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S. 1462

[Report No. 111–48]

To promote clean energy technology development, enhanced energy efficiency, improved energy security, and energy innovation and workforce development, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JULY 16, 2009

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

A BILL

To promote clean energy technology development, enhanced energy efficiency, improved energy security, and energy innovation and workforce development, and for other purposes.

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

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “American Clean Energy Leadership Act of 2009”.

1 (b) TABLE OF CONTENTS.—The table of contents of
 2 this Act is as follows:

- Sec. 1. Short title; table of contents.
 Sec. 2. Definition of Secretary.

TITLE I—CLEAN ENERGY TECHNOLOGY DEPLOYMENT

Subtitle A—Clean Energy Financing

- Sec. 101. Purpose.
 Sec. 102. Definitions.
 Sec. 103. Improvements to existing programs.
 Sec. 104. Energy technology deployment goals.
 Sec. 105. Clean Energy Deployment Administration.
 Sec. 106. Administration functions.
 Sec. 107. Federal Credit Authority.
 Sec. 108. General provisions.

Subtitle B—Improved Transmission Siting

- Sec. 121. Siting of interstate electric transmission facilities.

Subtitle C—Federal Renewable Electricity Standard

- Sec. 131. Sense of Congress on renewable energy and energy efficiency.
 Sec. 132. Federal renewable electricity standard.
 Sec. 133. Federal purchase requirement amendments.

Subtitle D—Energy and Water Integration

- Sec. 141. Energy water nexus study.
 Sec. 142. Power plant water and energy efficiency.
 Sec. 143. Reclamation water conservation and energy savings study.
 Sec. 144. Brackish groundwater national desalination research facility.
 Sec. 145. Enhanced information on water-related energy consumption.
 Sec. 146. Energy-Water Research and Development Roadmap.
 Sec. 147. Energy-water clean technology grant program.
 Sec. 148. Rural water utilities energy and water efficiency program.
 Sec. 149. Comprehensive water use and energy savings study.

Subtitle E—Vehicle Technology Deployment

- Sec. 151. Transportation roadmap study.
 Sec. 152. Vehicle technology and recharging infrastructure.
 Sec. 153. Electric drive transportation standardization.
 Sec. 154. Pilot program for plug-in electric drive vehicles for Federal fleet.
 Sec. 155. Study of end-of-useful life options for motor vehicle batteries.

TITLE II—ENHANCED ENERGY EFFICIENCY

Subtitle A—Manufacturing Energy Efficiency

- Sec. 201. State partnership industrial energy efficiency revolving loan program.
 Sec. 202. Coordination of research and development of energy efficient technologies for industry.
 Sec. 203. Energy efficient technologies assessment.

- Sec. 204. Future of Industry program.
- Sec. 205. Sustainable manufacturing initiative.
- Sec. 206. Innovation in industry grants.
- Sec. 207. Study of advanced energy technology manufacturing capabilities in the United States.
- Sec. 208. Industrial Technologies steering committee.
- Sec. 209. Authorization of appropriations.

Subtitle B—Improved Efficiency in Appliances and Equipment

- Sec. 221. Test procedure petition process.
- Sec. 222. Energy Star program.
- Sec. 223. Petition for amended standards.
- Sec. 224. Portable light fixtures.
- Sec. 225. GU-24 base lamps.
- Sec. 226. Standards for certain incandescent reflector lamps and reflector lamps.
- Sec. 227. Standards for commercial furnaces.
- Sec. 228. Motor efficiency rebate program.
- Sec. 229. Study of compliance with energy standards for appliances.
- Sec. 230. Study of direct current electricity supply in certain buildings.
- Sec. 231. Motor market assessment and commercial awareness program.
- Sec. 232. Study regarding Energy Superstar concept.
- Sec. 233. Technical amendment.

Subtitle C—Building Efficiency

PART I—BUILDING CODES

- Sec. 241. Greater energy efficiency in building codes.
- Sec. 242. Multifamily and Manufactured Housing Energy Efficiency Grant Program.
- Sec. 243. Building training and assessment centers.

PART II—WEATHERIZATION ASSISTANCE FOR LOW-INCOME PERSONS

- Sec. 251. Weatherization assistance for low-income persons.

PART III—STATE ENERGY PROGRAM

- Sec. 255. State Energy Program.

PART IV—STATE ENERGY EFFICIENCY GRANTS PROGRAM

- Sec. 261. Definitions.
- Sec. 262. State energy efficiency retrofit programs.
- Sec. 263. Administrative and technical support.
- Sec. 264. Regulations.
- Sec. 265. Funding.
- Sec. 266. Home Energy Retrofit Finance Program.

PART V—FEDERAL EFFICIENCY AND RENEWABLES

- Sec. 271. Federal purchase requirement.
- Sec. 272. Competition requirements for task or delivery orders under energy savings performance contracts.
- Sec. 273. Funding flexibility.
- Sec. 274. Definition of energy savings.

- Sec. 275. National energy efficiency improvement goals.
 Sec. 276. Energy sustainability and efficiency grants and loans for institutions.
 Sec. 277. Federal implementation strategy for energy-efficient information and communications technologies.
 Sec. 278. Incentives for Federal agencies to participate in energy efficiency programs.

PART VI—ENERGY EFFICIENCY INFORMATION ON HOMES AND BUILDINGS

- Sec. 281. Building energy performance information program.
 Sec. 282. Evaluation, measurement, and verification of energy savings.

PART VII—RESIDENTIAL HIGH PERFORMANCE ZERO-NET-ENERGY BUILDINGS INITIATIVE

- Sec. 291. Residential High Performance Zero-Net-Energy Buildings Initiative.

Subtitle D—Electric Grid

- Sec. 295. National electric system efficiency and peak demand reduction goal.
 Sec. 296. Uniform national standards for interconnection of certain small power production facilities.

TITLE III—IMPROVED ENERGY SECURITY

Subtitle A—Cyber Security of the Electric Transmission Grid

- Sec. 301. Critical electric infrastructure.

Subtitle B—Nuclear Energy

- Sec. 311. National Commission on Nuclear Waste.
 Sec. 312. Sense of Congress regarding the strategic role of nuclear energy.
 Sec. 313. Advanced fuel recycling process development.

Subtitle C—Improving United States Strategic Reserves

- Sec. 321. Petroleum product reserve.
 Sec. 322. Petroleum exchange authority.

Subtitle D—Federal Oil and Gas Development

PART I—OIL AND GAS LEASING

- Sec. 331. Oil and Gas Permit Processing Improvement Fund.
 Sec. 332. Facilitation of coproduction of geothermal energy on oil and gas leases.

PART II—OUTER CONTINENTAL SHELF

- Sec. 341. Implementation of inventory of outer Continental Shelf resources.
 Sec. 342. Alaska OCS permit processing coordination office.
 Sec. 343. Moratorium of oil and gas leasing in certain areas of the Gulf of Mexico.
 Sec. 344. Repeal of outer Continental Shelf deep water and deep gas royalty relief.

PART III—MISCELLANEOUS

- Sec. 351. Minerals Management Service.

- Sec. 352. Preservation of geological and geophysical data.
- Sec. 353. Alaska natural gas pipeline.
- Sec. 354. Denali National Park and Preserve natural gas pipeline.
- Sec. 355. Exemption of trans-Alaska oil pipeline system from certain requirements.
- Sec. 356. Procurement and acquisition of alternative fuels.
- Sec. 357. Geologic Materials Archiving Grant Program.

Subtitle E—Public Land Renewable Energy Deployment

- Sec. 361. Renewable energy Federal permit coordination.
- Sec. 362. Extension of funding for implementation of Geothermal Steam Act of 1970.
- Sec. 363. Programmatic environmental impact statements and land use planning.
- Sec. 364. Report.
- Sec. 365. Renewable energy development on brownfield sites.
- Sec. 366. Development of solar and wind energy on public land.

Subtitle F—Carbon Capture

- Sec. 371. Large-scale carbon storage program.
- Sec. 372. Training program for State agencies.

Subtitle G—Island Energy

- Sec. 381. Affiliated island energy independence team.

TITLE IV—ENERGY INNOVATION AND WORKFORCE DEVELOPMENT

Subtitle A—Funding

- Sec. 401. Authorization of appropriations for energy research, development, demonstration, and commercial application activities.

Subtitle B—Grand Energy Challenges Research Initiative

- Sec. 411. Grand Energy Challenges Research Initiative.

Subtitle C—Improvements to Existing Energy Research and Development Programs

- Sec. 421. Advanced Research Projects Agency—Energy.
- Sec. 422. Domestic vehicle battery manufacturing research.
- Sec. 423. Lightweight materials research and development.
- Sec. 424. Amendments to the Methane Hydrate Research and Development Act of 2000.
- Sec. 425. Program to exploit low-Btu gas and conserve helium resources.
- Sec. 426. Office of Arctic Energy.
- Sec. 427. Ultra-deepwater and unconventional natural gas and other petroleum resources program.

Subtitle D—Energy Workforce Development

- Sec. 431. Best practices for energy career academies.
- Sec. 432. Energy career academies.
- Sec. 433. Energy utility trades program for community colleges.
- Sec. 434. Student awareness of energy career opportunities.

- Sec. 435. Coordination of energy workforce training programs.
- Sec. 436. Direct hire authority.
- Sec. 437. Critical pay authority.
- Sec. 438. Reemployment of civilian retirees.
- Sec. 439. Sustainable energy training program for community colleges.

Subtitle E—Strengthening Education and Training in the Subsurface
Geosciences and Engineering for Energy Development

- Sec. 451. Definitions.
- Sec. 452. Policy.
- Sec. 453. Research personnel and programs.
- Sec. 454. Scholarships and fellowships.
- Sec. 455. Career technical and community college education.
- Sec. 456. Use of funds by institutions.
- Sec. 457. Advisory Committee.
- Sec. 458. Office; regulations.
- Sec. 459. Authorization of appropriations.
- Sec. 460. Study of availability of skilled workers.

Subtitle F—Miscellaneous

- Sec. 471. Other transactions authority.
- Sec. 472. Definition of National Laboratory.
- Sec. 473. Protection of results.
- Sec. 474. Marine and hydrokinetic renewable energy research and development.

TITLE V—ENERGY MARKETS

- Sec. 501. Enhanced information on critical energy supplies.
- Sec. 502. Working Group on Energy Markets.
- Sec. 503. Study of regulatory framework for energy markets.
- Sec. 504. Metadata formats for energy prices.
- Sec. 505. Emergency orders under the Federal Power Act.
- Sec. 506. Cease-and-desist authority under the Federal Power Act.
- Sec. 507. Cease-and-desist authority under the Natural Gas Act.
- Sec. 508. De novo review of civil penalties under the Natural Gas Act.

TITLE VI—POLICY STUDIES AND REPORTS

- Sec. 601. Helium gas resource assessment.
- Sec. 602. Potash mineral resource assessment.
- Sec. 603. Better energy strategy for tomorrow.
- Sec. 604. Addressing climate change in China and India.
- Sec. 605. Carbon leakage mitigation study.
- Sec. 606. Study of foreign fuel subsidies.
- Sec. 607. Assessment of renewable energy resources.
- Sec. 608. Efficiency review of electric generation facilities.
- Sec. 609. Report on emissions of alternative transportation fuels.
- Sec. 610. Oil savings.

1 SEC. 2. DEFINITION OF SECRETARY.

2 In this Act, the term “Secretary” means the Sec-
3 retary of Energy.

1 **TITLE I—CLEAN ENERGY**
2 **TECHNOLOGY DEPLOYMENT**
3 **Subtitle A—Clean Energy**
4 **Financing**

5 **SEC. 101. PURPOSE.**

6 The purpose of this subtitle is to promote the domes-
7 tie development and deployment of clean energy tech-
8 nologies required for the 21st century through the im-
9 provement of existing programs and the establishment of
10 a self-sustaining Clean Energy Deployment Administra-
11 tion that will provide for an attractive investment environ-
12 ment through partnership with and support of the private
13 capital market in order to promote access to affordable
14 financing for accelerated and widespread deployment of—

15 (1) clean energy technologies;

16 (2) advanced or enabling energy infrastructure
17 technologies;

18 (3) energy efficiency technologies in residential,
19 commercial, and industrial applications, including
20 end-use efficiency in buildings; and

21 (4) manufacturing technologies for any of the
22 technologies or applications described in this section.

23 **SEC. 102. DEFINITIONS.**

24 In this subtitle:

1 (1) ADMINISTRATION.—The term “Administra-
2 tion” means the Clean Energy Deployment Adminis-
3 tration established by section 105.

4 (2) ADMINISTRATOR.—The term “Adminis-
5 trator” means the Administrator of the Administra-
6 tion.

7 (3) ADVISORY COUNCIL.—The term “Advisory
8 Council” means the Energy Technology Advisory
9 Council of the Administration.

10 (4) BREAKTHROUGH TECHNOLOGY.—The term
11 “breakthrough technology” means a clean energy
12 technology that—

13 (A) presents a significant opportunity to
14 advance the goals developed under section 104,
15 as assessed under the methodology established
16 by the Advisory Council; but

17 (B) has generally not been considered a
18 commercially ready technology as a result of
19 high perceived technology risk or other similar
20 factors.

21 (5) CLEAN ENERGY TECHNOLOGY.—The term
22 “clean energy technology” means a technology re-
23 lated to the production, use, transmission, storage,
24 control, or conservation of energy that will—

1 (A) reduce the need for additional energy
2 supplies by using existing energy supplies with
3 greater efficiency or by transmitting, distrib-
4 uting, or transporting energy with greater effec-
5 tiveness through the infrastructure of the
6 United States;

7 (B) diversify the sources of energy supply
8 of the United States to strengthen energy secu-
9 rity and to increase supplies with a favorable
10 balance of environmental effects if the entire
11 technology system is considered; or

12 (C) contribute to a stabilization of atmos-
13 pheric greenhouse gas concentrations through
14 reduction, avoidance, or sequestration of en-
15 ergy-related emissions.

16 (6) COST.—The term “cost” has the meaning
17 given the term in section 502 of the Federal Credit
18 Reform Act of 1990 (2 U.S.C. 661a).

19 (7) DIRECT LOAN.—The term “direct loan” has
20 the meaning given the term in section 502 of the
21 Federal Credit Reform Act of 1990 (2 U.S.C. 661a).

22 (8) FUND.—The term “Fund” means the Clean
23 Energy Investment Fund established by section
24 103(a).

1 (9) LOAN GUARANTEE.—The term “loan guar-
2 antee” has the meaning given the term in section
3 502 of the Federal Credit Reform Act of 1990 (2
4 U.S.C. 661a).

5 (10) NATIONAL LABORATORY.—The term “Na-
6 tional Laboratory” has the meaning given the term
7 in section 2 of the Energy Policy Act of 2005 (42
8 U.S.C. 15801).

9 (11) SECRETARY.—The term “Secretary”
10 means the Secretary of Energy.

11 (12) SECURITY.—The term “security” has the
12 meaning given the term in section 2 of the Securities
13 Act of 1933 (15 U.S.C. 77b).

14 (13) STATE.—The term “State” means—

15 (A) a State;

16 (B) the District of Columbia;

17 (C) the Commonwealth of Puerto Rico;

18 and

19 (D) any other territory or possession of the
20 United States.

21 (14) TECHNOLOGY RISK.—The term “tech-
22 nology risk” means the risks during construction or
23 operation associated with the design, development,
24 and deployment of clean energy technologies (includ-
25 ing the cost, schedule, performance, reliability and

1 maintenance, and accounting for the perceived risk),
2 from the perspective of commercial lenders, that
3 may be increased as a result of the absence of ade-
4 quate historical construction, operating, or perform-
5 ance data from commercial applications of the tech-
6 nology.

7 **SEC. 103. IMPROVEMENTS TO EXISTING PROGRAMS.**

8 (a) CLEAN ENERGY INVESTMENT FUND.—

9 (1) ESTABLISHMENT.—There is established in
10 the Treasury of the United States a revolving fund,
11 to be known as the “Clean Energy Investment
12 Fund”, consisting of—

13 (A) such amounts as have been appro-
14 priated for administrative expenses to carry out
15 title XVII of the Energy Policy Act of 2005 (42
16 U.S.C. 16511 et seq.);

17 (B) such amounts as are deposited in the
18 Fund under this subtitle and amendments made
19 by this subtitle; and

20 (C) such sums as may be appropriated to
21 supplement the Fund.

22 (2) EXPENDITURES FROM FUND.—

23 (A) IN GENERAL.—Notwithstanding sec-
24 tion 1705(e) of the Energy Policy Act of 2005
25 (42 U.S.C. 16516(e)), amounts in the Fund

1 shall be available to the Secretary for obligation
2 without fiscal year limitation, to remain avail-
3 able until expended.

4 (B) ADMINISTRATIVE EXPENSES.—

5 (i) FEES.—Fees collected for adminis-
6 trative expenses shall be available without
7 limitation to cover applicable expenses.

8 (ii) FUND.—To the extent that ad-
9 ministrative expenses are not reimbursed
10 through fees, an amount not to exceed 1.5
11 percent of the amounts in the Fund as of
12 the beginning of each fiscal year shall be
13 available to pay the administrative ex-
14 penses for the fiscal year necessary to
15 carry out title XVII of the Energy Policy
16 Act of 2005 (42 U.S.C. 16511 et seq.).

17 (3) TRANSFERS OF AMOUNTS.—

18 (A) IN GENERAL.—The amounts required
19 to be transferred to the Fund under this sub-
20 section shall be transferred at least monthly
21 from the general fund of the Treasury to the
22 Fund on the basis of estimates made by the
23 Secretary of the Treasury.

24 (B) CASH FLOWS.—Cash flows associated
25 with costs of the Fund described in section

1 502(5)(B) of the Federal Credit Reform Act of
2 1990 (2 U.S.C. 661a(5)(B)) shall be trans-
3 ferred to appropriate credit accounts.

4 (C) ADJUSTMENTS.—Proper adjustment
5 shall be made in amounts subsequently trans-
6 ferred to the extent prior estimates were in ex-
7 cess of or less than the amounts required to be
8 transferred.

9 (b) REVISIONS TO LOAN GUARANTEE PROGRAM AU-
10 THORITY.—

11 (1) DEFINITION OF COMMERCIAL TECH-
12 NOLOGY.—Section 1701(1) of the Energy Policy Act
13 of 2005 (42 U.S.C. 16511(1)) is amended by strik-
14 ing subparagraph (B) and inserting the following:

15 “(B) EXCLUSION.—The term ‘commercial
16 technology’ does not include a technology if the
17 sole use of the technology is in connection
18 with—

19 “(i) a demonstration project; or

20 “(ii) a project for which the Secretary
21 approved a loan guarantee.”.

22 (2) SPECIFIC APPROPRIATION OR CONTRIBU-
23 TION.—Section 1702 of the Energy Policy Act of
24 2005 (42 U.S.C. 16512) is amended by striking sub-
25 section (b) and inserting the following:

1 “(b) SPECIFIC APPROPRIATION OR CONTRIBU-
2 TION.—

3 “(1) IN GENERAL.—No guarantee shall be
4 made unless sufficient amounts to account for the
5 cost are available—

6 “(A) in unobligated balances within the
7 Clean Energy Investment Fund established
8 under section 103(a) of the American Clean
9 Energy Leadership Act of 2009;

10 “(B) as a payment from the borrower and
11 the payment is deposited in the Clean Energy
12 Investment Fund; or

13 “(C) in any combination of balances and
14 payments described in subparagraphs (A) and
15 (B), respectively.

16 “(2) LIMITATION.—The source of payments re-
17 ceived from a borrower under paragraph (1)(B) shall
18 not be a loan or other debt obligation that is made
19 or guaranteed by the Federal Government.

20 “(3) RELATION TO OTHER LAWS.—Section
21 504(b) of the Federal Credit Reform Act of 1990 (2
22 U.S.C. 661c(b)) shall not apply to a loan or loan
23 guarantee under this section.”.

24 “(3) SUBROGATION.—Section 1702(g)(2) of the
25 Energy Policy Act of 2005 (42 U.S.C. 16512(g)(2))

1 is amended by striking subparagraphs (B) and (C)
2 and inserting the following:

3 “(B) SUPERIORITY OF RIGHTS.—Except as
4 provided in subparagraph (C), the rights of the
5 Secretary, with respect to any property ac-
6 quired pursuant to a guarantee or related
7 agreements, shall be superior to the rights of
8 any other person with respect to the property.

9 “(C) TERMS AND CONDITIONS.—A guar-
10 antee agreement shall include such detailed
11 terms and conditions as the Secretary deter-
12 mines appropriate to—

13 “(i) protect the interests of the United
14 States in the case of default;

15 “(ii) have available all the patents and
16 technology necessary for any person se-
17 lected, including the Secretary, to complete
18 and operate the project;

19 “(iii) provide for sharing the proceeds
20 received from the sale of project assets
21 with other creditors or control the disposi-
22 tion of project assets if necessary to pro-
23 tect the interests of the United States in
24 the case of default; and

1 “(iv) provide such lien priority in
2 project assets as necessary to protect the
3 interests of the United States in the case
4 of a default.”.

5 (4) FEES.—Section 1702(h) of the Energy Pol-
6 icy Act of 2005 (42 U.S.C. 16512(h)) is amended by
7 striking paragraph (2) and inserting the following:

8 “(2) AVAILABILITY.—Fees collected under this
9 subsection shall—

10 “(A) be deposited by the Secretary in the
11 Clean Energy Investment Fund established
12 under section 103(a) of the American Clean
13 Energy Leadership Act of 2009; and

14 “(B) remain available to the Secretary for
15 expenditure, without further appropriation or
16 fiscal year limitation, for administrative ex-
17 penses incurred in carrying out this title.

18 “(3) ADJUSTMENT.—The Secretary may adjust
19 the amount or manner of collection of fees under
20 this title as the Secretary determines is necessary to
21 promote, to the maximum extent practicable, eligible
22 projects under this title.

23 “(4) EXCESS FEES.—Of the amount of a fee
24 imposed on an applicant at the conditional commit-
25 ment stage, 75 percent of the amount shall be re-

1 fundable to the applicant if there is no financial
2 close on the application, unless the Secretary deter-
3 mines that the administrative costs of the Depart-
4 ment have exceeded the amount retained.

5 “(5) CREDIT REPORT.—If, in the opinion of the
6 Secretary, the credit rating of an applicant is not
7 relevant to the determination of whether or not sup-
8 port will be provided and the applicant agrees to ac-
9 cept the credit rating assigned to the applicant by
10 the Secretary, the Secretary may waive any require-
11 ment to provide a third-party credit report.”.

12 (5) PROCESSING.—Section 1702 of the Energy
13 Policy Act of 2005 (42 U.S.C. 16512) is amended
14 by adding at the end the following:

15 “(k) ACCELERATED REVIEWS.—To the maximum ex-
16 tent practicable and consistent with sound business prac-
17 tices, the Secretary shall seek to conduct necessary reviews
18 concurrently of an application for a loan guarantee under
19 this title such that decisions as to whether to enter into
20 a commitment on the application can be issued not later
21 than 180 days after the date of submission of a completed
22 application.”.

23 (6) WAGE RATES.—Section 1705(c) of the En-
24 ergy Policy Act of 2005 (42 U.S.C. 16516(c)) is

1 amended by striking “support under this section”
2 and inserting “support under this title”.

3 **SEC. 104. ENERGY TECHNOLOGY DEPLOYMENT GOALS.**

4 (a) GOALS.—Not later than 1 year after the date of
5 enactment of this Act, the Secretary, after consultation
6 with the Advisory Council, shall develop and publish for
7 review and comment in the Federal Register near-, me-
8 dium-, and long-term goals (including numerical perform-
9 ance targets at appropriate intervals to measure progress
10 toward those goals) for the deployment of clean energy
11 technologies through the credit support programs estab-
12 lished by this subtitle (including an amendment made by
13 this subtitle) to promote—

14 (1) sufficient electric generating capacity using
15 clean energy technologies to meet the energy needs
16 of the United States;

17 (2) clean energy technologies in vehicles and
18 fuels that will substantially reduce the reliance of
19 the United States on foreign sources of energy and
20 insulate consumers from the volatility of world en-
21 ergy markets;

22 (3) a domestic commercialization and manufac-
23 turing capacity that will establish the United States
24 as a world leader in clean energy technologies across
25 multiple sectors;

1 (4) installation of sufficient infrastructure to
2 allow for the cost-effective deployment of clean en-
3 ergy technologies appropriate to each region of the
4 United States;

5 (5) the transformation of the building stock of
6 the United States to zero net energy consumption;

7 (6) the recovery, use, and prevention of waste
8 energy;

9 (7) domestic manufacturing of clean energy
10 technologies on a scale that is sufficient to achieve
11 price parity with conventional energy sources;

12 (8) domestic production of commodities and
13 materials (such as steel, chemicals, polymers, and
14 cement) using clean energy technologies so that the
15 United States will become a world leader in environ-
16 mentally sustainable production of the commodities
17 and materials;

18 (9) a robust, efficient, and interactive electricity
19 transmission grid that will allow for the incorpora-
20 tion of clean energy technologies, distributed genera-
21 tion, smart grid functions, and demand-response in
22 each regional electric grid;

23 (10) sufficient availability of financial products
24 to allow owners and users of residential, retail, com-
25 mercial, and industrial buildings to make energy ef-

1 efficiency and distributed generation technology in-
2 vestments with reasonable payback periods; and

3 (11) such other goals as the Secretary, in con-
4 sultation with the Advisory Council, determines to be
5 consistent with the purposes of this subtitle.

6 (b) REVISIONS.—The Secretary shall revise the goals
7 established under subsection (a), from time to time as ap-
8 propriate, to account for advances in technology and
9 changes in energy policy.

10 **SEC. 105. CLEAN ENERGY DEPLOYMENT ADMINISTRATION.**

11 (a) ESTABLISHMENT.—

12 (1) IN GENERAL.—There is established in the
13 Department of Energy an administration to be
14 known as the Clean Energy Deployment Administra-
15 tion, under the direction of the Administrator and
16 the Board of Directors.

17 (2) STATUS.—

18 (A) IN GENERAL.—The Administration
19 (including officers, employees, and agents of the
20 Administration) shall not be responsible to, or
21 subject to the authority, direction, or control of,
22 any other officer, employee, or agent of the De-
23 partment of Energy other than the Secretary,
24 acting through the Administrator.

1 (B) EXEMPTION FROM REORGANIZA-
2 TION.—The Administration shall be exempt
3 from the reorganization authority provided
4 under section 643 of the Department of Energy
5 Organization Act (42 U.S.C. 7253).

6 (C) INSPECTOR GENERAL.—Section 12 of
7 the Inspector General Act of 1978 (5 U.S.C.
8 App.) is amended—

9 (i) in paragraph (1), by inserting “the
10 Administrator of the Clean Energy Deploy-
11 ment Administration;” after “Export-Im-
12 port Bank;”; and

13 (ii) in paragraph (2), by inserting
14 “the Clean Energy Deployment Adminis-
15 tration,” after “Export-Import Bank,”.

16 (3) OFFICES.—

17 (A) PRINCIPAL OFFICE.—The Administra-
18 tion shall—

19 (i) maintain the principal office of the
20 Administration in the District of Columbia;
21 and

22 (ii) for purposes of venue in civil ac-
23 tions, be considered to be a resident of the
24 District of Columbia.

1 (B) OTHER OFFICES.—The Administration
2 may establish other offices in such other places
3 as the Administration considers necessary or
4 appropriate for the conduct of the business of
5 the Administration.

6 (b) ADMINISTRATOR.—

7 (1) IN GENERAL.—The Administrator shall
8 be—

9 (A) appointed by the President, with the
10 advice and consent of the Senate, for a 5-year
11 term; and

12 (B) compensated at the annual rate of
13 basic pay prescribed for level II of the Execu-
14 tive Schedule under section 5313 of title 5,
15 United States Code.

16 (2) DUTIES.—The Administrator shall—

17 (A) serve as the Chief Executive Officer of
18 the Administration and Chairman of the Board;

19 (B) ensure that—

20 (i) the Administration operates in a
21 safe and sound manner, including mainte-
22 nance of adequate capital and internal con-
23 trols (consistent with section 404 of the
24 Sarbanes-Oxley Act of 2002 (15 U.S.C.
25 7262));

1 (ii) the operations and activities of the
2 Administration foster liquid, efficient, com-
3 petitive, and resilient energy and energy ef-
4 ficiency finance markets;

5 (iii) the Administration carries out the
6 purposes of this subtitle only through ac-
7 tivities that are authorized under and con-
8 sistent with this subtitle; and

9 (iv) the activities of the Administra-
10 tion and the manner in which the Adminis-
11 tration is operated are consistent with the
12 public interest;

13 (C) develop policies and procedures for the
14 Administration that will—

15 (i) promote a self-sustaining portfolio
16 of investments that will maximize the value
17 of investments to effectively promote clean
18 energy technologies;

19 (ii) promote transparency and open-
20 ness in Administration operations;

21 (iii) afford the Administration with
22 sufficient flexibility to meet the purposes of
23 this subtitle;

24 (iv) provide for the efficient proc-
25 essing of applications;

1 (v) promote, consistent with the pur-
2 poses of this Act, the participation of pri-
3 vate financial institutions and other
4 sources of private capital, on commercially
5 reasonable terms, if and to the extent the
6 capital is available; and

7 (vi) promote the availability of finan-
8 cial products to small business through
9 working with entities that have appropriate
10 expertise extending credit or other relevant
11 financial services to small companies devel-
12 oping clean energy technologies; and

13 (D) with the concurrence of the Board, set
14 expected loss reserves for the support provided
15 by the Administration consistent with section
16 106(a)(1)(C).

17 (c) BOARD OF DIRECTORS.—

18 (1) IN GENERAL.—The Board of Directors of
19 the Administration shall consist of—

20 (A) the Secretary or the designee of the
21 Secretary, who shall serve as an ex-officio vot-
22 ing member of the Board of Directors;

23 (B) the Administrator, who shall serve as
24 the Chairman of the Board of Directors; and

25 (C) 7 additional members who shall—

1 (i) be appointed by the President,
2 with the advice and consent of the Senate,
3 for staggered 5-year terms; and

4 (ii) have experience in banking or fi-
5 nancial services relevant to the operations
6 of the Administration, including individuals
7 with substantial experience in the develop-
8 ment of energy projects, the electricity
9 generation sector, the transportation sec-
10 tor, the manufacturing sector, and the en-
11 ergy efficiency sector.

12 (2) DUTIES.—The Board of Directors shall—

13 (A) oversee the operations of the Adminis-
14 tration and ensure industry best practices are
15 followed in all financial transactions involving
16 the Administration;

17 (B) consult with the Administrator on the
18 general policies and procedures of the Adminis-
19 tration to ensure the interests of the taxpayers
20 are protected;

21 (C) ensure the portfolio of investments are
22 consistent with purposes of this subtitle and
23 with the long-term financial stability of the Ad-
24 ministration;

1 (D) ensure that the operations and activi-
2 ties of the Administration are consistent with
3 the development of a robust private sector that
4 can provide commercial loans or financing prod-
5 ucts; and

6 (E) not serve on a full-time basis, except
7 that the Board of Directors shall meet at least
8 quarterly to review, as appropriate, applications
9 for credit support and set policies and proce-
10 dures as necessary.

11 (3) REMOVAL.—An appointed member of the
12 Board of Directors may be removed from office by
13 the President for good cause.

14 (4) VACANCIES.—An appointed seat on the
15 Board of Directors that becomes vacant shall be
16 filled by appointment by the President, but only for
17 the unexpired portion of the term of the vacating
18 member.

19 (5) COMPENSATION OF MEMBERS.—An ap-
20 pointed member of the Board of Directors shall be
21 compensated at a rate equal to the daily equivalent
22 of the annual rate of basic pay prescribed for level
23 III of the Executive Schedule under section 5314 of
24 title 5, United States Code, for each day (including
25 travel time) during which the member is engaged in

1 the performance of the duties of the Board of Direc-
2 tors.

3 (d) ENERGY TECHNOLOGY ADVISORY COUNCIL.—

4 (1) IN GENERAL.—The Administration shall
5 have an Energy Technology Advisory Council con-
6 sisting of—

7 (A) 5 members selected by the Secretary;

8 and

9 (B) 3 members selected by the Board of
10 Directors of the Administration.

11 (2) QUALIFICATIONS.—The members of the Ad-
12 visory Council shall—

13 (A) have relevant scientific expertise; and

14 (B) in the case of the members selected by
15 the Secretary under paragraph (1)(A), include
16 representatives of—

17 (i) the academic community;

18 (ii) the private research community;

19 (iii) National Laboratories;

20 (iv) the technology or project develop-
21 ment community; and

22 (v) the commercial energy financing
23 and operations sector.

24 (3) DUTIES.—The Advisory Council shall—

1 (A) develop and publish for comment in
2 the Federal Register a methodology for assess-
3 ment of clean energy technologies that will
4 allow the Administration to evaluate projects
5 based on the progress likely to be achieved per-
6 dollar invested in maximizing the attributes of
7 the definition of clean energy technology, taking
8 into account the extent to which support for a
9 clean energy technology is likely to accrue sub-
10 sequent benefits that are attributable to a com-
11 mercial scale deployment taking place earlier
12 than that which otherwise would have occurred
13 without the support; and

14 (B) advise on the technological approaches
15 that should be supported by the Administration
16 to meet the technology deployment goals estab-
17 lished by the Secretary pursuant to section 104.

18 (4) TERM.—

19 (A) IN GENERAL.—Members of the Advi-
20 sory Council shall have 5-year staggered terms,
21 as determined by the Secretary and the Admin-
22 istrator.

23 (B) REAPPOINTMENT.—A member of the
24 Advisory Council may be reappointed.

1 (5) COMPENSATION.—A member of the Advi-
2 sory Council, who is not otherwise compensated as
3 a Federal employee, shall be compensated at a rate
4 equal to the daily equivalent of the annual rate of
5 basic pay prescribed for level IV of the Executive
6 Schedule under section 5315 of title 5, United
7 States Code, for each day (including travel time)
8 during which the member is engaged in the perform-
9 ance of the duties of the Advisory Council.

10 (e) STAFF.—

11 (1) IN GENERAL.—The Administrator, in con-
12 sultation with the Board of Directors, may—

13 (A) appoint and terminate such officers,
14 attorneys, employees, and agents as are nec-
15 essary to carry out this subtitle; and

16 (B) vest those personnel with such powers
17 and duties as the Administrator may determine.

18 (2) DIRECT HIRE AUTHORITY.—

19 (A) IN GENERAL.—Notwithstanding sec-
20 tion 3304 and sections 3309 through 3318 of
21 title 5, United States Code, the Administrator
22 may, on a determination that there is a severe
23 shortage of candidates or a critical hiring need
24 for particular positions, recruit and directly ap-
25 point highly qualified critical personnel with

1 specialized knowledge important to the function
2 of the Administration into the competitive serv-
3 ice.

4 (B) EXCEPTION.—The authority granted
5 under subparagraph (A) shall not apply to posi-
6 tions in the excepted service or the Senior Exec-
7 utive Service.

8 (C) REQUIREMENTS.—In exercising the
9 authority granted under subparagraph (A), the
10 Administrator shall ensure that any action
11 taken by the Administrator—

12 (i) is consistent with the merit prin-
13 ciples of section 2301 of title 5, United
14 States Code; and

15 (ii) complies with the public notice re-
16 quirements of section 3327 of title 5,
17 United States Code.

18 (D) TERMINATION OF EFFECTIVENESS.—
19 The authority provided by this paragraph ter-
20 minates effective on the date that is 2 years
21 after the date of enactment of this Act.

22 (3) CRITICAL PAY AUTHORITY.—

23 (A) IN GENERAL.—Notwithstanding sec-
24 tion 5377 of title 5, United States Code, and
25 without regard to the provisions of that title

1 governing appointments in the competitive serv-
2 ice or the Senior Executive Service and chap-
3 ters 51 and 53 of that title (relating to classi-
4 fication and pay rates), the Administrator may
5 establish, fix the compensation of, and appoint
6 individuals to critical positions needed to carry
7 out the functions of the Administration, if the
8 Administrator certifies that—

9 (i) the positions require expertise of
10 an extremely high level in a financial, tech-
11 nical, or scientific field;

12 (ii) the Administration would not suc-
13 cessfully accomplish an important mission
14 without such an individual; and

15 (iii) exercise of the authority is nec-
16 essary to recruit an individual who is ex-
17 ceptionally well qualified for the position.

18 (B) LIMITATIONS.—The authority granted
19 under subparagraph (A) shall be subject to the
20 following conditions:

21 (i) The number of critical positions
22 authorized by subparagraph (A) may not
23 exceed 20 at any 1 time in the Administra-
24 tion.

1 (ii) The term of an appointment
2 under subparagraph (A) may not exceed 4
3 years.

4 (iii) An individual appointed under
5 subparagraph (A) may not have been an
6 Administration employee at any time dur-
7 ing the 2-year period preceding the date of
8 appointment.

9 (iv) Total annual compensation for
10 any individual appointed under subpara-
11 graph (A) may not exceed the highest total
12 annual compensation payable at the rate
13 determined under section 104 of title 3,
14 United States Code.

15 (v) An individual appointed under
16 subparagraph (A) may not be considered
17 to be an employee for purposes of sub-
18 chapter II of chapter 75 of title 5, United
19 States Code.

20 (C) NOTIFICATION.—Each year, the Ad-
21 ministrator shall submit to Congress a notifica-
22 tion that lists each individual appointed under
23 this paragraph.

24 **SEC. 106. ADMINISTRATION FUNCTIONS.**

25 (a) OPERATIONAL UNITS.—

1 (1) DIRECT SUPPORT.—

2 (A) IN GENERAL.—The Administration
3 may issue direct loans, letters of credit, loan
4 guarantees, insurance products, or such other
5 credit enhancements (including through partici-
6 pation as a co-lender or a lending member of a
7 syndication) as the Administrator considers ap-
8 propriate to deploy clean energy technologies if
9 the Administrator has determined that deploy-
10 ment of the technologies would benefit or be ac-
11 celerated by the support.

12 (B) ELIGIBILITY CRITERIA.—In carrying
13 out this paragraph and awarding credit support
14 to projects, the Administrator shall account
15 for—

16 (i) how the technology rates based on
17 an evaluation methodology established by
18 the Advisory Council;

19 (ii) how the project fits with the goals
20 established under section 104; and

21 (iii) the potential for the applicant to
22 successfully complete the project.

