	results of the use of carbon sequestration and carbon recapture technologies,
11	including—
12	(A) organic soil carbon sequestration practices;
13	(B) forest preservation and re-forestation activities which adequately
14	address the issues of permanence, leakage and verification; and
15	(4) such other measurement and verification standards as the Secretary of
16	Commerce, the Secretary of Agriculture, and the Secretary of Energy shall
17	determine to be appropriate.
18	(b) Public Comment.—The Secretary of Commerce shall make such standards
19	and practices available in draft form for public notice and opportunity for comment for a
20	period of at least 90 days, and thereafter shall adopt them, in coordination with the
21	Secretary of Energy, for use in the guidelines for implementation of the registry as issued
22	pursuant to this title.
23	SEC. 1125. CERTIFIED INDEPENDENT THIRD PARTIES.
24	(a) CERTIFICATION.—The Secretary of Commerce shall, through the Director of the
25	National Institute of Standards and Technology and the Administrator, develop standards
26	for certification of independent persons to act as certified parties to be employed in

1	verifying the accuracy and reliability of reports made under this title, including standards
2	that—
3	(1) prohibit a certified party from themselves participating in the registry
4	through the ownership or transaction of transferable credits recorded in the registry;
5	(2) prohibit the receipt by a certified party of compensation in the form of a
6	commission where such party receives payment based on the amount of emissions
7	reductions verified; and
8	(3) authorize such certified parties to enter into agreements with persons
9	engaged in trading of transferable credits recorded in the registry.
10	(b) LIST OF CERTIFIED PARTIES.—The Secretary shall maintain and make available
11	to persons or entities making reports under this title and to the public upon request a list of
12	such certified parties and their clients making reports under this title.
13	SEC. 1126. REPORT TO CONGRESS.
14	Not later than 1 year after guidelines are issued for the registry pursuant to this title,
15	and biennially thereafter, the President, through the Interagency Task Force, shall report to
16	the Congress on the status of the registry established by this title. The report shall
17	include—
18	(1) an assessment of the level of participation in the registry (both by sector
19	and in terms of total national emissions represented);
20	(2) effectiveness of voluntary reporting agreements in enhancing
21	participation in the registry;
22	(3) use of the registry for emissions trading and other purposes;
23	(4) assessment of progress towards individual and national emissions
24	reduction goals; and
25	(5) an inventory of administrative actions taken or planned to improve the
26	national registry or the guidelines, or both, and such recommendations for

1	legislative changes to this title or section 1605 of the Energy Policy Act of 1992 (42
2	U.S.C. 13385) as the President believes necessary to better carry out the purposes
3	of this title.
4	Subtitle C—Climate Technology Programs
5	SEC. 1131. OFFICE OF CLIMATE CHANGE TECHNOLOGY.
6	Section 1603 of the Energy Policy Act of 1992 (42 U.S.C. 13383) is amended to
7	read as follows:
8	"SEC. 1603. OFFICE OF CLIMATE CHANGE TECHNOLOGY
9	"(a) ESTABLISHMENT.—There shall be within the Department an Office of
10	Climate Change Technology. The Office shall be headed by a Director, who shall
11	be appointed in the Senior Executive Service, and who shall report to the Secretary
12	in such manner as the Secretary may prescribe. The Director shall be a person who,
13	by reason of professional background and experience, is specially qualified to
14	coordinate climate change policy and technical activities.
15	"(b) Duties of the director.—The Director shall—
16	"(1) promote and coordinate issues, policies, and activities within the
17	Department related to climate change and coordinate the issuance of such
18	reports as may be required under this title;
19	"(2) lead the formulation and periodic revision of a comprehensive
20	Departmental strategy for energy research, development, demonstration, and
21	technology deployment to implement national climate change policy,
22	including quantitative performance and deployment goals for energy
23	technologies that reduce, avoid, or sequester emissions of greenhouse gases;
24	"(3) analyze the research, development, demonstration, and
25	technology deployment activities of the Department to assess their
26	contribution to the strategy under paragraph (2) and make recommendations

1	to the appropriate officers of the Department;
2	"(4) facilitate, in cooperation with the appropriate Departmental
3	programs, the development of domestic and international cooperative
4	research and development agreements (as that term is defined in section
5	12(d)(1) of the Stevenson-Wydler Technology Innovation Act of 1980 (15
6	U.S.C. 3710a(d)(1))), or similar cooperative, cost-shared partnerships with
7	non-federal organizations to accelerate the rate of domestic and
8	international demonstration and deployment of energy technologies that
9	reduce, avoid or sequester emissions of greenhouse gases;
10	"(5) participate in the planning activities of relevant Department
11	programs;
12	"(6) participate in the development and assessment of domestic and
13	international policies in order to determine and report on the effects of such
14	policies on the generation, reduction, avoidance, and sequestration of
15	greenhouse gases from activities related to the production and use of energy;
16	"(7) help develop national climate change policy by providing
17	technical support, upon request, to the President, interagency groups, or
18	other federal agencies;
19	"(8) carry out programs to raise public awareness of climate change,
20	its relation to energy production and use, and means to mitigate human-
21	induced climate change through changes in energy production or use; and
22	"(9) at the direction of the Secretary or another appropriate officer of
23	the Department, serve as the Department's representative for interagency
24	and multilateral policy discussions relating to global climate change,
25	including the activities of—
26	"(A) the Committee on Earth and Environmental Sciences
27	established by section 102 of the Global Change Research Act of

1	1990 (15 U.S.C. 2932) and its successor committees; and
2	"(B) other interagency committees coordinating policies or
3	activities relating to global climate change; and
4	"(10) in accordance with all law administered by the Secretary and
5	other applicable Federal law and contracts, including patent and intellectual
6	property laws, and in furtherance of the United Nations Framework
7	Convention on Climate Change—
8	"(A) identify for, and transfer, deploy, diffuse, and apply to,
9	Parties to such Convention, including the United States, any
10	technologies, practices, or processes which reduce, avoid, or
11	sequester emissions of greenhouse gases if such technologies,
12	practices or processes have been developed with funding from the
13	Department of Energy or any of its facilities or laboratories; and
14	"(B) support reasonable efforts by the Parties to such
15	convention, including the United States, to identify and remove
16	legal, trade, financial, and other barriers to the use and application of
17	any technologies, practices, or processes which reduce, avoid, or
18	sequester emissions of greenhouse gases.".
19	SEC. 1132. CLIMATE CHANGE TECHNOLOGY PROGRAM.
20	(a) In General.—Section 1604 of the Energy Policy Act of 1992 (42 U.S.C.
21	13384) is amended to read as follows:
22	"SEC. 1604. CLIMATE CHANGE TECHNOLOGY PROGRAM.
23	"(a) ESTABLISHMENT.—There is established within the Office of Climate
24	Change Technology a program to support accelerated research and development
25	projects on energy technologies that—
26	"(1) have significant potential to—
27	"(A) reduce or avoid anthropogenic emissions of greenhouse

1	gases;
2	"(B) remove and sequester greenhouse gases from emissions
3	streams; or
4	"(C) remove and sequester greenhouse gases from the
5	atmosphere;
6	"(2) are not being addressed significantly by other Department
7	programs;
8	"(3) would represent a substantial advance beyond currently
9	available technology; and
10	"(4) are not expected to be applied commercially before 2020.
11	"(b) Program Plan.—Not later than one year after the date of enactment
12	of this section, the Secretary shall prepare and submit to the Congress a ten-year
13	program plan to guide activities to be carried out under this section. Thereafter, the
14	Secretary shall biennially update and resubmit the program plan to the Congress,
15	and include evaluation of
16	"(c) Proposals.—Proposals may be submitted by applicants or consortia
17	from industry, institutions of higher education, or Department of Energy national
18	laboratories. At minimum, each proposal shall also include—
19	"(1) a multi-year management plan that outlines how the proposed
20	research, development, demonstration and deployment activities will be
21	carried out;
22	"(2) quantitative technology goals and greenhouse gas emission
23	reduction targets that can be used to measure performance against program
24	objectives;
25	"(3) the total cost of the proposal for each year in which funding is
26	requested, and a breakdown of those costs by category;

1	"(4) evidence that the applicant has in existence or has access to—
2	"(A) the technical capability to enable it to make use of
3	existing research support and facilities in carrying out the objectives
4	of the proposal;
5	"(B) a multi-disciplinary research staff experienced in
6	technologies or practices able to sequester, avoid, or capture
7	greenhouse gas emissions;
8	"(C) access to facilities and equipment to enable the conduct
9	of laboratory-scale testing or demonstration of technologies or
10	related processes undertaken through the program; and
11	"(D) commitment for matching funds and other resources as
12	may be needed from non-Federal sources, including cash,
13	equipment, services, materials, appropriate technology transfer
14	activities, and other assets directly related to the cost of the proposal
15	"(5) evidence that the proposed activities are supplemental to, and
16	not duplicative of, existing research and development activities carried out,
17	funded, or otherwise supported by the Department;
18	"(6) a description of the technology transfer mechanisms and public-
19	private partnerships that the applicant will use to make available research
20	results to industry and to other researchers;
21	"(7) a statement whether the unique capabilities of Department of
22	Energy national laboratories warrant collaboration with those laboratories,
23	and the extent of any such collaboration proposed; and
24	"(8) demonstrated evidence of the ability of the applicant to
25	undertake and complete the proposed project.
26	"(d) PROCUREMENT AUTHORITIES.—The program under this section may
27	use any of the procurement authorities available to the Department to solicit

1	proposals for projects under subsection (a) and to encourage partnerships among
2	research performers that will increase the likelihood of success of such projects.
3	"(e) Relationship to Department Programs.—Each project under
4	subsection (a) shall be—
5	"(1) initiated only after consultation by the Office of Climate
6	Change Technology with one or more appropriate offices in the Department
7	that support research and development in areas related to the project; and
8	"(2) either—
9	"(A) managed directly by the Office of Climate Change
10	Technology; or
11	"(B) managed by the appropriate office (or by a cross-
12	functional team from several offices) in the Department that
13	supports research and development in areas related to the project,
14	using funds transferred by the Office of Climate Change
15	Technology.
16	"(f) Cost Sharing.—
17	"(1) Except as otherwise provided in this subsection, each project
18	under subsection (a) shall be subject only to such cost-sharing requirements
19	as the Office of Climate Change Technology may provide.
20	"(2) Each cost-sharing agreement under this subsection shall be
21	published in the Federal Register by the Office of Climate Change
22	Technology.
23	"(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be
24	appropriated to the Secretary to carry out this section \$40,000,000 for fiscal year
25	2004 and \$200,000,000 for each of fiscal years 2005 through 2014, to remain
26	available until expended.".