23 (C) RISK.—

24 (i) EXPECTED LOAN LOSS RE-
25 SERVE.—The Administrator shall establish

1 an expected loan loss reserve to account
2 for estimated losses attributable to activi-
3 ties under this section that is consistent
4 with the purposes of—

5 (I) developing breakthrough tech-
6 nologies to the point at which tech-
7 nology risk is largely mitigated;

8 (II) achieving widespread deploy-
9 ment and advancing the commercial
10 viability of clean energy technologies;
11 and

12 (III) advancing the goals estab-
13 lished under section 104.

14 (ii) INITIAL EXPECTED LOAN LOSS
15 RESERVE.—Until such time as the Admin-
16 istrator determines sufficient data exist to
17 establish an expected loan loss reserve that
18 is appropriate, the Administrator shall con-
19 sider establishing an initial rate of 10 per-
20 cent for the portfolio of investments under
21 this subtitle.

22 (iii) PORTFOLIO INVESTMENT AP-
23 PROACH.—The Administration shall—

1 (I) use a portfolio investment ap-
2 proach to mitigate risk and diversify
3 investments across technologies;

4 (II) to the maximum extent prac-
5 ticable and consistent with long-term
6 self-sufficiency, weigh the portfolio of
7 investments in projects to advance the
8 goals established under section 104;
9 and

10 (III) consistent with the expected
11 loan loss reserve established under
12 this subparagraph, the purposes of
13 this subtitle, and section
14 105(b)(2)(B), provide the maximum
15 practicable percentage of support to
16 promote breakthrough technologies.

17 (iv) LOSS RATE REVIEW.—

18 (I) IN GENERAL.—The Board of
19 Directors shall review on an annual
20 basis the loss rates of the portfolio to
21 determine the adequacy of the re-
22 serves.

23 (II) REPORT.—Not later than 90
24 days after the date of the initiation of
25 the review, the Administrator shall

1 submit to the Committee on Energy
2 and Natural Resources of the Senate
3 and the Committee on Energy and
4 Commerce of the House of Represent-
5 atives a report describing the results
6 of the review and any recommended
7 policy changes.

8 (D) APPLICATION REVIEW.—

9 (i) IN GENERAL.—To the maximum
10 extent practicable and consistent with
11 sound business practices, the Administra-
12 tion shall seek to consolidate reviews of ap-
13 plications for credit support under this
14 subtitle such that final decisions on appli-
15 cations can generally be issued not later
16 than 180 days after the date of submission
17 of a completed application.

18 (ii) ENVIRONMENTAL REVIEW.—In
19 carrying out this subtitle, the Administra-
20 tion shall, to the maximum extent prac-
21 ticable—

22 (I) avoid duplicating efforts that
23 have already been undertaken by
24 other agencies (including State agen-

1 cies acting under Federal programs);
2 and

3 (II) with the advice of the Coun-
4 cil on Environmental Quality and any
5 other applicable agencies, use the ad-
6 ministrative records of similar reviews
7 conducted throughout the executive
8 branch to develop the most expedi-
9 tious review process practicable.

10 (E) WAGE RATE REQUIREMENTS.—

11 (i) IN GENERAL.—No credit support
12 shall be issued under this section unless
13 the borrower has provided to the Adminis-
14 trator reasonable assurances that all labor-
15 ers and mechanics employed by contractors
16 and subcontractors in the performance of
17 construction work financed in whole or in
18 part by the Administration will be paid
19 wages at rates not less than those pre-
20 vailing on projects of a character similar to
21 the contract work in the civil subdivision of
22 the State in which the contract work is to
23 be performed as determined by the Sec-
24 retary of Labor in accordance with sub-

1 chapter IV of chapter 31 of part A of sub-
2 title II of title 40, United States Code.

3 (ii) LABOR STANDARDS.—With re-
4 spect to the labor standards specified in
5 this section, the Secretary of Labor shall
6 have the authority and functions set forth
7 in Reorganization Plan Numbered 14 of
8 1950 (64 Stat. 1267; 5 U.S.C. App.) and
9 section 3145 of title 40, United States
10 Code.

11 (2) INDIRECT SUPPORT.—

12 (A) IN GENERAL.—The Administration
13 shall work to develop financial products and ar-
14 rangements to both promote the widespread de-
15 ployment of, and mobilize private sector support
16 of credit and investment institutions for, clean
17 energy technologies by facilitating aggregation
18 of small projects and by providing indirect cred-
19 it support, including credit enhancement.

20 (B) FINANCIAL PRODUCTS.—The Adminis-
21 tration—

22 (i) in cooperation with Federal, State,
23 local, and private sector entities, shall de-
24 velop debt instruments that provide for the
25 aggregation of, or directly aggregate,

1 projects for clean energy technology de-
2 ployments on a scale appropriate for resi-
3 dential or commercial applications; and

4 (ii) may insure, purchase, and make
5 commitments to purchase, any debt instru-
6 ment associated with the deployment of
7 clean energy technologies (including instru-
8 ments secured by liens or other collateral
9 related to the funding of clean energy tech-
10 nology) for the purposes of enhancing the
11 availability of private financing for clean
12 energy technology deployments.

13 (C) DISPOSITION OF DEBT OR INTER-
14 EST.—The Administration may acquire, hold,
15 and sell or otherwise dispose of, pursuant to
16 commitments or otherwise, any debt associated
17 with the deployment of clean energy tech-
18 nologies or interest in the debt.

19 (D) PRICING.—

20 (i) IN GENERAL.—The Administrator
21 may establish requirements, and impose
22 charges or fees, which may be regarded as
23 elements of pricing, for different classes of
24 sellers, servicers, or services.

1 (ii) CLASSIFICATION OF SELLERS AND
2 SERVICERS.—For the purpose of clause (i),
3 the Administrator may classify sellers and
4 servicers as necessary to promote trans-
5 parency and liquidity and properly charac-
6 terize the risk of default.

7 (E) ELIGIBILITY.—The Administrator
8 shall establish—

9 (i) eligibility criteria for loan origina-
10 tors, sellers, and servicers seeking support
11 for portfolios of financial obligations relat-
12 ing to clean energy technologies so as to
13 ensure the capability of the loan origina-
14 tors, sellers, and servicers to perform the
15 functions required to maintain the ex-
16 pected performance of the portfolios; and

17 (ii) such criteria, standards, guide-
18 lines, and mechanisms such that, to the
19 maximum extent practicable, loan origina-
20 tors and sellers will be able to determine
21 the eligibility of loans for resale at the time
22 of initial lending.

23 (F) SECONDARY MARKET SUPPORT.—

24 (i) IN GENERAL.—The Administration
25 may lend on the security of, and make

1 commitments to lend on the security of,
2 any debt that the Administration has
3 issued or is authorized to purchase under
4 this section.

5 (ii) AUTHORIZED ACTIONS.—On such
6 terms and conditions as the Administrator
7 may prescribe, the Administration may,
8 based on the debt and with the concu-
9 rence of the Board of Directors—

10 (I) give security or guarantee;

11 (II) pay interest or other return;

12 and

13 (III) issue notes, debentures,
14 bonds, or other obligations or securi-
15 ties.

16 (G) LENDING ACTIVITIES.—

17 (i) IN GENERAL.—The Administrator
18 shall determine—

19 (I) the volume of the lending ac-
20 tivities of the Administration; and

21 (II) the types of loan ratios, risk
22 profiles, interest rates, maturities, and
23 charges or fees in the secondary mar-
24 ket operations of the Administration.

1 (ii) OBJECTIVES.—Determinations
2 under clause (i) shall be consistent with
3 the objectives of—

4 (I) providing an attractive invest-
5 ment environment for clean energy
6 technologies;

7 (II) making the operations of the
8 Administration self-supporting over
9 the long term; and

10 (III) advancing the goals estab-
11 lished under section 104.

12 (H) EXEMPT SECURITIES.—All securities
13 issued or guaranteed by the Administration
14 shall, to the same extent as securities that are
15 direct obligations of or obligations guaranteed
16 as to principal or interest by the United States,
17 be considered to be exempt securities within the
18 meaning of the laws administered by the Secu-
19 rities and Exchange Commission.

20 (b) OTHER AUTHORIZED PROGRAMS.—

21 (1) IN GENERAL.—The Secretary may delegate
22 to the Administration the provision of financial serv-
23 ices and program management for grant, loan, and
24 other credit enhancement programs authorized
25 under any other provision of law.

1 (2) ADMINISTRATION.—In administering any
2 other program delegated by the Secretary, the Ad-
3 ministration shall, to the maximum extent prac-
4 ticable (as determined by the Administrator)—

5 (A) administer the program in a manner
6 that is consistent with the terms and conditions
7 of this subtitle; and

8 (B) minimize the administrative costs to
9 the Federal Government.

10 **SEC. 107. FEDERAL CREDIT AUTHORITY.**

11 (a) TRANSFER OF FUNCTIONS AND AUTHORITY.—

12 (1) IN GENERAL.—Subject to paragraph (2), on
13 a finding by the Secretary and the Administrator
14 that the Administration is sufficiently ready to as-
15 sume the functions and that applicants to those pro-
16 grams will not be unduly adversely affected but in
17 no case later than 18 months after the date of en-
18 actment of this Act, all of the functions and author-
19 ity of the Secretary under title XVII of the Energy
20 Policy Act of 2005 (42 U.S.C. 16511 et seq.) and
21 authorities established by this subtitle shall be trans-
22 ferred to the Administration.

23 (2) FAILURE TO TRANSFER FUNCTIONS.—If the
24 functions and authorities are not transferred to the
25 Administration in accordance with paragraph (1),

1 the Secretary and the Administrator shall submit to
2 Congress a report on the reasons for delay and an
3 expected timetable for transfer of the functions and
4 authorities to the Administration.

5 (3) EFFECT ON EXISTING RIGHTS AND OBLIGA-
6 TIONS.—The transfer of functions and authority
7 under this subsection shall not affect the rights and
8 obligations of any party that arise under a prede-
9 cessor program or authority prior to the transfer
10 under this subsection.

11 (4) TRANSFER OF FUND AUTHORITY.—

12 (A) IN GENERAL.—On transfer of func-
13 tions pursuant to paragraph (1), the Adminis-
14 tration shall have all authorities to make use of
15 the Fund reserved for the Secretary before the
16 transfer.

17 (B) ADMINISTRATIVE EXPENSES.—Effec-
18 tive beginning on the date of enactment of this
19 Act, the Administrator may make use of up to
20 1.5 percent of the amounts in the Fund as of
21 the beginning of each fiscal year to pay admin-
22 istrative expenses for that fiscal year to carry
23 out the purposes of this Act.

24 (5) USE.—

1 (A) IN GENERAL.—Amounts in the Fund
2 shall be available for discharge of liabilities and
3 all other expenses of the Administration, includ-
4 ing subsequent transfer to the respective credit
5 accounts.

6 (B) LIABILITY.—All activities of the Ad-
7 ministration that could result in a liability for
8 the United States shall be transparently ac-
9 counted for and no obligation or liability may
10 be incurred unless—

11 (i) the appropriate amounts are trans-
12 ferred to credit accounts for activities pur-
13 suant to the Federal Credit Reform Act of
14 1990 (2 U.S.C. 661a); or

15 (ii) sufficient amounts are reserved
16 within the Fund to account for such liabil-
17 ities.

18 (6) INITIAL INVESTMENT.—

19 (A) IN GENERAL.—On transfer of func-
20 tions pursuant to paragraph (1), out of any
21 funds in the Treasury not otherwise appro-
22 priated, the Secretary of the Treasury shall
23 transfer to the Fund to carry out this subtitle
24 \$10,000,000,000, to remain available until ex-
25 pended.

1 (B) RECEIPT AND ACCEPTANCE.—The
2 Fund shall be entitled to receive and shall ac-
3 cept, and shall be used to carry out this sub-
4 title, the funds transferred to the Fund under
5 subparagraph (A), without further appropria-
6 tion.

7 (7) AUTHORIZATION OF APPROPRIATIONS.—In
8 addition to funds made available by paragraphs (1)
9 through (6), there are authorized to be appropriated
10 to the Fund such sums as are necessary to carry out
11 this subtitle.

12 (b) PAYMENTS OF LIABILITIES.—

13 (1) IN GENERAL.—Any payment to discharge li-
14 abilities arising from agreements under this subtitle
15 shall be made exclusively out of the Fund or the as-
16 sociated credit account, as appropriate.

17 (2) SECURITY.—Subject to paragraph (1), the
18 full faith and credit of the United States is pledged
19 to the payment of all obligations entered into by the
20 Administration pursuant to this subtitle.

21 (c) FEES.—

22 (1) IN GENERAL.—Consistent with achieving
23 the purposes of this subtitle, the Administrator shall
24 charge fees or collect compensation generally in ac-
25 cordance with commercial rates.

1 (2) AVAILABILITY OF FEES.—All fees collected
2 by the Administration may be retained by the Ad-
3 ministration and placed in the Fund and may re-
4 main available to the Administration, without fur-
5 ther appropriation or fiscal year limitation, for use
6 in carrying out the purposes of this subtitle.

7 (3) BREAKTHROUGH TECHNOLOGIES.—The Ad-
8 ministration shall charge the minimum amount in
9 fees or compensation practicable for breakthrough
10 technologies, consistent with the long-term viability
11 of the Administration, unless the Administration
12 first determines that a higher charge will not impede
13 the development of the technology.

14 (4) ALTERNATIVE FEE ARRANGEMENTS.—The
15 Administration may use such alternative arrange-
16 ments (such as profit participation, contingent fees,
17 and other valuable contingent interests) as the Ad-
18 ministration considers appropriate to compensate the
19 Administration for the expenses of the Administra-
20 tion and the risk inherent in the support of the Ad-
21 ministration.

22 (d) COST TRANSFER AUTHORITY.—Amounts col-
23 lected by the Administration for the cost of a loan or loan
24 guarantee shall be transferred by the Administration to
25 the respective credit program accounts.

1 (e) SUPPLEMENTAL BORROWING AUTHORITY.—In
2 order to maintain sufficient liquidity for activities author-
3 ized under section 106(a)(2), the Administration may
4 issue notes, debentures, bonds, or other obligations for
5 purchase by the Secretary of the Treasury.

6 (f) PUBLIC DEBT TRANSACTIONS.—For the purpose
7 of subsection (e)—

8 (1) the Secretary of the Treasury may use as
9 a public debt transaction the proceeds of the sale of
10 any securities issued under chapter 31 of title 31,
11 United States Code; and

12 (2) the purposes for which securities may be
13 issued under that chapter are extended to include
14 any purchase under this subsection.

15 (g) MAXIMUM OUTSTANDING HOLDING.—The Sec-
16 retary of the Treasury shall purchase instruments issued
17 under subsection (e) to the extent that the purchase would
18 not increase the aggregate principal amount of the out-
19 standing holdings of obligations under subsection (e) by
20 the Secretary of the Treasury to an amount that is greater
21 than \$2,000,000,000.

22 (h) RATE OF RETURN.—Each purchase of obligations
23 by the Secretary of the Treasury under this section shall
24 be on terms and conditions established to yield a rate of
25 return determined by the Secretary of the Treasury to be

1 appropriate, taking into account the current average rate
2 on outstanding marketable obligations of the United
3 States as of the last day of the month preceding the pur-
4 chase.

5 (i) SALE OF OBLIGATIONS.—The Secretary of the
6 Treasury may at any time sell, on terms and conditions
7 and at prices determined by the Secretary of the Treasury,
8 any of the obligations acquired by the Secretary of the
9 Treasury under this section.

10 (j) PUBLIC DEBT TRANSACTIONS.—All redemptions,
11 purchases, and sales by the Secretary of the Treasury of
12 obligations under this section shall be treated as public
13 debt transactions of the United States.

14 **SEC. 108. GENERAL PROVISIONS.**

15 (a) IMMUNITY FROM IMPAIRMENT, LIMITATION, OR
16 RESTRICTION.—

17 (1) IN GENERAL.—All rights and remedies of
18 the Administration (including any rights and rem-
19 edies of the Administration on, under, or with re-
20 spect to any mortgage or any obligation secured by
21 a mortgage) shall be immune from impairment, limi-
22 tation, or restriction by or under—

23 (A) any law (other than a law enacted by
24 Congress expressly in limitation of this para-
25 graph) that becomes effective after the acquisi-

1 tion by the Administration of the subject or
2 property on, under, or with respect to which the
3 right or remedy arises or exists or would so
4 arise or exist in the absence of the law; or

5 (B) any administrative or other action that
6 becomes effective after the acquisition.

7 (2) STATE LAW.—The Administrator may con-
8 duct the business of the Administration without re-
9 gard to any qualification or law of any State relating
10 to incorporation.

11 (b) USE OF OTHER AGENCIES.—With the consent of
12 a department, establishment, or instrumentality (including
13 any field office), the Administration may—

14 (1) use and act through any department, estab-
15 lishment, or instrumentality; or

16 (2) use, and pay compensation for, information,
17 services, facilities, and personnel of the department,
18 establishment, or instrumentality.

19 (c) PROCUREMENT.—The Administrator shall be the
20 senior procurement officer for the Administration for pur-
21 poses of section 16(a) of the Office of Federal Procure-
22 ment Policy Act (41 U.S.C. 414(a)).

23 (d) FINANCIAL MATTERS.—

1 (1) INVESTMENTS.—Funds of the Administra-
2 tion may be invested in such investments as the
3 Board of Directors may prescribe.

4 (2) FISCAL AGENTS.—Any Federal Reserve
5 bank or any bank as to which at the time of the des-
6 ignation of the bank by the Administrator there is
7 outstanding a designation by the Secretary of the
8 Treasury as a general or other depository of public
9 money, may be designated by the Administrator as
10 a depository or custodian or as a fiscal or other
11 agent of the Administration.

12 (e) JURISDICTION.—Notwithstanding section 1349 of
13 title 28, United States Code, or any other provision of
14 law—

15 (1) the Administration shall be considered a
16 corporation covered by sections 1345 and 1442 of
17 title 28, United States Code;

18 (2) all civil actions to which the Administration
19 is a party shall be considered to arise under the laws
20 of the United States, and the district courts of the
21 United States shall have original jurisdiction of all
22 such actions, without regard to amount or value;
23 and

24 (3) any civil or other action, case or controversy
25 in a court of a State, or in any court other than a

1 district court of the United States, to which the Ad-
2 ministration is a party may at any time before trial
3 be removed by the Administration, without the giv-
4 ing of any bond or security and by following any
5 procedure for removal of causes in effect at the time
6 of the removal—

7 (A) to the district court of the United
8 States for the district and division embracing
9 the place in which the same is pending; or

10 (B) if there is no such district court, to the
11 district court of the United States for the dis-
12 trict in which the principal office of the Admin-
13 istration is located.

14 (f) PERIODIC REPORTS.—Not later than 1 year after
15 commencement of operation of the Administration and at
16 least biannually thereafter, the Administrator shall submit
17 to the Committee on Energy and Natural Resources of
18 the Senate and the Committee on Energy and Commerce
19 of the House of Representatives a report that includes a
20 description of—

21 (1) the technologies supported by activities of
22 the Administration and how the activities advance
23 the purposes of this subtitle; and

24 (2) the performance of the Administration on
25 meeting the goals established under section 104.

1 (g) AUDITS BY THE COMPTROLLER GENERAL.—

2 (1) IN GENERAL.—The programs, activities, re-
3 ceipts, expenditures, and financial transactions of
4 the Administration shall be subject to audit by the
5 Comptroller General of the United States under
6 such rules and regulations as may be prescribed by
7 the Comptroller General.

8 (2) ACCESS.—The representatives of the Gov-
9 ernment Accountability Office shall—

10 (A) have access to the personnel and to all
11 books, accounts, documents, records (including
12 electronic records), reports, files, and all other
13 papers, automated data, things, or property be-
14 longing to, under the control of, or in use by
15 the Administration, or any agent, representa-
16 tive, attorney, advisor, or consultant retained by
17 the Administration, and necessary to facilitate
18 the audit;

19 (B) be afforded full facilities for verifying
20 transactions with the balances or securities held
21 by depositories, fiscal agents, and custodians;

22 (C) be authorized to obtain and duplicate
23 any such books, accounts, documents, records,
24 working papers, automated data and files, or

1 other information relevant to the audit without
2 cost to the Comptroller General; and

3 (D) have the right of access of the Comp-
4 troller General to such information pursuant to
5 section 716(e) of title 31, United States Code.

6 (3) ASSISTANCE AND COST.—

7 (A) IN GENERAL.—For the purpose of con-
8 ducting an audit under this subsection, the
9 Comptroller General may, in the discretion of
10 the Comptroller General, employ by contract,
11 without regard to section 3709 of the Revised
12 Statutes (41 U.S.C. 5), professional services of
13 firms and organizations of certified public ac-
14 countants for temporary periods or for special
15 purposes.

16 (B) REIMBURSEMENT.—

17 (i) IN GENERAL.—On the request of
18 the Comptroller General, the Administra-
19 tion shall reimburse the General Account-
20 ability Office for the full cost of any audit
21 conducted by the Comptroller General
22 under this subsection.

23 (ii) CREDITING.—Such reimburse-
24 ments shall—

1 (I) be credited to the appropria-
2 tion account entitled “Salaries and
3 Expenses, Government Accountability
4 Office” at the time at which the pay-
5 ment is received; and

6 (II) remain available until ex-
7 pended.

8 (h) ANNUAL INDEPENDENT AUDITS.—

9 (1) IN GENERAL.—The Administrator shall—

10 (A) have an annual independent audit
11 made of the financial statements of the Admin-
12 istration by an independent public accountant
13 in accordance with generally accepted auditing
14 standards; and

15 (B) submit to the Secretary the results of
16 the audit.

17 (2) CONTENT.—In conducting an audit under
18 this subsection, the independent public accountant
19 shall determine and report on whether the financial
20 statements of the Administration—

21 (A) are presented fairly in accordance with
22 generally accepted accounting principles; and

23 (B) comply with any disclosure require-
24 ments imposed under this subtitle.

25 (i) FINANCIAL REPORTS.—

1 (1) IN GENERAL.—The Administrator shall
2 submit to the Secretary annual and quarterly re-
3 ports of the financial condition and operations of the
4 Administration, which shall be in such form, contain
5 such information, and be submitted on such dates as
6 the Secretary shall require.

7 (2) CONTENTS OF ANNUAL REPORTS.—Each
8 annual report shall include—

9 (A) financial statements prepared in ac-
10 cordance with generally accepted accounting
11 principles;

12 (B) any supplemental information or alter-
13 native presentation that the Secretary may re-
14 quire; and

15 (C) an assessment (as of the end of the
16 most recent fiscal year of the Administration),
17 signed by the chief executive officer and chief
18 accounting or financial officer of the Adminis-
19 tration, of—

20 (i) the effectiveness of the internal
21 control structure and procedures of the
22 Administration; and

23 (ii) the compliance of the Administra-
24 tion with applicable safety and soundness
25 laws.

1 (3) SPECIAL REPORTS.—The Secretary may re-
2 quire the Administrator to submit other reports on
3 the condition (including financial condition), man-
4 agement, activities, or operations of the Administra-
5 tion, as the Secretary considers appropriate.

6 (4) ACCURACY.—Each report of financial condi-
7 tion shall contain a declaration by the Administrator
8 or any other officer designated by the Board of Di-
9 rectors of the Administration to make the declara-
10 tion, that the report is true and correct to the best
11 of the knowledge and belief of the officer.

12 (5) AVAILABILITY OF REPORTS.—Reports re-
13 quired under this section shall be published and
14 made publicly available as soon as is practicable
15 after receipt by the Secretary.

16 (j) SCOPE AND TERMINATION OF AUTHORITY.—

17 (1) NEW OBLIGATIONS.—The Administrator
18 shall not initiate any new obligations under this sub-
19 title on or after January 1, 2029.

20 (2) REVERSION TO SECRETARY.—The authori-
21 ties and obligations of the Administration shall re-
22 vert to the Secretary on January 1, 2029.

1 **Subtitle B—Improved**
 2 **Transmission Siting**

3 **SEC. 121. SITING OF INTERSTATE ELECTRIC TRANSMISSION**
 4 **FACILITIES.**

5 Section 216 of the Federal Power Act (16 U.S.C.
 6 824p) is amended to read as follows:

7 **“SEC. 216. SITING OF INTERSTATE ELECTRIC TRANS-**
 8 **MISSION FACILITIES.**

9 “(a) **POLICY.**—It is the policy of the United States
 10 that the national interstate transmission system should be
 11 guided by the goal of maximizing the net benefits of the
 12 electricity system, taking into consideration—

13 “(1) support for the development of new renew-
 14 able energy generation capacity, including renewable
 15 energy generation located distant from load centers
 16 and other location-constrained resources;

17 “(2) opportunities for reduced emissions from
 18 regional power production;

19 “(3) cost savings resulting from—

20 “(A) reduced transmission congestion;

21 “(B) enhanced opportunities for
 22 intraregional and interregional electricity
 23 trades;

24 “(C) reduced line losses;

25 “(D) generation resource-sharing; and

1 “(E) enhanced fuel diversity;

2 “(4) reliability benefits, including satisfying re-
3 liability standards and guidelines for resource ade-
4 quacy and system security;

5 “(5) diversification of risk relating to events af-
6 fecting fuel supply or generating resources in a par-
7 ticular region;

8 “(6) the enhancement of competition in elec-
9 tricity markets and mitigation of market power;

10 “(7) the ability to collocate facilities on existing
11 rights-of-way;

12 “(8) competing land use priorities, including
13 land protected under Federal or State law;

14 “(9) the requirements of section 217(b)(4); and

15 “(10) the contribution of demand side manage-
16 ment (including energy efficiency and demand re-
17 sponse), energy storage, distributed generation re-
18 sources, and smart grid investments.

19 “(b) DEFINITIONS.—In this section:

20 “(1) HIGH-PRIORITY NATIONAL TRANSMISSION
21 PROJECT.—The term ‘high-priority national trans-
22 mission project’ means an overhead or underground
23 transmission facility, consisting of conductors or ca-
24 bles, towers, manhole duct systems, phase shifting
25 transformers, reactors, capacitors, and any ancillary

1 facilities and equipment necessary for the proper op-
2 eration of the facility, that—

3 “(A)(i) operates at or above a voltage of—

4 “(I) 345 kilovolts alternating current;

5 or

6 “(II) 300 kilovolts direct current;

7 “(ii) is a very high current conductor or
8 superconducting cable that operates at or above
9 a power equivalent to the power of a conven-
10 tional transmission cable operating at or above
11 345 kilovolts alternating current or 300 kilo-
12 volts direct current; or

13 “(iii) is a renewable feeder line that trans-
14 mits electricity directly to a transmission facil-
15 ity under clause (i) or (ii); and

16 “(B) is included in a regional plan pursu-
17 ant to subsection (c).

18 “(2) INDIAN LAND.—The term ‘Indian land’
19 means land—

20 “(A) the title to which is held by the
21 United States in trust for an Indian tribe or in-
22 dividual Indian; or

23 “(B) that is held by an Indian tribe or in-
24 dividual Indian subject to a restriction by the

1 United States against alienation or encum-
2 brance.

3 “(3) INDIAN TRIBE.—The term ‘Indian tribe’
4 means any Indian tribe, band, nation, or other orga-
5 nized group or community, including any Alaska Na-
6 tive village or regional or village corporation (as de-
7 fined in or established pursuant to the Alaska Na-
8 tive Claims Settlement Act (43 U.S.C. 1601 et
9 seq.)), which is recognized as eligible for the special
10 programs and services provided by the United States
11 to Indians because of their status as Indians.

12 “(4) LOAD-SERVING ENTITY.—Except as other-
13 wise provided in this section, the term ‘load-serving
14 entity’ means any person, Federal, State, or local
15 agency or instrumentality, or electric cooperative
16 that delivers electric energy to end-use customers.

17 “(5) LOCATION-CONSTRAINED RESOURCE.—

18 “(A) IN GENERAL.—The term ‘location-
19 constrained resource’ means a low-carbon re-
20 source used to produce electricity that is geo-
21 graphically constrained such that the resource
22 cannot be relocated to an existing transmission
23 line.

24 “(B) INCLUSIONS.—The term ‘location-
25 constrained resource’ includes the following

1 types of resources described in subparagraph

2 (A):

3 “(i) Renewable energy, including off-
4 shore resources.

5 “(ii) A fossil fuel electricity plant
6 equipped with carbon capture technology
7 that is located at a site that is appropriate
8 for carbon storage or beneficial reuse.

9 “(6) RENEWABLE ENERGY.—The term ‘renew-
10 able energy’ means electric energy generated from—

11 “(A) solar energy;

12 “(B) wind energy;

13 “(C) marine and hydrokinetic renewable
14 energy;

15 “(D) geothermal energy;

16 “(E) hydropower;

17 “(F) biomass; or

18 “(G) landfill gas.

19 “(7) RENEWABLE FEEDER LINE.—The term
20 ‘renewable feeder line’ means a transmission line
21 that—

22 “(A) operates at a voltage of 100 kilovolts
23 or greater; and

24 “(B) is identified in the applicable Inter-
25 connection-wide transmission plan or by the

1 Commission as a facility that is to be developed
2 to facilitate collection of electric energy pro-
3 duced by renewable energy.

4 “(8) SECRETARY.—The term ‘Secretary’ means
5 the Secretary of Energy.

6 “(c) PLANS FOR NATIONAL INTERSTATE TRANS-
7 MISSION SYSTEM.—

8 “(1) IN GENERAL.—The Commission shall co-
9 ordinate regional planning to ensure that regional
10 plans are integrated into an Interconnection-wide
11 transmission plan with respect to high-priority na-
12 tional transmission projects, that achieves the policy
13 established under subsection (a).

14 “(2) PLANNING PRINCIPLES.—

15 “(A) IN GENERAL.—Not later than 180
16 days after the date of enactment of the Amer-
17 ican Clean Energy Leadership Act of 2009, the
18 Commission shall issue, by rule, after notice
19 and opportunity for comment, national elec-
20 tricity grid planning principles pursuant to the
21 policy established under subsection (a).

22 “(B) CONTENT.—The principles shall—

23 “(i) address how the utilities should
24 fully incorporate consideration of the need

1 for high-priority national transmission
2 projects into planning efforts;

3 “(ii) address how the utilities should
4 coordinate with each other, States, Indian
5 tribes, and other planning efforts in the
6 applicable Interconnection to effectively de-
7 velop an Interconnection-wide analysis to
8 identify needed additions or modifications
9 to high-priority national transmission
10 projects, with particular attention to iden-
11 tifying needs that can be most efficiently
12 and effectively addressed with high-priority
13 national transmission projects that cross
14 multiple utilities, Regional Transmission
15 Organizations, or Independent System Op-
16 erators;

17 “(iii)(I) address alternatives to high-
18 priority national transmission projects,
19 based on the factors described in subpara-
20 graph (C)(iii); and

21 “(II) determine whether alternative
22 investments can provide a more expedient
23 means of improving electricity system ca-
24 pacity or reliability or reduced costs for
25 end-users; and

1 “(iv) include mechanisms for soliciting
2 input from the Secretary, Federal trans-
3 mitting utilities, the Secretary of the Inte-
4 rior, States, Indian tribes, electric reli-
5 ability organizations, regional entities, enti-
6 ties described in section 201(f), generators,
7 load-serving entities, other interested par-
8 ties, and the public.

9 “(C) FACTORS.—Plans for the develop-
10 ment and improvement of high-priority national
11 transmission projects into a national high-ca-
12 pacity transmission grid shall take into consid-
13 eration—

14 “(i) the location of load centers;

15 “(ii) the location of generation and
16 potential generation development, including
17 location-constrained resources;

18 “(iii) existing and potential demand
19 side management (including energy effi-
20 ciency and demand response), energy stor-
21 age, distributed generation resources, and
22 smart grid investments;

23 “(iv) the plans of Regional Trans-
24 mission Organizations, Independent Sys-
25 tem Operators, State authorities, Indian

1 tribes, transmission owners, load-serving
2 entities, and others in the region;

3 “(v) the needs and long-term rights
4 described in section 217(b); and

5 “(vi) costs to consumers of high pri-
6 ority national transmission projects, in-
7 cluding considering the cost of reasonable
8 alternatives.

9 “(3) SUBMISSION OF PLANS.—

10 “(A) IN GENERAL.—

11 “(i) IN GENERAL.—One or more pub-
12 lic utilities, transmitting utilities, Regional
13 Transmission Organizations, Independent
14 System Operators, regional entities (as de-
15 fined in section 215(a)), or other
16 multistate organizations or entities (includ-
17 ing entities described in section 201(f))
18 may develop a regional plan relating to 1
19 or more high-priority national transmission
20 projects that is consistent with the plan-
21 ning principles established by the Commis-
22 sion.

23 “(ii) OTHER PLANS.—

24 “(I) IN GENERAL.—Any public
25 utility or transmitting utility that does

1 not participate in 1 of the regional
2 plans developed under clause (i) shall
3 develop its own plan relating to any
4 high priority national transmission
5 project planned for the system of the
6 utility.

7 “(II) PLANNING PRINCIPLES.—
8 The plan shall be consistent with the
9 planning principles established by the
10 Commission.

11 “(iii) TIMING.—Any plan developed
12 under clause (i) or (ii) shall be submitted
13 to the Commission—

14 “(I) as soon as practicable, but
15 not later than 2 years, after the date
16 of enactment of the American Clean
17 Energy Leadership Act of 2009; and

18 “(II) periodically thereafter as
19 prescribed by the Commission.

20 “(B) COORDINATION.—

21 “(i) JOINT SUBMISSIONS.—The re-
22 quirements of subparagraph (A) may be
23 satisfied by a joint submission.

24 “(ii) SINGLE INTERCONNECTION-WIDE
25 PLAN.—The Commission shall encourage

1 coordination that would permit submission
2 of a single Interconnection-wide plan for
3 high priority national transmission
4 projects.

5 “(C) MODIFICATIONS.—The Commission
6 may require modification of a submitted plan to
7 the extent that the Commission determines that
8 the modification is necessary—

9 “(i) to reconcile inconsistencies be-
10 tween plans submitted; or

11 “(ii) to achieve the policy goals estab-
12 lished under subsection (a).

13 “(4) APPLICABILITY.—The transmission plan-
14 ning principles and requirements of this subsection
15 shall apply to each transmission owner and trans-
16 mission planning entity in the United States portion
17 of the Eastern and Western Interconnections, in-
18 cluding an entity described in section 201(f).

19 “(d) SITING.—

20 “(1) PURPOSES.—The purpose of this sub-
21 section is to ensure that high-priority national trans-
22 mission projects are in the public interest and ad-
23 vance the policy established under subsection (a).

24 “(2) DESIGNATION OF ELIGIBILITY.—The Com-
25 mission may grant an applicant that submits an ap-

1 plication for a proposed project a designation of eli-
2 gibility for consideration under this subsection if the
3 Commission finds that the proposed project is a
4 high-priority national transmission project.

5 “(3) STATE REVIEW OF PROJECT SITING.—

6 “(A) IN GENERAL.—No developer of a
7 high-priority national transmission project may
8 seek a certificate for construction under sub-
9 section (e) unless the developer first seeks au-
10 thorization to construct the high-priority na-
11 tional transmission project under applicable
12 State law concerning authorization and routing
13 of transmission facilities.

14 “(B) FEDERAL AUTHORITY.—The Com-
15 mission may authorize, in accordance with sub-
16 section (e), construction of a high-priority na-
17 tional transmission project that the Commission
18 finds to be in the public interest and in accord-
19 ance with this section if a State—

20 “(i) fails to approve construction and
21 authorize routing of a high-priority na-
22 tional transmission project not later than 1
23 year after the date the applicant submits a
24 completed application for authorization to
25 the State;

1 “(ii) rejects the application for a high-
2 priority national transmission project; or

3 “(iii) authorizes the high-priority na-
4 tional transmission project subject to con-
5 ditions that unreasonably interfere with
6 the development of a high-priority national
7 transmission project contrary to the pur-
8 poses of this section.

9 “(e) CONSTRUCTION.—

10 “(1) APPLICATION FOR CERTIFICATE.—

11 “(A) IN GENERAL.—An applicant for a
12 high-priority national transmission project may
13 apply to the Commission for a certificate of
14 public convenience and necessity with respect to
15 construction of the high-priority national trans-
16 mission project within a State affected by the
17 high-priority national transmission project if
18 the State—

19 “(i) fails to authorize construction of
20 the high-priority national transmission
21 project under State law not later than 1
22 year after the date the developer submits a
23 completed application for authorization to
24 the State;

1 “(ii) rejects the application for the
2 high-priority national transmission project;
3 or

4 “(iii) authorizes the high-priority na-
5 tional transmission project subject to con-
6 ditions that unreasonably interfere with
7 the development of a high-priority national
8 transmission project contrary to the pur-
9 poses of this section.

10 “(B) FORM.—The application for a certifi-
11 cate shall be made in writing in such form and
12 containing such information as the Commission
13 may by regulation require.

14 “(C) HEARING.—On receipt of an applica-
15 tion under this paragraph, the Commission—

16 “(i) shall provide notice to interested
17 persons and opportunity for hearing; and

18 “(ii) may approve (with or without
19 conditions) or disapprove the application,
20 in accordance with paragraph (2).

21 “(2) GRANT OF CERTIFICATE.—

22 “(A) IN GENERAL.—A certificate shall be
23 issued to a qualified applicant for a certificate
24 authorizing the whole or partial operation, con-
25 struction, acquisition, or modification covered

1 by the application, only if the Commission de-
2 termines that—

3 “(i) the applicant is able and will-
4 ing—

5 “(I) to do the acts and to per-
6 form the service proposed; and

7 “(II) to comply with this Act (in-
8 cluding regulations); and

9 “(ii) the proposed operation, construc-
10 tion, acquisition, or modification, to the ex-
11 tent authorized by the certificate, is or will
12 be required by the present or future public
13 convenience and necessity.

14 “(B) TERMS AND CONDITIONS.—The Com-
15 mission shall have the power to attach to the
16 issuance of a certificate under this paragraph
17 and to the exercise of the rights granted under
18 the certificate such reasonable terms and condi-
19 tions as the public convenience and necessity
20 may require.

21 “(C) USE OF STATE WORK.—If 1 or more
22 States reject or fail to act on a high-priority na-
23 tional transmission project and the Commission
24 has siting authority for the high-priority na-

1 tional transmission project under this section,
2 the Commission shall give due weight to—

3 “(i) the environmental record and re-
4 sults of the siting process of a State that
5 did complete the siting process of the State
6 under this section; and

7 “(ii) the information that had been
8 submitted by an applicant to the State
9 under this section.