Research and Development Act of 1974 (42 U.S.C. 5905) is amended—
(1) in subsection (a)—
(A) in paragraph (2), by striking "and" at the end;
(B) in paragraph (3) by striking the period at the end and inserting ",
and"; and
(C) by adding at the end the following—
"(4) solutions to the effective management of greenhouse gas
emissions in the long term by the development of technologies and
practices designed to—
"(A) reduce or avoid anthropogenic emissions of
greenhouse gases;
"(B) remove and sequester greenhouse gases from
emissions streams; and
"(C) remove and sequester greenhouse gases from the
atmosphere."; and
(2) in subsection (b)—
(A) in paragraph (2), by striking "subsection (a)(1) through (3)" and
inserting "paragraphs (1) through (4) of subsection (a)"; and
(B) in paragraph (3)—
(i) in subparagraph (R), by striking "and" at the end;
(ii) in subparagraph (S), by striking the period at the end and
inserting "; and"; and
(iii) by adding at the end the following:
"(T) to pursue a long-term climate technology

1	strategy designed to demonstrate a variety of technologies by
2	which stabilization of greenhouse gases might be best
3	achieved, including accelerated research, development,
4	demonstration and deployment of—
5	"(i) renewable energy systems;
6	"(ii) advanced fossil energy technology;
7	"(iii) advanced nuclear power plant design;
8	"(iv) fuel cell technology for residential,
9	industrial and transportation applications;
10	"(v) carbon capture and sequestration
11	practices and technologies, including agricultural and
12	forestry practices that store and sequester carbon;
13	"(vi) efficient electrical generation,
14	transmission and distribution technologies; and
15	"(vii) efficient end use energy technologies.".
16	SEC. 1133. CLEAN ENERGY TECHNOLOGY EXPORTS PROGRAM.
17	(a) DEFINITIONS—In this section:
18	(1) The term "clean energy technology" means an energy supply or end-use
19	technology that, over its lifecycle and compared to a similar technology already in
20	commercial use in developing countries, countries with economies in transition, and
21	other partner countries—
22	(A) emits substantially lower levels of pollutants or greenhouse
23	gases; and
24	(B) may generate substantially smaller or less toxic volumes of solid
25	or liquid waste.
26	(2) The term "interagency working group" means the Interagency Working

1	Group on Clean Energy Technology Exports established under subsection (b).
2	(b) Interagency Working Group.—
3	(1) Not later than 90 days after the date of enactment of this section, the
4	Secretary of Energy, the Secretary of Commerce, and the Administrator of the
5	United States Agency for International Development shall jointly establish a
6	Interagency Working Group on Clean Energy Technology Exports. The interagency
7	working group will focus on opening and expanding energy markets and
8	transferring clean energy technology to those developing countries, countries with
9	economies in transition, and other partner countries that are expected to experience,
10	over the next 20 years, the most significant growth in energy production and
11	associated greenhouse gas emissions, including through technology transfer
12	programs under the Framework Convention on Climate Change, other international
13	agreements, and relevant Federal efforts.
14	(2) The interagency working group shall be jointly chaired by
15	representatives appointed by the agency heads under paragraph (1) and shall also
16	include representatives from the Department of State, the Department of the
17	Treasury, the Environmental Protection Agency, the Export-Import Bank, the
18	Overseas Private Investment Corporation, the Trade and Development Agency, and
19	other Federal agencies as deemed appropriate by all three agency heads under
20	paragraph (1).
21	(3) The interagency working group shall—
22	(A) analyze technology, policy, and market opportunities for
23	international development, demonstration, and deployment of clean energy
24	technology;
25	(B) investigate issues associated with building capacity to deploy
26	clean energy technology in developing countries, countries with economies
27	in transition, and other partner countries, including energy-sector reform;

1	creation of open, transparent, and competitive markets for clean energy
2	technologies; availability of trained personnel to deploy and maintain such
3	clean energy technology; and demonstration and cost-buydown mechanisms
4	to promote first adoption of the technology;
5	(C) examine relevant trade, tax, international, and other policy issues
6	to assess what policies would help open markets and improve United States
7	clean energy technology exports in support of the following areas—
8	(i) enhancing energy innovation and cooperation, including
9	energy sector and market reform, capacity building, and financing
10	measures;
11	(ii) improving energy end-use efficiency technologies,
12	including buildings and facilities, vehicle, industrial, and co-
13	generation technology initiatives; and
14	(iii) promoting energy supply technologies, including fossil,
15	nuclear, and renewable technology initiatives;
16	(D) establish an advisory committee involving the private sector and
17	other interested groups on the export and deployment of clean energy
18	technology;
19	(E) monitor each agency's progress towards meeting goals in the 5-
20	year strategic plan submitted to Congress pursuant to the Energy and Water
21	Development Appropriations Act, 2001, and the Energy and Water
22	Development Appropriations Act, 2002;
23	(F) make recommendations to heads of appropriate Federal agencies
24	on ways to streamline Federal programs and policies to improve each
25	agency's role in the international development, demonstration, and
26	deployment of clean energy technology;
)7	(G) make assessments and recommendations regarding the distinct

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technological, market, regional, and stakeholder challenges necessary to carry out the program; and

- (H) recommend conditions and criteria that will help ensure that United States funds promote sound energy policies in participating countries while simultaneously opening their markets and exporting United States energy technology.
- (c) Federal support for Clean energy technology

 TRANSFER.—Notwithstanding any other provision of law, each Federal agency or

 Government corporation carrying out an assistance program in support of the activities of

 United States persons in the environment or energy sector of a developing country, country

 with an economy in transition, or other partner country shall support, to the maximum

 extent practicable, the transfer of United States clean energy technology as part of that

 program.
- (d) Annual Report.—Not later than 90 days after the date of the enactment of this section, and on April 1st of each year thereafter, the interagency working group shall submit a report to Congress on its activities during the preceding calendar year. The report shall include a description of the technology, policy, and market opportunities for international development, demonstration, and deployment of clean energy technology investigated by the interagency working group in that year, as well as any policy recommendations to improve the expansion of clean energy markets and United States clean energy technology exports.
- (e) REPORT ON USE OF FUNDS.—Not later than October 1, 2003, and each year thereafter, the Secretary of State, in consultation with other Federal agencies, shall submit a report to Congress indicating how United States funds appropriated for clean energy technology exports and other relevant Federal programs are being directed in a manner that promotes sound energy policy commitments in developing countries, countries with economies in transition, and other partner countries, including efforts pursuant to multilateral environmental agreements.

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(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated
to the departments, agencies, and entities of the United States described in subsection (b)
such sums as may be necessary to support the transfer of clean energy technology,
consistent with the subsidy codes of the World Trade Organization, as part of assistance
programs carried out by those departments, agencies, and entities in support of activities of
United States persons in the energy sector of a developing country, country with an
economy in transition, or other partner country.
SEC. 1134. INTERNATIONAL ENERGY TECHNOLOGY DEPLOYMENT PROGRAM.
Title XVI of the Energy Policy Act of 1992 (42 U.S.C. 13381 et seq.) is amended
by adding at the end the following:
"SEC. 1610. INTERNATIONAL ENERGY TECHNOLOGY DEPLOYMENT PROGRAM.
"(a) DEFINITIONS.— In this subsection:
"(1) The term 'international energy deployment project' means a
project to construct an energy production facility outside the United States
for the production of energy to be consumed outside the United States,
where the deployment of such project will result in a greenhouse gas
reduction per unit of energy produced (when compared to the technology
that would otherwise be deployed) of —
"(A) 20 percentage points or more, in the case of a unit
placed in service before January 1, 2010;
"(B) 40 percentage points or more, in the case of a unit
placed in service after December 31, 2009, and before January 1,
2020; or
"(C) 60 percentage points or more, in the case of a unit
placed in service after December 31, 2019, and before January 1,
2030.
"(2) The term 'qualifying international energy deployment project'

1	means an international energy deployment project that —
2	"(A) is submitted by a United States firm to the Secretary in
3	accordance with procedures established by the Secretary by
4	regulation;
5	"(B) meets the criteria of subsection 1608(k), and uses
6	technology that has been successfully developed or deployed in the
7	United States;
8	"(C) is selected by the Secretary without regard to the
9	country in which the project is located, with notice of such selection
10	being published in the Federal Register; and
11	"(D) complies with such other terms and conditions as the
12	Secretary establishes by regulation.
13	"(3) For purposes of this section, the term "United States", when
14	used in a geographical sense, means the 50 States, the District of Columbia,
15	Puerto Rico, Guam, the Virgin Islands, American Samoa, and the
16	Commonwealth of the Northern Mariana Islands.
17	"(b) PILOT PROGRAM FOR FINANCIAL ASSISTANCE.—
18	"(1) In General.— Not later than 180 days after the date of
19	enactment of this subsection, the Secretary shall, by regulation, provide for
20	a pilot program that provides financial assistance for qualifying
21	international energy deployment projects.
22	"(2) Financial Assistance.—
23	"(A) IN GENERAL.—For each qualifying international energy
24	deployment project selected by the Secretary to participate in the
25	pilot program, the Secretary shall make available a loan or loan
26	guarantee for not more than 50 percent of the total cost of the
27	project, to be repaid at an interest rate equal to the rate for Treasury

1	obligations then issued for periods of comparable maturities.
2	"(B) Developed Countries.—Loans or loan guarantees
3	made available for projects to be located in a developed country, as
4	listed in Annex I of the United Nations Framework Convention on
5	Climate Change, shall require at least a 50 percent contribution
6	towards the total cost of the loan or loan guarantee by the host
7	country.
8	"(C) Developing Countries.— Loans or loan guarantees
9	made for projects to be located in a developing country (those
10	countries not listed in Annex I of the United Nations Framework
11	Convention on Climate Change) shall require at least a 10 percent
12	contribution towards the total cost of the loan or loan guarantee by
13	the host country.
14	"(D) CAPACITY BUILDING RESEARCH.—Proposals made for
15	projects to be located in a developing country may include a research
16	component intended to build technological capacity within the host
17	country. Such research must be related to the technologies being
18	deployed and must involve both an institution in the host country
19	and an industry, university or national laboratory participant from
20	the United States. The host institution shall contribute at least 50
21	percent of funds provided for the capacity building research.
22	"(3) COORDINATION WITH OTHER PROGRAMS.—A qualifying
23	international energy deployment project funded under this section shall not
24	be eligible as a qualifying clean coal technology under section 415 of the
25	Clean Air Act (42 U.S.C. 7651n).
26	"(4) REPORT AND RECOMMENDATION.—Not later than 5 years after
27	the date of enactment of this subsection, the Secretary shall submit to the
28	President a report on the results of the pilot projects. Not later than 60 days

1	after receiving such report, the President shall submit to Congress a
2	recommendation, based on the results of the pilot projects as reported by the
3	Secretary of Energy, concerning whether the financial assistance program
4	under this section should be continued, expanded, reduced, or eliminated.
5	"(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be
6	appropriated to the Secretary to carry out this section \$100,000,000 for each of
7	fiscal years 2005 through 2014, to remain available until expended.".
8	TITLE XII — ELECTRICITY
9	Subtitle A —Amendments to the Federal Power Act
10	SEC. 1201. DEFINITIONS
11	(a) Definition of Electric Utility—Section 3(23) of the Federal Power Act (16
12	U.S.C. 796(22)) is amended to read as follows:
13	"(22) 'electric utility' means any person or Federal or State agency (including any
14	municipality) that sells electric energy; such term includes the Tennessee Valley Authority
15	and each Federal power marketing agency.".
16	(b) Definition of Transmitting Utility.—Section 3(23) of the Federal Power
17	Act (16 U.S.C. 796(23)) is amended to read as follows:
18	"(23) Transmitting utility—The term `transmitting utility' means an entity
19	(including any entity described in section 201(f)) that owns or operates facilities used for
20	the transmission of electric energy—
21	"(A) in interstate commerce; or
22	"(B) for the sale of electric energy at wholesale.".
23	(c) Definition of Transmission Services.—Section 3(24) of the Federal Power
24	Act (16 U.S.C. 796(24)) is amended by adding at the end the following:
25	"(24) 'Transmission services' means the transmission of electric energy sold or