10 “(D) EVALUATION OF ABILITIES OF APPLI-
11 CANT.—

12 “(i) IN GENERAL.—In evaluating the
13 ability of an applicant described in sub-
14 paragraph (A)(i), the Commission shall
15 consider whether the financial and tech-
16 nical capabilities of the applicant are ade-
17 quate to support construction and oper-
18 ation of the high-priority national trans-
19 mission project proposed in the application.

20 “(ii) JOINT OWNERSHIP PROJECTS.—
21 In evaluating applications under paragraph
22 (1), the Commission shall consider benefits
23 from the greater diversification of financial
24 risk inherent in the applications involving

1 joint ownership projects by multiple load-
2 serving entities.

3 “(E) PUBLIC CONVENIENCE AND NECES-
4 SITY.—In making a determination with respect
5 to public convenience and necessity described in
6 subparagraph (A)(ii), the Commission shall—

7 “(i) consider whether the facilities
8 covered by an application are included in
9 an Interconnection-wide transmission grid
10 plan for a high-priority national trans-
11 mission project developed pursuant to sub-
12 section (c); and

13 “(ii) determine whether the facilities
14 covered by the application are in the public
15 interest.

16 “(3) RIGHT OF EMINENT DOMAIN.—If any
17 holder of a certificate issued under paragraph (2)
18 cannot acquire by contract, or is unable to agree
19 with the owner of property on the compensation to
20 be paid for, the necessary right-of-way to construct,
21 operate, and maintain the high-priority national
22 transmission project to which the certificate relates,
23 and the necessary land or other property necessary
24 to the proper operation of the high-priority national
25 transmission project, the holder may acquire the

1 right-of-way by the exercise of the right of eminent
2 domain in—

3 “(A) the United States district court for
4 the district in which the property is located; or

5 “(B) a State court.

6 “(4) STATE AND TRIBAL RECOMMENDA-
7 TIONS.—In granting a certificate under paragraph
8 (2), the Commission shall—

9 “(A) permit State regulatory agencies and
10 affected Indian tribes to recommend mitigation
11 measures, based on habitat protection, environ-
12 mental considerations, or cultural site protec-
13 tion; and

14 “(B)(i) incorporate those identified mitiga-
15 tion measures as conditions on the certificate;
16 or

17 “(ii) if the Commission determines that a
18 recommended mitigation measure is incon-
19 sistent with the purposes of this section, infea-
20 sible, or not cost-effective—

21 “(I) consult with State regulatory
22 agencies and affected Indian tribes to seek
23 to resolve the issue;

24 “(II) incorporate as conditions on the
25 certificate such recommended mitigation

1 measures as are determined to be appro-
2 priate by the Commission, based on con-
3 sultation by the Commission with State
4 regulatory agencies and affected Indian
5 tribes, the purposes of this section, and the
6 record before the Commission; and

7 “(III) if, after consultation, the Com-
8 mission does not adopt in whole or in part
9 a recommendation of an agency or affected
10 Indian tribe, publish a statement of a find-
11 ing that the adoption of the recommenda-
12 tion is infeasible, not cost-effective, or in-
13 consistent with this section or other appli-
14 cable provisions of law.

15 “(5) STATE OR LOCAL AUTHORIZATIONS.—An
16 applicant receiving a certificate under this sub-
17 section with respect to construction or modification
18 of a high-priority national transmission project in a
19 State shall not require a separate siting authoriza-
20 tion from the State or any local authority within the
21 State.

22 “(6) RIGHTS-OF-WAY OVER INDIAN LAND.—
23 Notwithstanding paragraph (3), in the case of siting,
24 construction, operation, and maintenance of a trans-
25 mission facility to be located on or over Indian land,

1 a certificate holder under this section shall comply
2 with the requirements of Federal law for obtaining
3 rights-of-way on or over Indian land.

4 “(f) COORDINATION OF FEDERAL AUTHORIZATIONS
5 FOR TRANSMISSION FACILITIES.—

6 “(1) DEFINITION OF FEDERAL AUTHORIZA-
7 TION.—In this subsection, the term ‘Federal author-
8 ization’ means any authorization required under
9 Federal law in order to site a transmission facility
10 on Federal land, including such permits, special use
11 authorizations, certifications, opinions, or other ap-
12 provals as may be required under Federal law in
13 order to site a transmission facility.

14 “(2) LEAD AGENCY.—If a Federal authoriza-
15 tion for a high-priority national transmission project
16 involves land under the jurisdiction of the Depart-
17 ment of the Interior and any other Federal agency,
18 the Secretary of the Interior shall act as the lead
19 agency for purposes of coordinating all applicable
20 Federal authorizations and related environmental re-
21 views.

22 “(3) COORDINATION.—To the maximum extent
23 practicable under applicable Federal law, the Sec-
24 retary of the Interior shall coordinate the Federal
25 authorization and review process under this sub-

1 section with the Commission, and with any Indian
2 tribes, multistate entities, and State agencies that
3 are responsible for conducting any separate permit-
4 ting and environmental reviews of the facility, to en-
5 sure timely and efficient review and permit deci-
6 sions.

7 “(4) MILESTONES AND DEADLINES.—

8 “(A) IN GENERAL.—As the lead agency,
9 the Secretary of the Interior, in consultation
10 with the Commission and any other agency re-
11 sponsible for Federal authorizations and, as ap-
12 propriate, with Indian tribes, multistate enti-
13 ties, and State agencies that are willing to co-
14 ordinate their own separate permitting and en-
15 vironmental reviews with the Federal authoriza-
16 tion and environmental reviews, shall establish
17 prompt and binding intermediate milestones
18 and ultimate deadlines for the review of, and
19 Federal authorization decisions relating to, the
20 proposed high-priority national transmission
21 project.

22 “(B) DEADLINE.—The Secretary of the
23 Interior shall ensure that, once an application
24 has been submitted with such data as the Com-
25 mission and the Secretaries with jurisdiction

1 over the affected land consider necessary, all
2 permit decisions and related environmental re-
3 views under all applicable Federal laws shall be
4 completed not later than 1 year after the date
5 of submission.

6 “(C) PREAPPLICATION INFORMATION.—
7 The Secretary of the Interior, in consultation
8 with the Commission, shall provide an expedi-
9 tious preapplication mechanism for prospective
10 applicants to confer with the agencies involved
11 to have each such agency determine and com-
12 municate to the prospective applicant not later
13 than 60 days after the prospective applicant
14 submits a request for such information con-
15 cerning—

16 “(i) the likelihood of approval for a
17 potential facility; and

18 “(ii) key issues of concern to the
19 agencies and public.

20 “(5) ENVIRONMENTAL REVIEW DOCUMENT.—

21 “(A) IN GENERAL.—As lead agency, the
22 Secretary of the Interior, in consultation with
23 the Commission and any affected agency, shall
24 prepare a single environmental review docu-
25 ment, which shall be used as the basis for all

1 decisions on the proposed high-priority national
2 transmission project under Federal law.

3 “(B) STREAMLINING.—The Secretary of
4 the Interior and the Secretary of Agriculture, in
5 consultation with the Commission, shall stream-
6 line the review and permitting of transmission
7 within corridors designated under section 503
8 of the Federal Land Policy and Management
9 Act of 1976 (43 U.S.C. 1763) or section 368
10 of the Energy Policy Act of 2005 (42 U.S.C.
11 15926) by fully taking into account prior anal-
12 yses and decisions relating to the corridors.

13 “(C) COMMENTS.—If the high-priority na-
14 tional transmission project includes Federal
15 land that is not under the jurisdiction of the
16 Department of the Interior, the document shall
17 include comments made by the Secretary with
18 jurisdiction over the affected land on matters
19 necessary for the protection of the land or re-
20 quired under applicable law.

21 “(6) ISSUANCE OR DENIAL OF AUTHORIZATION
22 BY PRESIDENT.—

23 “(A) IN GENERAL.—Subject to paragraph
24 (7), if any agency has denied a Federal author-
25 ization required for a transmission facility with-

1 in an energy right-of-way corridor on Federal
2 land designated pursuant to section 368 of the
3 Energy Policy Act of 2005 (42 U.S.C. 15926),
4 or has failed to act by the deadline established
5 by the Secretary of the Interior pursuant to
6 this section for deciding whether to issue the
7 authorization, the applicant or any State in
8 which the facility would be located may file an
9 appeal with the President, who shall, in con-
10 sultation with the affected agency, review the
11 denial or failure to take action on the pending
12 application.

13 “(B) OPTIONS.—Based on the overall
14 record and in consultation with the affected
15 agency, the President may—

16 “(i) issue the necessary authorization
17 with any appropriate conditions; or

18 “(ii) deny the application.

19 “(C) DEADLINE.—The President shall
20 issue a decision not later than 90 days after the
21 date of the filing of the appeal.

22 “(D) FEDERAL REQUIREMENTS.—In mak-
23 ing a decision under this paragraph, the Presi-
24 dent shall comply with applicable requirements
25 of Federal law, including any requirements of—

1 “(i) the National Forest Management
2 Act of 1976 (16 U.S.C. 1600 et seq.);

3 “(ii) the Endangered Species Act of
4 1973 (16 U.S.C. 1531 et seq.);

5 “(iii) the Federal Water Pollution
6 Control Act (33 U.S.C. 1251 et seq.);

7 “(iv) the National Environmental Pol-
8 icy Act of 1969 (42 U.S.C. 4321 et seq.);
9 and

10 “(v) the Federal Land Policy and
11 Management Act of 1976 (43 U.S.C. 1701
12 et seq.).

13 “(7) ISSUANCE OR DENIAL OF AUTHORIZATION
14 BY PRESIDENT.—Paragraph (6) shall not apply to—

15 “(A) a unit of the National Park System;

16 “(B) a unit of the National Wildlife Ref-
17 uge System;

18 “(C) a component of the National Wild
19 and Scenic Rivers System;

20 “(D) a component of the National Trails
21 System;

22 “(E) a component of the National Wilder-
23 ness Preservation System;

24 “(F) a National Monument;

1 “(G) any part of the National Landscape
2 Conservation System;

3 “(H) a National Preserve;

4 “(I) a National Scenic Area; or

5 “(J) a National Recreation Area.

6 “(8) ENERGY RIGHT-OF-WAY CORRIDORS ON
7 FEDERAL LAND.—

8 “(A) IN GENERAL.—In carrying out this
9 subsection, the Secretary with jurisdiction over
10 the land shall, to the maximum extent prac-
11 ticable, use the energy right-of-way corridors
12 designated in accordance with section 368 of
13 the Energy Policy Act of 2005 (42 U.S.C.
14 15926).

15 “(B) ADDITIONAL CORRIDORS.—If the
16 Secretary is unable to use an energy right-of-
17 way corridor described in subparagraph (A), the
18 Secretary shall establish an additional corridor
19 in accordance with section 368(c) of the Energy
20 Policy Act of 2005 (42 U.S.C. 15926(c)).

21 “(9) DURATION.—

22 “(A) IN GENERAL.—Each Federal land
23 use authorization for an electricity transmission
24 facility shall be issued—

1 “(i) for a duration, as determined by
2 the Secretary with jurisdiction over the
3 land, commensurate with the anticipated
4 use of the facility;

5 “(ii) with appropriate authority to
6 manage the right-of-way for reliability and
7 environmental protection; and

8 “(iii) consistent with the Federal
9 Land Policy and Management Act of 1976
10 (43 U.S.C. 1701 et seq.) and other appli-
11 cable law.

12 “(B) RENEWAL.—On the expiration of the
13 authorization (including an authorization issued
14 before the date of enactment of the American
15 Clean Energy Leadership Act of 2009), the au-
16 thorization shall be reviewed for renewal—

17 “(i) taking fully into account reliance
18 on the electricity infrastructure; and

19 “(ii) recognizing the importance of the
20 authorization for public health, safety, and
21 economic welfare and as a legitimate use of
22 Federal land.

23 “(10) CONSULTATION.—In exercising the re-
24 sponsibilities under this section, the Secretary of the

1 Interior and the Commission shall consult regularly
2 with—

3 “(A) electric reliability organizations (in-
4 cluding related regional entities) approved by
5 the Commission;

6 “(B) Transmission Organizations approved
7 by the Commission; and

8 “(C) transmission owners and users and
9 other interested parties.

10 “(11) IMPLEMENTATION.—

11 “(A) REGULATIONS.—Not later than 18
12 months after the date of enactment of the
13 American Clean Energy Leadership Act of
14 2009, the Secretary of the Interior and the
15 Commission shall issue any regulations nec-
16 essary to carry out this subsection.

17 “(B) FEDERAL STAFF AND RESOURCES.—
18 The head of each Federal agency with authority
19 to issue a Federal authorization shall designate
20 a senior official responsible for, and dedicate
21 sufficient other staff and resources to ensure,
22 full implementation of the regulations and
23 memorandum required under this paragraph.

24 “(g) EVALUATION AND RECOMMENDATIONS.—The
25 Commission shall—

1 “(1) periodically evaluate whether high-priority
2 national transmission projects are being constructed
3 in accordance with the Interconnection-wide trans-
4 mission grid plan for high-priority national trans-
5 mission projects for both the Western and Eastern
6 Interconnection areas;

7 “(2) take any necessary actions, pursuant to
8 applicable law, to address any identified obstacles to
9 investment, siting, and construction of high-priority
10 national transmission projects identified as needed
11 under an Interconnection-wide plan; and

12 “(3) not later than 2 years after the date of en-
13 actment of the American Clean Energy Leadership
14 Act of 2009, submit to Congress recommendations
15 for any further actions or authority needed to ensure
16 the effective and timely development of—

17 “(A) high-priority national transmission
18 projects; and

19 “(B) transmission projects to access re-
20 gional and offshore renewable energy genera-
21 tion.

22 “(h) REPORT OF SECRETARY.—Not later than 2
23 years after the date of enactment of the American Clean
24 Energy Leadership Act of 2009, the Secretary shall sub-
25 mit to Congress recommendations for any further actions

1 or authority needed to ensure the effective and timely de-
2 velopment of—

3 “(1) demand response;

4 “(2) energy storage;

5 “(3) distributed generation;

6 “(4) energy efficiency; and

7 “(5) other areas necessary to carry out the pol-
8 icy established under subsection (a).

9 “(i) COST ALLOCATION.—

10 “(1) IN GENERAL.—Not later than 270 days
11 after the date of enactment of the American Clean
12 Energy Leadership Act of 2009, the Commission—

13 “(A) shall establish by rule an appropriate
14 methodology for allocation of the costs of high-
15 priority national transmission projects, subject
16 to the requirement that any cost allocation
17 methodology, and any rates affected by the cost
18 allocation methodology, shall be just, reason-
19 able, and not unduly discriminatory or pref-
20 erential;

21 “(B) may permit allocation of costs for
22 high-priority national transmission projects to
23 load-serving entities within all or a part of a re-
24 gion, except that costs shall not be allocated to
25 a region, or subregion, unless the costs are rea-

1 sonably proportionate to measurable economic
2 and reliability benefits;

3 “(C) may permit allocation of costs to gen-
4 erators of electricity connected by a high-pri-
5 ority national transmission project; and

6 “(D) shall provide for due deference to
7 cost allocation proposals supported by broad
8 agreement among affected States.

9 “(2) MECHANISM FOR COLLECTION OF
10 COSTS.—The Commission shall adopt such rules and
11 require inclusion of such provisions in transmission
12 tariffs as are required to provide for—

13 “(A) the efficient collection of allocated
14 costs for development and operation of high-pri-
15 ority national transmission projects; and

16 “(B) the distribution of those revenues to
17 owners of the high-priority national trans-
18 mission projects.

19 “(j) RELATIONSHIP TO OTHER LAWS.—

20 “(1) IN GENERAL.—Except as specifically pro-
21 vided in this section, nothing in this section affects
22 any requirement of an environmental or historic
23 preservation law of the United States, including—

24 “(A) the National Environmental Policy
25 Act of 1969 (42 U.S.C. 4321 et seq.);

1 “(B) the Wilderness Act (16 U.S.C. 1131
2 et seq.); or

3 “(C) the National Historic Preservation
4 Act (16 U.S.C. 470 et seq.).

5 “(2) STATE LAW.—Nothing in this section pre-
6 cludes any person from constructing or modifying
7 any transmission facility in accordance with State
8 law.

9 “(k) TRANSMISSION RIGHTS TO SUPPORT NEW GEN-
10 ERATION DEVELOPMENT.—Subject to section 217(b)(4),
11 it is the policy of the United States that long-term trans-
12 mission rights of firmness and duration sufficient to sup-
13 port generation investment (or equivalent tradable or fi-
14 nancial long-term transmission rights), shall be available
15 under appropriate terms and conditions to load-serving en-
16 tities (as defined in section 217(a)(2)) for long-term power
17 supply arrangements for new generation facilities using
18 renewable energy.

19 “(l) RESOURCE ASSESSMENTS.—

20 “(1) IN GENERAL.—The Secretary shall con-
21 duct nationwide assessments to identify areas with a
22 significant potential for the development of location-
23 constrained resources.

24 “(2) FORMATS.—The resource assessments
25 shall be made available to the public in multiple for-

1 mats, including in a Geographical Information Sys-
2 tem compatible format.

3 “(3) TIMING.—The Secretary shall—

4 “(A) make the initial resource assessment
5 required under this subsection not later than
6 180 days after the date of enactment of the
7 American Clean Energy Leadership Act of
8 2009; and

9 “(B) refine the resource assessment on a
10 regular basis that is consistent with regional
11 planning cycles.

12 “(4) TECHNICAL ASSISTANCE.—The Secretary
13 shall provide technical assistance to regional plan-
14 ning authorities, on request, to assist the authorities
15 in carrying out this subsection.

16 “(m) CONGESTION STUDIES.—Not later than 1 year
17 after the date of enactment of the American Clean Energy
18 Leadership Act of 2009 and every 3 years thereafter, the
19 Secretary, in consultation with affected States and Indian
20 tribes, shall—

21 “(1) conduct a study of electric transmission
22 congestion; and

23 “(2) submit to the appropriate committees of
24 Congress a report that describes the results of the
25 study.

1 “(n) APPLICABILITY.—

2 “(1) IN GENERAL.—Except as otherwise pro-
3 vided in this subsection, the authority of the Com-
4 mission under this section to approve transmission
5 plans and to allocate costs incurred pursuant to the
6 plans applies to all transmission providers, genera-
7 tors, and users, owners, and operators of the power
8 system within the Eastern and Western Interconnec-
9 tions of the United States, including entities de-
10 scribed in section 201(f).

11 “(2) REGIONAL PLANNING ENTITIES.—The
12 Commission shall have authority over regional plan-
13 ning entities to the extent necessary to carry out
14 this section.

15 “(3) PROJECT DEVELOPERS.—Nothing in this
16 section precludes the development, subject to appli-
17 cable regulatory requirements, of transmission
18 projects that are not included in plans developed
19 under this section.

20 “(4) COMMISSION-APPROVED PLANNING PROC-
21 ESSES.—Nothing in this section affects the approval,
22 siting, or cost allocation for a project that is author-
23 ized pursuant to planning processes that have been
24 approved by the Commission.

1 “(5) EXCLUSIONS.—This section does not apply
2 in the State of Alaska or Hawaii or to the Electric
3 Reliability Council of Texas, unless the State or the
4 Council voluntarily elects to participate in a cost al-
5 location plan under this section.”.

6 **Subtitle C—Federal Renewable** 7 **Electricity Standard**

8 **SEC. 131. SENSE OF CONGRESS ON RENEWABLE ENERGY** 9 **AND ENERGY EFFICIENCY.**

10 It is the sense of Congress that the Federal Govern-
11 ment should continue to support the use and expansion
12 of renewable energy and energy efficiency in—

- 13 (1) the production and use of energy;
14 (2) the reduction of greenhouse gas emissions;
15 and
16 (3) the reduction of dependence on foreign oil.

17 **SEC. 132. FEDERAL RENEWABLE ELECTRICITY STANDARD.**

18 (a) IN GENERAL.—Title VI of the Public Utility Reg-
19 ulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.) is
20 amended by adding at the end the following:

21 **“SEC. 610. FEDERAL RENEWABLE ELECTRICITY STANDARD.**

22 “(a) DEFINITIONS.—In this section:

- 23 “(1) AFFILIATE.—The term ‘affiliate’ when
24 used with respect to a person, means another person
25 that directly or indirectly owns or controls, is owned

1 or controlled by, or is under common ownership or
2 control with, such person, as determined under regu-
3 lations issued by the Secretary.

4 “(2) BASE QUANTITY OF ELECTRICITY.—

5 “(A) IN GENERAL.—The term ‘base quan-
6 tity of electricity’ means the total quantity of
7 electricity sold by an electric utility to electric
8 consumers in a calendar year.

9 “(B) EXCLUSIONS.—The term ‘base quan-
10 tity of electricity’ does not include—

11 “(i) electricity generated by a hydro-
12 electric facility (including a pumped stor-
13 age facility but excluding qualified hydro-
14 power) owned by an electric utility or sold
15 under contract or rate order to an electric
16 utility to meet the needs of the retail cus-
17 tomers of the utility;

18 “(ii) electricity generated through the
19 incineration of municipal solid waste owned
20 by an electric utility or sold under contract
21 or rate order to an electric utility to meet
22 the needs of the retail customers of the
23 utility;

24 “(iii) the quantity of electricity gen-
25 erated by a fossil-fuel facility that is equal

1 to the proportion of greenhouse gases pro-
2 duced by such a unit that are captured
3 and geologically sequestered; or

4 “(iv)(I) electricity generated by a nu-
5 clear generating unit placed in service after
6 the date of enactment of this section; or

7 “(II) additional energy generated by
8 an existing nuclear facility as a result of
9 efficiency improvements or capacity addi-
10 tions made on or after the date of enact-
11 ment of this section.

12 “(3) BIOMASS.—The term ‘biomass’ has the
13 meaning given the term in section 203(b) of the En-
14 ergy Policy Act of 2005 (42 U.S.C. 15852(b)).

15 “(4) DISTRIBUTED GENERATION FACILITY.—
16 The term ‘distributed generation facility’ means a
17 facility at or near a customer site that provides elec-
18 tric energy to 1 or more customers for purposes
19 other than resale other than to a utility through a
20 net metering arrangement.

21 “(5) GEOTHERMAL ENERGY.—The term ‘geo-
22 thermal energy’ means energy derived from a geo-
23 thermal deposit (within the meaning of section
24 613(e)(2) of the Internal Revenue Code of 1986).

25 “(6) INCREMENTAL COST OF COMPLIANCE.—

1 “(A) IN GENERAL.—The term ‘incre-
2 mental cost of compliance’ means—

3 “(i) the costs attributable to all retail
4 sales of electricity incurred in a year by an
5 electric utility to—

6 “(I) generate renewable energy
7 eligible for Federal renewable energy
8 credits;

9 “(II) acquire Federal renewable
10 energy credits; or

11 “(III) make alternative compli-
12 ance payments in order to comply
13 with the requirements of subsection
14 (b); less

15 “(ii)(I) the costs the electric utility
16 would have incurred to serve all of the re-
17 tail customers of that electric utility in
18 that year to generate or acquire additional
19 electricity not eligible for renewable energy
20 credits if the requirements of subsection
21 (b) did not apply to the electric utility; and

22 “(II) the costs of compliance with any
23 comparable State renewable requirement.

24 “(B) COST OF ELECTRICITY.—In calcu-
25 lating the incremental cost of compliance of an

1 electric utility under this section, the Secretary
2 shall take into account the reduction, if any, on
3 the cost of electricity generated with fossil fuels
4 associated with increased reliance on renewable
5 electric energy generation.

6 “(7) INCREMENTAL GEOTHERMAL PRODUC-
7 TION.—

8 “(A) IN GENERAL.—The term ‘incremental
9 geothermal production’ means, for any year, the
10 excess of—

11 “(i) the total kilowatt hours of elec-
12 tricity produced from a facility (including a
13 distributed generation facility) using geo-
14 thermal energy; over

15 “(ii) the average number of kilowatt
16 hours produced annually at the facility for
17 5 of the previous 7 calendar years before
18 the date of enactment of this section after
19 eliminating the highest and the lowest kilo-
20 watt hour production years in that 7-year
21 period.

22 “(B) SPECIAL RULE.—A facility described
23 in subparagraph (A) that was placed in service
24 at least 7 years before the date of enactment of
25 this section shall, commencing with the year in

1 which that date of enactment occurs, reduce the
2 amount calculated under subparagraph (A)(ii)
3 each year, on a cumulative basis, by the average
4 percentage decrease in the annual kilowatt hour
5 production for the 7-year period described in
6 subparagraph (A)(ii) with such cumulative sum,
7 but not to exceed 30 percent.

8 “(8) INCREMENTAL HYDROPOWER.—

9 “(A) IN GENERAL.—The term ‘incremental
10 hydropower’ means additional energy generated
11 as a result of efficiency improvements or capac-
12 ity additions made on or after January 1, 1992.

13 “(B) EXCLUSION.—The term ‘incremental
14 hydropower’ does not include additional energy
15 generated as a result of operational changes not
16 directly associated with efficiency improvements
17 or capacity additions.

18 “(C) MEASUREMENT AND CERTIFI-
19 CATION.—Efficiency improvements and capacity
20 additions referred to in subparagraph (A) shall
21 be—

22 “(i) measured on the basis of the
23 same water flow information used to deter-
24 mine a historic average annual generation
25 baseline for the hydroelectric facility; and

1 “(ii) certified by the Secretary or the
2 Federal Energy Regulatory Commission.

3 “(9) INDIAN LAND.—The term ‘Indian land’
4 has the meaning given the term in section 2601 of
5 the Energy Policy Act of 1992 (25 U.S.C. 3501).

6 “(10) QUALIFIED HYDROPOWER.—

7 “(A) IN GENERAL.—The term ‘qualified
8 hydropower’ means—

9 “(i) incremental hydropower;

10 “(ii) additions of capacity made on or
11 after January 1, 2001, or the effective
12 commencement date of an existing applica-
13 ble State renewable electricity standard
14 program at an existing nonhydroelectric
15 dam, if—

16 “(I) the hydroelectric project in-
17 stalled on the nonhydroelectric dam—

18 “(aa) is licensed by the Fed-
19 eral Energy Regulatory Commis-
20 sion, or is exempt from licensing,
21 and is in compliance with the
22 terms and conditions of the li-
23 cense or exemption; and

24 “(bb) meets all other appli-
25 cable environmental, licensing,

1 and regulatory requirements, in-
2 cluding applicable fish passage
3 requirements;
4 “(II) the nonhydroelectric dam—
5 “(aa) was placed in service
6 before the date of enactment of
7 this section;
8 “(bb) was operated for flood
9 control, navigation, or water sup-
10 ply purposes; and
11 “(cc) did not produce hydro-
12 electric power as of the date of
13 enactment of this section; and
14 “(III) the hydroelectric project is
15 operated so that the water surface ele-
16 vation at any given location and time
17 that would have occurred in the ab-
18 sence of the hydroelectric project is
19 maintained, subject to any license re-
20 quirements imposed under applicable
21 law that change the water surface ele-
22 vation for the purpose of improving
23 the environmental quality of the af-
24 fected waterway, as certified by the

1 Federal Energy Regulatory Commis-
2 sion; and

3 “(iii) in the case of the State of Alas-
4 ka—

5 “(I) energy generated by a small
6 hydroelectric facility that produces
7 less than 50 megawatts;

8 “(II) energy from pumped stor-
9 age; and

10 “(III) energy from a lake tap.

11 “(B) STANDARDS.—Nothing in this para-
12 graph or the application of this paragraph shall
13 affect the standards under which the Federal
14 Energy Regulatory Commission issues licenses
15 for and regulates hydropower projects under
16 part I of the Federal Power Act (16 U.S.C.
17 791a et seq.).

18 “(11) QUALIFIED WASTE-TO-ENERGY.—The
19 term ‘qualified waste-to-energy’ means energy from
20 the combustion of post-recycled municipal solid
21 waste, or from the gasification or pyrolyzation of
22 such waste and the combustion of the resulting gas
23 at the same facility, if the owner or operator of the
24 facility generating electricity from the energy pro-
25 vides to the Commission, on an annual basis—

1 “(A) a certification that the facility is in
2 compliance with all applicable Federal and
3 State environmental permits;

4 “(B) in the case of a facility that com-
5 mences operation before the date of enactment
6 of this section, a certification that the facility
7 meets emissions standards promulgated under
8 section 112 or 129 of the Clean Air Act (42
9 U.S.C. 7412, 7429) that apply as of the date
10 of enactment of this section to new facilities
11 within the relevant source category; and

12 “(C) in the case of the combustion,
13 pyrolyzation, or gasification of municipal solid
14 waste, a certification that each local govern-
15 ment unit from which such waste originates op-
16 erates, participates in the operation of, con-
17 tracts for, or otherwise provides for, recycling
18 services for residents of the local government
19 unit.

20 “(12) RENEWABLE ENERGY.—The term ‘renew-
21 able energy’ means electric energy generated at a fa-
22 cility (including a distributed generation facility)
23 from—

24 “(A) solar, wind, or geothermal energy or
25 ocean energy;

1 “(B) biomass;

2 “(C) landfill gas;

3 “(D) qualified hydropower;

4 “(E) marine and hydrokinetic renewable
5 energy (as defined in section 632 of the Energy
6 Independence and Security Act of 2007 (42
7 U.S.C. 17211));

8 “(F) incremental geothermal production;

9 “(G) coal-mined methane;

10 “(H) qualified waste-to-energy; or

11 “(I) another renewable energy source
12 based on innovative technology, as determined
13 by the Secretary through rulemaking.

14 “(b) RENEWABLE ENERGY AND ENERGY EFFI-
15 CIENCY REQUIREMENT.—

16 “(1) REQUIREMENT.—

17 “(A) IN GENERAL.—Subject to subpara-
18 graph (B), each electric utility that sells elec-
19 tricity to electric consumers for a purpose other
20 than resale shall obtain a percentage of the
21 base quantity of electricity the electric utility
22 sells to electric consumers in any calendar year
23 from renewable energy or energy efficiency.

24 “(B) PERCENTAGE.—Except as provided
25 in section 611, the percentage obtained in a cal-

1 endar year under subparagraph (A) shall not be
2 less than the amount specified in the following
3 table:

“Calendar year:	Minimum annual percentage:
2011 through 2013	3.0
2014 through 2016	6.0
2017 through 2018	9.0
2019 through 2020	12.0
2021 through 2039	15.0

4 “(2) MEANS OF COMPLIANCE.—An electric util-
5 ity shall meet the requirements of paragraph (1)
6 by—

7 “(A) submitting to the Secretary renewable
8 energy credits issued under subsection (c);

9 “(B) submitting Federal energy efficiency
10 credits issued under subsection (i), except that
11 those credits may not be used to meet more
12 than 26.67 percent of the requirements under
13 paragraph (1) in any calendar year;

14 “(C) making alternative compliance pay-
15 ments to the Secretary at the rate of 2.1 cents
16 per kilowatt hour (as adjusted for inflation
17 under subsection (g)) if the electric utility does
18 not elect to petition the Secretary to waive the
19 requirements under subsection (d)(3)(C); or

20 “(D) a combination of activities described
21 in subparagraphs (A), (B), and (C).

1 “(3) PHASE-IN.—The Secretary shall prescribe,
2 by regulation, a reasonable phase-in of the require-
3 ments of paragraph (1) as the requirements apply to
4 an electric utility that becomes subject to this sec-
5 tion on or after January 1, 2013.

6 “(c) FEDERAL RENEWABLE ENERGY AND ENERGY
7 EFFICIENCY CREDIT TRADING PROGRAMS.—

8 “(1) IN GENERAL.—Not later than January 1,
9 2011, the Secretary shall establish a Federal renew-
10 able energy credit trading program, and a Federal
11 energy efficiency credit trading program, under
12 which electric utilities shall submit to the Secretary
13 Federal renewable energy credits and Federal energy
14 efficiency credits to certify the compliance of the
15 electric utilities with subsection (b)(1).

16 “(2) ADMINISTRATION.—As part of the pro-
17 gram, the Secretary shall—

18 “(A) issue renewable energy credits to gen-
19 erators of electric energy from renewable en-
20 ergy, regardless of whether the energy is trans-
21 mitted over the national interstate transmission
22 system;

23 “(B) to the extent that renewable sources
24 of electricity are used in combination with other
25 sources of energy, issue credits only to the ex-

1 tent that the electricity generated is from re-
2 newable resources;

3 “(C) issue renewable energy credits to elec-
4 tric utilities associated with State renewable
5 electricity standard compliance mechanisms
6 pursuant to subsection (h);

7 “(D) issue energy efficiency credits pursu-
8 ant to subsection (i);

9 “(E) subject to subparagraph (F), ensure
10 that a kilowatt hour, including the associated
11 renewable energy credit or energy efficiency
12 credit, shall be used only once for purposes of
13 compliance with this Act;

14 “(F) allow double credits for generation
15 from facilities on Indian land, and triple credits
16 for generation from small renewable distributed
17 generators (meaning those no larger than 1
18 megawatt), except that no distributed renewable
19 generation facilities on Indian land shall receive
20 a greater number of credits than triple credits;

21 “(G) allow triple credits for generation of
22 energy from algae;

23 “(H) ensure that, with respect to a pur-
24 chaser that, as of the date of enactment of this
25 section, has a purchase agreement from a re-

1 newable energy facility placed in service before
2 that date, the credit associated with the genera-
3 tion of renewable energy under the contract is
4 issued to the purchaser of the electric energy to
5 the extent that the contract does not already
6 provide for the allocation of the Federal credit;
7 and

8 “(I) issue tradeable renewable energy cred-
9 its for the useful electric and thermal output
10 from a facility that produces the output from
11 biomass, using a system under which—

12 “(i) in the case of efficiency that is
13 less than 50 percent, 1 renewable energy
14 credit is awarded;

15 “(ii) in the case of efficiency that is
16 50 percent or more but less than 70 per-
17 cent, 1.1 renewable energy credits are
18 awarded for the same unit output;

19 “(iii) in the case of efficiency that is
20 70 percent or more but less than 90 per-
21 cent, 1.25 renewable energy credits are
22 awarded for the same unit output; and

23 “(iv) in the case of efficiency that is
24 90 percent or more, 1.5 renewable energy

1 credits are awarded for the same unit out-
2 put.

3 “(3) DURATION.—A credit described in sub-
4 paragraph (A), (B), (C), or (D) of paragraph (2)
5 may only be used for compliance with this section
6 during the 3-year period beginning on the date of
7 issuance of the credit.

8 “(4) TRANSFERS.—An electric utility that holds
9 credits in excess of the quantity of credits needed to
10 comply with subsection (b) may transfer the credits
11 to another electric utility in the same utility holding
12 company system.

13 “(5) DELEGATION OF MARKET FUNCTION.—

14 “(A) IN GENERAL.—The Secretary may
15 delegate to—

16 “(i) an appropriate market-making
17 entity the administration of a national re-
18 newable energy credit market and a na-
19 tional energy efficiency credit market for
20 purposes of creating a transparent national
21 market for the sale or trade of renewable
22 energy credits and energy efficiency cred-
23 its; and

24 “(ii) regional entities the tracking of
25 dispatch of renewable generation.

1 “(B) ADMINISTRATION.—Any delegation
2 under subparagraph (A) shall ensure that the
3 tracking and reporting of information con-
4 cerning the dispatch of renewable generation is
5 transparent, verifiable, and independent of any
6 generation or load interests with obligations
7 under this section. .

8 “(d) ENFORCEMENT.—

9 “(1) CIVIL PENALTIES.—Any electric utility
10 that fails to meet the requirements of subsection (b)
11 shall be subject to a civil penalty.

12 “(2) AMOUNT OF PENALTY.—The amount of
13 the civil penalty shall be equal to the product ob-
14 tained by multiplying—

15 “(A) the number of kilowatt-hours of elec-
16 tric energy sold to electric consumers in viola-
17 tion of subsection (b); by

18 “(B) 200 percent of the value of the alter-
19 native compliance payment, as adjusted for in-
20 flation under subsection (g).

21 “(3) MITIGATION OR WAIVER.—

22 “(A) PENALTY.—

23 “(i) IN GENERAL.—The Secretary
24 may mitigate or waive a civil penalty under
25 this subsection if the electric utility is un-

1 able to comply with subsection (b) due to
2 a reason outside of the reasonable control
3 of the electric utility.

4 “(ii) AMOUNT.—The Secretary shall
5 reduce the amount of any penalty deter-
6 mined under paragraph (2) by the amount
7 paid by the electric utility to a State for
8 failure to comply with the requirement of
9 a State renewable energy program if the
10 State requirement is greater than the ap-
11 plicable requirement of subsection (b).

12 “(B) REQUIREMENT.—The Secretary may
13 waive the requirements of subsection (b) for a
14 period of up to 5 years with respect to an elec-
15 tric utility if the Secretary determines that the
16 electric utility cannot meet the requirements
17 due to a hurricane, tornado, fire, flood, earth-
18 quake, ice storm, or other natural disaster or
19 act of God beyond the reasonable control of the
20 utility.

21 “(C) RATEPAYER PROTECTION.—Effective
22 beginning June 1, 2010, and not later than
23 June 1 of each year thereafter, an electric util-
24 ity may petition the Secretary to waive, for the
25 following compliance year, all or part of the re-

1 requirements of subsection (b) in order to limit
2 the rate impact of the incremental cost of com-
3 pliance of the electric utility to not more than
4 4 percent per retail customer in any year.

5 “(D) VARIANCE.—A State public utility
6 commission or electric utility may submit an
7 application to the Secretary that requests a
8 variance from the requirements of subsection
9 (b) for 1 or more calendar years (including sus-
10 pension or reduction of the requirements) on
11 the basis of transmission constraints preventing
12 delivery of service.

13 “(4) PROCEDURE FOR ASSESSING PENALTY.—
14 The Secretary shall assess a civil penalty under this
15 subsection in accordance with the procedures pre-
16 scribed by section 333(d) of the Energy Policy and
17 Conservation Act (42 U.S.C. 6303(d)).

18 “(e) ALTERNATIVE COMPLIANCE PAYMENTS.—

19 “(1) IN GENERAL.—An electric utility may sat-
20 isfy the requirements of subsection (b), in whole or
21 in part, by submitting in accordance with this sub-
22 section, in lieu of each Federal renewable electricity
23 credit or megawatt hour of demonstrated total an-
24 nual electricity savings that would otherwise be due,
25 a payment equal to the amount required under sub-

1 section (b) in accordance with such regulations as
2 the Secretary may promulgate.