1	to be sold.".
2	(d) Definition of Transmission Organization.—Section 3 of the Federal Power
3	Act (16 U.S.C. 796(26)) is added to read as follows:
4	"(26) Transmission Organization.—The term 'Transmission Organization'
5	means a regional transmission organization, independent system operator, independent
6	transmission provider, or other transmission organization finally approved by the
7	Commission or a Regional Energy Services Commission for the operation of transmission
8	facilities.".
9	(e) Definition of Regional Energy Services Commission.—Section 3 of the
10	Federal Power Act (16 U.S.C. 796(27)) is amended by adding at the end the following:
11	"(25) REGIONAL ENERGY SERVICES COMMISSION.—The term 'Regional Energy
12	Services Commission' or 'RESC' means a voluntary multi-state entity designed to develop
13	and promote energy policies on regional levels.".
14	Subtitle B-State Coordination
1415	Subtitle B–State Coordination SEC. 1211. REGIONAL ENERGY SERVICES COMMISSIONS.
15	SEC. 1211. REGIONAL ENERGY SERVICES COMMISSIONS.
15 16	SEC. 1211. REGIONAL ENERGY SERVICES COMMISSIONS. The Federal Power Act is amended by adding at the end the following:
15 16 17	SEC. 1211. REGIONAL ENERGY SERVICES COMMISSIONS. The Federal Power Act is amended by adding at the end the following: "PART IV - REGIONAL ENERGY SERVICES COMMISSIONS
15 16 17 18	SEC. 1211. REGIONAL ENERGY SERVICES COMMISSIONS. The Federal Power Act is amended by adding at the end the following: "PART IV - REGIONAL ENERGY SERVICES COMMISSIONS "ESTABLISHMENT OF REGIONAL ENERGY SERVICES COMMISSIONS
15 16 17 18 19	SEC. 1211. REGIONAL ENERGY SERVICES COMMISSIONS. The Federal Power Act is amended by adding at the end the following: "PART IV - REGIONAL ENERGY SERVICES COMMISSIONS "ESTABLISHMENT OF REGIONAL ENERGY SERVICES COMMISSIONS "SEC 401. States are authorized to enter into agreements to establish Regional Energy
15 16 17 18 19 20	SEC. 1211. REGIONAL ENERGY SERVICES COMMISSIONS. The Federal Power Act is amended by adding at the end the following: "PART IV - REGIONAL ENERGY SERVICES COMMISSIONS "ESTABLISHMENT OF REGIONAL ENERGY SERVICES COMMISSIONS "SEC 401. States are authorized to enter into agreements to establish Regional Energy Services Commissions (RESC).
15 16 17 18 19 20 21	SEC. 1211. REGIONAL ENERGY SERVICES COMMISSIONS. The Federal Power Act is amended by adding at the end the following: "PART IV - REGIONAL ENERGY SERVICES COMMISSIONS "ESTABLISHMENT OF REGIONAL ENERGY SERVICES COMMISSIONS "SEC 401. States are authorized to enter into agreements to establish Regional Energy Services Commissions (RESC). "REGIONAL ENERGY SERVICES COMMISSIONS REQUIREMENTS
15 16 17 18 19 20 21 22	SEC. 1211. REGIONAL ENERGY SERVICES COMMISSIONS. The Federal Power Act is amended by adding at the end the following: "PART IV - REGIONAL ENERGY SERVICES COMMISSIONS "ESTABLISHMENT OF REGIONAL ENERGY SERVICES COMMISSIONS "SEC 401. States are authorized to enter into agreements to establish Regional Energy Services Commissions (RESC). "REGIONAL ENERGY SERVICES COMMISSIONS REQUIREMENTS "SEC. 402. (a) In order for States to form a Regional Energy Services Commission, the

1	percent of the nation's total electric load, based on the calculation by the Energy
2	Information Administration (EIA) Annual Report of electricity end use from utility
3	and nonutility sales for the most recent calendar year for which the EIA has
4	information.
5	"(2) A region for RESC purposes requires that each member of a RESC
6	(Member State) share a border with at least one other Member State.
7	"(3) A RESC shall be composed of one member from each State, appointed
8	by the Governor as provided by state law. A State may be a voting member of only
9	one RESC.
10	"(4) A RESC shall develop a program to coordinate the review, certification
11	and permitting of interstate transmission infrastructure to be developed in the
12	region and may exercise authority for siting transmission of electric facilities to the
13	extent the affected Member State of the RESC vests in the RESC its transmission
14	siting authority.
15	"(5) A RESC shall seek to ensure that there is no undue discrimination in
16	the provision of transmission service and encourage the development of
17	independent entities to operate transmission systems.
18	"(6) A RESC shall have the capability to address rate requirements for or in
19	connection with the transmission or sale of electric energy at wholesale within that
20	RESC's region.
21	"(7) Unless a contract provides otherwise, a RESC may not modify,
22	abrogate or order refunds with respect to a contractual transaction subject to the
23	jurisdiction of the RESC, except upon a finding that such action is necessary to
24	protect the public interest.
25	"(8) A RESC shall adopt a charter setting forth decisionmaking procedures,
26	and the specific authorities set forth in section 403 that the RESC would exercise.
27	"(b) A RESC shall file a copy of its charter, along with all protocols, rules, by-laws

1	and other administrative and substantive provisions and any amendment to, with the
2	Secretary of Energy within 30 days of completion.
3	"(c) CERTIFICATION.—The Secretary of Energy shall review any filing to confirm
4	that it is consistent with the requirements of section 402. The Secretary of Energy shall
5	approve or disapprove the filing within 60 days from the date of the filing. If the Secretary
6	of Energy disapproves a filing, the Secretary shall notify each of the Member States of the
7	reasons for the disapproval and the specific actions required for approval. After the
8	expiration of the 60-day period, the RESC filing will be deemed approved and certified.
9	"REGIONAL ENERGY SERVICES COMMISSION JURISDICTION
10	"SEC.403. (a) A RESC shall have primary jurisdiction over energy services to the extent
11	agreed to in a RESC charter.
12	(b) Energy services for Part IV purposes may include:
13	"(1) transmission infrastructure planning, certification and siting in the
14	RESC region;
15	"(2) identification of resource needs, supply and interconnection in the
16	RESC region;
17	"(3) rate design and revenue requirements for transmission and wholesale
18	sales in the RESC region;
19	"(4) market power review and market monitoring efforts in the RESC
20	region;
21	"(5) encouragement of cost-effective and environmentally advanced
22	infrastructure solutions, including demand response and load management, energy
23	efficiency and distributed generation, and increased fuel diversity in the RESC
24	region;
25	"(6) cooperation with Federal agencies which manage Federal Land and
26	natural resources within a State or States that are members of a RESC to ensure

1	timely and coordinated completion of environmental and other regulatory reviews;
2	"(7) formation and approval of Transmission Organizations pursuant to
3	section 407 in the RESC region;
4	"(8) promoting reliability standards and rules; and
5	"(9) developing adequate enforcement mechanisms.
6	"REGIONAL ENERGY SERVICES COMMISSION REVIEW
7	"SEC. 404. (a) A RESC may offer recommendations, findings, and advice to the State
8	regulatory authorities in the region. If a State regulatory authority issues an order or ruling
9	that conflicts with a recommendation or finding by the RESC for energy services that
10	affect transmission of electric energy in interstate commerce or wholesale sale of electric
11	energy in interstate commerce, the RESC may petition the Commission for review of the
12	order or ruling, or the State regulatory authority may certify such an issue to the
13	Commission for its review. Such a request for review must be filed within 30 days after
14	the issuance of such order.
15	"(b) A request for review or certification shall set forth specifically the ground or
16	grounds upon which such request or certification is based. A copy of such request for
17	review or certification shall be transmitted to the appropriate RESC or State regulatory
18	authority on the same day it is filed with the Commission. Upon the filing of such a
19	request for review or certification, the Commission shall have jurisdiction to affirm,
20	modify, or set aside such State regulatory order or ruling in whole or in part if the
21	Commission finds that the State regulatory authority's order or ruling would result in
22	undue discrimination in the provision of the transmission of electric energy or sale of such
23	energy at wholesale within the relevant RESC region or results in unjust and unreasonable
24	rates, charges or classifications within the relevant RESC region.
25	"TRANSMISSION ORGANIZATIONS
26	"SEC. 405. (a) To be approved by a RESC, a Transmission Organization must meet the
27	following requirements:

1	"(1) A Transmission Organization is independent of all market participants.
2	"(2) A Transmission Organization will oversee or control interstate
3	transmission facilities within a specific region to remove opportunities for unduly
4	discriminatory or preferential transmission practices. The Transmission
5	Organization shall own transmission assets, operate assets owned by other entities,
6	or oversee the operation of assets owned by other entities.
7	"(3) A Transmission Organization has the exclusive authority for
8	maintaining the short-term reliability of the transmission grid it operates or
9	oversees.
10	"(4) A Transmission Organization is the sole provider of transmission
11	service and the sole administrator of a non-discriminatory open access tariff for the
12	facilities under its control or oversight.
13	"(5) A Transmission Organization will develop market mechanisms for
14	identifying and managing congestion but such mechanisms need not be based upon
15	locational marginal pricing.
16	"(6) Each Transmission Organization will implement procedures to address
17	parallel path flows.
18	"(7) A Transmission Organization will operate a single open access same
19	time information system for all transmission facilities under its control or oversight
20	and shall calculate total transmission capacity and available transmission capacity
21	and will identify for the RESC the transmission capacity necessary to ensure that
22	native load requirements of load serving entities within the region managed by the
23	Transmission Organization are met.
24	"(8) A Transmission Organization will provide for a qualified, independent
25	market monitor to report directly to the Transmission Organization and RESC, and
26	who shall provide appropriate reports to interested States, and other appropriate
27	entities.

1	"(9) A Transmission Organization shall facilitate non-discriminatory
2	scheduling and interconnection arrangements on the transmission grid it operates or
3	oversees and with those Transmission Organizations overseeing or controlling
4	adjacent interstate transmission facilities.
5	"(10) A Transmission Organization shall provide participating transmitting
6	utilities with the opportunity to recover all legitimate, verifiable, prudently incurred
7	costs of forming the Transmission Organization.
8	"(11) A Transmission Organization will provide for the elimination of
9	so-called "pancaked" transmission rates within the Transmission Organization's
10	region.
11	"(12) A Transmission Organization can administer a real time, day ahead, or
12	such other market as deemed appropriate within the region.
13	"(b) Federal Utility Participation in Transmission Organizations.—Each
14	Federal power marketing agency and Tennessee Valley Authority may enter into a
15	contract, agreement or other arrangement transferring control and use of all or part of the
16	transmission system of a Federal utility to a Transmission Organization approved by the
17	Commission or a RESC subject to the statutory and other legal and treaty obligations
18	applicable to the Federal utility's transmission system, including recovery of all
19	transmission costs and expenses, existing contractual obligations, any third-party financing
20	obligations.
21	"PART II LIMITATION
22	"SEC. 406. Public utilities in States in a RESC shall not be subject to the Commission's
23	authority under Part II, except as provided in sections 407 and 408 and to the extent
24	authorities are not exercised by the RESC.
25	"COMMISSION JURISDICTION
26	"SEC. 407. A RESC or any State regulatory authority may petition the Commission for a
27	resolution of a conflict regarding transmission of electric energy or wholesale sales of

1	electric energy between adjacent regions. The Commission shall exercise its authority
2	under the Federal Power Act to resolve any such conflicts.

"SAVINGS CLAUSE

"SEC. 408. Nothing in Part IV shall change the Commission's exercise of its Federal Power Act authority granted pursuant to sections 202(c - g), 204, and 209(b) and (c). Nothing in this Part shall limit the Commission's Federal Power Act authority over States that are not members of a RESC.

"SEC. 409. Nothing in Part IV shall apply to Alaska or Hawaii."

Subtitle C—Improving Transmission Infrastructure

SEC. 1221. CONGESTION ZONE DESIGNATION.

Within one year after enactment of this section, and every 3 years thereafter, the Secretary of Energy shall conduct a study of our nation's transmission infrastructure to identify areas of congestion and inefficiency in the transmission of electric power over both private and publicly owned land. Any networks that the Secretary finds to be congested to a level that affects reliability or economic security, shall be listed in a report as Potential Congestion Zones. The Secretary shall inform the Governor of the States of the progress of the study and established procedures to obtain public comment on the designation of a Potential Congestion Zone and offer solutions. After considering alternatives and recommendations from all interested parties, the Secretary may designate a transmission system as a 'Congestion Zone.'

SEC. 1222. TRANSMISSION DEVELOPMENT CERTIFICATE

(a) The Commission may, after notice and an opportunity for hearing, issue a certificate of public convenience and necessity (transmission development certificate) to an entity for the construction or modification of transmission facilities if such proposed transmission facilities are located in a Congestion Zone designated by the Secretary of Energy and such proposed transmission facilities are in the public interest.

- (b) Applications for a transmission development certificate shall be submitted to the Commission under oath.
 - (c) The Commission shall issue rules setting forth the form of application, the information it is to contain, and the manner of service of notice of the transmission development certificate application upon interested parties.
 - (d) In any proceeding before the Commission under this section, the Commission shall afford each State and Regional Energy Services Commission in which a transmission facility covered by the transmission development certificate is or will be located as well as each affected Federal agency and Indian tribe, private property owners and other interested persons, a reasonable opportunity to present their views and recommendations with respect to the need for and impact of a facility covered by the transmission development certificate.
 - (e) Subject to subsection (f), in the case of a transmission development certificate issued for transmission facilities to be located on property other than property owned by the United States or a State, if a holder of a transmission development certificate issued by the Commission pursuant to paragraph (a) cannot acquire by contract, or is unable to agree with the owner of the land to the compensation, at fair market value, to be paid for, the necessary lands or interests therein to construct, operate, and maintain the transmission facility that is the subject of the permit, it may acquire the right-of-way by the exercise of the right of eminent domain in the district court of the United States for the district in which the land to be subject to the right-of-way is located, or in the appropriate court of the State in which the land is located. The practice and procedure in any action or proceeding for that purpose in the district court of the United States shall conform as nearly as practicable to the practice and procedures in similar action or proceeding in the courts of the State where the property is situated, except that the United States district courts shall only have jurisdiction of cases when the amount claimed by the owner of the property to be condemned exceeds \$3000.
 - (f) If a State is a member of a Regional Energy Services Commission (RESC) and

1	pursuant to its RESC charter vests its transmission siting authority in the RESC, the
2	Commission shall have no authority to issue a transmission development certificate for
3	facilities that are (1) proposed to be located on property not owned by the United States or
4	a State and (2) within the geographic boundary of a RESC Member State. If a Member
5	State has not vested its transmission siting authority in its RESC, the Commission may
6	issue a transmission development certificate for facilities that are (1) proposed to be
7	located on property not owned by the United States or a State and (2) within the geographic
8	boundary of a RESC Member State if that State has failed to initiate action on an
9	application for transmission development within 60 days of the filing of such an
10	application or if that State fails to complete and finalize action within 18 months of the
11	filing of such an application.
12	Subtitle D —Reliability
13	SEC. 1231, ELECTRIC RELIABILITY STANDARDS.
14	(a) Part II of the Federal Power Act (16 U.S.C 824, et seq.) is adding the following:
15	"SEC. 215. ELECTRIC RELIABILITY.
16	"(a) Definitions.—For purposes of this section—
17	"(1) The term 'bulk-power system' means—
18	"(A) facilities, including control systems, necessary for operating
19	interconnected electric energy transmission networks (or any portion
20	thereof); and
21	"(B) electric energy from generation facilities needed to maintain the
22	reliability of interconnected electric energy transmission networks.
23	The term does not include facilities used in the local distribution of electric energy.
24	"(2) The terms 'Electric Reliability Organization' and 'ERO' mean the
25	organization certified by the Commission under subsection (c) the purpose of which
26	is to establish and enforce reliability standards for the bulk-power system, subject

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"(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 facilities and the design of planned additions or modifications to such facilities 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 facilities or to construct new transmission capacity or generation capacity.

- "(4) The term 'reliable operation' means operating the facilities 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 facilities.
- "(5) The term 'Interconnection' means a geographic area in which the operation of bulk-power system facilities is synchronized such that the failure of one or more of such facilities may adversely affect the ability of the operators of other facilities within the system to maintain reliable operation of the facilities within their control.
- "(6) The term 'regional entity' means an entity having enforcement authority pursuant to subsection (e)(4).

"(b) JURISDICTION AND APPLICABILITY.—

"(1) The Commission shall have jurisdiction, within the United States, over the ERO certified by the Commission under subsection (c), any regional entities, and all users, owners and operators of the bulk-power system, including the entities described in section 201(f), for purposes of approving reliability standards established under this section and enforcing compliance with this section. All users, owners and operators of the bulk-power system shall comply with reliability

1	standards that take effect under this section.
2	"(2) The Commission shall issue a final rule to implement the requirements
3	of this section not later than 180 days after the date of enactment of this section.
4	"(c) CERTIFICATION.—Following the issuance of a Commission rule under
5	subsection (b)(2), any person may submit an application to the Commission for
6	certification as the Electric Reliability Organization (ERO). The Commission may certify
7	one such ERO if the Commission determines that such ERO—
8	"(1) has the ability to develop and enforce, subject to subsection (e)(2),
9	reliability standards that provide for an adequate level of reliability of the
10	bulk-power system;
11	"(2) has established rules that—
12	"(A) assure its independence of the users and owners and operators
13	of the bulk-power system, while assuring fair stakeholder representation in
14	the selection of its directors and balanced decisionmaking in any ERO
15	committee or subordinate organizational structure;
16	"(B) allocate equitably reasonable dues, fees, and other charges
17	among end users for all activities under this section;
18	"(C) provide fair and impartial procedures for enforcement of
19	reliability standards through the imposition of penalties in accordance with
20	subsection (e) (including limitations on activities, functions, or operations,
21	or other appropriate sanctions);
22	"(D) provide for reasonable notice and opportunity for public
23	comment, due process, openness, and balance of interests in developing
24	reliability standards and otherwise exercising its duties; and
25	"(E) provide for taking, after certification, appropriate steps to gain
26	recognition in Canada and Mexico.

"(4)	DELIADII	ITV CTA	NDARDS.—
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- "(1) The Electric Reliability Organization shall file each reliability standard or modification to a reliability standard that it proposes to be made effective under this section with the Commission.
- "(2) The Commission may approve by rule or order a proposed reliability standard or modification to a reliability standard if it determines that the standard is just, reasonable, not unduly discriminatory or preferential, and in the public interest. The Commission shall give due weight to the technical expertise of the Electric Reliability Organization with respect to the content of a proposed standard or modification to a reliability standard and to the technical expertise of a regional entity organized on an Interconnection-wide basis with respect to a reliability standard to be applicable within that Interconnection, but shall not defer with respect to the effect of a standard on competition. A proposed standard or modification shall take effect upon approval by the Commission.
- "(3) The Electric Reliability Organization shall rebuttably presume that a proposal from a regional entity organized on an Interconnection-wide basis for a reliability standard or modification to a reliability standard to be applicable on an Interconnection-wide basis is just, reasonable, and not unduly discriminatory or preferential, and in the public interest.
- "(4) The Commission shall remand to the Electric Reliability Organization for further consideration a proposed reliability standard or a modification to a reliability standard that the Commission disapproves in whole or in part.
- "(5) The Commission, upon its own motion or upon complaint, may order the Electric Reliability Organization to submit to the Commission a proposed reliability standard or a modification to a reliability standard that addresses a specific matter if the Commission considers such a new or modified reliability standard appropriate to carry out this section.

1	"(6) The final rule adopted under subsection (b)(2) shall include fair
2	processes for the identification and timely resolution of any conflict between a
3	reliability standard and any function, rule, order, tariff, rate schedule, or agreement
4	accepted, approved, or ordered by the Commission applicable to a Transmission
5	Organization. Such Transmission Organization shall continue to comply with such
6	function, rule, order, tariff, rate schedule or agreement accepted approved, or
7	ordered by the Commission until—
8	"(A) the Commission finds a conflict exists between a reliability
9	standard and any such provision;
10	"(B) the Commission orders a change to such provision pursuant to
11	section 206 of this part; and
12	"(C) the ordered change becomes effective under this part.
13	If the Commission determines that a reliability standard needs to be changed as a
14	result of such a conflict, it shall order the ERO to develop and file with the
15	Commission a modified reliability standard under paragraph (4) or (5) of this
16	subsection.
17	"(e) Enforcement.—
18	(1) The ERO may impose, subject to paragraph (2), a penalty on a user or
19	owner or operator of the bulk-power system for a violation of a reliability standard
20	approved by the Commission under subsection (d) if the ERO, after notice and an
21	opportunity for a hearing—
22	"(A) finds that the user or owner or operator has violated a reliability
23	standard approved by the Commission under subsection (d); and
24	"(B) files notice and the record of the proceeding with the
25	Commission.
26	"(2) A penalty imposed under paragraph (1) may take effect not earlier than
27	the 31st day after the Electric Reliability Organization files with the Commission

1	notice of the penalty and the record of proceedings. Such penalty shall be subject to
2	review by the Commission, on its own motion or upon application by the user,
3	owner or operator that is the subject of the penalty filed within 30 days after the
4	date such notice is filed with the Commission. Application to the Commission for
5	review, or the initiation of review by the Commission on its own motion, shall not
6	operate as a stay of such penalty unless the Commission otherwise orders upon its
7	own motion or upon application by the user, owner or operator that is the subject of
8	such penalty. In any proceeding to review a penalty imposed under paragraph (1),
9	the Commission, after notice and opportunity for hearing (which hearing may
10	consist solely of the record before the Electric Reliability Organization and
11	opportunity for the presentation of supporting reasons to affirm, modify, or set
12	aside the penalty), shall by order affirm, set aside, reinstate, or modify the penalty,
13	and, if appropriate, remand to the Electric Reliability Organization for further
14	proceedings. The Commission shall implement expedited procedures for such
15	hearings.
16	"(3) On its own motion or upon complaint, the Commission may order
17	compliance with a reliability standard and may impose a penalty against a user or
18	owner or operator of the bulk-power system, if the Commission finds, after notice
19	and opportunity for a hearing, that the user or owner or operator of the bulk-power
20	system has engaged or is about to engage in any acts or practices that constitute or
21	will constitute a violation of a reliability standard.
22	"(4) The Commission shall establish regulations directing the ERO to enter
23	into an agreement to delegate authority to a regional entity for the purpose of
24	proposing reliability standards to the ERO and enforcing reliability standards under
25	paragraph (1) if—
26	"(A) the regional entity is
27	"(i) a Regional Energy Services Commission; or
28	"(ii) governed by an independent board, a balanced

1	stakeholder board, or a combination independent and balanced stakeholder
2	board;
3	"(B) the regional entity otherwise satisfies the provisions of
4	subsection (c)(1) and (2); and
5	"(C) the agreement promotes effective and efficient administration
6	of bulk-power system reliability.
7	"The Commission may modify such delegation. The ERO and the Commission
8	shall rebuttably presume that a proposal for delegation to a regional entity
9	organized on an Interconnection-wide basis promotes effective and efficient
10	administration of bulk-power system reliability and should be approved. Such
11	regulation may provide that the Commission may assign the ERO's authority to
12	enforce reliability standards under paragraph (1) directly to a regional entity
13	consistent with the requirements of this paragraph.
14	"(5) The Commission may take such action as is necessary or appropriate
15	against the ERO or a regional entity to ensure compliance with a reliability standard
16	or any Commission order affecting the ERO or a regional entity.
17	"(6) Any penalty imposed under this section shall bear a reasonable relation
18	to the seriousness of the violation and shall take into consideration the efforts of
19	such user, owner, or operator to remedy the violation in a timely manner.
20	"(f) Changes in Electricity Reliability Organization Rules.—The Electric
21	Reliability Organization shall file with the Commission for approval any proposed rule or
22	proposed rule change, accompanied by an explanation of its basis and purpose. The
23	Commission, upon its own motion or complaint, may propose a change to the rules of the
24	Electric Reliability Organization. A proposed rule or proposed rule change shall take effect
25	upon a finding by the Commission, after notice and opportunity for comment, that the
26	change is just, reasonable, not unduly discriminatory or preferential, is in the public
27	interest, and satisfies the requirements of subsection (c).