3 “(2) PAYMENT TO STATE FUNDS.—Payments
4 made under this subsection shall be made directly to
5 the State in which the electric utility is located, if
6 the payments are deposited directly into a fund with-
7 in the treasury of the State for use in accordance
8 with paragraph (3).

9 “(3) USE OF GRANTS.—The Governor of any
10 State may expend amounts in a State renewable en-
11 ergy escrow account solely for purposes of—

12 “(A) increasing the quantity of electric en-
13 ergy produced from a renewable energy source
14 in the State, including nuclear and advanced
15 coal technologies for carbon capture and seques-
16 tration;

17 “(B) promoting the deployment and use of
18 electric drive vehicles in the State, including the
19 development of electric drive vehicles and bat-
20 teries; and

21 “(C) offsetting the costs of carrying out
22 this section paid by electric consumers in the
23 State through—

24 “(i) direct grants to electric con-
25 sumers; or

1 “(ii) energy efficiency investments.

2 “(4) INFORMATION AND REPORTS.—As a condi-
3 tion of providing payments to a State under this
4 subsection, the Secretary may require the Governor
5 to keep such accounts or records, and furnish such
6 information and reports, as the Secretary determines
7 are necessary and appropriate for determining com-
8 pliance with this subsection.

9 “(f) EXEMPTIONS.—During any calendar year, this
10 section shall not apply to an electric utility—

11 “(1) that sold less than 4,000,000 megawatt-
12 hours of electric energy to electric consumers during
13 the preceding calendar year, except that sales to an
14 affiliate, lessee, or tenant of the electric utility shall
15 not be treated as sales to electric consumers under
16 this paragraph; or

17 “(2) in Hawaii.

18 “(g) INFLATION ADJUSTMENT.—Not later than De-
19 cember 31 of each year beginning in 2008, the Secretary
20 shall adjust for inflation the rate of the alternative compli-
21 ance payment under subsection (b)(2)(C).

22 “(h) STATE PROGRAMS.—

23 “(1) IN GENERAL.—Subject to paragraph (2),
24 nothing in this section diminishes any authority of
25 a State or political subdivision of a State to adopt

1 or enforce any law or regulation respecting renew-
2 able energy or energy efficiency, or the regulation of
3 electric utilities,.

4 “(2) COMPLIANCE.—Except as provided in sub-
5 section (d)(3), no such law or regulation shall relieve
6 any person of any requirement otherwise applicable
7 under this section.

8 “(3) COORDINATION.—The Secretary, in con-
9 sultation with States having such renewable energy
10 and energy efficiency programs, shall, to the max-
11 imum extent practicable, facilitate coordination be-
12 tween the Federal program and State programs.

13 “(4) REGULATIONS.—

14 “(A) IN GENERAL.—The Secretary, in con-
15 sultation with States, shall promulgate regula-
16 tions to ensure that an electric utility that is
17 subject to the requirements of this section and
18 is subject to a State renewable energy standard
19 receives renewable energy credits if—

20 “(i) the electric utility complies with
21 the State standard by generating or pur-
22 chasing renewable electric energy or renew-
23 able energy certificates or credits rep-
24 resenting renewable electric energy; or

1 “(ii) the State imposes or allows other
2 mechanisms for achieving the State stand-
3 ard, including the payment of taxes, fees,
4 surcharges, or other financial obligations.

5 “(B) AMOUNT OF CREDITS.—The amount
6 of credits received by an electric utility under
7 this subsection shall equal—

8 “(i) in the case of subparagraph
9 (A)(i), the quantity of renewable energy re-
10 sulting from the generation or purchase by
11 the electric utility of renewable energy; and

12 “(ii) in the case of subparagraph
13 (A)(ii), the pro rata share of the electric
14 utility, based on the contributions to the
15 mechanism made by the electric utility or
16 customers of the electric utility, in the
17 State, of the quantity of renewable energy
18 resulting from those mechanisms.

19 “(C) PROHIBITION ON DOUBLE COUNT-
20 ING.—The regulations promulgated under this
21 paragraph shall ensure that a kilowatt-hour as-
22 sociated with a renewable energy credit issued
23 pursuant to this subsection shall not be used
24 for compliance with this section more than
25 once.

1 “(i) ENERGY EFFICIENCY CREDITS.—

2 “(1) DEFINITIONS.—In this subsection:

3 “(A) CUSTOMER FACILITY SAVINGS.—The
4 term ‘customer facility savings’ means a reduc-
5 tion in the consumption of end-use electricity at
6 a facility of an end-use consumer of electricity
7 served by an electric utility, as compared to—

8 “(i) consumption at the facility during
9 a base year, taking into account reductions
10 attributable to causes other than energy ef-
11 ficiency investments (such as economic
12 downturns, reductions in customer base,
13 favorable weather conditions, or other such
14 causes); or

15 “(ii) in the case of new equipment (re-
16 gardless of whether the new equipment re-
17 places existing equipment at the end of the
18 useful life of the existing equipment), con-
19 sumption by similar equipment of average
20 efficiency available for purchase at the
21 time that new equipment is acquired.

22 “(B) ELECTRICITY SAVINGS.—The term
23 ‘electricity savings’ means—

24 “(i) customer facility savings of elec-
25 tricity consumption adjusted to reflect any

1 associated increase in fuel consumption at
2 the facility;

3 “(ii) reductions in distribution system
4 losses of electricity achieved by a retail
5 electricity distributor, as compared to
6 losses attributable to new or replacement
7 distribution system equipment of average
8 efficiency (as defined by the Secretary by
9 regulation); and

10 “(iii) the output of new combined heat
11 and power systems, to the extent provided
12 under paragraph (5).

13 “(C) QUALIFIED ELECTRICITY SAVINGS.—
14 The term ‘qualified electricity savings’ means
15 electricity saving that meet the measurement
16 and verification requirements of paragraph (4).

17 “(2) PETITION.—On petition by the Governor
18 of a State or, in the case of the power service area
19 of the Tennessee Valley Authority, the Board of Di-
20 rectors of the Tennessee Valley Authority, the Sec-
21 retary shall allow up to 26.67 percent of the require-
22 ments of an electric utility under subsection (b)(1)
23 associated with the sales of electricity of the utility
24 in the State to be met by submitting Federal energy
25 efficiency credits issued pursuant to this subsection.

1 “(3) ISSUANCE OF ENERGY EFFICIENCY CRED-
2 ITS.—

3 “(A) IN GENERAL.—The Secretary shall
4 issue energy efficiency credits for qualified elec-
5 tricity savings achieved in States described in
6 paragraph (2) in accordance with this sub-
7 section.

8 “(B) QUALIFIED ELECTRICITY SAVINGS.—
9 Subject to subparagraph (C), in accordance
10 with regulations promulgated by the Secretary,
11 the Secretary shall issue credits for—

12 “(i) qualified electricity savings
13 achieved by an electric utility on or after
14 the date of enactment of this section; and

15 “(ii) qualified electricity savings
16 achieved by other entities (including State
17 agencies) on or after the date of enactment
18 of this section if—

19 “(I) the measures used to achieve
20 the qualified electricity savings were
21 installed or placed in operation by the
22 entity seeking the credit; and

23 “(II) an electric utility eligible to
24 receive efficiency did not pay a sub-
25 stantial portion of the cost of achiev-

1 ing the qualified electricity savings
2 (unless the utility has waived any en-
3 itlement to the credit).

4 “(C) STANDARDS.—No credits shall be
5 issued for electricity savings achieved as a re-
6 sult of compliance with a national, State, or
7 local building, equipment, or appliance effi-
8 ciency standard.

9 “(4) MEASUREMENT AND VERIFICATION OF
10 ELECTRICITY SAVINGS.—Not later than January
11 2010, the Secretary shall promulgate regulations re-
12 garding the measurement and verification of elec-
13 tricity savings under this subsection, including regu-
14 lations covering—

15 “(A) procedures and standards for defining
16 and measuring electricity savings that will be
17 eligible to receive credits under paragraph (3),
18 which shall—

19 “(i) specify the types of energy effi-
20 ciency and energy conservation that will be
21 eligible for the credits;

22 “(ii) require that energy consumption
23 for customer facilities or portions of facili-
24 ties in the applicable base and current
25 years be adjusted, as appropriate, to ac-

1 count for changes in weather, level of pro-
2 duction, and building area;

3 “(iii) account for the useful life of
4 electricity savings measures;

5 “(iv) include specified electricity sav-
6 ings values for specific, commonly-used ef-
7 ficiency measures; and

8 “(v) exclude electricity savings that—
9 “(I) are not properly attributable
10 to measures carried out by the entity
11 seeking the credit;

12 “(II) have already been credited
13 under this section to another entity;
14 or

15 “(III) do not result from actions
16 not intended to achieve electricity sav-
17 ings;

18 “(B) procedures and standards for third-
19 party verification of reported electricity savings;
20 and

21 “(C) such requirements for information,
22 reports, and access to facilities as may be nec-
23 essary to carry out this subsection.

24 “(5) COMBINED HEAT AND POWER.—Under
25 regulations promulgated by the Secretary, the incre-

1 ment of electricity output of a new combined heat
2 and power system that is attributable to the higher
3 efficiency of the combined system (as compared to
4 the efficiency of separate production of the electric
5 and thermal outputs), shall be considered electricity
6 savings under this subsection.

7 “(j) BIOMASS HARVESTING AND SUSTAINABILITY.—
8 The provisions of this section relating to biomass shall be
9 administered in accordance with section 203(e) of the En-
10 ergy Policy Act of 2005 (42 U.S.C. 15852(e)).

11 “(k) LOANS FOR PROJECTS TO COMPLY WITH FED-
12 ERAL RENEWABLE ELECTRICITY STANDARD.—

13 “(1) PURPOSES.—The purposes of this sub-
14 section are—

15 “(A) to reduce the cost incurred by electric
16 utilities in complying with the requirements of
17 this section; and

18 “(B) to minimize the impact of the re-
19 quirements on electricity rates for consumers.

20 “(2) LOANS.—The Secretary shall make loans
21 available to electric utilities to carry out qualified
22 projects approved by the Secretary to comply with
23 the requirements of this section.

24 “(3) QUALIFIED PROJECTS.—

1 “(A) IN GENERAL.—A loan may be made
2 under this subsection for a project—

3 “(i) to construct a renewable energy
4 generation facility;

5 “(ii) to install an energy efficiency or
6 electricity demand reduction technology; or

7 “(iii) to carry out any other project
8 approved by the Secretary that the Sec-
9 retary determines is consistent with the
10 purposes of this subsection.

11 “(B) DISAPPROVAL.—The Secretary may
12 disapprove an application for a loan for a
13 project under this subsection if the Secretary
14 determines that—

15 “(i) the revenues generated under the
16 project are unlikely to be sufficient to
17 cover the repayment obligations of the pro-
18 posed loan; or

19 “(ii) the project is not otherwise con-
20 sistent with the purposes of this sub-
21 section.

22 “(4) TERMS.—A loan made by the Secretary to
23 an electric utility under this subsection shall—

24 “(A) be for a term of not to exceed 30
25 years; and

1 “(B) bear an annual interest rate that is
2 50 basis points more than the Federal funds
3 rate established by the Board of Governors of
4 the Federal Reserve System.

5 “(5) PRIORITY.—Notwithstanding any other
6 provision of law, the debt to the Federal Government
7 under a loan made to an electric utility under this
8 subsection shall have priority in any case in which
9 the electric utility files for bankruptcy protection
10 under title 11, United States Code.

11 “(6) AUTHORIZATION OF APPROPRIATIONS.—
12 There are authorized to be appropriated such sums
13 as are necessary to carry out this subsection.

14 “(1) RECONSIDERATION.—

15 “(1) REVIEW.—

16 “(A) IN GENERAL.—Not later than Janu-
17 ary 15, 2017, and every 5 years thereafter, the
18 Secretary shall review and make recommenda-
19 tions to Congress on the program established
20 under this section.

21 “(B) ANALYSIS.—The review shall analyze
22 whether—

23 “(i) the program established under
24 this section has contributed to an economi-

1 cally harmful increase in electricity rates in
2 regions of the United States;

3 “(ii) the program has resulted in net
4 economic benefits for the United States;
5 and

6 “(iii) new technologies and clean, re-
7 newable energy sources will advance the
8 purposes of this section.

9 “(2) RECOMMENDATIONS.—The Secretary shall
10 submit to Congress recommendations on whether—

11 “(A) the percentage of energy efficiency
12 credits eligible to be submitted under subsection
13 (b)(1) should be increased or decreased;

14 “(B) the percentage of renewable elec-
15 tricity required under subsection (b)(1) should
16 be increased or decreased; and

17 “(C) the definition of ‘renewable energy’
18 should be expanded to reflect advances in tech-
19 nology or previously unavailable sources of
20 clean or renewable energy.

21 “(3) REPORT.—Not later than January 15,
22 2017, the Secretary shall submit to Congress a re-
23 port that describes any recommendations of the Sec-
24 retary on changes to the program established under
25 this section.

1 “(m) REGULATIONS.—Not later than 1 year after the
2 date of enactment of this section, the Secretary shall pro-
3 mulgate regulations implementing this section.

4 “(n) TERMINATION OF AUTHORITY.—This section
5 and the authority provided by this section terminate on
6 December 31, 2039.”.

7 (b) TABLE OF CONTENTS AMENDMENT.—The table
8 of contents of the Public Utility Regulatory Policies Act
9 of 1978 (16 U.S.C. prec. 2601) is amended by adding at
10 the end of the items relating to title VI the following:

“Sec. 610. Federal renewable electricity standard.”.

11 **SEC. 133. FEDERAL PURCHASE REQUIREMENT AMEND-**
12 **MENTS.**

13 Section 203 of the Energy Policy Act of 2005 (42
14 U.S.C. 15852) is amended—

15 (1) by striking subsection (b) and inserting the
16 following:

17 “(b) DEFINITIONS.—In this section:

18 “(1) BIOMASS.—The term ‘biomass’ means the
19 following types of nonhazardous organic materials:

20 “(A) Residues and byproducts from milled
21 logs.

22 “(B) Wood, paper products that are not
23 commonly recyclable, and vegetation (including
24 trees and trimmings, yard waste, pallets, rail-
25 road ties, crates, and solid-wood manufacturing

1 and construction debris), if diverted from or
2 separated from other waste out of a municipal
3 waste stream.

4 “(C) Hazard trees, trimmings, and brush
5 that are necessary to remove in order to main-
6 tain a utility right-of-way or a public road (not
7 including any unpaved road within Federal
8 land).

9 “(D) Trees, trimmings, and brush har-
10 vested from the immediate vicinity of any build-
11 ing, campground, or other structure in wildfire-
12 prone areas to reduce the risk to the structure
13 or campground or to human life from wildfires.

14 “(E) Invasive species (as defined in Execu-
15 tive Order 13112 (42 U.S.C. 4321 note; relat-
16 ing to invasive species)) removed to control or
17 eradicate the invasive species.

18 “(F) Animal waste and animal byproducts
19 (including biogas and any solid produced by
20 micro-organisms).

21 “(G) Food waste.

22 “(H) Algae.

23 “(I) Slash, brush, trees, and other vegeta-
24 tion that is harvested from non-Federal land or
25 Indian land—

1 “(i) that is, at the time of harvest—

2 “(I) naturally regenerated forest
3 land;

4 “(II) forest land that was planted
5 for the purpose of restoring land to a
6 naturally regenerated forest; or

7 “(III) if harvested in quantities
8 and through practices that maintain
9 or contribute toward the restoration
10 of the species, ecological systems, and
11 ecological communities for which the
12 conservation forest land was identi-
13 fied, conservation forest land; or

14 “(ii) that is—

15 “(I) at the time of harvest, plant-
16 ed forest land; and

17 “(II) on the date of enactment of
18 this section, cropland (including fallow
19 land), pastureland, or planted forest
20 land.

21 “(J) Crops, crop byproducts, and crop resi-
22 dues from non-Federal land or Indian land that
23 is—

24 “(i) at the time of harvest, not forest
25 land; and

1 “(ii) on the date of enactment of this
2 section—

3 “(I) cropland (including fallow
4 land and not including planted forest
5 land); or

6 “(II) pastureland.

7 “(K) If harvested from Federal land in ac-
8 cordance with applicable law and land manage-
9 ment plans and in quantities and through prac-
10 tices that maintain or contribute toward the
11 restoration of ecological sustainability—

12 “(i) slash; and

13 “(ii) brush and trees that are byprod-
14 ucts of ecological restoration, disease or in-
15 sect infestation control, or hazardous fuels
16 reduction treatments and—

17 “(I) are from stands that—

18 “(aa) were killed by an in-
19 sect or disease epidemic or a nat-
20 ural disaster; and

21 “(bb) do not meet the utili-
22 zation standards for sawtimber;
23 or

24 “(II) do not exceed the minimum
25 size standards for sawtimber.

1 “(2) CONSERVATION FOREST LAND.—

2 “(A) IN GENERAL.—The term ‘conserva-
3 tion forest land’ means forest land that con-
4 tains a species, or includes all or part of an eco-
5 logical system or community, that is at risk of
6 extinction or elimination within a State or glob-
7 ally.

8 “(B) IDENTIFICATION.—Conservation for-
9 est land shall be identified based on the best
10 available science and data by any of—

11 “(i) the State in which the land is lo-
12 cated, unless the land is under the jurisdic-
13 tion of an Indian tribe;

14 “(ii) an Indian tribe with jurisdiction
15 over the land; or

16 “(iii) in consultation with the State in
17 which the land is located or the Indian
18 tribe with jurisdiction over the land—

19 “(I) the Secretary of Agriculture;
20 or

21 “(II) the Secretary of the Inte-
22 rior.

23 “(C) EXCEPTIONS.—A tract of conserva-
24 tion forest land may not be removed from con-
25 servation forest land status under this section

1 as a result of land management practices on the
2 tract that—

3 “(i) occurred on or after the date of
4 enactment of this subparagraph; and

5 “(ii) contributed toward the elimi-
6 nation of the species, or all or part of an
7 ecological system or ecological community,
8 for which the land was identified as con-
9 servation forest land.

10 “(3) FEDERAL LAND.—

11 “(A) IN GENERAL.—The term ‘Federal
12 land’ means—

13 “(i) National Forest System land; and

14 “(ii) public lands (as defined in sec-
15 tion 103 of the Federal Land Policy and
16 Management Act of 1976 (43 U.S.C.
17 1702)).

18 “(B) EXCLUSIONS.—

19 “(i) IN GENERAL.—The term ‘Federal
20 land’ does not include—

21 “(I) any area designated by Con-
22 gress to be administered for conserva-
23 tion purposes; or

24 “(II) a National Monument pro-
25 claimed by the President.

1 “(ii) OLD GROWTH OR LATE SUCCES-
2 SIONAL FOREST STANDS.—The term ‘Fed-
3 eral land’ does not include an old growth
4 or late successional forest stand unless bio-
5 mass from the stand does not exceed the
6 minimum size standards for sawtimber and
7 is a byproduct of an ecological restoration
8 treatment that fully maintains, or contrib-
9 utes toward the restoration of, the struc-
10 ture and composition of an old growth for-
11 est stand in accordance with the old
12 growth conditions characteristic of the for-
13 est type and retains the large trees con-
14 tributing to old growth structure.

15 “(4) INDIAN LAND.—The term ‘Indian land’
16 has the meaning given the term ‘Indian country’ in
17 section 1151 of title 18, United States Code.

18 “(5) INDIAN TRIBE.—The term ‘Indian tribe’
19 has the meaning given the term in section 4 of the
20 Indian Self-Determination and Education Assistance
21 Act (25 U.S.C. 450b).

22 “(6) NON-FEDERAL LAND.—The term ‘non-
23 Federal land’ means land that is not owned by the
24 Federal Government.

1 “(7) RENEWABLE ENERGY.—The term ‘renew-
2 able energy’ means energy generated from solar,
3 wind, biomass, landfill gas, ocean (including tidal,
4 wave, current, and thermal), geothermal, municipal
5 solid waste, or new hydroelectric generation capacity
6 achieved from increased efficiency or additions of
7 new capacity at an existing hydroelectric project.

8 “(8) SECRETARY CONCERNED.—The term ‘Sec-
9 retary concerned’ means—

10 “(A) the Secretary of Agriculture, with re-
11 gard to—

12 “(i) National Forest System land; and

13 “(ii) except as provided by subpara-
14 graph (B), non-Federal land; and

15 “(B) the Secretary of the Interior, with re-
16 gard to—

17 “(i) public lands (as defined in section
18 103 of the Federal Land Policy and Man-
19 agement Act of 1976 (43 U.S.C. 1702));
20 and

21 “(ii) Indian land.”; and

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

23 “(e) BIOMASS HARVESTING AND SUSTAINABILITY.—

24 “(1) IN GENERAL.—The Secretaries concerned
25 shall administer the provisions covered by subsection

1 (b)(1) relating to the harvesting of biomass from
2 Federal land and forest land.

3 “(2) INTER-AGENCY BIOMASS SUSTAINABILITY
4 STUDY.—

5 “(A) IN GENERAL.—The Secretary, in con-
6 sultation with the Secretary of Agriculture, the
7 Secretary of the Interior, and the Administrator
8 of the Environmental Protection Agency, shall
9 conduct a study that assesses the impacts of
10 biomass harvesting for energy production on—

11 “(i) landscape-level water quality, soil
12 productivity, wildlife habitat, and biodiver-
13 sity; and

14 “(ii) conservation forest land.

15 “(B) TIMING.—The Secretary shall—

16 “(i) complete the study required
17 under this paragraph not later than 5
18 years after the date of enactment of this
19 subsection; and

20 “(ii) update the study not later than
21 every 5 years thereafter.

22 “(C) BASIS.—The Secretary shall base the
23 study on the best available data and science.

24 “(D) RECOMMENDATIONS.—The Secretary
25 shall include in the study such recommenda-

1 tions as are appropriate to reduce the impacts
2 described in subparagraph (A).

3 “(E) PUBLIC PARTICIPATION AND AVAIL-
4 ABILITY.—In carrying out this paragraph, the
5 Secretary shall—

6 “(i) consult with States, Indian tribes,
7 and other interested stakeholders;

8 “(ii) make available, and seek public
9 comment on, a draft version of the study
10 results; and

11 “(iii) make the final study results
12 available to the public.”.

13 **Subtitle D—Energy and Water** 14 **Integration**

15 **SEC. 141. ENERGY WATER NEXUS STUDY.**

16 (a) IN GENERAL.—Not later than 90 days after the
17 date of enactment of this Act, the Secretary, in consulta-
18 tion with the Secretary of the Interior and the Adminis-
19 trator of the Environmental Protection Agency, shall enter
20 into an arrangement with the National Academy of
21 Sciences under which the Academy shall conduct an in-
22 depth analysis of the impact of energy development and
23 production on the water resources of the United States.

24 (b) SCOPE OF STUDY.—

1 (1) IN GENERAL.—The study described in sub-
2 section (a) shall be comprised of each assessment de-
3 scribed in paragraphs (2) through (4).

4 (2) TRANSPORTATION SECTOR ASSESSMENT.—

5 (A) IN GENERAL.—The study shall include
6 a lifecycle assessment of the quantity of water
7 withdrawn and consumed in the production of
8 transportation fuels, or electricity used as a fuel
9 source, to evaluate the ratio that—

10 (i) the quantity of water withdrawn
11 and consumed in the production of trans-
12 portation fuels (measured in gallons), or
13 electricity (measured in kilowatt-hours);
14 bears to

15 (ii) the total distance (measured in
16 miles) that may be traveled as a result of
17 the consumption of transportation fuels, or
18 electricity.

19 (B) SCOPE OF ASSESSMENT.—

20 (i) IN GENERAL.—The assessment
21 shall include, as applicable—

22 (I) the exploration for, and ex-
23 traction or growing of, energy feed-
24 stock;

1 (II) the processing of energy
2 feedstock into transportation fuel;

3 (III) the generation, transpor-
4 tation, and storage of electricity for
5 transportation; and

6 (IV) the conduct of an analysis of
7 the efficiency with which the transpor-
8 tation fuel is consumed.

9 (ii) FUELS.—The assessment shall
10 contain an analysis of transportation fuel
11 sources, including—

12 (I) domestically produced crude
13 oil (including products derived from
14 domestically produced crude oil);

15 (II) imported crude oil (including
16 products derived from imported crude
17 oil);

18 (III) domestically produced nat-
19 ural gas (including liquid fuels derived
20 from natural gas);

21 (IV) imported natural gas (in-
22 cluding liquid fuels derived from nat-
23 ural gas);

24 (V) oil shale;

25 (VI) tar sands;

1 (VII) domestically produced corn-
2 based ethanol;

3 (VIII) imported corn-based eth-
4 anol;

5 (IX) advanced biofuels (including
6 cellulosic- and algae-based biofuels);

7 (X) coal to liquids (including
8 aviation fuel, diesel, and gasoline
9 products);

10 (XI) electricity consumed in—

11 (aa) fully electric drive vehi-
12 cles; and

13 (bb) plug-in hybrid vehicles;

14 (XII) hydrogen; and

15 (XIII) any reasonably foreseeable
16 combination of any transportation fuel
17 source described in subclauses (I)
18 through (XII).

19 (3) ELECTRICITY SECTOR ASSESSMENT.—

20 (A) IN GENERAL.—The study shall include
21 a lifecycle assessment of the quantity of water
22 withdrawn and consumed in the production of
23 electricity to evaluate the ratio that—

1 (i) the quantity of water used and
2 consumed in the production of electricity
3 (measured in gallons); bears to

4 (ii) the quantity of electricity that is
5 produced (measured in kilowatt-hours).

6 (B) SCOPE OF ASSESSMENT.—The assess-
7 ment shall include, as applicable—

8 (i) the exploration for, or extraction
9 or growing of, energy feedstock;

10 (ii) the processing of energy feedstock
11 for electricity production; and

12 (iii) the production of electricity.

13 (C) GENERATION TYPES.—The assessment
14 shall contain an evaluation and analysis of elec-
15 tricity generation facilities that are constructed
16 in accordance with different plant designs (in-
17 cluding different cooling technologies such as
18 water, air, and hybrid systems, and technologies
19 designed to minimize carbon dioxide releases)
20 based on the fuel used by the facility, includ-
21 ing—

22 (i) coal;

23 (ii) natural gas;

24 (iii) oil;

25 (iv) nuclear energy;

- 1 (v) solar energy;
2 (vi) wind energy;
3 (vii) geothermal energy;
4 (viii) biomass;
5 (ix) the beneficial use of waste heat;
6 and
7 (x) any reasonably foreseeable com-
8 bination of any fuel described in clauses (i)
9 through (ix).

10 (4) ASSESSMENT OF ADDITIONAL IMPACTS.—In
11 addition to the impacts associated with the direct
12 use and consumption of water resources in the
13 transportation and electricity sectors described in
14 paragraphs (2) and (3), the study shall contain an
15 identification and analysis of any unique water im-
16 pact associated with a specific fuel source, including
17 an impact resulting from—

- 18 (A) any extraction or mining practice;
19 (B) the transportation of feedstocks from
20 the point of extraction to the point of proc-
21 essing;
22 (C) the transportation of fuel and power
23 from the point of processing to the point of con-
24 sumption; and

1 (D) the location of a specific fuel source
2 that is limited to 1 or more specific geo-
3 graphical regions.

4 (c) REPORT TO SECRETARY.—Not later than 18
5 months after the date of enactment of this Act, the Na-
6 tional Academy of Sciences shall submit to the Secretary
7 a report that contains a summary of the results of the
8 study conducted under this section.

9 (d) AVAILABILITY OF RESULTS OF STUDY.—On the
10 date on which the National Academy of Sciences completes
11 the study under this section, the National Academy of
12 Sciences shall make available to the public the results of
13 the study.

14 (e) AUTHORIZATION OF APPROPRIATIONS.—There
15 are authorized to be appropriated to the Secretary such
16 sums as are necessary to carry out this section.

17 **SEC. 142. POWER PLANT WATER AND ENERGY EFFICIENCY.**

18 (a) IN GENERAL.—To protect water supplies and
19 promote the efficient use of water in the electricity produc-
20 tion sector, the Secretary, in consultation with the Sec-
21 retary of the Interior and the Administrator of the Envi-
22 ronmental Protection Agency, shall conduct a study to
23 identify alternative technologies and related strategies to
24 optimize water and energy efficiency in the production of
25 electricity by each type of generation.

1 (b) GENERATION TYPES.—The study shall include an
2 evaluation of different types of generation facilities, in-
3 cluding—

4 (1) coal facilities, under which the evaluation
5 shall account for—

6 (A) different types of coal and associated
7 generating technologies; and

8 (B) the use of technologies designed to
9 minimize and sequester carbon dioxide releases;

10 (2) oil and natural gas facilities, under which
11 the evaluation shall account for the use of tech-
12 nologies designed to minimize and sequester carbon
13 dioxide releases;

14 (3) hydropower, including turbine upgrades, in-
15 cremental hydropower, in-stream hydropower, and
16 pump-storage projects;

17 (4) thermal solar facilities; and

18 (5) nuclear facilities.

19 (c) REPORT TO CONGRESS.—Not later than 18
20 months after the date of enactment of this Act, the Sec-
21 retary shall submit to the appropriate committees of Con-
22 gress a report that contains a description of the results
23 of the study conducted under this section (including an
24 assessment of any region-specific factor, such as water

1 availability and energy reliability, that should be consid-
2 ered in evaluating the results).

3 (d) AUTHORIZATION OF APPROPRIATIONS.—There
4 are authorized to be appropriated to the Secretary such
5 sums as are necessary to carry out this section, to remain
6 available until expended.

7 **SEC. 143. RECLAMATION WATER CONSERVATION AND EN-**
8 **ERGY SAVINGS STUDY.**

9 (a) DEFINITIONS.—In this section:

10 (1) MAJOR RECLAMATION PROJECT.—The term
11 “major Reclamation project” means a multipurpose
12 project authorized by the Federal Government and
13 carried out by the Bureau of Reclamation.

14 (2) SECRETARY.—The term “Secretary” means
15 the Secretary of the Interior, acting through the
16 Commissioner of Reclamation.

17 (b) STUDY.—

18 (1) IN GENERAL.—In accordance with para-
19 graph (2), to promote the efficient use of energy in
20 water distribution systems, the Secretary shall con-
21 duct a study to evaluate the quantities of energy
22 used in water storage and delivery operations in
23 major Reclamation projects.

24 (2) ELEMENTS.—In conducting the study, the
25 Secretary shall—

1 (A) with respect to each major Reclama-
2 tion project—

3 (i) assess and estimate the annual en-
4 ergy consumption associated with the
5 major Reclamation project; and

6 (ii) identify—

7 (I) each major Reclamation
8 project that consumes the greatest
9 quantity of energy; and

10 (II) the aspect of the operation of
11 each major Reclamation project de-
12 scribed in subclause (I) that is the
13 most energy intensive (including water
14 storage and releases, water delivery,
15 and administrative operations); and

16 (B) identify opportunities to significantly
17 reduce current energy consumption and costs
18 with respect to each major Reclamation project
19 described in subparagraph (A), including, as
20 applicable, through—

21 (i) reduced groundwater pumping;

22 (ii) improved reservoir operations;

23 (iii) infrastructure rehabilitation;

24 (iv) water reuse; and

1 (v) the integration of renewable en-
2 ergy generation with project operations.

3 (c) REPORT TO CONGRESS.—Not later than 18
4 months after the date of enactment of this Act, the Sec-
5 retary shall submit to the appropriate committees of Con-
6 gress a report that contains a description of the results
7 of the study conducted under this section.

8 (d) AUTHORIZATION OF APPROPRIATIONS.—There
9 are authorized to be appropriated to the Secretary such
10 sums as are necessary to carry out this section, to remain
11 available until expended.

12 **SEC. 144. BRACKISH GROUNDWATER NATIONAL DESALINA-**
13 **TION RESEARCH FACILITY.**

14 (a) DEFINITIONS.—In this section:

15 (1) FACILITY.—The term “facility” means the
16 Brackish Groundwater National Desalination Re-
17 search Facility, located in Otero County, New Mex-
18 ico.

19 (2) SECRETARY.—The term “Secretary” means
20 the Secretary of the Interior.

21 (b) DUTY OF SECRETARY.—The Secretary shall oper-
22 ate, manage, and maintain the facility to carry out re-
23 search, development, and demonstration activities to de-
24 velop technologies and methods that promote brackish

1 groundwater desalination as a viable method to increase
2 water supply in a cost-effective manner.

3 (c) OBJECTIVES; ACTIVITIES.—

4 (1) OBJECTIVES.—The Secretary shall operate
5 and manage the facility as a state-of-the-art desali-
6 nation research center—

7 (A) to develop new water and energy tech-
8 nologies with widespread applicability; and

9 (B) to create new supplies of usable water
10 for municipal, agricultural, industrial, or envi-
11 ronmental purposes.

12 (2) ACTIVITIES.—In operating, managing, and
13 maintaining the facility under subsection (b), the
14 Secretary shall carry out—

15 (A) as a priority, the development of re-
16 newable energy technologies for integration with
17 desalination technologies—

18 (i) to reduce the capital and oper-
19 ational costs of desalination;

20 (ii) to minimize the environmental im-
21 pacts of desalination; and

22 (iii) to increase public acceptance of
23 desalination as a viable water supply proc-
24 ess;

1 (B) research regarding various desalination
2 processes, including improvements in reverse
3 and forward osmosis technologies;

4 (C) the development of innovative methods
5 and technologies to reduce the volume and cost
6 of desalination concentrated wastes (including
7 the disposal of desalination concentrated
8 wastes) in an environmentally sound manner;

9 (D) an outreach program to create part-
10 nerships with States, academic institutions, pri-
11 vate entities, and other appropriate organiza-
12 tions to conduct research, development, and
13 demonstration activities, including the establish-
14 ment of rental and other charges to provide rev-
15 enue to help offset the costs of operating and
16 maintaining the facility; and

17 (E) an outreach program to educate the
18 public on—

19 (i) desalination and renewable energy
20 technologies; and

21 (ii) the benefits of using water in an
22 efficient manner.

23 (d) AUTHORITY OF SECRETARY.—The Secretary may
24 enter into contracts or other agreements with, or make
25 grants to, appropriate entities to manage, operate, or oth-

1 erwise carry out this section, including an agreement with
2 a local or regional academic institution or a consortium
3 of institutions to manage research activities at the facility.

4 (e) AUTHORIZATION OF APPROPRIATIONS.—There
5 are authorized to be appropriated such sums as are nec-
6 essary to carry out this section, to remain available until
7 expended.

8 **SEC. 145. ENHANCED INFORMATION ON WATER-RELATED**
9 **ENERGY CONSUMPTION.**

10 Section 205 of the Department of Energy Organiza-
11 tion Act (42 U.S.C. 7135) is amended by adding at the
12 end the following:

13 “(n) WATER-RELATED ENERGY CONSUMPTION.—

14 “(1) IN GENERAL.—Not less than once during
15 each 3-year period, to aid in the understanding and
16 reduction of the quantity of energy used in associa-
17 tion with the use of water, the Administrator shall
18 conduct an assessment under which the Adminis-
19 trator shall collect information on energy use in var-
20 ious sectors of the economy that are associated with
21 the procurement, treatment, or delivery of water.

22 “(2) REQUIRED SECTORS.—An assessment de-
23 scribed in paragraph (1) shall contain an analysis of
24 water-related energy use for all relevant sectors of
25 the economy, including water used for—

- 1 “(A) agricultural purposes;
2 “(B) municipal purposes;
3 “(C) industrial purposes; and
4 “(D) domestic purposes.

5 “(3) EFFECT.—Nothing in this subsection af-
6 fects the authority of the Administrator to collect
7 data under section 52 of the Federal Energy Admin-
8 istration Act of 1974 (15 U.S.C. 790a).”.

9 **SEC. 146. ENERGY-WATER RESEARCH AND DEVELOPMENT**
10 **ROADMAP.**

11 (a) IN GENERAL.—Not later than 90 days after the
12 date of enactment of this Act, the Secretary shall develop
13 a document to be known as the “Energy-Water Research
14 and Development Roadmap” to define the future research,
15 development, demonstration, and commercialization ef-
16 forts that are required to address emerging water-related
17 challenges to future, cost-effective, reliable, and sustain-
18 able energy generation and production.

19 (b) REPORT.—Not later than 120 days after the date
20 of enactment of this Act, the Secretary shall submit to
21 the appropriate committees of Congress a report describ-
22 ing the document described in subsection (a), including
23 recommendations for any future action with respect to the
24 document.

1 **SEC. 147. ENERGY-WATER CLEAN TECHNOLOGY GRANT**
2 **PROGRAM.**

3 (a) DEFINITIONS.—In this section:

4 (1) ELIGIBLE ENTITY.—The term “eligible enti-
5 ty” means—

6 (A) an eligible unit of local government;

7 (B) an Indian tribe; and

8 (C) a water or wastewater agency of a
9 State or local government.

10 (2) ELIGIBLE UNIT OF LOCAL GOVERNMENT.—

11 The term “eligible unit of local government” has the
12 meaning given the term in section 541 of the Energy
13 Independence and Security Act of 2007 (42 U.S.C.
14 17151).

15 (3) INDIAN TRIBE.—The term “Indian tribe”
16 has the meaning given the term in section 4 of the
17 Indian Self-Determination and Education Assistance
18 Act (25 U.S.C. 450b).

19 (b) GRANT PROGRAM.—In accordance with sub-
20 section (c), the Secretary may carry out a competitive
21 grant program under which the Secretary may provide
22 grants to eligible entities to demonstrate the deployment
23 of technologies that reduce the consumption of, or con-
24 serve, energy supplies through energy savings and water
25 conservation activities in commercial, residential, and
26 mixed-use development projects.

1 (c) REQUIREMENTS.—

2 (1) PROVISION OF ASSISTANCE.—In carrying
3 out the program under subsection (b), the Secretary
4 shall provide assistance to eligible entities that carry
5 out projects that—

6 (A) have the potential to be replicated in
7 other locations;

8 (B) are of sufficient size to demonstrate
9 deployment of the project at scale; and

10 (C) are likely to accelerate and expand in-
11 vestment in cost-effective technologies that
12 demonstrate sustained reductions in energy con-
13 sumption or conservation of energy supplies, in-
14 cluding the deployment of renewable energy and
15 water reuse technologies.

16 (2) PRIORITIZATION.—In selecting eligible enti-
17 ties under paragraph (1), the Secretary shall give
18 priority to each eligible entity that carries out a
19 project that has the potential to create sustained en-
20 ergy reductions that are greater than 50 percent for
21 the project development, as compared to similar
22 project developments that do not include the tech-
23 nology used by the project that is the subject of the
24 demonstration.