1	"(g) Reliability Reports.—The Electric Reliability Organization shall conduct
2	periodic assessments of the reliability and adequacy of the bulk-power system in North
3	America.
4	"(h) COORDINATION WITH CANADA AND MEXICO.—The President is urged to
5	negotiate international agreements with the governments of Canada and Mexico to provide
6	for effective compliance with reliability standards and the effectiveness of the Electric
7	Reliability Organization in the United States and Canada or Mexico.
8	"(i) Savings Provisions.—
9	"(1) The Electric Reliability Organization shall have authority to develop
10	and enforce compliance with reliability standards for only the bulk-power system.
11	"(2) This section does not authorize the Electric Reliability Organization or
12	the Commission to order the construction of additional generation or transmission
13	capacity or to set and enforce compliance with standards for adequacy or safety of
14	electric facilities or services.
15	"(3) Nothing in this section shall be construed to preempt any authority of
16	any State to take action to ensure the safety, adequacy, and reliability of electric
17	service within that State, as long as such action is not inconsistent with any
18	reliability standard.
19	"(4) Within 90 days of the application of the Electric Reliability
20	Organization or other affected party, and after notice and opportunity for comment
21	the Commission shall issue a final order determining whether a State action is
22	inconsistent with a reliability standard, taking into consideration any
23	recommendation of the Electric Reliability Organization.
24	"(5) The Commission, after consultation with the Electric Reliability
25	Organization, may stay the effectiveness of any State action, pending the
26	Commission's issuance of a final order.
27	"(j) REGIONAL ENERGY SERVICES COMMISSIONS.—Any Regional Energy Service

1	Commissions (RESC) may provide advice to the Electric Reliability Organization, a
2	regional entity, or the Commission regarding the governance of an existing or proposed
3	regional entity within the same region, whether a standard proposed to apply within the
4	region is just, reasonable, not unduly discriminatory or preferential, and in the public
5	interest, whether related reliability fees proposed to be assessed within the region are just,
6	reasonable, not unduly discriminatory or preferential, and in the public interest and any
7	other responsibilities requested by the Commission. The Commission may give deference
8	to the advice of any such RESC if that body is organized on an Interconnection-wide basis.
9	"(k) APPLICATION TO ALASKA AND HAWAII.—The provisions of this section do not
10	apply to Alaska or Hawaii.".
11	(b) Section 211(b) of the Federal Power Act (16 U.S.C. 824j(b)) is amended by
12	striking "consistently applied regional or national reliability standards, guidelines, or
13	criteria" and inserting "reliability standards established under section 215."
14	Subtitle E—Fair Access to the Transmission System
15	SEC. 1241. OPEN ACCESS TRANSMISSION BY CERTAIN UTILITIES.
16	Part II of the Federal Power Act is further amended by inserting after section 211
17	the following:
18	"OPEN ACCESS BY CERTAIN UTILITIES
19	"SEC. 211A. (a) IN GENERAL.—Subject to section 212(h), the Commission may,
20	by rule or order, require an unregulated transmitting utility to provide transmission
21	services—
22	"(1) at rates that are comparable to those that the unregulated transmitting
23	utility charges itself, and
24	"(2) on terms and conditions (not relating to rates) that are comparable to
25	those under Commission rules that require public utilities to offer open access
26	transmission services and that are not unduly discriminatory or preferential.

1	"(b) EXEMPTIONS.—The Commission shall exempt from any rule or order under
2	this subsection any unregulated transmitting utility that—
3	"(1) sells no more than 4,000,000 megawatt hours of electricity per year;
4	and
5	"(2) does not own or operate any transmission facilities that are necessary
6	for operating an interconnected transmission system (or any portion thereof); or
7	"(3) meets other criteria the Commission determines to be in the public
8	interest.
9	"(c) RATE CHANGING PROCEDURES.—The rate changing procedures applicable to
10	public utilities under subsections (c) and (d) of section 205 are applicable to unregulated
11	transmitting utilities for purposes of this section.
12	"(d) REMAND.—In exercising its authority under subsection(a)(1), the Commission
13	may remand transmission rates to an unregulated transmitting utility for review and
14	revision where necessary to meet the requirements of subsection (a)(1).
15	"(e) Section 211 Requests.—The provision of transmission services under
16	subsection (a) does not preclude a request for transmission services under section 211.
17	"(f) PRIVATE USE.—The Commission may not require a State or municipality to
18	take action under this section that constitutes a private business use for purposes of section
19	141 of the Internal Revenue Code of 1986 (26 U.S.C. 141).
20	"(g) Definition.—For purposes of this subsection, the term 'unregulated
21	transmitting utility' means an entity that—
22	"(1) owns or operates facilities used for the transmission of electric energy
23	in interstate commerce, and
24	"(2) is either an entity described in section 201(f) or a rural electric
25	cooperative.".
26	SEC. 1242. TRANSMISSION INFRASTRUCTURE INVESTMENT.

1	Part II of the Federal Power Act is amended by adding by adding at the end the
2	following:
3	"SEC TRANSMISSION INVESTMENT INCENTIVES
4	"Within 1 year after the enactment of this section, the Commission shall establish,
5	by rule, transmission pricing policies to support interstate wholesale markets for electric
6	power and expanded transmission capacity needed to sustain the growth of wholesale
7	competition. Policies and standards established under the section shall specifically—
8	"(1) promote economically efficient enlargement of transmission networks
9	including the provision of proper price signals so that new generation and
10	transmission is built where it provides the lowest overall cost to consumers;
11	"(2) encourage deployment of transmission technologies to increase
12	capacity and efficiency of existing networks;
13	"(3) provide an adequate return on equity; and
14	"(4) reduce congestion on transmission networks."
15	SEC. 1243. INFRASTRUCTURE COST ALLOCATION PRINCIPLE.
16	(a) Within one year after the enactment of this Act, the Commission shall issue a
17	final rule regarding the allocation of costs associated with the interconnection of new
18	transmission facilities as well as the modification, expansion or upgrade of existing
19	transmission facilities (hereinafter "transmission expansion").
20	(b) The final rule shall ensure that the costs of any transmission expansion are
21	allocated in such a way that all users of the transmission expansion bear the appropriate
22	share of its costs.
23	(c) In its rulemaking, the Commission shall consider system-wide benefits as
24	benefits that include, but are not limited to projects that—
25	(1) provide reliability and adequacy for regional needs;
26	(2) accommodate load growth on a regional level;

1	(3) increase transmission capability into congested areas;
2	(4) facilitate major regional and inter-regional power transfers (seams).
3	(d) The cost of transmission expansion projects that do not provide sufficient
4	system-wide benefits but rather primarily benefit only a subset of users or market
5	participants shall be recovered from that subset on an incremental basis.
6	Subtitle F—Market Transparency,
7	Anti-Manipulation and Enforcement
8	SEC. 1251. MARKET TRANSPARENCY RULES.
9	Part II of the Federal Power Act is amended by adding after section 215 as added
10	by this Act the following:
11	"SEC. 216. MARKET TRANSPARENCY RULES.
12	"(a) COMMISSION RULES.—Not later than 180 days after the date of enactment of
13	this section, the Commission shall issue rules establishing an electronic information system
14	to provide the Commission and the public with access to such information as is necessary
15	or appropriate to facilitate price transparency and participation in markets subject to the
16	Commission's jurisdiction. Such systems shall provide statistical information about the
17	availability and market price of wholesale electric energy and transmission services to the
18	Commission, State commissions, buyers and sellers of wholesale electric energy, users of
19	transmission services, and the public on a timely basis.
20	"(b) Information Required.—The Commission shall require—
21	"(1) each Transmission Organization or, where no Transmission
22	Organization is operating, each transmitting utility to provide information about the
23	available capacity of transmission facilities operated by the organization or
24	transmitting utility; and
25	"(2) each Transmission Organization or broker or exchange to provide

1	aggregate information about the amount and price of physical sales of electric
2	energy at wholesale in interstate commerce it transacts.
3	"(c) Definition.—For purposes of this section, the term 'broker or exchange'
4	means an entity that matches offers to sell and offers to buy physical sales of wholesale
5	electric energy in interstate commerce.
6	"(d) PROTECTION OF SENSITIVE INFORMATION.—The Commission shall exempt
7	from disclosure information it determines would, if disclosed, be detrimental to the
8	operation of an effective market.".
9	SEC. 1252. MARKET MANIPULATION.
10	Part II of the Federal Power Act is amended by adding after section 216 as added
11	by this Act the following:
12	"SEC PROHIBITION ON FILING FALSE INFORMATION.
13	"It shall be a violation of this Act for any person willfully and knowingly to report
14	any information relating to the price of electricity sold at wholesale, which information the
15	person knew to be false at the time of the reporting, to any governmental entity with the
16	intent to manipulate the data being compiled by such entity.
17	"SEC PROHIBITION ON ROUND TRIP TRADING.
18	"(a) Prohibition.—It shall be a violation of this Act for any person willfully and
19	knowingly to enter into any contract or other arrangement to execute a "round-trip trade"
20	for the purchase or sale of electric energy at wholesale.
21	"(b) Definition of Round-Trip Trade.—For the purposes of this section, the
22	term 'round trip trade' means a transaction, or combination of transactions, in which a
23	person or other entity—
24	"(1) enters into a contract or other arrangement to purchase from, or sell to
25	any other person or other entity electric energy at wholesale;
26	"(2) simultaneously with entering into the contract or arrangement described

1	in paragraph (1), arranges a financially offsetting trade with such other person or
2	entity for the same amount of electric energy, at the same location, price, quantity
3	and terms so that, collectively, the purchase and sale transactions in themselves
4	result in no financial gain or loss; and
5	"(3) enters into the contract or arrangement with the intent to deceptively
6	affect reported revenues, trading volumes, or prices.".
7	SEC. 1253. ENFORCEMENT.
8	(a) Criminal Penalties.—Section 316 of the Federal Power Act (16 U.S.C. 8250)
9	is amended—
10	(1) in subsection (a), by striking "\$5,000" and inserting "\$1,000,000", and
11	by striking "two years" and inserting "five years";
12	(2) in subsection (b), by striking "\$500" and inserting "\$25,000"; and
13	(3) by striking subsection (c).
14	(b) CIVIL PENALTIES.—Section 316A of the Federal Power Act (16 U.S.C. 825-1) is
15	amended—
16	(1) in subsections (a) and (b), by striking "section 211, 212, 213, or 214"
17	each place it appears and inserting "Part II"; and
18	(2) in subsection (b) by striking "\$10,000" and inserting "\$1,000,000."
19	SEC. 1254. REFUND EFFECTIVE DATE.
20	Section 206(b) of the Federal Power Act (16 U.S.C. 824e(b)) is amended by—
21	(1) striking "the date 60 days after the filing of such complaint nor later than
22	5 months after the expiration of such 60-day period" in the second sentence and
23	inserting "the date of the filing of such complaint nor later than 5 months after the
24	filing of such complaint";
25	(2) striking "60 days after" in the third sentence and inserting "of";
26	(3) striking "expiration of such 60-day period" in the third sentence and
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1	inserting "publication date"; and
2	(4) striking the fifth sentence and inserting: "If no final decision is rendered
3	by the conclusion of the 180-day period commencing upon initiation of a
4	proceeding pursuant to this section, the Commission shall state the reasons why it
5	has failed to do so and shall state its best estimate as to when it reasonably expects
6	to make such decision.".
7	Subtitle G— Elimination of Competitive Barriers
8	SEC. 1261. SHORT TITLE.
9	This subtitle may be cited as the 'Public Utility Holding Company Act of 2003'.
10	SEC. 1262. DEFINITIONS.
11	For purposes of this subtitle:
12	(1) The term "affiliate" of a company means any company 5 percent or
13	more of the outstanding voting securities of which are owned, controlled, or held
14	with power to vote, directly or indirectly, by such company.
15	(2) The term "associate company" of a company means any company in the
16	same holding company system with such company.
17	(3) The term "Commission" means the Federal Energy Regulatory
18	Commission.
19	(4) The term "company" means a corporation, partnership, association, joint
20	stock company, business trust, or any organized group of persons, whether
21	incorporated or not, or a receiver, trustee, or other liquidating agent of any of the
22	foregoing.
23	(5) The term "electric utility company" means any company that owns or
24	operates facilities used for the generation, transmission, or distribution of electric
25	energy for sale.
26	(6) The terms "exempt wholesale generator" and "foreign utility company"

1	have the same meanings as in sections 32 and 33, respectively, of the Public Utility
2	Holding Company Act of 1935 (15 U.S.C. 79z-5a, 79z-5b), as those sections
3	existed on the day before the effective date of this subtitle.
4	(7) The term "gas utility company" means any company that owns or
5	operates facilities used for distribution at retail (other than the distribution only in
6	enclosed portable containers or distribution to tenants or employees of the company
7	operating such facilities for their own use and not for resale) of natural or
8	manufactured gas for heat, light, or power.
9	(8) The term "holding company" means—
10	(A) any company that directly or indirectly owns, controls, or holds,
11	with power to vote, 10 percent or more of the outstanding voting securities
12	of a public utility company or of a holding company of any public utility
13	company; and
14	(B) any person, determined by the Commission, after notice and
15	opportunity for hearing, to exercise directly or indirectly (either alone or
16	pursuant to an arrangement or understanding with one or more persons)
17	such a controlling influence over the management or policies of any public
18	utility company or holding company as to make it necessary or appropriate
19	for the protection of utility customers with respect to rates that such person
20	be subject to the obligations, duties, and liabilities imposed by this subtitle
21	upon holding companies.
22	(9) The term "holding company system" means a holding company, together
23	with its subsidiary companies.
24	(10) The term "jurisdictional rates" means rates established by the
25	Commission for the transmission of electric energy in interstate commerce, the sale
26	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

1	resale for ultimate public consumption for domestic, commercial, industrial, or any
2	other use.
3	(11) The term "natural gas company" means a person engaged in the
4	transportation of natural gas in interstate commerce or the sale of such gas in
5	interstate commerce for resale.
6	(12) The term "person" means an individual or company.
7	(13) The term "public utility" means any person who owns or operates
8	facilities used for transmission of electric energy in interstate commerce or sales of
9	electric energy at wholesale in interstate commerce.
10	(14) The term "public utility company" means an electric utility company or
11	a gas utility company.
12	(15) The term "State commission" means any commission, board, agency,
13	or officer, by whatever name designated, of a State, municipality, or other political
14	subdivision of a State that, under the laws of such State, has jurisdiction to regulate
15	public utility companies.
16	(16) The term "subsidiary company" of a holding company means—
17	(A) any company, 10 percent or more of the outstanding voting
18	securities of which are directly or indirectly owned, controlled, or held with
19	power to vote, by such holding company; and
20	(B) any person, the management or policies of which the
21	Commission, after notice and opportunity for hearing, determines to be
22	subject to a controlling influence, directly or indirectly, by such holding
23	company (either alone or pursuant to an arrangement or understanding with
24	one or more other persons) so as to make it necessary for the protection of
25	utility customers with respect to rates that such person be subject to the
26	obligations, duties, and liabilities imposed by this subtitle upon subsidiary
27	companies of holding companies.

1	(17) The term "voting security" means any security presently entitling the
2	owner or holder thereof to vote in the direction or management of the affairs of a
3	company.
4	SEC. 1263. REPEAL OF THE PUBLIC UTILITY HOLDING COMPANY ACT OF 1935.
5	The Public Utility Holding Company Act of 1935 (15 U.S.C. 79a, et seq.) is
6	repealed.
7	SEC. 1264. FEDERAL ACCESS TO BOOKS AND RECORDS.
8	(a) In General.—Each holding company and each associate company thereof shall
9	maintain, and shall make available to the Commission, such books, accounts, memoranda,
10	and other records as the Commission determines are necessary to identify costs incurred by
11	a public utility or natural gas company that is an associate company of such holding
12	company and necessary or appropriate for the protection of utility customers with respect
13	to jurisdictional rates.
14	(b) Affiliate Companies.—Each affiliate of a holding company or of any
15	subsidiary company of a holding company shall maintain, and make available to the
16	Commission, such books, accounts, memoranda, and other records with respect to any
17	transaction with another affiliate, as the Commission determines are necessary to identify
18	costs incurred by a public utility or natural gas company that is an associate company of
19	such holding company and necessary or appropriate for the protection of utility customers
20	with respect to jurisdictional rates.
21	(c) HOLDING COMPANY SYSTEMS.—The Commission may examine the books,
22	accounts, memoranda, and other records of any company in a holding company system, or
23	any affiliate thereof, as the Commission determines are necessary to identify costs incurred
24	by a public utility or natural gas company within such holding company system and
25	necessary or appropriate for the protection of utility customers with respect to jurisdictional

(d) CONFIDENTIALITY.—No member, officer, or employee of the Commission shall

rates.

26

divulge any fact or information that may come to his or her knowledge during the course of
examination of books, accounts, memoranda, or other records as provided in this section,
except as may be directed by the Commission or by a court of competent jurisdiction.
SEC. 1265. STATE ACCESS TO BOOKS AND RECORDS.
(a) In General.—Upon the written request of a State commission having
jurisdiction to regulate a public utility company in a holding company system, and subject
to such terms and conditions as may be necessary and appropriate to safeguard against
unwarranted disclosure to the public of any trade secrets or sensitive commercial
information, a holding company or its associate company or affiliate thereof, wherever
located, shall produce for inspection books, accounts, memoranda, and other records that—
(1) have been identified in reasonable detail in a proceeding before the State
commission;
(2) the State commission determines are necessary to identify costs incurred
by such public utility company; and
(3) are necessary for the effective discharge of the responsibilities of the
State commission with respect to such proceeding.
(b) EFFECT ON STATE LAW.—Nothing in this section shall preempt applicable State
law concerning the provision of books, accounts, memoranda, or other records, or in any
way limit the rights of any State to obtain books, accounts, memoranda, or other records
under Federal law, contract, or otherwise.
(c) COURT JURISDICTION.—Any United States district court located in the State in
which the State commission referred to in subsection (a) is located shall have jurisdiction
to enforce compliance with this section.
(d) LIMITATION.—Subsection (a) does not apply to any person that is a holding
company solely by reason of ownership of one or more qualifying facilities under the
Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601, et seq.).

SEC. 1266. EXEMPTION AUTHORITY.

1	(a) RULEMAKING.—Not later than 90 days after the date of enactment of this
2	subtitle, the Commission shall promulgate a final rule to exempt from the requirements of
3	section 1264 any person that is a holding company, solely with respect to one or more—
4	(1) qualifying facilities under the Public Utility Regulatory Policies Act of
5	1978;
6	(2) exempt wholesale generators; or
7	(3) foreign utility companies.
8	(b) OTHER AUTHORITY.—If, upon application or upon its own motion, the
9	Commission finds that the books, accounts, memoranda, and other records of any person
10	are not relevant to the jurisdictional rates of a public utility company or natural gas
11	company, or if the Commission finds that any class of transactions is not relevant to the
12	jurisdictional rates of a public utility company, the Commission shall exempt such person
13	or transaction from the requirements of section 1264.
14	SEC. 1267. AFFILIATE TRANSACTIONS.
15	(a) COMMISSION AUTHORITY UNAFFECTED.—Nothing in this subtitle shall limit the
16	authority of the Commission under the Federal Power Act (16 U.S.C. 791a, et seq.) to
17	require that jurisdictional rates are just and reasonable, including the ability to deny or
18	approve the pass through of costs, the prevention of cross-subsidization, and the
19	promulgation of such rules and regulations as are necessary or appropriate for the
20	protection of utility consumers.
21	(b) Recovery of Costs.—Nothing in this subtitle shall preclude the Commission
22	or a State commission from exercising its jurisdiction under otherwise applicable law to
23	determine whether a public utility company, public utility, or natural gas company may
24	recover in rates any costs of an activity performed by an associate company, or any costs of
25	goods or services acquired by such public utility company, public utility, or natural gas
26	company from an associate company.

SEC. 1268. APPLICABILITY.

1	Except as otherwise specifically provided in this subtitle shall apply to, or be
2	deemed to include—
3	(1) the United States;
4	(2) a State or any political subdivision of a State;
5	(3) any foreign governmental authority not operating in the United States;
6	(4) any agency, authority, or instrumentality of any entity referred to in
7	paragraph (1), (2), or (3); or
8	(5) any officer, agent, or employee of any entity referred to in paragraph (1),
9	(2), or (3) acting as such in the course of such officer, agent, or employee's official
10	duty.
11	SEC. 1269. EFFECT ON OTHER REGULATIONS.
12	Nothing in this subtitle precludes the Commission or a State commission from
13	exercising its jurisdiction under otherwise applicable law to protect utility customers.
14	SEC. 1270. ENFORCEMENT.
15	The Commission shall have the same powers as set forth in sections 306 through
16	317 of the Federal Power Act (16 U.S.C. 825e-825p) to enforce the provisions of this
17	subtitle.
18	SEC. 1271. SAVINGS PROVISIONS.
19	(a) In General.—Nothing in this subtitle prohibits a person from engaging in or
20	continuing to engage in activities or transactions in which it is legally engaged or
21	authorized to engage on the date of enactment of this Act.
22	(b) EFFECT ON OTHER COMMISSION AUTHORITY.—Nothing in this subtitle limits
23	the authority of the Commission under the Federal Power Act (16 U.S.C. 791a, et seq.)
24	(including section 301 of that Act) or the Natural Gas Act (15 U.S.C. 717, et seq.)
25	(including section 8 of that Act).
26	SEC. 1272. IMPLEMENTATION.