1 (3) COST-SHARING.—Each demonstration activ-
2 ity carried out under a project under this program
3 shall be subject to each cost-sharing requirement de-
4 scribed in section 988 of the Energy Policy Act of
5 2005 (42 U.S.C. 16352).

6 (4) PUBLIC-PRIVATE PARTNERSHIPS.—The Sec-
7 retary shall provide a grant under this section only
8 to an eligible entity that uses a public-private part-
9 nership to design and carry-out the project of the el-
10 igible entity.

11 (5) LIMITATION ON FUNDS.—Funds provided
12 through a grant made by the Secretary under this
13 section shall not be used by the recipient eligible en-
14 tity for any operation or maintenance cost of the eli-
15 gible entity.

16 (6) REPORT.—The Secretary shall require each
17 eligible entity that receives a grant from the Sec-
18 retary under this section to submit to the Secretary
19 on a date not later than 1 year after the date on
20 which the eligible entity completes the project of the
21 eligible entity a report that contains a description
22 of—

23 (A) the estimated reductions in water use
24 achieved by the project of the entity;

1 (B) the reductions in energy consumption
2 achieved by the project of the entity;

3 (C) the comprehensive environmental bene-
4 fits achieved by the project of the entity; and

5 (D) the manner by which each reduction or
6 benefit described in subparagraphs (A) through
7 (C) compare to the original estimates of the eli-
8 gible entity.

9 (d) AUTHORIZATION OF APPROPRIATIONS.—There is
10 authorized to be appropriated to the Secretary to carry
11 out this section \$100,000,000 for each of fiscal years 2010
12 through 2015, to remain available until expended.

13 **SEC. 148. RURAL WATER UTILITIES ENERGY AND WATER**
14 **EFFICIENCY PROGRAM.**

15 (a) DUTY OF SECRETARY.—As soon as practicable
16 after the date of enactment of this Act, the Secretary shall
17 establish and carry out a program similar to, and con-
18 sistent with, the national rural water and wastewater cir-
19 cuit rider program established under section 306(a)(22)
20 of the Consolidated Farm and Rural Development Act (7
21 U.S.C. 1926(a)(22)) (including the authority to make
22 grants)—

23 (1) to provide on-site technical assistance to
24 rural drinking water and wastewater utilities (in-
25 cluding utilities serving an Indian tribe (as defined

1 in section 4 of the Indian Self-Determination and
2 Education Assistance Act (25 U.S.C. 450b)); and

3 (2) to improve energy efficiency, identify and
4 develop alternative and renewable energy supplies,
5 and conserve water in the operation of rural drink-
6 ing water and wastewater utilities.

7 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
8 authorized to be appropriated to the Secretary to carry
9 out this section \$7,000,000 for each of fiscal years 2010
10 through 2015.

11 **SEC. 149. COMPREHENSIVE WATER USE AND ENERGY SAV-**
12 **INGS STUDY.**

13 (a) IN GENERAL.—As soon as practicable after the
14 date of enactment of this Act, in consultation with other
15 Federal agencies and appropriate entities, and incor-
16 porating available governmental and nongovernmental
17 data as appropriate, the Secretary shall conduct a com-
18 prehensive study to determine the interrelated nature of
19 water and energy use (including energy consumption in
20 water-related processes and the manner by which to re-
21 duce water-related energy consumption) to promote the ef-
22 ficient use of water and energy.

23 (b) REQUIRED COMPONENTS.—

24 (1) IN GENERAL.—In conducting the study
25 under subsection (a), the Secretary shall include

1 each component described in paragraphs (2) through
2 (5).

3 (2) INDUSTRIAL WATER.—In accordance with
4 paragraph (1), the Secretary shall—

5 (A) assess the annual industrial water use
6 of the United States through a comparison, as
7 the Secretary determines to be appropriate, of
8 the differences in usage among—

9 (i) various regions of the United
10 States;

11 (ii) industry types and processes; and

12 (iii) the use of in-plant waste treat-
13 ment facilities; and

14 (B) identify opportunities to reduce signifi-
15 cantly industrial energy consumption and asso-
16 ciated costs through the use of—

17 (i) water management strategies;

18 (ii) water conservation using tech-
19 nologies in existence as of the date of en-
20 actment of this Act; and

21 (iii) reused water, particularly with re-
22 spect to industrial energy applications.

23 (3) PEAK DEMAND.—In accordance with para-
24 graph (1), the Secretary shall identify options to re-
25 duce energy use by water treatment and delivery

1 systems during peak electric demand periods, includ-
2 ing through—

3 (A) the use of increased water storage fa-
4 cilities;

5 (B) the aggregation of water system utility
6 accounts;

7 (C) the installation of supervisory control
8 and data acquisition systems; and

9 (D) improvements made to primary and
10 secondary water and wastewater treatment.

11 (4) NONPOTABLE WATER SOURCES.—In accord-
12 ance with paragraph (1), the Secretary shall identify
13 and assess—

14 (A) the applications and uses for nonfresh-
15 water sources of water supply in industrial,
16 commercial, and residential applications; and

17 (B) the potential energy conservation that
18 may result from the use of nonfreshwater sup-
19 plies, including—

20 (i) recycled and reclaimed water;

21 (ii) produced water; and

22 (iii) other nontraditional water
23 sources.

24 (5) EMBEDDED ENERGY.—In accordance with
25 paragraph (1), to facilitate an understanding of the

1 potential energy savings associated with water con-
2 servation and efficiency, the Secretary shall assess
3 and estimate the quantity and type of energy con-
4 sumed in the procurement, transport, and treatment
5 of water supplies and wastewater that serve indus-
6 trial, commercial, and residential uses, including
7 variations relating to differences in geography and
8 types of supply and wastewater processes.

9 (c) REPORT.—Not later than 18 months after the
10 date of enactment of this Act, the Secretary shall submit
11 to the appropriate committees of Congress a report that
12 contains a description of—

13 (1) the results of the study conducted by the
14 Secretary under this section; and

15 (2) the means by which to incorporate, and the
16 benefits of incorporating, the results of the study
17 into related reports prepared by the Secretary.

18 **Subtitle E—Vehicle Technology** 19 **Deployment**

20 **SEC. 151. TRANSPORTATION ROADMAP STUDY.**

21 (a) IN GENERAL.—The Secretary shall enter into an
22 arrangement with the National Academy of Sciences
23 under which the Academy shall—

1 (1) conduct a comprehensive analysis of energy
2 use within the light-duty vehicle transportation sec-
3 tor; and

4 (2) use the analysis to conduct an integrated
5 study of the technology options for alternative fuels,
6 including electricity, natural gas, hydrogen, and ad-
7 vanced technologies (including battery, hybrid and
8 fuel cell electric, advanced internal combustion, and
9 lean burn diesel technologies), that could reduce pe-
10 troleum consumption and greenhouse gas emissions.

11 (b) COMPONENTS.—The study shall—

12 (1) review the status of technologies and assess
13 the potential of the technologies to meet goals to re-
14 duce petroleum consumption and greenhouse gas
15 emissions, including—

16 (A) potential future fuels and pathways to
17 commercial deployment;

18 (B) infrastructure needs for future fuels
19 and other barriers to market penetration;

20 (C) potential timing of market adoption
21 and opportunities to increase the pace of mar-
22 ket adoption;

23 (D) a comparison of the potential reduc-
24 tions of petroleum consumption and greenhouse

1 gas emissions for different technological ap-
2 proaches; and

3 (E) improvements in and priorities for
4 Federal research and development program ac-
5 tivities to accelerate the development of the
6 most promising technologies;

7 (2) consider issues relating to vehicle duty cy-
8 cles, regional distinctions, and technology develop-
9 ment timelines;

10 (3) build on and integrate applicable research
11 conducted in recent years, including by the Acad-
12 emy;

13 (4) evaluate technical options and assess the ex-
14 tent to which the United States can employ the op-
15 tions to reduce oil intensity by 80 percent by cal-
16 endar year 2050 and reduce carbon dioxide emis-
17 sions at a rate that is consistent with national goals;
18 and

19 (5) recommend policies to help facilitate the
20 United States meeting national goals.

21 (c) REPORT.—Not later than 21 months after the
22 date on which funds are first made available to carry out
23 this section, and every 5 years thereafter, the Secretary
24 shall submit to the Committee on Energy and Natural Re-
25 sources of the Senate and the Committee on Energy and

1 Commerce of the House of Representatives a report (or
2 updated report) on the results of the study conducted
3 under subsection (a), including any recommendations.

4 (d) AUTHORIZATION OF APPROPRIATIONS.—There
5 are authorized to be appropriated such sums as are nec-
6 essary to carry out this section.

7 **SEC. 152. VEHICLE TECHNOLOGY AND RECHARGING INFRA-**
8 **STRUCTURE.**

9 Section 131 of the Energy Independence and Security
10 Act of 2007 (42 U.S.C. 17011) is amended by adding at
11 the end the following:

12 “(e) MARKET ASSESSMENT AND RECHARGING IN-
13 FRASTRUCTURE STUDY.—

14 “(1) DEFINITIONS.—In this subsection:

15 “(A) LOCAL GOVERNMENT.—

16 “(i) IN GENERAL.—The term ‘local
17 government’ has the meaning given the
18 term in section 3371 of title 5, United
19 States Code.

20 “(ii) INCLUSIONS.—The term ‘local
21 government’ includes entities described in
22 sections 7 and 8 of the Alaska Native
23 Claims Settlement Act (43 U.S.C. 1606,
24 1607).

1 “(B) RANGE EXTENSION INFRASTRUC-
2 TURE.—The term ‘range extension infrastruc-
3 ture’ includes equipment, products, or services
4 for recharging plug-in electric vehicles that—

5 “(i) are available to retail consumers
6 of electric drive vehicles on a nonexclusive
7 basis, including payment interoperability
8 with other systems; and

9 “(ii) provide for extending driving
10 range through battery exchange or rapid
11 recharging.

12 “(C) STATE.—The term ‘State’ has the
13 meaning given the term in section 3371 of title
14 5, United States Code.

15 “(2) STUDY.—The Secretary, in consultation
16 with the Administrator, and the Secretary of Trans-
17 portation, shall carry out a program to analyze and
18 assess—

19 “(A) the number and distribution of re-
20 charging facilities, including range extension in-
21 frastructure, that will be required for drivers of
22 plug-in electric drive vehicles and neighborhood
23 electric vehicles to reliably recharge those elec-
24 tric drive vehicles to meet the average needs of
25 the drivers;

1 “(B) minimum technical standards for
2 public recharging facilities necessary for wide-
3 spread deployment;

4 “(C) the technical and infrastructure in-
5 vestments that electric utilities and electricity
6 providers will be required to make to support
7 widespread deployment of recharging infra-
8 structure, including an estimate of the invest-
9 ments;

10 “(D) existing electric drive transportation
11 technologies and the state of markets for the
12 purchase of those technologies;

13 “(E) methods of removing market barriers
14 for existing and emerging applications of elec-
15 tric drive transportation technologies;

16 “(F) the potential value to the electric grid
17 of using the energy stored in on-board storage
18 systems to improve the efficiency and reliability
19 of the grid generation system; and

20 “(G) the implications of the introduction of
21 plug-in electric drive vehicles and other types of
22 electric transportation on the production of
23 electricity from renewable resources.

1 “(3) COMPONENTS.—In conducting the study,
2 the Secretary shall analyze and make recommenda-
3 tions on—

4 “(A) the variety and density of recharging
5 infrastructure options necessary to power plug-
6 in electric drive vehicles under diverse scenarios,
7 including—

8 “(i) the ratio of residential, commer-
9 cial, and public recharging infrastructure
10 options necessary to support 10 percent-,
11 20 percent-, and 50 percent-penetration of
12 plug-in electric vehicles on a city fleet
13 basis;

14 “(ii) the ratio of residential, commer-
15 cial, and public recharging infrastructure
16 options necessary to support 10 percent-,
17 20 percent-, and 50 percent-penetration of
18 plug-in electric vehicles on a regional fleet
19 basis;

20 “(iii) the ratio of residential, commer-
21 cial, and public recharging infrastructure
22 options necessary to support 10 percent-,
23 20 percent-, and 50 percent-penetration of
24 plug-in electric vehicles on a national fleet
25 basis; and

1 “(iv) the potential impact of fast
2 charging on market penetration rates for
3 electric drive vehicles and the effects on
4 electric utilities;

5 “(B) the effects on market penetration of
6 reserved parking spots with access to re-
7 charging facilities;

8 “(C) model codes (including building
9 codes) that need to be updated or otherwise
10 modified to enable widespread deployment of re-
11 charging facilities; and

12 “(D) such other issues as the Secretary
13 considers to be appropriate.

14 “(4) REPORT.—Not later than 1 year after the
15 date of enactment of this subsection, the Secretary
16 shall submit to the Committee on Energy and Nat-
17 ural Resources of the Senate and the Committee on
18 Energy and Commerce of the House of Representa-
19 tives a report on the results of the study conducted
20 under this subsection, including recommendations.

21 “(f) FINANCIAL SUPPORT.—

22 “(1) IN GENERAL.—Not later than 18 months
23 after the date of enactment of this subsection, the
24 Secretary shall establish a program to support the
25 deployment and integration of plug-in electric drive

1 vehicles in multiple regions of the United States
2 through the provision of financial support to State
3 and local governments and other entities to assist in
4 the installation of recharging facilities for electric
5 drive vehicles.

6 “(2) FINANCIAL ASSISTANCE.—In carrying out
7 the program, the Secretary may provide financial as-
8 sistance described in paragraph (7) to promote the
9 goals described in paragraph (4).

10 “(3) REGIONS.—The Secretary shall select re-
11 gions for financial assistance under this subsection
12 based on applications for the assistance received
13 under paragraph (7), taking into consideration the
14 findings of the study conducted under subsection (e).

15 “(4) GOALS.—The goals of the program estab-
16 lished under this subsection shall be—

17 “(A) to demonstrate the viability of a vehi-
18 cle-based transportation system that reduces—

19 “(i) the use of petroleum as a fuel;

20 and

21 “(ii) the emissions of greenhouse
22 gases and other pollutants compared to a
23 system based on conventional transpor-
24 tation fuels;

1 “(B) to facilitate the integration of ad-
2 vanced vehicle technologies into electricity dis-
3 tribution areas to improve system performance
4 and reliability;

5 “(C) to demonstrate the potential benefits
6 of coordinated investments in vehicle electrifica-
7 tion on personal mobility and a regional grid;

8 “(D) to demonstrate protocols and stand-
9 ards that facilitate vehicle integration into the
10 grid; and

11 “(E) to investigate differences in each re-
12 gion and regulatory environment regarding best
13 practices in implementing vehicle electrification.

14 “(5) USE OF FUNDS.—Subject to paragraph
15 (6), the Secretary may provide financial assistance
16 to any applicant that applies for, and receives the
17 approval of the Secretary, under paragraph (7)—

18 “(A) to assist persons located in a region
19 (including fleet owners) in the purchase of new
20 plug-in electric drive vehicles by reducing the
21 incremental cost of the vehicles above the cost
22 of comparable conventionally fueled vehicles;

23 “(B) to support the use of plug-in electric
24 drive vehicles by funding projects for the de-
25 ployment of—

1 “(i) recharging infrastructure for
2 plug-in electric drive vehicles (including
3 range extension infrastructure);

4 “(ii) smart grid equipment and infra-
5 structure to facilitate the charging and in-
6 tegration of plug-in electric drive vehicles;
7 or

8 “(iii) the purchase of advanced bat-
9 teries for use in plug-in electric drive vehi-
10 cles; or

11 “(C) to carry out such other projects as
12 the Secretary determines are appropriate to
13 support the large-scale deployment of plug-in
14 electric drive vehicles in regional deployment
15 areas.

16 “(6) COST SHARE.—The Secretary shall carry
17 out the programs established under this subsection
18 in accordance with section 988 of the Energy Policy
19 Act of 2005 (42 U.S.C. 16352).

20 “(7) FINANCIAL SUPPORT.—

21 “(A) IN GENERAL.—The Secretary may—

22 “(i) provide grants to States and local
23 governments for demonstration and com-
24 mercial application of recharging infra-
25 structure in accordance with paragraph (8)

1 in accordance with section 988 of the En-
2 ergy Policy Act of 2005 (42 U.S.C.
3 16352); and

4 “(ii) consult with the Administrator of
5 the Clean Energy Deployment Administra-
6 tion to further the goals of this section.

7 “(B) APPLICATIONS.—

8 “(i) IN GENERAL.—An applicant that
9 seeks to receive financial assistance under
10 this subsection shall submit to the Sec-
11 retary an application at such time, in such
12 manner, and containing such information
13 as the Secretary determines are necessary
14 through rulemaking.

15 “(ii) JOINT SPONSORSHIP.—An appli-
16 cation may be jointly sponsored by electric
17 utilities, automobile manufacturers, tech-
18 nology providers, car-sharing companies or
19 organizations, or other persons or entities.

20 “(C) REQUIREMENTS.—The design ele-
21 ments and requirements of the program estab-
22 lished under this subsection shall include—

23 “(i) an evaluation of the financial
24 mechanisms that will most effectively pro-
25 mote the purposes of this section;

1 “(ii) criteria for evaluating applica-
2 tions submitted under this paragraph, tak-
3 ing into consideration the findings of the
4 study conducted under subsection (e) (in-
5 cluding the anticipated ability to promote
6 deployment and market penetration of
7 plug-in electric drive vehicles that are less
8 dependent on petroleum as a fuel source);

9 “(iii) reporting requirements for enti-
10 ties that receive financial assistance under
11 this subsection, including a comprehensive
12 set of performance data that reflect the re-
13 sults of the program; and

14 “(iv) provisions that no proprietary
15 information, trade secret, or other con-
16 fidential information is required to be dis-
17 closed.

18 “(8) GRANTS TO STATES AND LOCAL GOVERN-
19 MENTS FOR RECHARGING INFRASTRUCTURE.—

20 “(A) IN GENERAL.—The Secretary shall
21 establish a program under which the Secretary
22 shall provide grants and other financial support
23 to States and local governments to assist in the
24 installation of recharging infrastructure for

1 plug-in electric drive vehicles in areas under the
2 jurisdiction of the States or local governments.

3 “(B) ELIGIBILITY.—To be eligible to ob-
4 tain a grant or other financial support under
5 this subsection, a State or local government
6 shall—

7 “(i) demonstrate to the Secretary that
8 the applicant has taken into consideration
9 the findings of the report submitted under
10 subsection (e), unless the State or local
11 government demonstrates to the Secretary
12 that an alternative variety and density of
13 recharging infrastructure options would
14 better meet the purposes of this section;
15 and

16 “(ii) agree not to charge a premium
17 for use of a parking space used to recharge
18 an electric drive vehicle other than a
19 charge for electric energy.

20 “(C) GUIDELINES.—The Secretary shall
21 establish guidelines for carrying out this sub-
22 section that are consistent with the report sub-
23 mitted under subsection (e).

24 “(9) AUTHORIZATION OF APPROPRIATIONS.—

25 There are authorized to be appropriated to the Sec-

1 retary such sums as are necessary to carry out this
2 subsection, to remain available until expended.

3 “(g) INFORMATION CLEARINGHOUSE.—As part of
4 the program established under this section, the Secretary
5 shall collect and make available to the public information
6 regarding the cost, performance, and other technical data
7 regarding the deployment and integration of plug-in hy-
8 brid electric drive vehicles.

9 “(i) AUTHORIZATION OF APPROPRIATIONS.—There
10 are authorized to be appropriated such sums as are nec-
11 essary to carry out this subsections (e) and (g).”.

12 **SEC. 153. ELECTRIC DRIVE TRANSPORTATION STANDARD-**
13 **IZATION.**

14 (a) REPORT TO CONGRESS.—

15 (1) IN GENERAL.—Not later than 180 days
16 after the date of enactment of this Act, the Sec-
17 retary, in consultation with the National Institute of
18 Standards and Technology, the National Labora-
19 tories, utilities, vehicle manufacturers, battery man-
20 ufacturers, industry trade associations, and such
21 other entities as the Secretary determines to be ap-
22 propriate, shall submit to Congress a report con-
23 taining recommendations for establishing and adopt-
24 ing consensus or industry standards for electric
25 drive transportation.

1 (2) CONTENTS.—The report shall—

2 (A) identify consensus standards that exist
3 or are under development, such as—

4 (i) standardized electronic protocols
5 for use in communicating with the elec-
6 trical power grid;

7 (ii) safety and interoperability stand-
8 ards for the plug and socket for plug-in
9 electric drive vehicles;

10 (iii) battery-to-vehicle high voltage
11 power connectors;

12 (iv) battery-to-vehicle communications
13 signal interface hardware and operational
14 protocols;

15 (v) safety interlock devices;

16 (vi) battery safety; and

17 (vii) other items identified by the Sec-
18 retary as priority items;

19 (B) identify priority standards for the
20 widespread deployment of electric drive tech-
21 nology; and

22 (C) recommend a collaborative process for
23 public and private entities that will accelerate
24 the development of priority standards, includ-
25 ing—

- 1 (i) making maximum use of existing
2 relevant work; and
3 (ii) identifying areas in which new re-
4 search is required.

5 (b) AUTHORIZATION OF APPROPRIATIONS.—There
6 are authorized to be appropriated such sums as are nec-
7 essary to carry out this section.

8 **SEC. 154. PILOT PROGRAM FOR PLUG-IN ELECTRIC DRIVE**
9 **VEHICLES FOR FEDERAL FLEET.**

10 Section 131 of the Energy Independence and Security
11 Act of 2007 (42 U.S.C. 17011) (as amended by section
12 152) is amended by adding at the end the following:

13 “(h) PILOT PROGRAM FOR PLUG-IN ELECTRIC
14 DRIVE VEHICLES.—

15 “(1) IN GENERAL.—The Secretary shall estab-
16 lish, as part of the Federal Energy Management
17 Program, a pilot program under which the Secretary
18 shall provide grants for—

19 “(A) the incremental cost of precommercial
20 plug-in electric drive vehicles for purchase or
21 lease in an amount not to exceed \$10,000 per
22 vehicle purchased or \$1,500 per year per vehicle
23 leased; and

24 “(B) recharging infrastructure at Federal
25 facilities in conjunction with the vehicles.

1 “(2) GUIDELINES.—Not later than 90 days
2 after the date of enactment of this subsection, the
3 Secretary shall issue guidelines for the pilot program
4 established under this subsection.

5 “(3) AUTHORIZATION OF APPROPRIATIONS.—
6 There are authorized to be appropriated such sums
7 as are necessary to carry out this subsection for the
8 period of fiscal years 2010 through 2015.”.

9 **SEC. 155. STUDY OF END-OF-USEFUL LIFE OPTIONS FOR**
10 **MOTOR VEHICLE BATTERIES.**

11 (a) IN GENERAL.—In combination with the research,
12 demonstration, and deployment activities conducted under
13 section 641(k) of the Energy Independence and Security
14 Act of 2007 (42 U.S.C. 17231(k)), the Secretary shall
15 conduct a study on the end-of-useful life options for motor
16 vehicle batteries, including batteries used in electric drive
17 vehicles.

18 (b) REPORT.—Not later than 1 year after the date
19 of enactment of this Act, the Secretary shall submit to
20 the appropriate committees of Congress a report on the
21 results of the study conducted under subsection (a), in-
22 cluding recommendations for stationary storage applica-
23 tions and recyclability design specifications.

1 **TITLE II—ENHANCED ENERGY**
2 **EFFICIENCY**
3 **Subtitle A—Manufacturing Energy**
4 **Efficiency**

5 **SEC. 201. STATE PARTNERSHIP INDUSTRIAL ENERGY EFFI-**
6 **CIENCY REVOLVING LOAN PROGRAM.**

7 Section 399A of the Energy Policy and Conservation
8 Act (42 U.S.C. 6371h–1) is amended—

9 (1) in the section heading, by inserting “**AND**
10 **INDUSTRY**” before the period at the end;

11 (2) by redesignating subsections (h) and (i) as
12 subsections (i) and (j), respectively; and

13 (3) by inserting after subsection (g) the fol-
14 lowing:

15 “(h) STATE PARTNERSHIP INDUSTRIAL ENERGY EF-
16 FICIENCY REVOLVING LOAN PROGRAM.—

17 “(1) IN GENERAL.—The Secretary shall carry
18 out a program under which the Secretary shall pro-
19 vide grants to eligible lenders to pay the Federal
20 share of creating a revolving loan program under
21 which loans are provided to commercial and indus-
22 trial manufacturers to implement commercially avail-
23 able technologies or processes that significantly—

1 “(A) reduce systems energy intensity, in-
2 cluding the use of energy intensive feedstocks;
3 and

4 “(B) improve the industrial competitive-
5 ness of the United States.

6 “(2) ELIGIBLE LENDERS.—To be eligible to re-
7 ceive cost-matched Federal funds under this sub-
8 section, a lender shall—

9 “(A) be a community and economic devel-
10 opment lender that the Secretary certifies meets
11 the requirements of this subsection;

12 “(B) lead a partnership that includes par-
13 ticipation by, at a minimum—

14 “(i) a State government agency; and

15 “(ii) a private financial institution or
16 other provider of loan capital;

17 “(C) submit an application to the Sec-
18 retary, and receive the approval of the Sec-
19 retary, for cost-matched Federal funds to carry
20 out a loan program described in paragraph (1);
21 and

22 “(D) ensure that non-Federal funds are
23 provided to match, on at least a dollar-for-dol-
24 lar basis, the amount of Federal funds that are

1 provided to carry out a revolving loan program
2 described in paragraph (1).

3 “(3) AWARD.—The amount of cost-matched
4 Federal funds provided to an eligible lender shall not
5 exceed \$100,000,000 for any fiscal year.

6 “(4) RECAPTURE OF AWARDS.—

7 “(A) IN GENERAL.—An eligible lender that
8 receives an award under paragraph (1) shall be
9 required to repay to the Secretary an amount
10 of cost-match Federal funds, as determined by
11 the Secretary under subparagraph (B), if the
12 eligible lender is unable or unwilling to operate
13 a program described in this subsection for a pe-
14 riod of not less than 10 years beginning on the
15 date on which the eligible lender first receives
16 funds made available through the award.

17 “(B) DETERMINATION BY SECRETARY.—
18 The Secretary shall determine the amount of
19 cost-match Federal funds that an eligible lender
20 shall be required to repay to the Secretary
21 under subparagraph (A) based on the consider-
22 ation by the Secretary of—

23 “(i) the amount of non-Federal funds
24 matched by the eligible lender;

1 “(ii) the amount of loan losses in-
2 curred by the revolving loan program de-
3 scribed in paragraph (1); and

4 “(iii) any other appropriate factor, as
5 determined by the Secretary.

6 “(C) USE OF RECAPTURED COST-MATCH
7 FEDERAL FUNDS.—The Secretary may dis-
8 tribute to eligible lenders under this subsection
9 each amount received by the Secretary under
10 this paragraph.

11 “(5) ELIGIBLE PROJECTS.—A program for
12 which cost-matched Federal funds are provided
13 under this subsection shall be designed to accelerate
14 the implementation of industrial and commercial ap-
15 plications of technologies or processes that—

16 “(A) improve energy efficiency;

17 “(B) enhance the industrial competitive-
18 ness of the United States; and

19 “(C) achieve such other goals as the Sec-
20 retary determines to be appropriate.

21 “(6) EVALUATION.—The Secretary shall evalu-
22 ate applications for cost-matched Federal funds
23 under this subsection on the basis of—

1 “(A) the description of the program to be
2 carried out with the cost-matched Federal
3 funds;

4 “(B) the commitment to provide non-Fed-
5 eral funds in accordance with paragraph
6 (2)(D);

7 “(C) program sustainability over a 10-year
8 period;

9 “(D) the capability of the applicant;

10 “(E) the quantity of energy savings or en-
11 ergy feedstock minimization;

12 “(F) the advancement of the goal under
13 this Act of 25-percent energy avoidance;

14 “(G) the ability to fund energy efficient
15 projects not later than 120 days after the date
16 of the grant award; and

17 “(H) such other factors as the Secretary
18 determines appropriate.

19 “(7) AUTHORIZATION OF APPROPRIATIONS.—

20 There is authorized to be appropriated to carry out
21 this subsection \$500,000,000 for each of fiscal years
22 2010 through 2012.”.

1 **SEC. 202. COORDINATION OF RESEARCH AND DEVELOP-**
2 **MENT OF ENERGY EFFICIENT TECH-**
3 **NOLOGIES FOR INDUSTRY.**

4 (a) IN GENERAL.—As part of the research and devel-
5 opment activities of the Industrial Technologies Program
6 of the Department of Energy, the Secretary shall estab-
7 lish, as appropriate, collaborative research and develop-
8 ment partnerships with other programs within the Office
9 of Energy Efficiency and Renewable Energy, including the
10 Building Technologies Program, the Office of Electricity
11 Delivery and Energy Reliability, and programs of the Of-
12 fice of Science—

13 (1) to leverage the research and development
14 expertise of those programs to promote early stage
15 energy efficiency technology development; and

16 (2) to apply the knowledge and expertise of the
17 Industrial Technologies Program to help achieve the
18 program goals of the other programs.

19 (b) REPORTS.—Not later than 2 years after the date
20 of enactment of this Act and biennially thereafter, the Sec-
21 retary shall submit to Congress a report that describes
22 actions taken to carry out subsection (a) and the results
23 of those actions.

1 **SEC. 203. ENERGY EFFICIENT TECHNOLOGIES ASSESS-**
2 **MENT.**

3 (a) IN GENERAL.—Not later than 60 days after the
4 date of enactment of this Act, the Secretary shall com-
5 mence an assessment of commercially available, cost com-
6 petitive energy efficiency technologies that are not widely
7 implemented within the United States for the energy in-
8 tensive industries of—

- 9 (1) steel;
- 10 (2) aluminum;
- 11 (3) forest and paper products;
- 12 (4) food processing;
- 13 (5) metal casting;
- 14 (6) glass;
- 15 (7) chemicals;
- 16 (8) petroleum refining;
- 17 (9) cement;
- 18 (10) information and communication tech-
19 nologies; and
- 20 (11) other industries that (as determined by the
21 Secretary)—
 - 22 (A) use large quantities of energy;
 - 23 (B) emit large quantities of greenhouse
24 gases; or
 - 25 (C) use a rapidly increasing quantity of en-
26 ergy.

1 (b) REPORT.—Not later than 1 year after the date
2 of enactment of this Act, the Secretary shall publish a re-
3 port, based on the assessment conducted under subsection
4 (a), that contains—

5 (1) a detailed inventory describing the cost, en-
6 ergy, and greenhouse gas emission savings of each
7 technology described in subsection (a);

8 (2) for each technology, the total cost, energy,
9 and greenhouse gas emissions savings if the tech-
10 nology is implemented throughout the industry of
11 the United States;

12 (3) for each industry, an assessment of total
13 possible cost, energy, and greenhouse gas emissions
14 savings possible if state-of-the art, cost-competitive,
15 commercial energy efficiency technologies were
16 adopted; and

17 (4) for each industry, a comparison to the Eu-
18 ropean Union, Japan, and other appropriate coun-
19 tries of energy efficiency technology adoption rates,
20 as determined by the Secretary.

21 **SEC. 204. FUTURE OF INDUSTRY PROGRAM.**

22 (a) IN GENERAL.—Section 452(c)(2) of the Energy
23 Independence and Security Act of 2007 (42 U.S.C.
24 17111(c)(2)) is amended by striking the section heading

1 and inserting the following: “**FUTURE OF INDUSTRY**
2 **PROGRAM**”.

3 (b) INDUSTRY-SPECIFIC ROAD MAPS.—Section
4 452(c)(2) of the Energy Independence and Security Act
5 of 2007 (42 U.S.C. 17111(c)(2)) is amended—

6 (1) in subparagraph (E), by striking “and” at
7 the end;

8 (2) by redesignating subparagraph (F) as sub-
9 paragraph (G); and

10 (3) by inserting after subparagraph (E) the fol-
11 lowing:

12 “(F) research to establish (through the In-
13 dustrial Technologies Program and in collabora-
14 tion with energy-intensive industries) a road
15 map process under which—

16 “(i) industry-specific studies are con-
17 ducted to determine the intensity of energy
18 use, greenhouse gas emissions, and waste
19 and operating costs, by process and sub-
20 process;

21 “(ii) near-, mid-, and long-term tar-
22 gets of opportunity are established for syn-
23 ergistic improvements in efficiency, sus-
24 tainability, and resilience; and

1 “(iii) public/private actionable plans
2 are created to achieve roadmap goals;
3 and”.

4 (c) INDUSTRIAL RESEARCH AND ASSESSMENT CEN-
5 TERS.—

6 (1) IN GENERAL.—Section 452(e) of the En-
7 ergy Independence and Security Act of 2007 (42
8 U.S.C. 17111(e)) is amended—

9 (A) by redesignating paragraphs (1)
10 through (5) as subparagraphs (A) through (E),
11 respectively, and indenting appropriately;

12 (B) by striking “The Secretary” and in-
13 serting the following:

14 “(1) IN GENERAL.—The Secretary”;

15 (C) in subparagraph (A) (as redesignated
16 by subparagraph (A)), by inserting before the
17 semicolon at the end the following: “, including
18 assessments of sustainable manufacturing goals
19 and the implementation of information tech-
20 nology advancements for supply chain analysis,
21 logistics, industrial and manufacturing proc-
22 esses, and other purposes”; and

23 (D) by adding at the end the following:

24 “(2) CENTERS OF EXCELLENCE.—

1 “(A) IN GENERAL.—The Secretary shall
2 establish a Center of Excellence at up to 10 of
3 the highest performing industrial research and
4 assessment centers, as determined by the Sec-
5 retary.

6 “(B) DUTIES.—A Center of Excellence
7 shall coordinate with and advise the industrial
8 research and assessment centers located in the
9 region of the Center of Excellence.

10 “(C) FUNDING.—Subject to the availability
11 of appropriations, of the funds made available
12 under subsection (f), the Secretary shall use to
13 support each Center of Excellence not less than
14 \$500,000 for fiscal year 2010 and each fiscal
15 year thereafter, as determined by the Secretary.

16 “(3) EXPANSION OF CENTERS.—The Secretary
17 shall provide funding to establish additional indus-
18 trial research and assessment centers at institutions
19 of higher education that do not have industrial re-
20 search and assessment centers established under
21 paragraph (1), taking into account the size of, and
22 potential energy efficiency savings for, the manufac-
23 turing base within the region of the proposed center.

24 “(4) COORDINATION.—

1 “(A) IN GENERAL.—To increase the value
2 and capabilities of the industrial research and
3 assessment centers, the centers shall—

4 “(i) coordinate with Manufacturing
5 Extension Partnership Centers of the Na-
6 tional Institute of Science and Technology;

7 “(ii) coordinate with the Building
8 Technologies Program of the Department
9 of Energy to provide building assessment
10 services to manufacturers;

11 “(iii) increase partnerships with the
12 National Laboratories of the Department
13 of Energy to leverage the expertise and
14 technologies of the National Laboratories
15 for national industrial and manufacturing
16 needs;

17 “(iv) identify opportunities for reduc-
18 ing greenhouse gas emissions; and

19 “(v) promote sustainable manufac-
20 turing practices for small- and medium-
21 sized manufacturers.

22 “(5) OUTREACH.—The Secretary shall provide
23 funding for—

24 “(A) outreach activities by the industrial
25 research and assessment centers to inform

1 small- and medium-sized manufacturers of the
2 information, technologies, and services avail-
3 able; and

4 “(B) a full-time equivalent employee at
5 each center of excellence whose primary mission
6 shall be to coordinate and leverage the efforts
7 of the center with—

8 “(i) Federal and State efforts;

9 “(ii) the efforts of utilities; and

10 “(iii) the efforts of other centers in
11 the region of the center of excellence.

12 “(6) WORKFORCE TRAINING.—

13 “(A) IN GENERAL.—The Secretary shall
14 pay the Federal share of associated internship
15 programs under which students work with in-
16 dustries and manufactures to implement the
17 recommendations of industrial research and as-
18 sessment centers.

19 “(B) FEDERAL SHARE.—The Federal
20 share of the cost of carrying out internship pro-
21 grams described in subparagraph (A) shall be
22 50 percent.

23 “(C) FUNDING.—Subject to the availability
24 of appropriations, of the funds made available
25 under subsection (f), the Secretary shall use to

1 carry out this paragraph not less than
2 \$5,000,000 for fiscal year 2010 and each fiscal
3 year thereafter.

4 “(7) SMALL BUSINESS LOANS.—The Adminis-
5 trator of the Small Business Administration shall, to
6 the maximum practicable, expedite consideration of
7 applications from eligible small business concerns for
8 loans under the Small Business Act (15 U.S.C. 631
9 et seq.) to implement recommendations of industrial
10 research and assessment centers established under
11 paragraph (1).”.

12 (d) FUTURE OF INDUSTRY PROGRAM.—Section
13 452(f) of the Energy Independence and Security Act of
14 2007 (42 U.S.C. 17111(f)) is amended—

15 (1) in paragraph (1)—

16 (A) in subparagraph (C), by striking
17 “\$196,000,000” and inserting “\$216,000,000”;

18 (B) in subparagraph (D), by striking
19 “\$202,000,000” and inserting “\$232,000,000”;

20 and

21 (C) in subparagraph (E), by striking
22 “\$208,000,000” and inserting “\$248,000,000”;

23 and

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

1 “(4) INDUSTRIAL RESEARCH AND ASSESSMENT
2 CENTERS.—Of the amounts made available under
3 paragraph (1), the Secretary shall use to provide
4 funding to industrial research and assessment cen-
5 ters under subsection (e) not less than—

6 “(A) \$20,000,000 for fiscal year 2010;

7 “(B) \$30,000,000 for fiscal year 2011; and

8 “(C) \$40,000,000 for fiscal year 2012 and
9 each fiscal year thereafter.”.

10 **SEC. 205. SUSTAINABLE MANUFACTURING INITIATIVE.**

11 (a) IN GENERAL.—Part E of title III of the Energy
12 Policy and Conservation Act (42 U.S.C. 6341) is amended
13 by adding at the end the following:

14 **“SEC. 376. SUSTAINABLE MANUFACTURING INITIATIVE.**

15 “(a) IN GENERAL.—As part of the Industrial Tech-
16 nologies Program of the Department of Energy, the Sec-
17 retary shall carry out a sustainable manufacturing initia-
18 tive under which the Secretary, on the request of a manu-
19 facturer, shall conduct onsite technical assessments to
20 identify opportunities for—

21 “(1) maximizing the energy efficiency of sys-
22 tems;

23 “(2) preventing pollution and minimizing waste;

24 “(3) reducing the use of water in manufac-
25 turing processes;

1 “(4) conserving natural resources; and

2 “(5) achieving such other goals as the Secretary
3 determines to be appropriate.