1	Not later than 12 months after the date of enactment of this Act, the Commission
2	shall—
3	(1) promulgate such regulations as may be necessary or appropriate to
4	implement this subtitle; and
5	(2) submit to the Congress detailed recommendations on technical and
6	conforming amendments to Federal law necessary to carry out this subtitle and the
7	amendments made by this subtitle.
8	SEC. 1273. TRANSFER OF RESOURCES.
9	All books and records that relate primarily to the functions transferred to the
10	Commission under this subtitle shall be transferred from the Securities and Exchange
11	Commission to the Commission.
12	SEC. 1274. EFFECTIVE DATE.
13	This subtitle shall take effect 12 months after the date of enactment of this Act.
14	SEC. 1275. CONFORMING AMENDMENT TO THE FEDERAL POWER ACT.
15	(a) CONFLICT OF JURISDICTION.—Section 318 of the Federal Power Act (16 U.S.C
16	825q) is repealed.
17	(b) Definitions.—
18	(1) Section 201(g) of the Federal Power Act (16 U.S.C. 824(g)) is amended
19	by striking "1935" and inserting "2003".
20	(2) Section 214 of the Federal Power Act (16 U.S.C. 824m) is amended by
21	striking "1935" and inserting "2003".
22	Subtitle H—Public Utility Regulatory Policies
23	Act of 1978
24	SEC. 1281. PROSPECTIVE REPEAL AND RECOVERY OF COSTS.
25	(a) PROSPECTIVE REPEAL AND RECOVERY OF COSTS.—Title II of the Public Utility

1	Regulatory Policies Act of 1978 (16 U.S.C. 2601, et seq.) is amended by inserting the
2	following after section 214 as added by this Act:
3	"SEC. 215. PROSPECTIVE REPEAL AND RECOVERY OF COSTS.
4	"(a) Termination of Mandatory Purchase and Sale
5	REQUIREMENTS.—Section 210 of the Public Utility Regulatory Policies Act of 1978 (16
6	U.S.C. 824a-3) is amended by adding at the end the following:
7	"(m) TERMINATION OF MANDATORY PURCHASE AND SALE REQUIREMENTS.—
8	"(1) OBLIGATION TO PURCHASE.—After the date of enactment of this
9	subsection, no electric utility shall be required to enter into a new contract or
10	obligation to purchase electric energy from a qualifying cogeneration facility or a
11	qualifying small power production facility under this section if the Commission or a
12	Regional Energy Services Commission finds that the qualifying cogeneration
13	facility or qualifying small power production facility has access to competitive
14	wholesale markets for the sale of electric energy.
15	"(2) Obligation to Sell.—After the date of enactment of this subsection
16	no electric utility shall be required to enter into a new contract or obligation to sell
17	electric energy to a qualifying cogeneration facility or a qualifying small power
18	production facility under this section if competing retail electric suppliers are able
19	to provide electric energy to the qualifying cogeneration facility or qualifying small
20	power production facility.
21	"(3) NO EFFECT ON EXISTING RIGHTS AND REMEDIES.—Nothing in this
22	subsection affects the rights or remedies of any party under any contract or
23	obligation, in effect on the date of enactment of this subsection, to purchase electric
24	energy or capacity from or to sell electric energy or capacity to a facility under this
25	Act (including the right to recover costs of purchasing electric energy or capacity).
26	(b) Ownership Limits.—
27	(1) Section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)) is

1	amended to read as follows:
2	"(C) 'qualifying small power production facility' means a small power
3	production facility which the Commission determines, by rule, meets requirements
4	(including requirements respecting minimum size, fuel use, and fuel efficiency) that
5	the Commission, by rule, may prescribe;".
6	(2) Section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)) is
7	amended to read as follows:
8	"(B) 'qualifying cogeneration facility' means a cogeneration facility which
9	the Commission determines, by rule, meets requirements (including requirements
10	respecting minimum size, fuel use, and fuel efficiency) the Commission, by rule,
11	may prescribe;".
12	(c) RECOVERY OF COSTS.—The Commission shall issue and enforce regulations to
13	ensure that an electric utility recovers all costs associated with its purchases of electric
14	energy or capacity from a qualifying facility under a legally enforceable obligation entered
15	into or imposed under section 210 before the date of enactment of this section. These
16	regulations shall be treated as a rule enforceable under the Federal Power Act (16 U.S.C.
17	791a-825r).".
18	(d) TABLE OF CONTENTS.—The table of contents for Title II of the Public Utility
19	Regulatory Policies Act of 1978 (16 U.S.C. 2601, et. seq) is amended by inserting the
20	following after the heading for Section 214:
21	"SEC. 215. PROSPECTIVE REPEAL AND RECOVERY OF COSTS."
22	SEC. 1282. NET METERING.
23	(a) ADOPTION OF STANDARD—Section 111(d) of the Public Utility Regulatory
24	Policies Act of 1978 (16 U.S.C. 2621(d)) is further amended by adding at the end the
25	following:
26	"(11) Net metering.—
27	"(A) Each electric utility shall make available upon request net metering

1	service to any electric consumer that the electric utility serves.
2	"(B) For purposes of implementing this paragraph, any reference contained
3	in this section to the date of enactment of the Public Utility Regulatory Policies Act
4	of 1978 shall be deemed to be a reference to the date of enactment of this paragraph.
5	"(C) Notwithstanding subsections (b) and (c) of section 112, each State
6	regulatory authority shall consider and make a determination concerning whether it
7	is appropriate to implement the standard set out in subparagraph (A) not later than 1
8	year after the date of enactment of this paragraph.".
9	(b) Special Rules for Net Metering.—Section 115 of the Public Utility
10	Regulatory Policies Act of 1978 (16 U.S.C. 2625) is further amended by adding at the end
11	the following:
12	"(k) NET METERING.—In undertaking the consideration and making the
13	determination under section 111 with respect to the standard concerning net metering
14	established by section 111(d)(13), the term net metering service shall mean a service
15	provided in accordance with the following standards:
16	"(1) RATES AND CHARGES.—An electric utility—
17	"(A) shall charge the owner or operator of an on-site generating
18	facility rates and charges that are identical to those that would be charged
19	other electric consumers of the electric utility in the same rate class; and
20	"(B) shall not charge the owner or operator of an on-site generating
21	facility any additional standby, capacity, interconnection, or other rate or
22	charge.
23	"(2) MEASUREMENT.—An electric utility that sells electric energy to the
24	owner or operator of an on-site generating facility shall measure the quantity of
25	electric energy produced by the on-site facility and the quantity of electric energy
26	consumed by the owner or operator of an on-site generating facility during a billing
27	period in accordance with normal metering practices.

1	"(3) ELECTRIC ENERGY SUPPLIED EXCEEDING ELECTRIC ENERGY
2	GENERATED.—If the quantity of electric energy sold by the electric utility to an
3	on-site generating facility exceeds the quantity of electric energy supplied by the
4	on-site generating facility to the electric utility during the billing period, the electric
5	utility may bill the owner or operator for the net quantity of electric energy sold, in
6	accordance with normal metering practices.
7	"(4) Electric Energy Generated Exceeding Electric Energy
8	SUPPLIED.—If the quantity of electric energy supplied by the on-site generating
9	facility to the electric utility exceeds the quantity of electric energy sold by the
10	electric utility to the on-site generating facility during the billing period—
11	"(A) the electric utility may bill the owner or operator of the on-site
12	generating facility for the appropriate charges for the billing period in
13	accordance with paragraph (2); and
14	"(B) the owner or operator of the on-site generating facility shall be
15	credited for the excess kilowatt-hours generated during the billing period,
16	with the kilowatt-hour credit appearing on the bill for the following billing
17	period.
18	"(5) SAFETY AND PERFORMANCE STANDARDS.—An eligible on-site
19	generating facility and net metering system used by an electric consumer shall meet
20	all applicable safety, performance, reliability, and interconnection standards
21	established by the National Electrical Code, the Institute of Electrical and
22	Electronics Engineers, and Underwriters Laboratories.
23	"(6) Additional Control and Testing Requirements.—The
24	Commission, after consultation with State regulatory authorities and nonregulated
25	electric utilities and after notice and opportunity for comment, may adopt, by rule,
26	additional control and testing requirements for on-site generating facilities and net
27	metering systems that the Commission determines are necessary to protect public
28	safety and system reliability.

1	"(7) Definitions.—For purposes of this subsection—
2	"(A) The term 'eligible on-site generating facility' means—
3	"(i) a facility on the site of a residential electric consumer
4	with a maximum generating capacity of 10 kilowatts or less that is
5	fueled by solar energy, wind energy, or fuel cells; or
6	"(ii) a facility on the site of a commercial electric consumer
7	with a maximum generating capacity of 500 kilowatts or less that is
8	fueled solely by a renewable energy resource, landfill gas, or a high
9	efficiency system.
10	"(B) The term 'renewable energy resource' means solar, wind,
11	biomass, or geothermal energy.
12	"(C) The term 'high efficiency system' means fuel cells or combined
13	heat and power.
14	"(D) The term 'net metering service' means service to an electric
15	consumer under which electric energy generated by that electric consumer
16	from an eligible on-site generating facility and delivered to the local
17	distribution facilities may be used to offset electric energy provided by the
18	electric utility to the electric consumer during the applicable billing period.".
19	SEC. 1283. REAL-TIME PRICING AND TIME-OF-USE METERING STANDARDS.
20	(a) ADOPTION OF STANDARDS.—Section 111(d) of the Public Utility Regulatory
21	Policies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding at the end the following:
22	"(12) REAL-TIME PRICING.—
23	"(A) Each electric utility shall, at the request of an electric consumer, provide
24	electric service under a real-time rate schedule, under which the rate charged by the
25	electric utility varies by the hour (or smaller time interval) according to changes in
26	the electric utility's wholesale power and transmission and distribution costs. The

1	real-time pricing service shall enable the electric consumer to manage energy use
2	and cost through real-time metering and communications technology.
3	"(B) For purposes of implementing this paragraph, any reference contained
4	in this section to the date of enactment of the Public Utility Regulatory Policies Act
5	of 1978 shall be deemed to be a reference to the date of enactment of this paragraph
6	"(C) Notwithstanding subsections (b) and (c) of section 112, each State
7	regulatory authority shall consider and make a determination concerning whether it
8	is appropriate to implement the standard set out in subparagraph (A) not later than 1
9	year after the date of enactment of this paragraph.
10	"(13) Time-of-Use Metering.—
11	"(A) Each electric utility shall, at the request of an electric consumer, provide
12	electric service under a time-of-use rate schedule which enables the electric
13	consumer to manage energy use and cost through time-of-use metering and
14	technology.
15	"(B) For purposes of implementing this paragraph, any reference contained
16	in this section to the date of enactment of the Public Utility Regulatory Policies Act
17	of 1978 shall be deemed to be a reference to the date of enactment of this paragraph
18	"(C) Notwithstanding subsections (b) and (c) of [section 112], each State
19	regulatory authority shall consider and make a determination concerning whether it
20	is appropriate to implement the standards set out in subparagraph (A) not later than 1
21	year after the date of enactment of this paragraph.".
22	(b) Special Rules.—Section 115 of the Public Utility Regulatory Policies Act of
23	1978 (16 U.S.C. 2625) is amended by adding at the end the following:
24	"(i) REAL-TIME PRICING.—In a State that permits third-party marketers to sell
25	electric energy to retail electric consumers, the electric consumer shall be entitled to receive
26	the same real-time metering and communication service as a direct retail electric consumer
2.7	of the electric utility.

1	"(j) TIME-OF-USE METERING.—In a State that permits third-party marketers to sell
2	electric energy to retail electric consumers, the electric consumer shall be entitled to receive
3	the same time-of-use metering and communication service as a direct retail electric
4	consumer of the electric utility.".
5	SEC. 1284. ADOPTION OF ADDITIONAL STANDARDS.
6	(a) ADOPTION OF STANDARDS.—Section 113(b) of the Public Utility Regulatory
7	Policies Act of 1978 (16 U.S.C. 2623(b)) is amended by adding at the end the following:
8	"(6) DISTRIBUTED GENERATION.—Each electric utility shall provide distributed
9	generation, combined heat and power, and district heating and cooling systems competitive
10	access to the local distribution grid and competitive pricing of service, and shall use
11	simplified standard contracts for the interconnection of generating facilities that have a
12	power production capacity of 250 kilowatts or less.
13	"(7) DISTRIBUTION INTERCONNECTIONS.—No electric utility may refuse to
14	interconnect a generating facility with the distribution facilities of the electric utility if the
15	owner or operator of the generating facility complies with technical standards adopted by
16	the State regulatory authority and agrees to pay the costs established by such State
17	regulatory authority.
18	"(8) MINIMUM FUEL AND TECHNOLOGY DIVERSITY STANDARD.—Each electric
19	utility shall develop a plan to minimize dependence on one fuel source and to ensure that the
20	electric energy it sells to consumers is generated using a diverse range of fuels and
21	technologies, including renewable technologies.
22	"(9) Fossil Fuel Efficiency.—Each electric utility shall develop and implement a
23	ten-year plan to increase the efficiency of its fossil fuel generation.".
24	(b) TIME FOR ADOPTING STANDARDS.—Section 113 of the Public Utility Regulatory
25	Policies Act of 1978 (16 U.S.C. 2623) is further amended by adding at the end the
26	following:
27	"(d) Special Rule.—For purposes of implementing paragraphs (6), (7), (8), and (9)

1	of subsection (b), any reference contained in this section to the date of enactment of the
2	Public Utility Regulatory Policies Act of 1978 shall be deemed to be a reference to the date
3	of enactment of this subsection.".
4	SEC. 1285. TECHNICAL ASSISTANCE.
5	Section 132(c) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C.
6	2642(c)) is amended to read as follows:
7	"(c) Technical Assistance for Certain Responsibilities.—The Secretary may
8	provide such technical assistance as determined appropriate to assist State regulatory
9	authorities and electric utilities in carrying out their responsibilities under section
10	111(d)(11) and paragraphs (6), (7), (8), and (9) of section 113(b).".
11	Subtitle I—Consumer Protections
12	SEC. 1291. INFORMATION DISCLOSURE.
13	(a) DISCLOSURE RULES.—Not later than 180 days after the date of enactment of this
14	Act, the Federal Trade Commission shall issue rules prescribing the form, content,
15	placement, and timing of the disclosure required under subsections (b) and (c) of this
16	section. The rules shall be issued in accordance with section 553 of title 5, United States
17	Code, after consultation with the Federal Energy Regulatory Commission, the Secretary of
18	Energy, and the Administrator of the Environmental Protection Agency.
19	(b) DISCLOSURE TO ELECTRIC CONSUMERS.—In order to assist electric consumers in
20	making informed purchasing decisions, an electric utility that sells or makes an offer to sell
21	electric energy, or solicits electric consumers to purchase electric energy, shall provide the
22	electric consumer, in accordance with rules issued under subsection (a), a statement
23	containing the following information:
24	(1) the nature of the service being offered, including information about
25	interruptibility of service;
26	(2) the price of the electric energy, including a description of any variable

1	charges;
2	(3) a description of all other charges associated with the service being
3	offered, including access charges, exit charges, back-up service charges, stranded
4	cost recovery charges, and customer service charges; and
5	(4) information the Federal Trade Commission determines is technologically
6	and economically feasible to provide, is of assistance to electric consumers in
7	making purchasing decisions, and concerns—
8	(A) the product or its price,
9	(B) the share of electric energy that is generated by each type of
10	electric generation resource, and
11	(C) the generation emissions characteristics of the electric energy.
12	(c) DISCLOSURE TO WHOLESALE PURCHASERS.—In every sale of electric energy for
13	resale, the seller shall provide to the purchaser the information respecting generation source
14	and emissions characteristics required by rules issued under subsection (a).
15	(d) FEDERAL TRADE COMMISSION ENFORCEMENT.—Violation of a rule issued under
16	this section shall be treated as a violation of a rule under section 18 of the Federal Trade
17	Commission Act (15 U.S.C. 57a). All functions and powers of the Federal Trade
18	Commission under the Federal Trade Commission Act are available to the Federal Trade
19	Commission to enforce compliance with this section notwithstanding any jurisdictional
20	limitations in the Federal Trade Commission Act.
21	(e) STATE AUTHORITY.—This section does not preclude a State regulatory authority
22	from issuing and enforcing additional laws, regulations, or procedures regarding the
23	practices that are the subject of this section.
24	SEC. 1292. CONSUMER PRIVACY.
25	The Federal Trade Commission shall issue rules protecting the privacy of electric
26	consumers from the disclosure of consumer information in connection with the sale or

1	delivery of electric energy to a retail electric consumer. The Federal Trade Commissions
2	shall proceed in accordance with section 553 of title 5 of the United States Code, when
3	prescribing a rule under this section.
4	SEC. 1293. UNFAIR TRADE PRACTICES.
5	(a) SLAMMING.—The Federal Trade Commission shall issue rules prohibiting the
6	change of selection of an electric utility except with the informed consent of the electric
7	consumer or if determined by the appropriate State regulatory authority to be necessary to
8	prevent loss of service.
9	(b) CRAMMING.—The Federal Trade Commission shall issue rules prohibiting the
10	sale of goods and services to an electric consumer unless expressly authorized by law or the
11	electric consumer.
12	(c) RULEMAKING.—The Federal Trade Commission shall proceed in accordance
13	with section 553 of title 5, United States Code, when prescribing a rule under this section.
14	SEC. 1294. DEFINITIONS.
15	For purposes of this subtitle—
16	(1) "State commission" has the meaning given that term in section 3(15) of
17	the Federal Power Act (16 U.S.C. 796(15)),
18	(2) "electric consumer" and "electric utility" have the meanings given those
19	terms in section 3 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C.
20	2602), and
21	(3) "local distribution company" means any entity that owns, controls, or
22	operates local distribution facilities.
23	SEC. 1295. TECHNICAL AMENDMENTS.
24	(a) Section 201(a) of the Federal Power Act (16 U.S.C. § 824(a)) is amended by
25	striking "States." and inserting "States or a Regional Energy Services Commission."
26	(b) Section 201(b)(1) of the Federal Power Act (16 U.S.C. § 824(b)(1)) is amended

1	by striking "state line." and inserting "state line and except as provided in Part IV shall not
2	apply to the transmission of electric energy within the borders of a Regional Energy
3	Services Commission and to the sale of electric energy at wholesale within the borders of a
4	Regional Energy Services Commission."
5	(c) Section 204(f) of the Federal Power Act is amended by striking "State
6	commission" and adding "State commission or Regional Energy Services Commission."
7	(d) Section 211(c) of the Federal Power Act (16 U.S.C. 824j(c)) is amended by—
8	(1) striking "(2)';
9	(2) striking "(A)" and inserting "(1)"
10	(3) striking "(B)" and inserting "(2)"; and
11	(4) striking "termination of modification" and inserting "termination or
12	modification".
13	(e) Section 211(d)(1) of the Federal Power Act (16 U.S.C. 824j(d)) is amended by
14	striking "electric utility" the second time it appears and inserting "transmitting utility".
15	(f) COMPLAINTS.—Section 306 of the Federal Power Act (16 U.S.C. 825e) is
16	amended by—
17	(1) inserting "electric utility," after "Any person,"; and
18	(2) inserting "transmitting utility," after "licensee" each place it appears.
19	(g) Investigations.—Section 307(a) of the Federal Power Act (16 U.S.C. 825f(a))
20	is amended by inserting "or transmitting utility" after "any person" in the first sentence.
21	(h) REVIEW OF COMMISSION ORDERS.—Section 313(a) of the Federal Power Act (10
22	U.S.C. 8251) is amended by inserting "electric utility, State regulatory authority or
23	Regional Energy Services Commission" after "State Commission," in the first sentence.
24	(i) Section 315 of the Federal Power Act (16 U.S.C. 825n) is amended by striking
25	"subsection" and inserting "section".

TITLE XIII— STATE ENERGY PROGRAMS

2	SEC. 1301. LOW-INCOME HOME ENERGY ASSISTANCE PROGRAM.
3	Section 2602(b) of the Low-Income Home Energy Assistance Act of 1981 (42
4	U.S.C. 8621(b)) is amended by striking "each of fiscal years 2002 through 2004" and
5	inserting "fiscal years 2002 and 2003, and \$3,400,000,000 for each of fiscal years 2004
6	through 2006.".
7	SEC. 1302. WEATHERIZATION ASSISTANCE PROGRAM.
8	(a) ELIGIBILITY—Section 412 of the Energy Conservation and Production Act (42
9	U.S.C. 6862) is amended—
10	(1) in definition (7)(A), by striking "125" and inserting "150", and
11	(2) in definition (7)(C), by striking "125" and inserting "150".
12	(b) AUTHORIZATION OF APPROPRIATIONS.—Section 422 of the Energy Conservation
13	and Production Act (42 U.S.C. 6872) is amended by striking the period at the end and
14	inserting ", \$325,000,000 for fiscal year 2004, \$400,000,000 for fiscal year 2005, and
15	\$500,000,000 for fiscal year 2006.".
16	SEC. 1303. STATE ENERGY PLANS.
17	(a) STATE ENERGY CONSERVATION PLANS.—Section 362 of the Energy Policy and
18	Conservation Act (42 U.S.C. 6322) is amended by inserting at the end the following new
19	subsection:
20	"(g) The Secretary shall, at least once every 3 years, invite the Governor of each
21	State to review and, if necessary, revise the energy conservation plan of such State
22	submitted under subsection (b) or (e). Such reviews should consider the energy conservation
23	plans of other States within the region, and identify opportunities and actions carried out in
24	pursuit of common energy conservation goals.".
25	(B) STATE ENERGY EFFICIENCY GOALS.—Section 364 of the Energy Policy and
26	Conservation Act (42 U.S.C. 6324) is amended to read as follows:

1	"STATE ENERGY EFFICIENCY GOALS
2	"SEC. 364. Each State energy conservation plan with respect to which assistance is
3	made available under this part on or after the date of enactment of this title shall contain a
4	goal, consisting of an improvement of 25 percent or more in the efficiency of use of energy
5	in the State concerned in calendar year 2010 as compared to calendar year 1990, and may
6	contain interim goals.".
7	(c) AUTHORIZATION OF APPROPRIATIONS.—Section 365(f) of the Energy Policy and
8	Conservation Act (42 U.S.C. 6325(f)) is amended by striking the period at the end and
9	inserting ", \$100,000,000 for each of fiscal years 2004 and 2005 and \$125,000,000 for fiscal
10	year 2006.".