4 “(b) COORDINATION.—The Secretary shall carry out
5 the initiative in coordination with appropriate agencies, in-
6 cluding the National Institute of Standards and Tech-
7 nology.

8 “(c) RESEARCH AND DEVELOPMENT PROGRAM FOR
9 SUSTAINABLE MANUFACTURING AND INDUSTRIAL TECH-
10 NOLOGIES AND PROCESSES.—As part of the Industrial
11 Technologies Program of the Department of Energy, the
12 Secretary shall carry out a joint industry-government
13 partnership program to conduct research and development
14 of new sustainable manufacturing and industrial tech-
15 nologies and processes that maximize the energy efficiency
16 of systems, reduce pollution, and conserve natural re-
17 sources.

18 “(d) AUTHORIZATION OF APPROPRIATIONS.—There
19 are authorized to be appropriated such sums as are nec-
20 essary to carry out this section.”.

21 (b) TABLE OF CONTENTS.—The table of contents of
22 the Energy Policy and Conservation Act (42 U.S.C. prec.
23 6201) is amended by adding at the end of the items relat-
24 ing to part E of title III the following:

“Sec. 376. Sustainable manufacturing initiative.”.

1 **SEC. 206. INNOVATION IN INDUSTRY GRANTS.**

2 Section 1008 of the Energy Policy Act of 2005 (42
3 U.S.C. 16396) is amended by adding at the end the fol-
4 lowing:

5 “(g) INNOVATION IN INDUSTRY GRANTS.—

6 “(1) IN GENERAL.—As part of the program
7 under this section, the Secretary shall carry out a
8 program to pay the Federal share of competitively
9 awarding grants to State-industry partnerships in
10 accordance with this subsection to develop, dem-
11 onstrate, and commercialize new technologies or
12 processes for industries that significantly—

13 “(A) reduce energy use and energy inten-
14 sive feedstocks;

15 “(B) reduce pollution and greenhouse gas
16 emissions;

17 “(C) reduce industrial waste; and

18 “(D) improve domestic industrial cost com-
19 petitiveness.

20 “(2) ADMINISTRATION.—

21 “(A) APPLICATIONS.—A State-industry
22 partnership seeking a grant under this sub-
23 section shall submit to the Secretary an applica-
24 tion for a grant to carry out a project to dem-
25 onstrate an innovative energy efficiency tech-
26 nology or process described in paragraph (1).

1 “(B) COST SHARING.—To be eligible to re-
2 ceive a grant under this subsection, a State-in-
3 dustry partnership shall agree to match, on at
4 least a dollar-for-dollar basis, the amount of
5 Federal funds that are provided to carry out
6 the project.

7 “(C) GRANT.—The Secretary shall provide
8 to a State-industry partnership selected under
9 this subsection a 1-time grant of not more than
10 \$500,000 to initiate the project.

11 “(3) ELIGIBLE PROJECTS.—A project for which
12 a grant is received under this subsection shall be de-
13 signed to demonstrate successful—

14 “(A) industrial applications of energy effi-
15 cient technologies or processes that reduce costs
16 to industry and prevent pollution and green-
17 house gas releases; or

18 “(B) energy efficiency improvements in
19 material inputs, processes, or waste streams to
20 enhance the industrial competitiveness of the
21 United States.

22 “(4) EVALUATION.—The Secretary shall evalu-
23 ate applications for grants under this subsection on
24 the basis of—

25 “(A) the description of the concept;

- 1 “(B) cost-efficiency;
- 2 “(C) the capability of the applicant;
- 3 “(D) the quantity of energy savings;
- 4 “(E) the commercialization or marketing
- 5 plan; and
- 6 “(F) such other factors as the Secretary
- 7 determines to be appropriate.”.

8 **SEC. 207. STUDY OF ADVANCED ENERGY TECHNOLOGY**

9 **MANUFACTURING CAPABILITIES IN THE**

10 **UNITED STATES.**

11 (a) IN GENERAL.—Not later than 60 days after the

12 date of enactment of this Act, the Secretary shall enter

13 into an arrangement with the National Academy of

14 Sciences under which the Academy shall conduct a study

15 of the development of advanced manufacturing capabilities

16 for various energy technologies, including—

17 (1) an assessment of the manufacturing supply

18 chains of established and emerging industries;

19 (2) an analysis of—

20 (A) the manner in which supply chains

21 have changed over the 25-year period ending on

22 the date of enactment of this Act;

23 (B) current trends in supply chains; and

1 (C) the energy intensity of each part of the
2 supply chain and opportunities for improve-
3 ment;

4 (3) for each technology or manufacturing sec-
5 tor, an analysis of which sections of the supply chain
6 are critical for the United States to retain or develop
7 to be competitive in the manufacturing of the tech-
8 nology;

9 (4) an assessment of which emerging energy
10 technologies the United States should focus on to
11 create or enhance manufacturing capabilities; and

12 (5) recommendations on leveraging the exper-
13 tise of energy efficiency and renewable energy user
14 facilities so that best materials and manufacturing
15 practices are designed and implemented.

16 (b) REPORT.—Not later than 2 years after the date
17 on which the Secretary enters into the agreement with the
18 Academy described in subsection (a), the Academy shall
19 submit to the Committee on Energy and Natural Re-
20 sources of the Senate, the Committee on Energy and Com-
21 merce of the House of Representatives, and the Secretary
22 a report describing the results of the study required under
23 this section, including any findings and recommendations.

1 **SEC. 208. INDUSTRIAL TECHNOLOGIES STEERING COM-**
 2 **MITTEE.**

3 The Secretary shall establish an advisory steering
 4 committee to provide recommendations to the Secretary
 5 on planning and implementation of the Industrial Tech-
 6 nologies Program of the Department of Energy.

7 **SEC. 209. AUTHORIZATION OF APPROPRIATIONS.**

8 There are authorized to be appropriated to the Sec-
 9 retary such sums as are necessary to carry out this sub-
 10 title.

11 **Subtitle B—Improved Efficiency in**
 12 **Appliances and Equipment**

13 **SEC. 221. TEST PROCEDURE PETITION PROCESS.**

14 (a) CONSUMER PRODUCTS OTHER THAN AUTO-
 15 MOBILES.—Section 323(b)(1) of the Energy Policy and
 16 Conservation Act (42 U.S.C. 6293(b)(1)) is amended—

17 (1) in subparagraph (A)(i), by striking
 18 “amend” and inserting “publish in the Federal Reg-
 19 ister amended”; and

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

21 “(B) PETITIONS.—

22 “(i) IN GENERAL.—In the case of any
 23 covered product, any person may petition
 24 the Secretary to conduct a rulemaking—

25 “(I) to prescribe a test procedure
 26 for the covered product; or

1 “(II) to amend the test proce-
2 dures applicable to the covered prod-
3 uct to more accurately or fully comply
4 with paragraph (3).

5 “(ii) DETERMINATION.—The Sec-
6 retary shall—

7 “(I) not later than 90 days after
8 the date of receipt of the petition,
9 publish the petition in the Federal
10 Register; and

11 “(II) not later than 180 days
12 after the date of receipt of the peti-
13 tion, grant or deny the petition.

14 “(iii) BASIS.—The Secretary shall
15 grant a petition if the Secretary finds that
16 the petition contains evidence that, assum-
17 ing no other evidence was considered, pro-
18 vides an adequate basis for determining
19 that an amended test method would more
20 accurately or fully comply with paragraph
21 (3).

22 “(iv) EFFECT ON OTHER REQUIRE-
23 MENTS.—The granting of a petition by the
24 Secretary under this subparagraph shall
25 create no presumption with respect to the

1 determination of the Secretary that the
2 proposed test procedure meets the require-
3 ments of paragraph (3).

4 “(v) RULEMAKING.—

5 “(I) IN GENERAL.—Except as
6 provided in subclause (II), not later
7 than the end of the 18-month period
8 beginning on the date of granting a
9 petition, the Secretary shall publish
10 an amended test method or a deter-
11 mination not to amend the test meth-
12 od.

13 “(II) EXTENSION.—The Sec-
14 retary may extend the period de-
15 scribed in subclause (I) for 1 addi-
16 tional year.

17 “(III) DIRECT FINAL RULE.—
18 The Secretary may adopt a consensus
19 test procedure in accordance with the
20 direct final rule procedure established
21 under section 325(p)(4).”.

22 (b) CERTAIN INDUSTRIAL EQUIPMENT.—Section 343
23 of the Energy Policy and Conservation Act (42 U.S.C.
24 6314) is amended—

1 (1) in subsection (a), by striking paragraph (1)
2 and inserting the following:

3 “(1) AMENDMENT AND PETITION PROCESS.—

4 “(A) IN GENERAL.—At least once every 7
5 years, the Secretary shall review test procedures
6 for all covered equipment and—

7 “(i) publish in the Federal Register
8 amended test procedures with respect to
9 any covered equipment, if the Secretary
10 determines that amended test procedures
11 would more accurately or fully comply with
12 paragraphs (2) and (3); or

13 “(ii) publish notice in the Federal
14 Register of any determination not to
15 amend a test procedure.

16 “(B) PETITIONS.—

17 “(i) IN GENERAL.—In the case of any
18 class or category of covered equipment,
19 any person may petition the Secretary to
20 conduct a rulemaking—

21 “(I) to prescribe a test procedure
22 for the covered equipment; or

23 “(II) to amend the test proce-
24 dures applicable to the covered equip-

1 ment to more accurately or fully com-
2 ply with paragraphs (2) and (3).

3 “(ii) DETERMINATION.—The Sec-
4 retary shall—

5 “(I) not later than 90 days after
6 the date of receipt of the petition,
7 publish the petition in the Federal
8 Register; and

9 “(II) not later than 180 days
10 after the date of receipt of the peti-
11 tion, grant or deny the petition.

12 “(iii) BASIS.—The Secretary shall
13 grant a petition if the Secretary finds that
14 the petition contains evidence that, assum-
15 ing no other evidence was considered, pro-
16 vides an adequate basis for determining
17 that an amended test method would more
18 accurately promote energy or water use ef-
19 ficiency.

20 “(iv) EFFECT ON OTHER REQUIRE-
21 MENTS.—The granting of a petition by the
22 Secretary under this paragraph shall cre-
23 ate no presumption with respect to the de-
24 termination of the Secretary that the pro-

1 posed test procedure meets the require-
2 ments of paragraphs (2) and (3).

3 “(v) RULEMAKING.—

4 “(I) IN GENERAL.—Except as
5 provided in subclause (II), not later
6 than the end of the 18-month period
7 beginning on the date of granting a
8 petition, the Secretary shall publish
9 an amended test method or a deter-
10 mination not to amend the test meth-
11 od.

12 “(II) EXTENSION.—The Sec-
13 retary may extend the period de-
14 scribed in subclause (I) for 1 addi-
15 tional year.

16 “(III) DIRECT FINAL RULE.—
17 The Secretary may adopt a consensus
18 test procedure in accordance with the
19 direct final rule procedure established
20 under section 325(p).”;

21 (2) by striking subsection (e); and

22 (3) by redesignating subsections (d) and (e) as
23 subsections (c) and (d), respectively.

1 **SEC. 222. ENERGY STAR PROGRAM.**

2 (a) DIVISION OF RESPONSIBILITIES.—Section
3 324A(b) of the Energy Policy and Conservation Act (42
4 U.S.C. 6294a(b)) is amended—

5 (1) by striking “Responsibilities” and inserting
6 the following:

7 “(1) IN GENERAL.—Responsibilities”; and

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

9 “(2) UPDATE.—Not later than 180 days after
10 the date of enactment of this paragraph, the Sec-
11 retary and the Administrator shall update the agree-
12 ments described in paragraph (1), including agree-
13 ments on provisions that provide—

14 “(A) a clear delineation of the roles and
15 responsibilities of each agency that is based on
16 the resources and areas of expertise of each
17 agency;

18 “(B) a formal process for high-level deci-
19 sionmaking that allows each agency to make
20 specific programmatic decisions based on the
21 program approaches of each agency;

22 “(C) a facilitated annual planning meeting
23 that establishes strategic priorities and goals
24 for the coming year;

25 “(D) a prescribed course of action to work
26 through differences and disagreements;

1 “(E) a facilitated biannual program review
2 conducted by a third-party that—

3 “(i) incorporates an assessment of
4 program progress, partner acceptance, the
5 achievement of program goals, and future
6 strategic planning; and

7 “(ii) is evaluated by the Council on
8 Environmental Quality, which shall ap-
9 praise the findings in the review and work
10 with the agencies to resolve any negative
11 findings; and

12 “(F) a sunset date for the new agreement
13 and a timetable for establishing future agree-
14 ments based on priorities at that time.”.

15 (b) DUTIES.—Section 324A(c) of the Energy Policy
16 and Conservation Act (42 U.S.C. 6294a(c)) is amended—

17 (1) in paragraph (6), by striking “and” after
18 the semicolon at the end;

19 (2) in paragraph (7), by striking the period at
20 the end and inserting a semicolon; and

21 (3) by adding at the end the following:

22 “(8)(A) review each product category—

23 “(i) at least once every 3 years; or

24 “(ii) when market share for an Energy
25 Star product category reaches 35 percent;

1 “(B) based on the review—

2 “(i) update and publish the Energy Star
3 product criteria for the category; or

4 “(ii) publish a finding that no update is
5 justified with the explanation for the finding;

6 “(C) require that—

7 “(i) industry consensus test methods estab-
8 lished by the Department of Energy shall—

9 “(I) take into consideration test pro-
10 cedures or rating procedures developed by
11 industry standards organizations; and

12 “(II) be used for all solid-state light-
13 ing products, including—

14 “(aa) integral luminaries;

15 “(bb) integral replacement lamps;

16 “(cc) light engines; and

17 “(ii) in accordance with the commercializa-
18 tion support provisions of section 912 of the
19 Energy Policy Act of 2005 (42 U.S.C. 16192),
20 the Department of Energy shall assume all re-
21 sponsibility for the implementation of an En-
22 ergy Star program for solid-state lighting; and

23 “(D) during the initial review for each product
24 category, establish an alternative market share to

1 trigger subsequent reviews, based on product-specific
2 technology and market attributes;

3 “(9) require a demonstration of compliance
4 with the Energy Star criteria by qualified products,
5 except that—

6 “(A) the demonstration shall be conducted
7 in accordance with appropriate methods deter-
8 mined for each product type by the Secretary or
9 the Administrator of the Environmental Protec-
10 tion Agency (as appropriate), including—

11 “(i) third-party verification;

12 “(ii) third-party certification;

13 “(iii) purchase and testing of products
14 from the market; or

15 “(iv) other verified testing and compli-
16 ance approaches; and

17 “(B) the Secretary or Administrator may
18 exempt specific types of products from the re-
19 quirements of this subparagraph if the Sec-
20 retary or Administrator finds that—

21 “(i) the benefits to the Energy Star
22 program of verifying product performance
23 are substantially exceeded by the burdens;
24 or

1 “(ii) there are no benefits to the En-
2 ergy Star program; and

3 “(10) develop and publish standardized building
4 energy audit methods.”.

5 (c) FUNDING.—Section 324A of the Energy Policy
6 and Conservation Act (42 U.S.C. 6294a) is amended by
7 adding at the end the following:

8 “(f) AUTHORIZATION OF APPROPRIATIONS.—There
9 are authorized to be appropriated to carry out this sec-
10 tion—

11 “(1) to the Department of Energy \$25,000,000
12 for each fiscal year; and

13 “(2) to the Environmental Protection Agency
14 \$100,000,000 for each fiscal year.”.

15 **SEC. 223. PETITION FOR AMENDED STANDARDS.**

16 Section 325(n) of the Energy Policy and Conserva-
17 tion Act (42 U.S.C. 6295(n)) is amended—

18 (1) by redesignating paragraph (3) as para-
19 graph (5); and

20 (2) by inserting after paragraph (2) the fol-
21 lowing:

22 “(3) NOTICE OF DECISION.—Not later than
23 180 days after the date of receiving a petition, the
24 Secretary shall publish in the Federal Register a no-

1 tice of, and explanation for, the decision of the Sec-
2 retary to grant or deny the petition.

3 “(4) NEW OR AMENDED STANDARDS.—Not
4 later than 3 years after the date of granting a peti-
5 tion for new or amended standards, the Secretary
6 shall publish in the Federal Register—

7 “(A) a final rule that contains the new or
8 amended standards; or

9 “(B) a determination that no new or
10 amended standards are necessary.”.

11 **SEC. 224. PORTABLE LIGHT FIXTURES.**

12 (a) DEFINITIONS.—Section 321 of the Energy Policy
13 and Conservation Act (42 U.S.C. 6291) is amended by
14 adding at the end the following:

15 “(67) ART WORK LIGHT FIXTURE.—The term
16 ‘art work light fixture’ means a light fixture de-
17 signed only to be mounted directly to an art work
18 and for the purpose of illuminating that art work.

19 “(68) LED LIGHT ENGINE.—The term ‘LED
20 light engine’ or ‘LED light engine with integral heat
21 sink’ means a subsystem of an LED light fixture
22 that—

23 “(A) includes 1 or more LED components,
24 including—

1 “(i) an LED driver power source with
2 electrical and mechanical interfaces; and

3 “(ii) an integral heat sink to provide
4 thermal dissipation; and

5 “(B) may be designed to accept additional
6 components that provide aesthetic, optical, and
7 environmental control.

8 “(69) LED LIGHT FIXTURE.—The term ‘LED
9 light fixture’ means a complete lighting unit con-
10 sisting of—

11 “(A) an LED light source with 1 or more
12 LED lamps or LED light engines; and

13 “(B) parts—

14 “(i) to distribute the light;

15 “(ii) to position and protect the light
16 source; and

17 “(iii) to connect the light source to
18 electrical power.

19 “(70) LIGHT FIXTURE.—The term ‘light fix-
20 ture’ means a product designed to provide light that
21 includes—

22 “(A) at least 1 lamp socket; and

23 “(B) parts—

24 “(i) to distribute the light;

1 “(ii) position and protect 1 or more
2 lamps; and

3 “(iii) to connect 1 or more lamps to a
4 power supply.

5 “(71) PORTABLE LIGHT FIXTURE.—

6 “(A) IN GENERAL.—The term ‘portable
7 light fixture’ means a light fixture that has a
8 flexible cord and an attachment plug for con-
9 nection to a nominal 120-volt circuit that—

10 “(i) allows the user to relocate the
11 product without any rewiring; and

12 “(ii) typically can be controlled with a
13 switch located on the product or the power
14 cord of the product.

15 “(B) EXCLUSIONS.—The term ‘portable
16 light fixture’ does not include—

17 “(i) direct plug-in night lights, sun or
18 heat lamps, medical or dental lights, port-
19 able electric hand lamps, signs or commer-
20 cial advertising displays, photographic
21 lamps, germicidal lamps, or light fixtures
22 for marine use or for use in hazardous lo-
23 cations (as those terms are defined in
24 ANSI/NFPA 70 of the National Electrical
25 Code); or

1 “(ii) decorative lighting strings, deco-
2 rative lighting outfits, or electric candles or
3 candelabra without lamp shades that are
4 covered by Underwriter Laboratories (UL)
5 standard 588, ‘Seasonal and Holiday Dec-
6 orative Products’.”.

7 (b) COVERAGE.—

8 (1) IN GENERAL.—Section 322(a) of the En-
9 ergy Policy and Conservation Act (42 U.S.C.
10 6292(a)) is amended—

11 (A) by redesignating paragraph (20) as
12 paragraph (21); and

13 (B) by inserting after paragraph (19) the
14 following:

15 “(20) Portable light fixtures.”.

16 (2) CONFORMING AMENDMENTS.—Section
17 325(l) of the Energy Policy and Conservation Act
18 (42 U.S.C. 6295(l)) is amended by striking “para-
19 graph (19)” each place it appears in paragraphs (1)
20 and (2) and inserting “paragraph (21)”.

21 (c) TEST PROCEDURES.—Section 323(b) of the En-
22 ergy Policy and Conservation Act (42 U.S.C. 6293(b)) is
23 amended by adding at the end the following:

24 “(19) LED FIXTURES AND LED LIGHT EN-
25 GINES.—Test procedures for LED fixtures and LED

1 light engines shall be based on Illuminating Engi-
2 neering Society of North America test procedure
3 LM-79, Approved Method for Electrical and Photo-
4 metric Testing of Solid-State Lighting Devices and
5 an IES-approved test procedure for testing LED
6 light engines.”.

7 (d) STANDARDS.—Section 325 of the Energy Policy
8 and Conservation Act (42 U.S.C. 6295) is amended—

9 (1) by redesignating subsection (ii) as sub-
10 section (kk); and

11 (2) by inserting after subsection (hh) the fol-
12 lowing:

13 “(ii) PORTABLE LIGHT FIXTURES.—

14 “(1) IN GENERAL.—Subject to paragraphs (2)
15 and (3), portable light fixtures manufactured on or
16 after January 1, 2012, shall meet 1 or more of the
17 following requirements:

18 “(A) Be a fluorescent light fixture that
19 meets the requirements of the Energy Star Pro-
20 gram for Residential Light Fixtures, Version
21 4.2.

22 “(B) Be equipped with only 1 or more
23 GU-24 line-voltage sockets, not be rated for
24 use with incandescent lamps of any type (as de-
25 fined in ANSI standards), and meet the re-

1 requirements of version 4.2 of the Energy Star
2 program for residential light fixtures.

3 “(C) Be an LED light fixture or a light
4 fixture with an LED light engine and comply
5 with the following minimum requirements:

6 “(i) Minimum light output: 200
7 lumens (initial).

8 “(ii) Minimum LED light engine effi-
9 cacy: 40 lumens/watt installed in fixtures
10 that meet the minimum light fixture effi-
11 cacy of 29 lumens/watt or, alternatively, a
12 minimum LED light engine efficacy of 60
13 lumens/watt for fixtures that do not meet
14 the minimum light fixture efficacy of 29
15 lumens/watt.

16 “(iii) All portable fixtures shall have a
17 minimum LED light fixture efficacy of 29
18 lumens/watt and a minimum LED light
19 engine efficacy of 60 lumens/watt by Janu-
20 ary 1, 2016.

21 “(iv) Color Correlated Temperature
22 (CCT): 2700K through 4000K.

23 “(v) Minimum Color Rendering Index
24 (CRI): 75.

1 “(vi) Power factor equal to or greater
2 than 0.70.

3 “(vii) Portable luminaries that have
4 internal power supplies shall have zero
5 standby power when the luminaire is
6 turned off.

7 “(viii) LED light sources shall deliver
8 at least 70 percent of initial lumens for at
9 least 25,000 hours.

10 “(D)(i) Be equipped with an ANSI-des-
11 ignated E12, E17, or E26 screw-based socket
12 and be prepackaged and sold together with 1
13 screw-based compact fluorescent lamp or screw-
14 based LED lamp for each screw-based socket
15 on the portable light fixture.

16 “(ii) The compact fluorescent or LED
17 lamps prepackaged with the light fixture shall
18 be fully compatible with any light fixture con-
19 trols incorporated into the light fixture (for ex-
20 ample, light fixtures with dimmers shall be
21 packed with dimmable lamps).

22 “(iii) Compact fluorescent lamps pre-
23 packaged with light fixtures shall meet the re-
24 quirements of the Energy Star Program for
25 CFLs Version 4.0.

1 “(iv) Screw-based LED lamps shall comply
2 with the minimum requirements described in
3 subparagraph (C).

4 “(E) Be equipped with 1 or more single-
5 ended, non-screw based halogen lamp sockets
6 (line or low voltage), a dimmer control or high-
7 low control, and be rated for a maximum of 100
8 watts.

9 “(2) REVIEW.—

10 “(A) REVIEW.—The Secretary shall review
11 the criteria and standards established under
12 paragraph (1) to determine if revised standards
13 are technologically feasible and economically
14 justified.

15 “(B) COMPONENTS.—The review shall in-
16 clude consideration of—

17 “(i) whether a separate compliance
18 procedure is still needed for halogen fix-
19 tures described in subparagraph (E) and,
20 if necessary, what an appropriate standard
21 for halogen fixtures shall be;

22 “(ii) which of the specific technical
23 criteria described in subparagraphs (A),
24 (C), and (D)(iii) should be modified; and

1 “(iii) which fixtures should be exempt-
2 ed from the light fixture efficacy standard
3 as of January 1, 2016, because the fix-
4 tures are primarily decorative in nature (as
5 defined by the Secretary) and, even if ex-
6 empted, are likely to be sold in limited
7 quantities.

8 “(C) TIMING.—

9 “(i) DETERMINATION.—Not later
10 than January 1, 2014, the Secretary shall
11 publish amended standards, or a deter-
12 mination that no amended standards are
13 justified, under this subsection.

14 “(ii) STANDARDS.—Any standards
15 under this subsection take effect on Janu-
16 ary 1, 2016.

17 “(3) ART WORK LIGHT FIXTURES.—Art work
18 light fixtures manufactured on or after January 1,
19 2012, shall—

20 “(A) comply with paragraph (1); or

21 “(B)(i) contain only ANSI-designated E12
22 screw-based line-voltage sockets;

23 “(ii) have not more than 3 sockets;

24 “(iii) be controlled with an integral high/
25 low switch;

1 “(iv) be rated for not more than 25 watts
2 if fitted with 1 socket; and

3 “(v) be rated for not more than 15 watts
4 per socket if fitted with 2 or 3 sockets.

5 “(4) EXCEPTION FROM PREEMPTION.—Not-
6 withstanding section 327, Federal preemption shall
7 not apply to a regulation concerning portable light
8 fixtures adopted by the California Energy Commis-
9 sion on or before January 1, 2014.”.

10 **SEC. 225. GU-24 BASE LAMPS.**

11 (a) DEFINITIONS.—Section 321 of the Energy Policy
12 and Conservation Act (42 U.S.C. 6291) (as amended by
13 section 224(a)) is amended by adding at the end the fol-
14 lowing:

15 “(72) GU-24.—The term ‘GU-24’ ” means the
16 designation of a lamp socket, based on a coding sys-
17 tem by the International Electrotechnical Commis-
18 sion, under which—

19 “(A) ‘G’ indicates a holder and socket type
20 with 2 or more projecting contacts, such as pins
21 or posts;

22 “(B) ‘U’ distinguishes between lamp and
23 holder designs of similar type that are not
24 interchangeable due to electrical or mechanical
25 requirements; and

1 “(C) 24 indicates the distance in millime-
2 ters between the electrical contact posts.

3 “(73) GU-24 ADAPTOR.—

4 “(A) IN GENERAL.—The term ‘GU-24
5 Adaptor’ means a 1-piece device, pig-tail, wiring
6 harness, or other such socket or base attach-
7 ment that—

8 “(i) connects to a GU-24 socket on 1
9 end and provides a different type of socket
10 or connection on the other end; and

11 “(ii) does not alter the voltage.

12 “(B) EXCLUSION.—The term ‘GU-24
13 Adaptor’ does not include a fluorescent ballast
14 with a GU-24 base.

15 “(74) GU-24 BASE LAMP.—‘GU-24 base lamp’
16 means a light bulb designed to fit in a GU-24 sock-
17 et.”.

18 (b) STANDARDS.—Section 325 of the Energy Policy
19 and Conservation Act (42 U.S.C. 6295) (as amended by
20 section 224(d)) is amended by inserting after subsection
21 (ii) the following:

22 “(jj) GU-24 BASE LAMPS.—

23 “(1) IN GENERAL.—A GU-24 base lamp shall
24 not be an incandescent lamp as defined by ANSI.

1 “(2) GU-24 ADAPTORS.—GU-24 adaptors shall
2 not adapt a GU-24 socket to any other line voltage
3 socket.”.

4 **SEC. 226. STANDARDS FOR CERTAIN INCANDESCENT RE-**
5 **FLECTOR LAMPS AND REFLECTOR LAMPS.**

6 Section 325(i) of the Energy Policy and Conservation
7 Act (42 U.S.C. 6295(i)) is amended by adding at the end
8 the following:

9 “(9) CERTAIN INCANDESCENT REFLECTOR
10 LAMPS.—

11 “(A) IN GENERAL.—Not later than July 1,
12 2011, the Secretary shall publish a final rule
13 establishing standards for incandescent reflector
14 lamp types described in paragraph (1)(C).

15 “(B) EFFECTIVE DATE.—The standards
16 described in subparagraph (A) shall take effect
17 on July 1, 2013.

18 “(C) STANDARDS.—In conducting a rule-
19 making for incandescent reflector lamps under
20 this paragraph after the date of enactment of
21 this paragraph, the Secretary shall consider the
22 standards for all incandescent reflector lamps,
23 including lamp types described in paragraph
24 (1)(C).

25 “(10) REFLECTOR LAMPS.—

1 “(A) IN GENERAL.—Not later than Janu-
2 ary 1, 2015, the Secretary shall publish a final
3 rule establishing and amending standards for
4 reflector lamps, including incandescent reflector
5 lamps.

6 “(B) ADMINISTRATION.—In conducting
7 the rulemaking for reflector lamps under this
8 paragraph, the Secretary shall consider—

9 “(i) incandescent and nonincandescent
10 technologies; and

11 “(ii) a new metric, other than lumens
12 per watt, that is based on the photometric
13 distribution of those lamps.

14 “(C) EFFECTIVE DATE.—The standards
15 described in subparagraph (A) shall take effect
16 not earlier than the date that is 3 years after
17 the date of publication of the final rule, as de-
18 termined by the Secretary.”.

19 **SEC. 227. STANDARDS FOR COMMERCIAL FURNACES.**

20 Section 342(a) of the Energy Policy and Conserva-
21 tion Act (42 U.S.C. 6313(a)) is amended by adding at
22 the end the following:

23 “(11) Warm air furnaces with an input rating
24 of 225,000 Btu per hour or more and manufactured

1 after January 1, 2011, shall meet the following
2 standard levels:

3 “(A) Gas-fired units shall—

4 “(i) have a minimum combustion effi-
5 ciency of 80 percent;

6 “(ii) include an interrupted or inter-
7 mittent ignition device;

8 “(iii) have jacket losses not exceeding
9 0.75 percent of the input rating; and

10 “(iv) have power venting or a flue
11 damper.

12 “(B) Oil-fired units shall have—

13 “(i) a minimum thermal efficiency of
14 81 percent;

15 “(ii) jacket losses not exceeding 0.75
16 percent of the input rating; and

17 “(iii) power venting or a flue damp-
18 er.”.

19 **SEC. 228. MOTOR EFFICIENCY REBATE PROGRAM.**

20 (a) IN GENERAL.—Part C of title III of the Energy
21 Policy and Conservation Act (42 U.S.C. 6311 et seq.) is
22 amended by adding at the end the following:

23 **“SEC. 347. MOTOR EFFICIENCY REBATE PROGRAM.**

24 “(a) ESTABLISHMENT.—By not later than January
25 1, 2010, in accordance with subsection (b), the Secretary

1 shall establish a program to provide rebates for expendi-
2 tures made by entities—

3 “(1) for the purchase and installation of a new
4 electric motor that has a nominal full load efficiency
5 that is not less than the nominal full load efficiency
6 as defined in—

7 “(A) table 12–12 of NEMA Standards
8 Publication MG 1–2006 for random wound mo-
9 tors rated 600 volts or lower; or

10 “(B) table 12–13 of NEMA Standards
11 Publication MG 1–2006 for form wound motors
12 rated 5000 volts or lower; and

13 “(2) to replace an installed motor of the entity
14 the specifications of which are established by the
15 Secretary by a date that is not later than 90 days
16 after the date of enactment of this section.

17 “(b) REQUIREMENTS.—

18 “(1) APPLICATION.—To be eligible to receive a
19 rebate under this section, an entity shall submit to
20 the Secretary an application in such form, at such
21 time, and containing such information as the Sec-
22 retary may require, including—

23 “(A) demonstrated evidence that the entity
24 purchased an electric motor described in sub-

1 section (a)(1) to replace an installed motor de-
2 scribed in subsection (a)(2);

3 “(B) demonstrated evidence that the enti-
4 ty—

5 “(i) removed the installed motor of
6 the entity from service; and

7 “(ii) properly disposed the installed
8 motor of the entity; and

9 “(C) the physical nameplate of the in-
10 stalled motor of the entity.

11 “(2) AUTHORIZED AMOUNT OF REBATE.—The
12 Secretary may provide to an entity that meets each
13 requirement under paragraph (1) a rebate the
14 amount of which shall be equal to the product ob-
15 tained by multiplying—

16 “(A) the nameplate horsepower of the elec-
17 tric motor purchased by the entity in accord-
18 ance with subsection (a)(1); and

19 “(B) \$25.00.

20 “(3) PAYMENTS TO DISTRIBUTORS OF QUALI-
21 FYING ELECTRIC MOTORS.—To assist in the pay-
22 ment for expenses relating to processing and motor
23 core disposal costs, the Secretary shall provide to the
24 distributor of an electric motor described in sub-
25 section (a)(1), the purchaser of which received a re-

1 bate under this section, an amount equal to the
2 product obtained by multiplying—

3 “(A) the nameplate horsepower of the elec-
4 tric motor; and

5 “(B) \$5.00.

6 “(c) **AUTHORIZATION OF APPROPRIATIONS.**—There
7 are authorized to be appropriated to carry out this section,
8 to remain available until expended—

9 “(1) \$80,000,000 for fiscal year 2010;

10 “(2) \$75,000,000 for fiscal year 2011;

11 “(3) \$70,000,000 for fiscal year 2012;

12 “(4) \$65,000,000 for fiscal year 2013; and

13 “(5) \$60,000,000 for fiscal year 2014.”.

14 (b) **TABLE OF CONTENTS.**—The table of contents of
15 the Energy Policy and Conservation Act (42 U.S.C. prec.
16 6201) is amended by adding at the end of the items relat-
17 ing to part C of title III the following:

“Sec. 347. Motor efficiency rebate program.”.

18 **SEC. 229. STUDY OF COMPLIANCE WITH ENERGY STAND-**
19 **ARDS FOR APPLIANCES.**

20 (a) **IN GENERAL.**—The Secretary shall conduct a
21 study of the degree of compliance with energy standards
22 for appliances, including an investigation of compliance
23 rates and options for improving compliance, including en-
24 forcement.

1 (b) REPORT.—Not later than 18 months after the
2 date of enactment of this Act, the Secretary shall submit
3 to the appropriate committees of Congress a report de-
4 scribing the results of the study, including any rec-
5 ommendations.

6 **SEC. 230. STUDY OF DIRECT CURRENT ELECTRICITY SUP-**
7 **PLY IN CERTAIN BUILDINGS.**

8 (a) IN GENERAL.—The Secretary shall conduct a
9 study—

10 (1) of the costs and benefits (including signifi-
11 cant energy efficiency, power quality, and other
12 power grid, safety, and environmental benefits) of
13 requiring high-quality, direct current electricity sup-
14 ply in certain buildings; and

15 (2) to determine, if the requirement described
16 in paragraph (1) is imposed, what the policy and
17 role of the Federal Government should be in real-
18 izing those benefits.

19 (b) REPORT.—Not later than 1 year after the date
20 of enactment of this Act, the Secretary shall submit to
21 the appropriate committees of Congress a report describ-
22 ing the results of the study, including any recommenda-
23 tions.

1 **SEC. 231. MOTOR MARKET ASSESSMENT AND COMMERCIAL**
2 **AWARENESS PROGRAM.**

3 (a) FINDINGS.—Congress finds that—

4 (1) electric motor systems account for about
5 half of the electricity used in the United States;

6 (2) electric motor energy use is determined by
7 both the efficiency of the motor and the system in
8 which the motor operates;

9 (3) Federal Government research on motor end
10 use and efficiency opportunities is more than a dec-
11 ade old; and

12 (4) the Census Bureau has discontinued collec-
13 tion of data on motor and generator importation,
14 manufacture, shipment, and sales.

15 (b) DEFINITIONS.—In this section:

16 (1) DEPARTMENT.—The term “Department”
17 means the Department of Energy.

18 (2) INTERESTED PARTIES.—The term “inter-
19 ested parties” includes—

20 (A) trade associations;

21 (B) motor manufacturers;

22 (C) motor end users;

23 (D) electric utilities; and

24 (E) individuals and entities that conduct
25 energy efficiency programs.

1 (3) SECRETARY.—The term “Secretary” means
2 the Secretary of Energy, in consultation with inter-
3 ested parties.

4 (c) ASSESSMENT.—The Secretary shall conduct an
5 assessment of electric motors and the electric motor mar-
6 ket in the United States that shall—

7 (1) include important subsectors of the indus-
8 trial and commercial electric motor market (as de-
9 termined by the Secretary), including—

10 (A) the stock of motors and motor-driven
11 equipment;

12 (B) efficiency categories of the motor pop-
13 ulation; and

14 (C) motor systems that use drives, servos,
15 and other control technologies;

16 (2) characterize and estimate the opportunities
17 for improvement in the energy efficiency of motor
18 systems by market segment, including opportunities
19 for—

20 (A) expanded use of drives, servos, and
21 other control technologies;

22 (B) expanded use of process control,
23 pumps, compressors, fans or blowers, and mate-
24 rial handling components; and

1 (C) substitution of existing motor designs
2 with existing and future advanced motor de-
3 signs, including electronically commutated per-
4 manent magnet, interior permanent magnet,
5 and switched reluctance motors; and

6 (3) develop an updated profile of motor system
7 purchase and maintenance practices, including sur-
8 veying the number of companies that have motor
9 purchase and repair specifications, by company size,
10 number of employees, and sales.

11 (d) RECOMMENDATIONS; UPDATE.—Based on the as-
12 sessment conducted under subsection (c), the Secretary
13 shall—

14 (1) develop—

15 (A) recommendations to update the de-
16 tailed motor profile on a periodic basis;

17 (B) methods to estimate the energy sav-
18 ings and market penetration that is attributable
19 to the Save Energy Now Program of the De-
20 partment; and

21 (C) recommendations for the Director of
22 the Census Bureau on market surveys that
23 should be undertaken in support of the motor
24 system activities of the Department; and

1 (2) prepare an update to the Motor Master+
2 program of the Department.

3 (e) PROGRAM.—Based on the assessment, rec-
4 ommendations, and update required under subsections (c)
5 and (d), the Secretary shall establish a proactive, national
6 program targeted at motor end-users and delivered in co-
7 operation with interested parties to increase awareness
8 of—

9 (1) the energy and cost-saving opportunities in
10 commercial and industrial facilities using higher effi-
11 ciency electric motors;

12 (2) improvements in motor system procurement
13 and management procedures in the selection of high-
14 er efficiency electric motors and motor-system com-
15 ponents, including drives, controls, and driven equip-
16 ment; and

17 (3) criteria for making decisions for new, re-
18 placement, or repair motor and motor system com-
19 ponents.

20 **SEC. 232. STUDY REGARDING ENERGY SUPERSTAR CON-**
21 **CEPT.**

22 Section 324A of the Energy Policy and Conservation
23 Act (42 U.S.C. 6294a) is amended by inserting after sub-
24 section (d) the following:

1 “(e) STUDY REGARDING ENERGY SUPERSTAR CON-
2 CEPT.—

3 “(1) STUDY.—

4 “(A) IN GENERAL.—As soon as practicable
5 after the date of enactment of this subsection,
6 in accordance with subparagraph (B), the Sec-
7 retary and the Administrator of the Environ-
8 mental Protection Agency (referred to in this
9 subsection as the ‘heads of the Federal agencies
10 concerned’) shall carry out jointly a study to
11 determine the feasibility and advisability of add-
12 ing to the Energy Star program of the Environ-
13 mental Protection Agency and the Department
14 of Energy a component to be known as the ‘En-
15 energy Superstar tier’ under which—

16 “(i) the tier would recognize the top-
17 performing products and buildings (which
18 would include the top approximately 5 per-
19 cent of the market) that are determined to
20 be products that are cost-effective to con-
21 sumers; and

22 “(ii) at least a portion of the Energy
23 Star product categories would be included
24 under the tier.

1 “(B) REQUIREMENTS.—In carrying out
2 the study under subparagraph (A), the heads of
3 the Federal agencies concerned shall—

4 “(i) examine the costs and benefits,
5 and advantages and disadvantages, of es-
6 tablishing the Energy Superstar tier;

7 “(ii) survey a sample of program par-
8 ticipants (including builders, manufactur-
9 ers, energy efficiency program operators,
10 and other interested parties) to determine
11 the opinions of the program participants
12 regarding the potential usefulness of the
13 Energy Superstar tier; and

14 “(iii) conduct an examination to de-
15 termine whether the Energy Superstar tier
16 will cause an undesirable dilution of the
17 Energy Star brand.

18 “(2) REPORT.—Not later than 1 year after the
19 date of enactment of this subsection, the heads of
20 the Federal agencies concerned shall jointly submit
21 to the appropriate committees of Congress a report
22 that contains each recommendation of the heads of
23 the Federal agencies concerned regarding—

24 “(A) whether the Energy Superstar tier
25 should be established; and

1 “(B) if the heads of the Federal agencies
2 concerned recommend the establishment of the
3 Energy Superstar tier under subparagraph (A),
4 a proposed schedule and budget for the estab-
5 lishment and implementation of the Energy Su-
6 perstar tier.”.

7 **SEC. 233. TECHNICAL AMENDMENT.**

8 Section 343(a) of the Energy Policy and Conserva-
9 tion Act (42 U.S.C. 6314(a)) is amended by striking “Air-
10 Conditioning and Refrigeration Institute” each place it ap-
11 pears in paragraphs (4)(A) and (7) and inserting “Air-
12 Conditioning, Heating, and Refrigeration Institute”.

13 **Subtitle C—Building Efficiency**

14 **PART I—BUILDING CODES**

15 **SEC. 241. GREATER ENERGY EFFICIENCY IN BUILDING**
16 **CODES.**

17 (a) IN GENERAL.—Section 304 of the Energy Con-
18 servation and Production Act (42 U.S.C. 6833) is amend-
19 ed to read as follows:

20 **“SEC. 304. UPDATING STATE BUILDING ENERGY EFFI-**
21 **CIENCY CODES.**

22 “(a) UPDATING NATIONAL MODEL BUILDING EN-
23 ERGY CODES.—

24 “(1) TARGETS.—

1 “(A) IN GENERAL.—The Secretary shall
2 support updating the national model building
3 energy codes and standards at least every 3
4 years to achieve overall energy savings, com-
5 pared to the 2006 IECC for residential build-
6 ings and ASHRAE Standard 90.1–2004 for
7 commercial buildings, of at least—

8 “(i) 30 percent in editions of each
9 model code or standard released during or
10 after 2010; and

11 “(ii) 50 percent in editions of each
12 model code or standard released during or
13 after 2016.

14 “(B) SPECIFIC YEARS.—

15 “(i) IN GENERAL.—Targets for spe-
16 cific years shall be set by the Secretary at
17 least 3 years in advance of each target
18 year, coordinated with the IECC and
19 ASHRAE Standard 90.1 cycles, at the
20 maximum level of energy efficiency that is
21 technologically feasible and life-cycle cost
22 effective and on a path to achieving net-
23 zero-energy buildings.

24 “(ii) DIFFERENT TARGET YEARS.—
25 Subject to paragraph (2)(D), prior to

1 2013, the Secretary may set a different
2 target year for 1 or both model codes de-
3 scribed in subparagraph (A) if the Sec-
4 retary determines that a 50 percent target
5 cannot be met in 2016.

6 “(C) TECHNICAL ASSISTANCE TO MODEL
7 CODE-SETTING AND STANDARD DEVELOPMENT
8 ORGANIZATIONS.—

9 “(i) IN GENERAL.—The Secretary
10 shall, on a timely basis, provide technical
11 assistance to model code-setting and stand-
12 ard development organizations.

13 “(ii) ASSISTANCE.—The assistance
14 shall include technical assistance as re-
15 quested by the organizations in—

16 “(I) evaluating code or standards
17 proposals or revisions;

18 “(II) building energy analysis
19 and design tools;

20 “(III) building demonstrations;
21 and

22 “(IV) design assistance and
23 training.

24 “(D) AMENDMENT PROPOSALS.—The Sec-
25 retary shall submit code and standard amend-

1 ment proposals, with supporting evidence, suffi-
2 cient to enable the national model building en-
3 ergy codes and standards to meet the targets
4 established under subparagraph (A).

5 “(2) REVISION OF BUILDING ENERGY USE
6 STANDARDS.—

7 “(A) IN GENERAL.—If the provisions of
8 the IECC or ASHRAE Standard 90.1 regard-
9 ing building energy use are revised, the Sec-
10 retary shall make a determination not later
11 than 1 year after the date of the revision, on
12 whether the revision will—

13 “(i) improve energy efficiency in
14 buildings; and

15 “(ii) meet the targets under para-
16 graph (1).

17 “(B) CODES OR STANDARDS NOT MEETING
18 TARGETS.—

19 “(i) IN GENERAL.—If the Secretary
20 makes a determination under subpara-
21 graph (A)(ii) that a code or standard does
22 not meet the targets established under
23 paragraph (1), not later than 1 year after
24 the date of the determination, the Sec-
25 retary shall provide the model code or

1 standard developer with proposed changes
2 that would result in a model code that
3 meets the targets.

4 “(ii) INCORPORATION OF CHANGES.—
5 On receipt of the proposed changes, the
6 model code or standard developer shall
7 have an additional 180 days to incorporate
8 the proposed changes into the model code
9 or standard.

10 “(iii) ESTABLISHMENT BY SEC-
11 RETARY.—If the proposed changes are not
12 incorporated into the model code or stand-
13 ard, the Secretary shall establish a modi-
14 fied code or standard that meets the estab-
15 lished targets.

16 “(iv) ADMINISTRATION.—Any code or
17 standard modified under this subparagraph
18 shall—

19 “(I) achieve the maximum level
20 of energy savings that is techno-
21 logically feasible and life-cycle cost-ef-
22 fective;

23 “(II) be based on the latest edi-
24 tion of the IECC or ASHRAE Stand-
25 ard 90.1, including any subsequent

1 amendments, addenda, or additions,
2 but may also consider other model
3 codes or standards; and

4 “(III) serve as the baseline for
5 the next determination under sub-
6 paragraph (A)(i).

7 “(C) CODES OR STANDARDS NOT UPDATED
8 FOR 3 YEARS.—

9 “(i) IN GENERAL.—If a national
10 model code or standard is not updated for
11 more than 3 years, the Secretary shall, not
12 later than 1 year after the date of the de-
13 termination, establish a modified code or
14 standard that meets the targets.

15 “(ii) REQUIREMENTS.—Any modified
16 code or standard shall—

17 “(I) achieve the maximum level
18 of energy savings that is techno-
19 logically feasible and life-cycle cost-ef-
20 fective;

21 “(II) be based on the latest revi-
22 sion of the IECC or ASHRAE Stand-
23 ard 90.1, including any amendments
24 or additions to the code or standard,

1 but may also consider other model
2 codes or standards; and

3 “(III) serve as the baseline for
4 the next determination under sub-
5 paragraph (A)(i).

6 “(D) ADMINISTRATION.—The Secretary
7 shall—

8 “(i) provide an opportunity for public
9 comment on targets, determinations, and
10 modified codes and standards under this
11 subsection; and

12 “(ii) publish notice of targets, deter-
13 minations, and modified codes and stand-
14 ards under this subsection in the Federal
15 Register.

16 “(b) STATE CERTIFICATION OF BUILDING ENERGY
17 CODE UPDATES.—

18 “(1) REVIEW AND UPDATING OF CODES BY
19 EACH STATE.—

20 “(A) IN GENERAL.—Not later than 2 years
21 after the date of enactment of the American
22 Clean Energy Leadership Act of 2009, each
23 State shall certify to the Secretary whether or
24 not the State has reviewed and updated the
25 provisions of the residential and commercial

1 building codes of the State regarding energy ef-
2 ficiency.

3 “(B) DEMONSTRATION.—The certification
4 shall include a demonstration that the code pro-
5 visions of the State—

6 “(i) meet or exceed the 2009 IECC
7 for residential buildings and the ASHRAE
8 Standard 90.1–2007 for commercial build-
9 ings; or

10 “(ii) achieve equivalent or greater en-
11 ergy savings.

12 “(2) REVIEW AND UPDATING OF CODES BASED
13 ON DETERMINATION OF SECRETARY.—

14 “(A) DETERMINATION OF IMPROVEMENT
15 OF ENERGY EFFICIENCY IN BUILDINGS; MODI-
16 FIED CODES OR STANDARDS.—

17 “(i) IN GENERAL.—If the Secretary
18 makes an affirmative determination under
19 subsection (a)(2)(A)(i) or establishes a
20 modified code or standard under sub-
21 section (a)(2)(B), each State shall, not
22 later than 2 years after the date of the de-
23 termination or establishment, certify
24 whether or not the State has reviewed and

1 updated the provisions of the building code
2 of the State regarding energy efficiency.

3 “(ii) DEMONSTRATION.—The certifi-
4 cation shall include a demonstration that
5 the code provisions of the State meet or
6 exceed the revised code or standard, or
7 achieve equivalent or greater energy sav-
8 ings.

9 “(B) NO DETERMINATION OF IMPROVE-
10 MENT OF ENERGY EFFICIENCY IN BUILD-
11 INGS.—If the Secretary fails to make a deter-
12 mination under subsection (a)(2)(A)(i) by the
13 date specified in subsection (a)(2), or makes a
14 negative determination, each State shall not
15 later than 2 years after the specified date or
16 the date of the determination, certify whether
17 or not the State has reviewed the revised code
18 or standard, and updated the provisions of the
19 building code of the State regarding energy effi-
20 ciency to meet or exceed any provisions found
21 to improve energy efficiency in buildings, or to
22 achieve equivalent or greater energy savings in
23 other ways.

24 “(c) STATE CERTIFICATION OF COMPLIANCE WITH
25 BUILDING CODES.—

1 “(1) REQUIREMENT.—

2 “(A) IN GENERAL.—Not later than 3 years
3 after the date of a certification under sub-
4 section (b), each State shall certify whether or
5 not the State has—

6 “(i) achieved compliance under para-
7 graph (3) with the certified State building
8 energy code or with the associated model
9 code or standard; or

10 “(ii) made significant progress under
11 paragraph (4) toward achieving compliance
12 with the certified State building energy
13 code or with the associated model code or
14 standard.

15 “(B) REPEAT CERTIFICATIONS.—If the
16 State certifies progress toward achieving com-
17 pliance, the State shall repeat the certification
18 each year until the State certifies that the State
19 has achieved compliance.

20 “(2) MEASUREMENT OF COMPLIANCE.—A cer-
21 tification under paragraph (1) shall include docu-
22 mentation of the rate of compliance based on—

23 “(A) independent inspections of a random
24 sample of the new and renovated buildings cov-
25 ered by the code in the preceding year; or

1 “(B) an alternative method that yields an
2 accurate measure of compliance.

3 “(3) ACHIEVEMENT OF COMPLIANCE.—

4 “(A) IN GENERAL.—A State shall be con-
5 sidered to achieve compliance under paragraph
6 (1) if—

7 “(i) at least 90 percent of new and
8 renovated building space covered by the
9 code in the preceding year substantially
10 meets all the requirements of the code re-
11 garding energy efficiency, or achieves an
12 equivalent energy savings level; or

13 “(ii) the estimated excess energy use
14 of new and renovated buildings that did
15 not meet the code in the preceding year,
16 compared to a baseline of comparable
17 buildings that meet the code, is not more
18 than 5 percent of the estimated energy use
19 of all new and renovated buildings covered
20 by the code during the preceding year.

21 “(B) RENOVATED BUILDINGS.—If the Sec-
22 retary determines that the percentage targets
23 under subparagraph (A) are not reasonably
24 achievable for renovated residential or commer-
25 cial buildings, the Secretary may reduce the

1 targets for the renovated buildings to the high-
2 est achievable level.

3 “(4) SIGNIFICANT PROGRESS TOWARD
4 ACHIEVEMENT OF COMPLIANCE.—

5 “(A) IN GENERAL.—A State shall be con-
6 sidered to have made significant progress to-
7 ward achieving compliance for purposes of para-
8 graph (1) if the State—

9 “(i) has developed and is imple-
10 menting a plan for achieving compliance
11 within 8 years, assuming continued ade-
12 quate funding, including active training
13 and enforcement programs;

14 “(ii) after 1 or more years of ade-
15 quate funding, has demonstrated progress,
16 in conformance with the plan described in
17 clause (i), toward compliance;

18 “(iii) after 5 or more years of ade-
19 quate funding, meets the requirements of
20 paragraph (3) if ‘80 percent’ is substituted
21 for ‘90 percent’ or ‘10 percent’ is sub-
22 stituted for ‘5 percent’; and

23 “(iv) has not had more than 8 years
24 of adequate funding.

1 “(B) ADEQUATE FUNDING.—For purposes
2 of this paragraph, funding shall be considered
3 adequate if the Federal Government provides to
4 the States at least \$50,000,000 for a fiscal year
5 in funding and support for development and im-
6 plementation of State building energy codes, in-
7 cluding for training and enforcement.

8 “(C) TECHNICAL ASSISTANCE TO
9 STATES.—The Secretary shall provide technical
10 assistance to States to implement the require-
11 ments of this section, including procedures for
12 States—

13 “(i) to demonstrate that the code pro-
14 visions of the States achieve equivalent or
15 greater energy savings than the national
16 model codes and standards; and

17 “(ii) to improve and implement State
18 residential and commercial building energy
19 efficiency codes or to otherwise promote
20 the design and construction of energy effi-
21 cient buildings.

22 “(D) VOLUNTARY ADVANCED CODES.—

23 “(i) IN GENERAL.—The Secretary
24 shall support the development of voluntary
25 advanced model codes and standards for

1 residential and commercial buildings that
2 achieve energy savings of at least 30 per-
3 cent compared to the national model build-
4 ing codes and standards.

5 “(ii) UPDATES.—The voluntary ad-
6 vanced model codes and standards shall be
7 updated at least once every 3 years, for
8 use in—

9 “(I) green building design;

10 “(II) voluntary and market
11 transformation programs;

12 “(III) incentive criteria; and

13 “(IV) voluntary adoption by
14 States.

15 “(iii) PREFERENCE.—In carrying out
16 this subparagraph, the Secretary shall give
17 preference to voluntary advanced model
18 codes and standards developed by the
19 International Code Council and by
20 ASHRAE.

21 “(d) FAILURE TO MEET DEADLINES.—

22 “(1) IN GENERAL.—A State that has not made
23 a certification required under subsection (b) or (c)
24 by the applicable deadline shall submit to the Sec-
25 retary a report on—

1 “(A) the status of the State with respect
2 to meeting the requirements and submitting the
3 certification; and

4 “(B) a plan for meeting the requirements
5 and submitting the certification.

6 “(2) NONACCEPTANCE OF CERTIFICATION.—
7 Any State for which the Secretary has not accepted
8 a certification by a deadline under subsection (b) or
9 (c) shall be considered out of compliance with this
10 section.

11 “(3) LOCAL GOVERNMENT.—In any State that
12 is out of compliance with this section, a local govern-
13 ment may be considered in compliance with this sec-
14 tion by meeting the certification requirements under
15 subsections (b) and (c).

16 “(4) ANNUAL REPORTS BY SECRETARY.—

17 “(A) IN GENERAL.—The Secretary shall
18 annually submit to Congress, and publish in the
19 Federal Register, a report on—

20 “(i) the status of national model
21 building energy codes and standards;

22 “(ii) the status of code adoption and
23 compliance in the States; and

24 “(iii) implementation of this section.

1 “(B) IMPACTS.—The report shall include
2 estimates of impacts of past action under this
3 section, and potential impacts of further action,
4 on lifetime energy use by buildings and result-
5 ing energy costs to individuals and businesses.

6 “(e) AVAILABILITY OF INCENTIVE FUNDING.—

7 “(1) IN GENERAL.—

8 “(A) REQUIREMENT.—The Secretary shall
9 provide incentive funding to States to imple-
10 ment the requirements of this section, and to
11 improve and implement State residential and
12 commercial building energy efficiency codes, in-
13 cluding increasing and verifying compliance
14 with the codes.

15 “(B) STATE ACTIONS.—In determining
16 whether, and in what amount, to provide incen-
17 tive funding under this subsection, the Sec-
18 retary shall consider the actions proposed by
19 the State—

20 “(i) to implement the requirements of
21 this section;

22 “(ii) to improve and implement resi-
23 dential and commercial building energy ef-
24 ficiency codes; and

1 “(iii) to promote building energy effi-
2 ciency through the use of the codes.

3 “(2) ADDITIONAL FUNDING.—Additional fund-
4 ing shall be provided under this subsection for im-
5 plementation of a plan to achieve and document at
6 least a 90 percent rate of compliance with residential
7 and commercial building energy efficiency codes,
8 based on energy performance—

9 “(A) to a State that has adopted and is
10 implementing, on a Statewide basis—

11 “(i) a residential building energy effi-
12 ciency code that meets or exceeds the re-
13 quirements of the 2009 IECC, or any suc-
14 ceeding version of that code that has re-
15 ceived an affirmative determination from
16 the Secretary under subsection
17 (a)(2)(A)(i); and

18 “(ii) a commercial building energy ef-
19 ficiency code that meets or exceeds the re-
20 quirements of the ASHRAE Standard
21 90.1–2007, or any succeeding version of
22 that standard that has received an affirma-
23 tive determination from the Secretary
24 under subsection (a)(2)(A)(i); or

1 “(B) in a State in which there is no State-
2 wide energy code for either residential buildings
3 or commercial buildings, or in which State
4 codes fail to comply with subparagraph (A), to
5 a local government that has adopted and is im-
6 plementing residential and commercial building
7 energy efficiency codes, as described in subpara-
8 graph (A).

9 “(3) TRAINING.—Of the amounts made avail-
10 able under this subsection, the State may use
11 amounts required, but not to exceed \$500,000 for a
12 State, to train State and local building code officials
13 to implement and enforce codes described in para-
14 graph (2).

15 “(4) AUTHORIZATION OF APPROPRIATIONS.—
16 There are authorized to be appropriated to carry out
17 this subsection—

18 “(A) \$100,000,000 for each of fiscal years
19 2009 through 2013; and

20 “(B) such sums as are necessary for fiscal
21 year 2014 and each fiscal year thereafter.”.

22 (b) DEFINITION OF IECC.—Section 303 of the En-
23 ergy Conservation and Production Act (42 U.S.C. 6832)
24 is amended by adding at the end the following:

1 “(17) IECC.—The term ‘IECC’ means the
2 International Energy Conservation Code.”.

3 **SEC. 242. MULTIFAMILY AND MANUFACTURED HOUSING**
4 **ENERGY EFFICIENCY GRANT PROGRAM.**

5 (a) DEFINITIONS.—In this section:

6 (1) ELIGIBLE ENTITY.—The term “eligible enti-
7 ty” means a State or local government agency or
8 nonprofit organization that implements energy effi-
9 ciency programs to increase energy efficiency in mul-
10 tifamily buildings or manufactured housing.

11 (2) ENERGY EFFICIENCY PROGRAM.—The term
12 “energy efficiency program” means a program de-
13 signed to increase energy efficiency in multifamily
14 buildings and manufactured housing through finan-
15 cial incentives, building renovation and construction,
16 appliance retrofits, or other means, as determined by
17 an eligible entity.

18 (3) ENERGY STAR PROGRAM.—The term “En-
19 ergy Star program” means the program established
20 by section 324A of the Energy Policy and Conserva-
21 tion Act (42 U.S.C. 6294a).

22 (4) MANUFACTURED HOUSING.—The term
23 “manufactured housing” means a manufactured
24 home (as defined in section 603 of the National

1 Manufactured Housing Construction and Safety
2 Standards Act of 1974 (42 U.S.C. 5402)).

3 (5) MULTIFAMILY BUILDING.—The term “mul-
4 tifamily building” means a structure with 5 or more
5 dwelling units.

6 (6) SECRETARY.—The term “Secretary” means
7 the Secretary of Energy.

8 (b) ESTABLISHMENT.—The Secretary shall establish
9 a program, to be known as the “Multifamily and Manufac-
10 tured Housing Energy Efficiency Grant Program”, under
11 which the Secretary shall provide grants to eligible entities
12 to carry out energy efficiency programs in accordance with
13 this section.

14 (c) PURPOSE.—The purpose of the program estab-
15 lished under this section is to provide financial assistance
16 to eligible entities to carry out energy efficiency programs
17 to increase energy efficiency in multifamily buildings and
18 manufactured housing in a manner that—

19 (1) demonstrates an innovative approach to en-
20 ergy efficiency;

21 (2) maximizes the cost effectiveness of Federal
22 and non-Federal expenditures;

23 (3) maximizes energy efficiency potential for re-
24 cipients;

1 (4) prioritizes recipients with the greatest fi-
2 nancial need;

3 (5) prioritizes efficiency programs with high lev-
4 els of matching funds;

5 (6) maintains geographical diversity in allo-
6 cating grants; and

7 (7) is replicable.

8 (d) GRANTS.—The Secretary shall make grants to el-
9 igible entities to implement energy efficiency program
10 under this section through—

11 (1) in the case of multifamily buildings—

12 (A) renovation of multifamily buildings;
13 and

14 (B) encouragement and recommendations
15 for replacement of appliances, equipment, and
16 systems with low energy efficiency with appli-
17 ances, equipment, and systems that meet cri-
18 teria established under the Energy Star pro-
19 gram;

20 (2) in the case of manufactured housing, re-
21 bates to owners of manufactured housing con-
22 structed before calendar year 1976 to assist the
23 owners in replacing the manufactured housing with
24 manufactured housing that meets criteria estab-
25 lished under the Energy Star program; and

1 (3) other innovative approaches, as determined
2 by the eligible entities and approved by the Sec-
3 retary.

4 (e) ADMINISTRATION.—An eligible entity that re-
5 ceives a grant under this section shall—

6 (1) maintain such records and evidence of com-
7 pliance as the Secretary may require;

8 (2) develop and distribute information and ma-
9 terials and conduct programs to provide technical
10 services and assistance to encourage planning, fi-
11 nancing, and design of energy-efficient multifamily
12 buildings or manufactured housing; and

13 (3) report publicly the results of a project con-
14 ducted under this section to enable other eligible en-
15 tities to learn from each project.

16 (f) AUTHORIZATION OF APPROPRIATIONS.—There
17 are authorized to be appropriated such sums as are nec-
18 essary to carry out this section.

19 **SEC. 243. BUILDING TRAINING AND ASSESSMENT CENTERS.**

20 (a) IN GENERAL.—The Secretary of Energy shall
21 provide grants to institutions of higher education (as de-
22 fined in section 101 of the Higher Education Act of 1965
23 (20 U.S.C. 1001)) to establish building training and as-
24 sessment centers—

1 (1) to identify opportunities for optimizing en-
2 ergy efficiency and environmental performance in
3 buildings;

4 (2) to promote the application of emerging con-
5 cepts and technologies in commercial and institu-
6 tional buildings;

7 (3) to train engineers, architects, building sci-
8 entists, building energy permitting and enforcement
9 officials, and building technicians in energy-efficient
10 design and operation;

11 (4) to assist institutions of higher education in
12 training building technicians;

13 (5) to promote research and development for
14 the use of alternative energy sources to supply heat
15 and power for buildings, particularly energy-inten-
16 sive buildings; and

17 (6) to coordinate with and assist State-accred-
18 ited technical training centers, community colleges,
19 and local offices of the National Institute of Food
20 and Agriculture and ensure appropriate services are
21 provided under this section to each region of the
22 United States.

23 (b) COORDINATION AND NONDUPLICATION.—

24 (1) IN GENERAL.—The Secretary shall coordi-
25 nate the program with the Industrial Assessment

1 Centers program established under this Act and with
2 other Federal programs to avoid duplication of ef-
3 fort.

4 (2) COLLOCATION.—To the maximum extent
5 practicable, building, training, and assessment cen-
6 ters established under this section shall be collocated
7 with Industrial Assessment Centers.

8 (c) AUTHORIZATION OF APPROPRIATIONS.—There
9 are authorized to be appropriated such sums as are nec-
10 essary to carry out this section.

11 **PART II—WEATHERIZATION ASSISTANCE FOR**
12 **LOW-INCOME PERSONS**

13 **SEC. 251. WEATHERIZATION ASSISTANCE FOR LOW-INCOME**
14 **PERSONS.**

15 Section 422 of the Energy Conservation and Produc-
16 tion Act (42 U.S.C. 6872) is amended—

17 (1) in paragraph (4), by striking “and” at the
18 end;

19 (2) in paragraph (5), by striking the double pe-
20 riods at the end and inserting “; and”; and

21 (3) by adding at the end the following:

22 “(6) \$1,700,000,000 for each of fiscal years
23 2011 through 2015.”.

1 **PART III—STATE ENERGY PROGRAM**

2 **SEC. 255. STATE ENERGY PROGRAM.**

3 Section 365 of the Energy Policy and Conservation
4 Act (42 U.S.C. 6325) is amended by striking subsection
5 (f) and inserting the following:

6 “(f) AUTHORIZATION OF APPROPRIATIONS.—There
7 is authorized to be appropriated to the Secretary to carry
8 out this part \$250,000,000 for each of fiscal years 2011
9 through 2015, to remain available until expended.”.

10 **PART IV—STATE ENERGY EFFICIENCY GRANTS**
11 **PROGRAM**

12 **SEC. 261. DEFINITIONS.**

13 In this part:

14 (1) ADMINISTRATOR.—The term “Adminis-
15 trator” means the Administrator of the Environ-
16 mental Protection Agency, acting in consultation
17 with the Secretary.

18 (2) ANSI.—The term “ANSI” means the
19 American National Standards Institute.

20 (3) ASHRAE.—The term “ASHRAE” means
21 the American Society of Heating, Refrigerating and
22 Air Conditioning Engineers.

23 (4) BUILDING ENERGY CODE POLICY.—The
24 term “building energy code policy” means a policy
25 that provides—

1 (A) a building energy code for residential
2 buildings throughout a State that meets or ex-
3 ceeds the 2009 International Energy Conserva-
4 tion Code;

5 (B) a building energy code for commercial
6 buildings throughout the State that meets or
7 exceeds the ANSI/ASHRAE/IES Standard 90.1
8 (2007); and

9 (C) a plan for the jurisdiction achieving
10 compliance with subparagraphs (A) and (B) not
11 later than 8 years after the date of enactment
12 of this Act in at least 90 percent of new and
13 renovated residential and commercial building
14 space, including compliance through—

15 (i) active training and enforcement
16 programs; and

17 (ii) measurement of the rate of com-
18 pliance each year.

19 (5) COMMERCIAL BUILDING.—The term “com-
20 mercial building” means a building that is—

21 (A) covered by ASHRAE/IES Standard
22 90.1 (2007);

23 (B) located in the United States; and

24 (C) constructed before the date of enact-
25 ment of this Act.

1 (6) **ELECTRIC UTILITY.**—The term “electric
2 utility” means any individual, entity, or State agen-
3 cy that distributes electricity directly to retail con-
4 sumers pursuant to a legal, regulatory, or contrac-
5 tual obligation.

6 (7) **ENERGY EFFICIENCY MEASURE.**—The term
7 “energy efficiency measure” means an installed
8 measure (including products, equipment, systems,
9 services, and practices) that result in reductions in
10 end-use demand for externally supplied energy, or
11 fuel, by a consumer, facility, or user.

12 (8) **HOME.**—The term “home” means a prin-
13 cipal residential dwelling unit that is—

14 (A) located in the United States; and

15 (B) constructed before the date of enact-
16 ment of this Act.

17 (9) **IESNA.**—The term “IESNA” means the Il-
18 luminating Engineering Society of North America.

19 (10) **NATURAL GAS UTILITY.**—The term “nat-
20 ural gas utility” means any individual, entity, or
21 State agency engaged in the local distribution of
22 natural gas to any ultimate consumer of natural gas.

23 (11) **SECRETARY.**—The term “Secretary”
24 means the Secretary of Energy, acting in consulta-
25 tion with the Administrator.

1 (12) STATE.—The term “State” means—

2 (A) a State;

3 (B) the District of Columbia;

4 (C) the Commonwealth of Puerto Rico;

5 (D) Guam;

6 (E) American Samoa; and

7 (F) the United States Virgin Islands.

8 **SEC. 262. STATE ENERGY EFFICIENCY RETROFIT PRO-**
9 **GRAMS.**

10 (a) IN GENERAL.—The Secretary shall make grants
11 to States to carry out energy efficiency retrofit programs
12 in accordance with this section.

13 (b) GRANT AWARDS.—The Secretary shall apply per-
14 formance-based criteria in awarding grants to States
15 under this section, which shall give priority for funding
16 of energy efficiency retrofit programs based on—

17 (1) the cost-effectiveness of the energy effi-
18 ciency programs;

19 (2) the number and quality of jobs created;

20 (3) the quantity of energy and water saved;

21 (4) the development of an effective plan for
22 evaluation, measurement, and verification of energy
23 savings;

24 (5) the inclusion of measures—

25 (A) to reach underserved populations;

1 (B) to provide for independent evaluation
2 and adequate incentives for successful program
3 management; and

4 (C) to leverage private sector funds and
5 use innovative financing methods to implement
6 more comprehensive energy efficiency projects,
7 including the methods described in section 266;

8 (6) the effective use of grant funds provided
9 under the American Recovery and Reinvestment Act
10 of 2009 (Public Law 111–5); and

11 (7) progress on the adoption and implementa-
12 tion of the building energy code policies.

13 (c) IMPLEMENTATION.—A State that receives a grant
14 to carry out an energy efficiency program under this sec-
15 tion may implement the program through the State or a
16 third party designated by the State, including an energy
17 service company, an electric utility, a natural gas utility,
18 a third party administrator designated by the State, or
19 a unit of local government.

20 (d) HOME EFFICIENCY RETROFITS PROGRAM.—

21 (1) IN GENERAL.—A State may use a grant
22 provided under this section to provide a grant to an
23 owner of a home for an energy efficiency retrofit of
24 the home, on completion of the retrofit, if the ret-
25 rofit is carried out in accordance with—

1 (A) the prescriptive option described in
2 paragraph (2); or

3 (B) the performance-based option de-
4 scribed in paragraph (3).

5 (2) PRESCRIPTIVE OPTION.—

6 (A) IN GENERAL.—A grant provided for
7 the energy retrofit of a home under the pre-
8 scriptive option described in this paragraph
9 shall be made for achieving energy savings from
10 measures—

11 (i) selected from a prescriptive list es-
12 tablished under subparagraph (B); and

13 (ii) installed in the home.

14 (B) LIST.—Not later than 90 days after
15 the date of enactment of this Act, the Secretary
16 shall establish a list of combinations of energy
17 savings measures that can be implemented by
18 the owner of a home to save at least—

19 (i) 10 percent on whole home energy
20 consumption; and

21 (ii) 20 percent on whole home energy
22 consumption.

23 (C) AMOUNT OF GRANT.—Subject to sub-
24 paragraph (E)(ii), the amount of a grant pro-

1 vided to the owner of a home under this para-
2 graph shall be—

3 (i) \$1,000 for energy savings of 10
4 percent described in subparagraph (B)(i);
5 and

6 (ii) \$2,000 for energy savings of not
7 less than 20 percent, but not more than 50
8 percent, described in subparagraph (B)(ii).

9 (D) VERIFICATION.—To be eligible for a
10 grant for the energy retrofit of a home in a
11 State under this paragraph, the owner of a
12 home shall submit to the State a certification
13 by the contractor or installer that carried out
14 the retrofit that the measures undertaken for
15 the retrofit—

16 (i) are described on the list estab-
17 lished under subparagraph (B); and

18 (ii) were installed properly.

19 (E) ADMINISTRATION.—The Secretary
20 may—

21 (i) discontinue the prescriptive option
22 established under this paragraph at any
23 time after the date that is 1 year after the
24 date of enactment of this Act; and

1 (ii) adjust the amount of grants pro-
2 vided under this paragraph.

3 (3) PERFORMANCE-BASED OPTION.—

4 (A) IN GENERAL.—A grant provided for
5 the energy retrofit of a home under the per-
6 formance-based option described in this para-
7 graph shall be made for retrofits that achieve
8 whole home energy savings.

9 (B) AMOUNT OF GRANT.—Subject to sub-
10 paragraph (E), the amount of a grant provided
11 to the owner of a home under this paragraph
12 shall be—

13 (i) \$3,000 for a 20-percent reduction
14 in whole home energy consumption; and

15 (ii) an additional \$150 for each addi-
16 tional 1-percent reduction up to the lower
17 of—

18 (I) \$12,000; or

19 (II) 50 percent of the total ret-
20 rofit cost.

21 (C) ENERGY SAVINGS.—

22 (i) IN GENERAL.—Energy savings
23 under this paragraph shall be determined
24 by a comparison of the energy consump-

1 tion of the home before the retrofit to the
2 consumption of the home after the retrofit.

3 (ii) DOCUMENTATION.—The percent
4 improvement in energy consumption under
5 this paragraph shall be documented
6 through—

7 (I) the use of whole home simula-
8 tion software programs approved by
9 the Administrator; or

10 (II) a comparison of the dif-
11 ference before and after the retrofit as
12 measured by home energy ratings on
13 the Home Energy Rating System
14 Index as specified in the Residential
15 Energy Services Network Publication
16 No. 06-001 (or a successor publica-
17 tion).

18 (D) VERIFICATION.—

19 (i) IN GENERAL.—Subject to clause
20 (ii), the Administrator shall ensure that at
21 least 15 percent of the retrofits performed
22 under this paragraph are randomly subject
23 to a third party verification of all work as-
24 sociated with the retrofit.

1 (ii) ADJUSTMENT.—On or after the
2 date that is 1 year after the date of enact-
3 ment of this Act, the Administrator may
4 adjust the percentage specified under
5 clause (i) based on program experience.

6 (iii) CONTRACTOR CERTIFICATION.—
7 Subject to clause (iv), the Administrator—

8 (I) shall determine the level of
9 contractor certification appropriate
10 for retrofits performed under this
11 paragraph; and

12 (II) may adjust the level in re-
13 sponse to program data.

14 (iv) ADVANCED CONTRACTOR CERTIFI-
15 CATIONS.—The Secretary may develop an
16 additional incentive for advanced con-
17 tractor certifications under clause (iii).

18 (E) ADMINISTRATION.—On or after the
19 date that is 1 year after the date of enactment
20 of this Act, the Secretary may adjust the grant
21 amounts provided under this paragraph based
22 on program data.

23 (e) COMMERCIAL BUILDINGS EFFICIENCY RETRO-
24 FITS PROGRAM.—

1 (1) IN GENERAL.—A State may use a grant
2 provided under this section to provide incentives for
3 energy efficiency retrofits to the owner of 1 or more
4 commercial buildings, including submetered areas or
5 individual tenant spaces within a commercial build-
6 ing or an aggregation of commercial buildings.

7 (2) ENERGY SAVINGS.—

8 (A) IN GENERAL.—A State may provide
9 incentives to the owner of 1 or more commercial
10 buildings for energy efficiency retrofits under
11 this subsection if the retrofits improve energy
12 performance by at least 20 percent compared to
13 energy consumption during the previous year of
14 the 1 or more commercial buildings, while ad-
15 justing for other relevant factors including
16 changes in occupancy loads and process energy.

17 (B) BENCHMARKING TOOL.—The energy
18 savings shall be determined by using an estab-
19 lished energy benchmarking tool designated by
20 the Administrator.

21 (3) INCENTIVES.—

22 (A) IN GENERAL.—The Secretary shall es-
23 tablish the amount and form of the incentives
24 provided under this subsection in a manner that
25 encourages implementation of retrofits that

1 achieve the largest and most durable improve-
2 ments in energy performance.

3 (B) AMOUNT.—

4 (i) IN GENERAL.—Subject to clause
5 (ii), the amount of the incentives provided
6 under this subsection shall be equal to—

7 (I) \$0.15 per square foot of ret-
8 rofit floor area for 20 to 24 percent
9 savings;

10 (II) \$0.75 per square foot of ret-
11 rofit floor area for 25 to 29 percent
12 savings;

13 (III) \$1.20 per square foot of
14 retrofit floor area for 30 to 34 percent
15 savings;

16 (IV) \$1.60 per square foot of ret-
17 rofit floor area for 35 to 39 percent
18 savings;

19 (V) \$2.05 per square foot of ret-
20 rofit floor area for 40 to 44 percent
21 savings;

22 (VI) \$2.50 per square foot of ret-
23 rofit floor area for 45 to 49 percent
24 savings; and

1 (VII) \$3.00 per square foot of
2 retrofit floor area for 50 or more per-
3 cent savings.

4 (ii) MODIFICATION.—The Secretary
5 may modify the amount and form of incen-
6 tives provided under this subsection based
7 on data gathered during program imple-
8 mentation, including the development of
9 incentives for particular building types.

10 (C) TIMING.—

11 (i) PAYMENT ON COMPLETION.—On
12 the completion of the energy retrofit of 1
13 or more commercial buildings and the
14 verification of at least a 20-percent energy
15 savings from the retrofit, the State shall
16 provide to the owner or agent of the 1 or
17 more commercial buildings 60 percent of
18 the qualified incentive amount for the ret-
19 rofit determined under subparagraph (B).

20 (ii) REMAINING PAYMENTS.—During
21 the 3-year period beginning on the date of
22 the initial payment under clause (i), the
23 State shall provide to the owner or agent
24 of the commercial building the remaining
25 40 percent of the qualified incentive

1 amount for the retrofit determined under
2 subparagraph (B) for any energy savings
3 of 20 percent or more, with the amount
4 awarded proportionate to the level of sus-
5 tained performance improvement.

6 (iii) MINIMUM IMPROVEMENTS.—No
7 incentives shall be provided under this sub-
8 section for sustained performance improve-
9 ments of less than 20 percent, as deter-
10 mined by annual audits.

11 (iv) DISCLOSURE.—The Secretary
12 may require such information as is nec-
13 essary to determine energy performance
14 under this subsection.

15 (f) HISTORIC BUILDINGS.—Notwithstanding sub-
16 sections (d) and (e), a building that is eligible for or listed
17 in the National Register of Historic Places shall be eligible
18 for incentives under this section in amounts of up to 120
19 percent of the applicable amounts described in subsections
20 (d) and (e).

21 (g) REPORT.—

22 (1) IN GENERAL.—Not later than 300 days
23 after the date that the Secretary initially provides
24 funds to a State under this section, the State shall

1 submit to the Secretary a report on the use of the
2 funds.

3 (2) CONTENTS.—The report shall include a de-
4 scription of—

5 (A) the measured and verified energy sav-
6 ings produced under this section;

7 (B) the projected energy savings under
8 this section during the subsequent 1-year pe-
9 riod;

10 (C) the specific entities implementing the
11 energy efficiency programs;

12 (D) the beneficiaries who received the effi-
13 ciency improvements;

14 (E) the manner in which funds provided
15 under this section were used;

16 (F) the sources (such as mortgage lenders,
17 utility companies, and local governments) and
18 types of financing used by the beneficiaries to
19 finance the retrofit expenses that were not cov-
20 ered by grants provided in this part;

21 (G) the direct and indirect employment
22 created as a result of the programs supported
23 by the funds;

24 (H) the results of verification require-
25 ments; and

1 (I) any other information the Secretary
2 considers appropriate.

3 (3) NONCOMPLIANCE.—If the Secretary deter-
4 mines that a State has not provided the information
5 required under this subsection, the Secretary shall
6 provide to the State a period of at least 90 days to
7 provide any necessary information.

8 **SEC. 263. ADMINISTRATIVE AND TECHNICAL SUPPORT.**

9 Subject to section 265(b)(2), not later than 90 days
10 after the date of enactment of this Act, the Secretary may
11 provide such administrative and technical support to
12 States as is necessary to carry out this part.

13 **SEC. 264. REGULATIONS.**

14 Not later than 180 days after the date of enactment
15 of this Act, the Secretary shall promulgate such regula-
16 tions as are necessary to carry out this part.

17 **SEC. 265. FUNDING.**

18 (a) IN GENERAL.—There are authorized to be appro-
19 priated such sums as are necessary to carry out this part
20 for each of fiscal years 2010 through 2015.

21 (b) USE.—Funds provided for a fiscal year under
22 subsection (a) shall be allocated as follows:

23 (1) In the case of State energy efficiency grants
24 programs under section 262:

1 (A) 45 percent for the home efficiency retrofits program under section 262(d).

2
3 (B) 45 percent for the commercial buildings efficiency retrofits program under section
4 262(e).

5
6 (C) 10 percent to provide administrative
7 and technical support to the States to carry out
8 this part.

9 (c) LIMITATION ON THE USE OF FUNDS.—A State
10 shall use not more than—

11 (1) 10 percent of the funds provided for a fiscal
12 year under this part for administration of programs
13 under this part; and

14 (2) 5 percent of the funds provided for a fiscal
15 year under part for measurement and verification.

16 **SEC. 266. HOME ENERGY RETROFIT FINANCE PROGRAM.**

17 (a) DEFINITIONS.—In this section:

18 (1) ELIGIBLE PARTICIPANT.—The term “eligible
19 participant” means a homeowner, apartment
20 complex owner, residential cooperative association,
21 or condominium association that finances energy efficiency
22 improvements to homes and residential
23 buildings under this section.

1 (2) PROGRAM.—The term “program” means
2 the Home Energy Retrofit Finance Program estab-
3 lished under subsection (b).

4 (3) QUALIFIED PROGRAM DELIVERY ENTITY.—
5 The term “qualified program delivery entity” means
6 a local government, energy utility, or any other enti-
7 ty designated by the Secretary that administers the
8 program for a State under this section.

9 (b) ESTABLISHMENT.—The Secretary shall provide
10 Home Energy Retrofit Finance Program grants to States
11 for the purpose of establishing or expanding a State re-
12 volving finance fund to support financing offered by quali-
13 fied program delivery entities for energy efficiency meas-
14 ures and renewable energy improvements to existing
15 homes and residential buildings (including apartment
16 complexes, residential cooperative associations, and condo-
17 minium buildings under 5 stories).

18 (c) FUNDING MECHANISM.—In carrying out the pro-
19 gram, the Secretary shall provide funds to States, for use
20 by qualified program delivery entities that administer fi-
21 nance programs directly or under agreements with collabo-
22 rating third party entities, to capitalize revolving finance
23 funds and increase participation in associated financing
24 programs.

1 (d) ELIGIBILITY OF QUALIFIED PROGRAM DELIVERY
2 ENTITIES.—To be eligible to participate in the program,
3 a qualified program delivery entity shall establish a meth-
4 od by which eligible participants may pay over time for
5 the financed cost of allowable energy efficiency measures
6 and renewable energy improvements.

7 (e) ALLOCATION.—In making funds available to
8 States for each fiscal year under this section, the Sec-
9 retary shall use the allocation formula used to allocate
10 funds to States to carry out State energy conservation
11 plans under part D of title III of the Energy Policy and
12 Conservation Act (42 U.S.C. 6321 et seq.).

13 (f) USE OF FUNDS.—Of the amounts in a State re-
14 volving finance fund—

15 (1) not more than 20 percent may be used by
16 qualified program delivery entities for interest rate
17 reductions for eligible participants; and

18 (2) the remainder shall be available to provide
19 direct funding or other financial support to qualified
20 program delivery entities.

21 (g) STATE REVOLVING FINANCE FUNDS.—On repay-
22 ment of any funds made available by qualified program
23 delivery entities under the program, the funds shall be de-
24 posited in the applicable State revolving finance fund to
25 support additional financing to qualified program delivery

1 entities for energy efficiency measures and renewable en-
2 ergy improvements.

3 (h) COORDINATION WITH STATE ENERGY EFFI-
4 CIENCY RETROFIT PROGRAMS.—Home energy retrofit
5 programs that receive financing through the program shall
6 be carried out in accordance with all authorized measures,
7 performance criteria, and other requirements of section
8 262(d).

9 (i) PROGRAM EVALUATION.—

10 (1) IN GENERAL.—The Secretary shall conduct
11 a program evaluation to determine—

12 (A) how the program is being used by eli-
13 gible participants, including what improvements
14 have been most typical and what regional dis-
15 tinctions exist, if any;

16 (B) what improvements could be made to
17 increase the effectiveness of the program; and

18 (C) the quantity of verifiable energy sav-
19 ings and renewable energy deployment achieved
20 through the program.

21 (2) REPORTS.—

22 (A) IN GENERAL.—Not later than 3 years
23 after the date of enactment of this Act, the Sec-
24 retary shall submit to the Committee on Energy
25 and Natural Resources of the Senate and the

1 Committee on Energy and Commerce of the
2 House of Representatives a report that de-
3 scribes the results of the program evaluation re-
4 quired under this subsection, including any rec-
5 ommendations.

6 (B) STATE REPORTS.—Not less than once
7 every 2 years, States participating in the pro-
8 gram shall submit to the Secretary reports on
9 the use of funds through the program that in-
10 clude any information that the Secretary may
11 require.

12 (j) AUTHORIZATION OF APPROPRIATIONS.—

13 (1) IN GENERAL.—There are authorized to be
14 appropriated such sums as are necessary to carry
15 out this section for each of fiscal years 2010 through
16 2015.

17 (2) ADMINISTRATIVE EXPENSES.—An amount
18 not exceeding 5 percent of the amounts made avail-
19 able under paragraph (1) shall be available for each
20 fiscal year to pay the administrative expenses nec-
21 essary to carry out this section.

1 **PART V—FEDERAL EFFICIENCY AND**
2 **RENEWABLES**

3 **SEC. 271. FEDERAL PURCHASE REQUIREMENT.**

4 Section 203 of the Energy Policy Act of 2005 (42
5 U.S.C. 15852) (as amended by section 133) is amended—

6 (1) in subsection (a), in the matter preceding
7 paragraph (1), by striking “electric”;

8 (2) by redesignating subsection (d) as sub-
9 section (f) and moving that subsection to appear
10 after subsection (e);

11 (3) by inserting after subsection (c) the fol-
12 lowing:

13 “(d) SEPARATE CALCULATION.—Renewable energy
14 produced at a Federal facility, on Federal land, or on In-
15 dian land (as defined in section 2601 of the Energy Policy
16 Act of 1992 (25 U.S.C. 3501))—

17 “(1) shall be calculated separately from renew-
18 able energy used; and

19 “(2) may be used individually or in combination
20 to comply with subsection (a).”; and

21 (4) by adding at the end the following:

22 “(g) CONTRACT PERIOD.—

23 “(1) IN GENERAL.—Notwithstanding section
24 501(b)(1)(B) of title 40, United States Code, a con-
25 tract entered into by a Federal agency to acquire re-

1 newable energy may be made for a period of not
2 more than 30 years.

3 “(2) TECHNICAL ASSISTANCE.—The Secretary
4 shall provide technical assistance to Federal agencies
5 to enter into contracts under this subsection.

6 “(3) STANDARDIZED RENEWABLE ENERGY PUR-
7 CHASE AGREEMENT.—Not later than 90 days after
8 the date of enactment of this subsection, the Sec-
9 retary, acting through the Federal Energy Manage-
10 ment Program, shall publish a standardized renew-
11 able energy purchase agreement setting forth com-
12 mercial terms and conditions that can be used by
13 Federal agencies to acquire renewable energy.”.

14 **SEC. 272. COMPETITION REQUIREMENTS FOR TASK OR DE-**
15 **LIVERY ORDERS UNDER ENERGY SAVINGS**
16 **PERFORMANCE CONTRACTS.**

17 (a) IN GENERAL.—Section 801(a) of the National
18 Energy Conservation Policy Act (42 U.S.C. 8287(a)) is
19 amended by adding at the end the following

20 “(3) TASK OR DELIVERY ORDERS.—

21 “(A) IN GENERAL.—The head of a Federal
22 agency may issue a task or delivery order under
23 an energy savings performance contract by—

24 “(i)(I) notifying all contractors that
25 have received an award under the contract

1 that the agency proposes to consider using
2 energy savings performance services for all
3 or part of the facilities of the agency;

4 “(II) soliciting an expression of inter-
5 est in the performance of site surveys or
6 investigations and feasibility designs and
7 studies and the submission of qualifica-
8 tions from the contractors; and

9 “(III) including in the notice sum-
10 mary information concerning energy use
11 for any facilities that the agency has spe-
12 cific interest in including in the contract;

13 “(ii) reviewing all expressions of inter-
14 est and qualifications submitted pursuant
15 to the notice provided under clause (i);

16 “(iii) selecting 2 or more contractors
17 (from among the contractors reviewed
18 under clause (ii)) to analyze the respective
19 qualifications of the contractors to imple-
20 ment potential energy conservation meas-
21 ures, including requesting references dem-
22 onstrating experience on similar efforts
23 and the resulting energy savings of the
24 similar efforts;

25 “(iv) selecting and authorizing—

1 “(I) more than 1 contractor
2 (from among the contractors selected
3 under clause (iii)) to conduct site sur-
4 veys, investigations, feasibility designs
5 and studies, or similar assessments
6 for the energy savings performance
7 contract services (or for discrete por-
8 tions of the services), for the purpose
9 of allowing each such contractor to
10 submit a firm, fixed-price proposal to
11 implement specific energy conserva-
12 tion measures; or

13 “(II) 1 contractor (from among
14 the contractors selected under clause
15 (iii)) to conduct a site survey, inves-
16 tigation, feasibility design and study,
17 or similar assessment for the purpose
18 of allowing the contractor to submit a
19 firm, fixed-price proposal to imple-
20 ment specific energy conservation
21 measures;

22 “(v) negotiating a task or delivery
23 order for energy savings performance con-
24 tracting services with the 1 or more con-
25 tractors selected under clause (iv) based on

1 the energy conservation measures identi-
2 fied; and

3 “(vi) issuing a task or delivery order
4 for energy savings performance contracting
5 services to the 1 or more contractors.

6 “(B) COMPETITION REQUIREMENTS.—The
7 issuance of a task or delivery order for energy
8 savings performance contracting services pursu-
9 ant to subparagraph (A) shall be consider to
10 satisfy the task and delivery order competition
11 requirements of section 2304e(d) of title 10,
12 United States Code, and section 303J(d) of the
13 Federal Property and Administrative Services
14 Act of 1949 (41 U.S.C. 253j(d)).

15 “(C) GUIDANCE.—The Secretary may
16 issue guidance as necessary to Federal agencies
17 issuing task or delivery orders pursuant to sub-
18 paragraph (A).”.

19 (b) NONAPPLICABILITY.—The amendment made by
20 subsection (a) does not apply to a task or delivery order
21 issued before the date of enactment of this Act.

22 **SEC. 273. FUNDING FLEXIBILITY.**

23 Section 801(a)(2) of the National Energy Conserva-
24 tion Policy Act (42 U.S.C. 8287(a)(2)) is amended by
25 striking subparagraph (E) and inserting the following:

1 “(E) FUNDING OPTIONS.—Notwith-
2 standing any other provision of law, in carrying
3 out a contract under this title, a Federal agency
4 may use any combination of—

5 “(i) appropriated funds; and

6 “(ii) private financing under energy
7 savings performance contracts or other pri-
8 vate financing of energy savings meas-
9 ures.”.

10 **SEC. 274. DEFINITION OF ENERGY SAVINGS.**

11 Section 804(2)(B) of the National Energy Conserva-
12 tion Policy Act (42 U.S.C. 8287e(2)(B)) is amended by
13 inserting “and installation of renewable energy systems”
14 after “cogeneration or heat recovery”.

15 **SEC. 275. NATIONAL ENERGY EFFICIENCY IMPROVEMENT**
16 **GOALS.**

17 (a) GOALS.—The goals of the United States are—

18 (1) to achieve an improvement in the overall en-
19 ergy productivity of the United States (measured in
20 gross domestic product per unit of energy input) of
21 at least 2.5 percent per year by the year 2012; and

22 (2) to maintain that annual rate of improve-
23 ment each year through 2030.

24 (b) STRATEGIC PLAN.—

1 (1) IN GENERAL.—Not later than 1 year after
2 the date of enactment of this Act, the Secretary of
3 Energy (referred to in this section as the “Sec-
4 retary”), in cooperation with the Administrator of
5 the Environmental Protection Agency and the heads
6 of other appropriate Federal agencies, shall develop
7 a strategic plan to achieve the national goals for im-
8 provement in energy productivity established under
9 subsection (a).

10 (2) PUBLIC INPUT AND COMMENT.—The Sec-
11 retary shall develop the plan in a manner that pro-
12 vides appropriate opportunities for public input and
13 comment.

14 (c) PLAN CONTENTS.—The strategic plan shall—

15 (1) establish future regulatory, funding, and
16 policy priorities to ensure compliance with the na-
17 tional goals;

18 (2) include energy savings estimates for each
19 sector; and

20 (3) include data collection methodologies and
21 compilations used to establish baseline and energy
22 savings data.

23 (d) PLAN UPDATES.—

24 (1) IN GENERAL.—The Secretary shall—

1 (A) update the strategic plan biennially;
2 and

3 (B) include the updated strategic plan in
4 the national energy policy plan required by sec-
5 tion 801 of the Department of Energy Organi-
6 zation Act (42 U.S.C. 7321).

7 (2) CONTENTS.—In updating the plan, the Sec-
8 retary shall—

9 (A) report on progress made toward imple-
10 menting efficiency policies to achieve the na-
11 tional goals established under subsection (a);
12 and

13 (B) verify, to the maximum extent prac-
14 ticable, energy savings resulting from the poli-
15 cies.

16 (e) REPORT TO CONGRESS AND PUBLIC.—The Sec-
17 retary shall submit to Congress, and make available to the
18 public, the initial strategic plan developed under sub-
19 section (b) and each updated plan.

20 **SEC. 276. ENERGY SUSTAINABILITY AND EFFICIENCY**
21 **GRANTS AND LOANS FOR INSTITUTIONS.**

22 Section 399A of the Energy Policy and Conservation
23 Act (42 U.S.C. 6371h–1) (as amended by section 201(2))
24 is amended—

1 (1) in subsection (a)(5), by striking “‘or a des-
2 ignee’” and inserting “‘a not-for-profit hospital, a
3 not-for-profit inpatient health care facility, or a des-
4 ignated agent’”;

5 (2) in subsection (c)(1), by striking subpara-
6 graph (C);

7 (3) in subsection (f)(3)(A), by striking
8 “\$1,000,000” and inserting “\$2,500,000”; and

9 (4) in subsection (j)(1), by striking
10 “\$250,000,000 for each of fiscal years 2009
11 through 2013’” and inserting “‘such sums as are
12 necessary for each of fiscal years 2010 through
13 2015’”.

14 **SEC. 277. FEDERAL IMPLEMENTATION STRATEGY FOR EN-**
15 **ERGY-EFFICIENT INFORMATION AND COM-**
16 **MUNICATIONS TECHNOLOGIES.**

17 Section 543 of the National Energy Conservation
18 Policy Act (42 U.S.C. 8253) is amended—

19 (1) by redesignating the second subsection (f)
20 (relating to large capital energy investments) as sub-
21 section (g); and

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

23 “(h) **FEDERAL IMPLEMENTATION STRATEGY FOR**
24 **ENERGY-EFFICIENT INFORMATION AND COMMUNICA-**
25 **TIONS TECHNOLOGIES.—**

1 “(1) IN GENERAL.—Not later than 1 year after
2 the date of enactment of this subsection, each Fed-
3 eral agency shall collaborate with the Director of the
4 Office of Management and Budget (referred to in
5 this subsection as the ‘Director’) to create an imple-
6 mentation strategy (including best-practices and
7 measurement and verification techniques) for the
8 maintenance, purchase, and use of energy efficient
9 and energy-reducing information and communica-
10 tions technologies and practices.

11 “(2) ADMINISTRATION.—In developing an im-
12 plementation strategy, each Federal agency shall—

13 “(A) consider information and communica-
14 tions technologies and infrastructure, includ-
15 ing—

16 “(i) advanced metering infrastructure;

17 “(ii) information and communications
18 technology services and products;

19 “(iii) efficient data center strategies;

20 “(iv) computer power management;

21 “(v) applications modernization and
22 rationalization;

23 “(vi) building systems energy effi-
24 ciency; and

25 “(vii) telework;

1 “(B) ensure that the agency is eligible to
2 realize savings and rewards brought about
3 through increased efficiency; and

4 “(C) to the maximum extent practicable,
5 incorporate existing standards, specifications,
6 performance metrics, and best management
7 practices.

8 “(3) PERFORMANCE GOALS.—

9 “(A) IN GENERAL.—Not later than 180
10 days after the date of enactment of this sub-
11 section, the Director shall establish performance
12 goals for evaluating the efforts of Federal agen-
13 cies in improving the maintenance, purchase,
14 and use of energy efficiency of information and
15 communications technology systems.

16 “(B) ADMINISTRATION.—The performance
17 goals shall—

18 “(i) measure information technology
19 costs over a specific time period of 3 to 5
20 years; and

21 “(ii) provide, to the maximum extent
22 practicable, a complete picture of all costs,
23 including energy costs.

24 “(4) REPORTS.—

1 “(A) AGENCY REPORTS.—Each Federal
2 agency subject to the requirements of this sub-
3 section shall include in the report of the agency
4 under section 527 of the Energy Independence
5 and Security Act of 2007(42 U.S.C. 17143) a
6 description of the efforts of the agency under
7 this subsection.

8 “(B) OMB GOVERNMENT EFFICIENCY RE-
9 PORT AND SCORE CARDS.—Effective beginning
10 not later than April 1, 2011, the Director shall
11 include in the annual report and scorecard of
12 the Director under section 528 of the Energy
13 Independence and Security Act of 2007 (42
14 U.S.C. 17143) a description of the efforts of
15 Federal agencies under this subsection.”.

16 **SEC. 278. INCENTIVES FOR FEDERAL AGENCIES TO PAR-**
17 **TICIPATE IN ENERGY EFFICIENCY PRO-**
18 **GRAMS.**

19 Section 546(c) of the National Energy Conservation
20 Policy Act (42 U.S.C. 8256(c)) is amended—

21 (1) in paragraph (1), by inserting “(including
22 Independent System Operators, State agencies, and
23 third party entities implementing those programs on
24 behalf of utilities or State agencies)” after “electric
25 utilities”;

1 (2) in paragraph (2), by inserting “State agen-
2 cy, and third party entity implementing those pro-
3 grams on behalf of utilities or State agencies,” after
4 “such utility,”;

5 (3) in paragraph (3), by inserting “State agen-
6 cies, and third party entities implementing those
7 programs on behalf of utilities or State agencies,”
8 after “gas utilities”; and

9 (4) in the paragraph (4), by inserting “or State
10 agency” after “a utility”.

11 **PART VI—ENERGY EFFICIENCY INFORMATION**

12 **ON HOMES AND BUILDINGS**

13 **SEC. 281. BUILDING ENERGY PERFORMANCE INFORMA-**
14 **TION PROGRAM.**

15 (a) DEFINITIONS.—In this section:

16 (1) ACHIEVED PERFORMANCE.—The term
17 “achieved performance” means the measured energy
18 consumption of a building determined using actual
19 consumption data normalized for appropriate vari-
20 ables.

21 (2) ADMINISTRATOR.—The term “Adminis-
22 trator” means the Administrator of the Environ-
23 mental Protection Agency.

24 (3) BUILDING ENERGY PERFORMANCE.—The
25 term “building energy performance” means primary

1 energy consumption per square foot of floor space,
2 or other measure of energy consumption per energy
3 service, as determined by the Secretary for a build-
4 ing type.

5 (4) BUILDING ENERGY PERFORMANCE
6 VALUE.—The term “building energy performance
7 value” means a value used for comparing building
8 energy performance among buildings, as determined
9 by methods developed by the Administrator.

10 (5) BUILDING TYPE.—The term “building
11 type” means a type of a building, as identified by
12 the 1 or more principal activities in the building,
13 such as office buildings, laboratories, libraries, data
14 centers, retail spaces, hotels, food sales, food service,
15 warehouses, and educational facilities.

16 (6) COMMERCIAL BUILDINGS ENERGY CON-
17 SUMPTION SURVEY.—The term “Commercial Build-
18 ings Energy Consumption Survey” means the Com-
19 mercial Buildings Energy Consumption Survey au-
20 thorized by section 205(k) of the Department of En-
21 ergy Organization Act (42 U.S.C. 7135(k)).

22 (7) COVERED BUILDING TYPE.—The term “cov-
23 ered building type” means a building type for which
24 statistically significant energy performance data

1 exist to serve as the basis of measurement protocols
2 and certifications for building energy use.

3 (8) DESIGNED PERFORMANCE.—The term “de-
4 signed performance” means the estimated energy
5 performance of a building using a standardized set
6 of operational conditions obtained from building con-
7 struction documents and other available data.

8 (9) MEASUREMENT PROTOCOL.—The term
9 “measurement protocol” means the methodology,
10 prescribed by the Administrator, for determining the
11 achieved performance or designed performance and
12 the associated building energy performance value for
13 a building of a specific building type.

14 (10) RESIDENTIAL ENERGY CONSUMPTION SUR-
15 VEY.—The term “Residential Energy Consumption
16 Survey” means the Residential Energy Consumption
17 Survey authorized by section 205(k) of the Depart-
18 ment of Energy Organization Act (42 U.S.C.
19 7135(k)).

20 (11) SECRETARY.—The term “Secretary”
21 means the Secretary of Energy.

22 (b) BUILDING ENERGY PERFORMANCE INFORMA-
23 TION PROGRAM.—The Administrator, in consultation with
24 the Secretary, shall establish a voluntary energy perform-

1 ance information program with broad applicability to
2 buildings nationwide—

3 (1) to provide timely and accurate information
4 on comparative energy performance; and

5 (2) to increase public awareness of the impor-
6 tance of building energy efficiency and energy per-
7 formance through public education.

8 (c) BUILDING TYPE DETERMINATION FOR ASSESS-
9 MENT OF ENERGY PERFORMANCE.—

10 (1) REPORT.—Not later than 90 days after the
11 date of enactment of this Act, the Secretary shall
12 submit to Congress a report that describes—

13 (A) all principal building types for which
14 statistically significant energy performance data
15 exists to serve as the basis for building energy
16 performance information; and

17 (B) those building types for which addi-
18 tional data are required.

19 (2) ADDITIONAL RESOURCES AND REPORTS.—

20 (A) IN GENERAL.—For each principal
21 building type identified under paragraph
22 (1)(B), the Secretary shall include a description
23 of—

1 (i) additional resources that will be re-
2 quired to fully develop the relevant data-
3 bases; and

4 (ii) the anticipated timeline for com-
5 pletion of the data development.

6 (B) ADDITIONAL REPORTS.—The Sec-
7 retary shall submit to Congress additional re-
8 ports on information required under this sub-
9 section as often as is considered necessary by
10 the Secretary, but not less than once every 2
11 years.

12 (d) IMPROVING BUILDING ENERGY CONSUMPTION
13 DATABASES.—

14 (1) COMMERCIAL BUILDINGS ENERGY CON-
15 SUMPTION SURVEY.—The Secretary shall support
16 improvements to the Commercial Buildings Energy
17 Consumption Survey or such other commercial build-
18 ings energy performance databases as the Secretary
19 considers appropriate—

20 (A) to characterize the achieved perform-
21 ance of existing commercial buildings for the
22 building types covered by the Commercial
23 Buildings Energy Consumption Survey (as of
24 the date of enactment of this Act); and

1 (B) to cover additional building types, as
2 identified by the Secretary, to enable the devel-
3 opment of measurement protocols for those
4 building types under subsection (e) that cover
5 at least 85 percent of all major commercial
6 building energy use not later than 5 years after
7 the date of enactment of this Act.

8 (2) RESIDENTIAL ENERGY CONSUMPTION SUR-
9 VEY.—While conducting the Residential Energy
10 Consumption Survey, the Secretary may evaluate
11 whether the data, or other data types are appro-
12 priate, to enable the development of achieved per-
13 formance measurement formats for residential build-
14 ing energy not later than 5 years after the date of
15 enactment of this Act.

16 (e) ENERGY PERFORMANCE MEASUREMENT.—

17 (1) MEASUREMENT.—Not later than 2 years
18 after identifying a covered building type, the Admin-
19 istrator shall, after providing notice and soliciting
20 public comment, establish —

21 (A) methods to measure achieved perform-
22 ance and designed performance; and

23 (B) procedures for collecting and updating
24 information.

1 (2) INFORMATION DISPLAY.—After providing
2 notice and soliciting public comment, the Adminis-
3 trator may—

4 (A) establish 1 or more formats that—

5 (i) display achieved performance and
6 designed performance;

7 (ii) are tailored to building types; or

8 (iii) display other desired information
9 related to building energy performance;

10 and

11 (B) provide for the display of both
12 achieved performance and designed performance
13 for a building, other than in a case in which
14 data are not available, practicable, or cost effec-
15 tive.

16 (3) EXISTING PROGRAMS.—In developing for-
17 mats under this subsection, the Administrator shall
18 consider existing public and private programs for
19 building energy performance information, including
20 programs outside of the United States.

21 (4) CERTIFICATES.—After providing for appro-
22 priate notice and comment, the Administrator shall
23 publish the final specifications for the information,
24 including on certificates or other forms of informa-
25 tion applicable to covered building types.

1 (5) PROGRAM REVIEW.—At least once every 5
2 years, the Administrator shall review, and as nec-
3 essary, modify the building energy performance in-
4 formation program.

5 (f) PUBLIC OUTREACH.—In consultation with the
6 Administrator and in conjunction with other energy effi-
7 ciency awareness efforts, the Secretary shall establish a
8 business and consumer education program to increase
9 awareness of the importance of building energy efficiency
10 and the availability of building energy performance infor-
11 mation, to facilitate widespread use of building energy per-
12 formance information programs.

13 (g) DEMONSTRATION PROJECTS.—

14 (1) IN GENERAL.—The Administrator, in con-
15 sultation with the Secretary shall conduct dem-
16 onstration projects for different building types to
17 evaluate the sufficiency of the model certificate spec-
18 ifications, measurement, and other alternatives pro-
19 posed by State or local agencies, utilities, or other
20 implementing organizations.

21 (2) ZERO-NET ENERGY COMMERCIAL BUILD-
22 INGS INITIATIVE.—The Secretary shall coordinate
23 demonstration projects under this subsection with
24 the Zero-Net Energy Commercial Buildings Initia-
25 tive established under section 422 of the Energy

1 Independence and Security Act of 2007 (42 U.S.C.
2 17082).

3 (h) VOLUNTARY STATE AND LOCAL INFORMATION
4 PROGRAM.—

5 (1) COORDINATION WITH STATES AND LOCAL
6 GOVERNMENTS.—On the request of a State or local
7 government, the Secretary may—

8 (A) coordinate with the State energy office
9 or other State agencies, or with the appropriate
10 local government offices, on the development of
11 a building energy performance information pro-
12 gram;

13 (B) provide technical assistance and infor-
14 mation on best practices; and

15 (C) in the case of a program that includes
16 the key elements in paragraph (2), provide a
17 grant for initial program administration.

18 (2) KEY ELEMENTS OF A BUILDING ENERGY
19 PERFORMANCE INFORMATION PROGRAM.—A model
20 building energy information performance program
21 shall—

22 (A) make information on building energy
23 performance available to the public; and

1 (B) use the information formats estab-
2 lished by the Administrator under subsection
3 (e) or alternative formats.

4 (3) PROGRESS REPORT.—Not later than 3
5 years after the date of enactment of this Act, the
6 Secretary shall submit to Congress a progress report
7 that—

8 (A) evaluates the effectiveness of efforts to
9 advance the use of the program by States and
10 units of local government; and

11 (B) recommends any further steps that are
12 necessary to broaden the use of the program by
13 States and units of local government.

14 (i) PUBLIC BUILDING IMPLEMENTATION.—

15 (1) FEDERAL BUILDINGS.—

16 (A) IN GENERAL.—Not later than 3 years
17 after the date of enactment of this Act, each
18 Federal agency owning or operating buildings
19 of covered building types shall implement the
20 building energy information program in a man-
21 ner that—

22 (i) 30 percent of covered buildings
23 built before the final rule establishing the
24 program; and

1 (ii) 90 percent of the stock of covered
2 building types built after the establishment
3 of the program.

4 (B) GUIDELINES.—Not later than 1 year
5 after the date of enactment of this Act, the Sec-
6 retary shall develop guidelines for the imple-
7 mentation of Federal building energy perform-
8 ance information programs.

9 (2) STATE AND UNITS OF LOCAL GOVERNMENT
10 BUILDINGS.—

11 (A) IN GENERAL.—Effective beginning on
12 the date that is 3 years after the date of enact-
13 ment of this Act, any newly constructed build-
14 ing to be owned by a State, county, or local
15 government that is a covered building and re-
16 ceives Federal financial assistance shall be re-
17 quired to use the certificate provided for under
18 this section.

19 (B) INFORMATION.—The Secretary shall
20 provide information concerning the building en-
21 ergy performance information program for Fed-
22 eral buildings (including information on the re-
23 sults, best practices, accompanying analysis,
24 and implementation) to States and units of
25 local governments for adaptation and adoption,

1 at the discretion of the States and units of local
 2 government, as soon as practicable after the
 3 date of enactment of this Act.

4 (j) ENERGY STAR FOR EXISTING BUILDINGS PRO-
 5 GRAM.—The Administrator may use information, meas-
 6 urements, and other forms of energy performance infor-
 7 mation developed under this section to establish a vol-
 8 untary Energy Star program that recognizes high effi-
 9 ciency retrofits of existing commercial and residential
 10 buildings.

11 (k) AUTHORIZATION OF APPROPRIATIONS.—There
 12 are authorized to be appropriated such sums as are nec-
 13 essary to carry out this section.

14 **SEC. 282. EVALUATION, MEASUREMENT, AND**
 15 **VERIFICATION OF ENERGY SAVINGS.**

16 (a) DEFINITIONS.—In this section:

17 (1) EVALUATION.—The term “evaluation”
 18 means the performance of studies and activities to
 19 determine—

20 (A) the effects of a program or project;

21 (B) changes in energy efficiency markets;

22 (C) levels of demand or energy savings;

23 and

24 (D) program cost-effectiveness.

1 (2) IMPACT EVALUATION.—The term “impact
2 evaluation” means the evaluation of the program or
3 project-specific, directly induced changes in energy
4 savings and greenhouse gas emissions reductions at-
5 tributable to a program or project.

6 (3) MEASUREMENT AND VERIFICATION.—The
7 term “measurement and verification” means data
8 collection, monitoring, and analysis associated with
9 the calculation of total energy and demand savings
10 from individual sites or projects, including as a part
11 of an impact evaluation.

12 (b) RULES.—Not later than 2 years after the date
13 of enactment of this Act, the Secretary shall promulgate
14 uniform rules to document the energy savings and avoided
15 greenhouse gas emissions of energy efficiency programs
16 and projects that—

17 (1) receive funding from Federal, State, or local
18 governments or public utilities;

19 (2) require specific levels of energy reductions;
20 and

21 (3) are eligible for allowances or allowance pro-
22 ceeds based on energy savings and greenhouse gas
23 emissions reductions under climate change regula-
24 tions.

25 (c) REQUIREMENTS.—

1 (1) IN GENERAL.—In developing rules under
2 subsection (b), the Secretary shall ensure, to the
3 maximum extent practicable, that the rules—

4 (A) are enforceable;

5 (B) give reasonable assurance that energy
6 savings and avoided greenhouse gas emission
7 from energy efficiency programs and projects
8 are verifiable and additional;

9 (C) are complete and transparent;

10 (D) balance risk management, certainty of
11 estimated impacts, and implementation costs;
12 and

13 (E) provide sufficient direction relating to
14 methodologies and assumptions (including
15 additionality, market transformation impacts,
16 and measure persistence) to ensure—

17 (i) reasonable uniformity among var-
18 ious States and entities; and

19 (ii) consistency in results.

20 (2) PROCESS.—In developing rules under sub-
21 section (b), the Secretary shall—

22 (A) consider and harmonize the rules with
23 existing domestic and international protocols
24 wherever practicable; and

1 (B) consult with States, utilities, and other
2 appropriate stakeholders.

3 **PART VII—RESIDENTIAL HIGH PERFORMANCE**

4 **ZERO-NET-ENERGY BUILDINGS INITIATIVE**

5 **SEC. 291. RESIDENTIAL HIGH PERFORMANCE ZERO-NET-**
6 **ENERGY BUILDINGS INITIATIVE.**

7 (a) DEFINITIONS.—In this section:

8 (1) DIRECTOR.—The term “Director” means
9 the Director of Residential High-Performance Zero-
10 Net-Energy Buildings appointed under subsection
11 (c).

12 (2) INITIATIVE.—The term “Initiative” means
13 the Residential High Performance Zero-Net-Energy
14 Buildings Initiative established under subsection (b).

15 (3) SECRETARY.—The term “Secretary” means
16 the Secretary of Energy, acting through the Assist-
17 ant Secretary of Energy Efficiency and Renewable
18 Energy.

19 (4) ZERO-NET-ENERGY BUILDING.—The term
20 “zero-net-energy building” means a residential build-
21 ing 4 stories or less that is designed, constructed,
22 and operated—

23 (A) to require greatly reduced needs for
24 energy through efficiency gains;

1 (B) to meet the balance of energy needs
2 through renewable technologies;

3 (C) to produce no net emissions of green-
4 house gases in space heating, cooling, domestic
5 water heating, lighting, and appliances; and

6 (D) to be economically viable.

7 (b) ESTABLISHMENT.—The Secretary shall establish
8 and carry out an initiative, to be known as the “Residen-
9 tial High-Performance Zero-Net-Energy Buildings Initia-
10 tive”—

11 (1) to reduce the quantity of energy consumed,
12 and increase the quantity of renewable energy gen-
13 erated, in residential buildings located in the United
14 States; and

15 (2) to promote the development of zero-net-en-
16 ergy buildings in the United States.

17 (c) DIRECTOR.—

18 (1) IN GENERAL.—The Secretary shall appoint
19 a Director of Residential High-Performance Zero-
20 Net-Energy Buildings to carry out the Initiative.

21 (2) POSITION.—The position of the Director
22 shall be a career reserved position in the Senior Ex-
23 ecutive Service,

24 (d) HIGH-PERFORMANCE RESIDENTIAL GREEN
25 BUILDING PARTNERSHIP CONSORTIUM.—

1 (1) INITIAL PERIOD.—Not later than 180 days
2 after the date of enactment of this Act, the Director
3 shall—

4 (A) use existing resources and frameworks
5 (such as the residential research and develop-
6 ment program) to enter into 1 or more agree-
7 ments with the competitively selected Building
8 America Industry consortia in existence on the
9 date of enactment of this Act, if feasible, to de-
10 velop and carry out the Initiative during the 5-
11 year period beginning on the date of enactment
12 of this Act; or

13 (B) competitively select, and enter into 1
14 or more agreements with, 1 or more consortia
15 to develop and carry out the Initiative during
16 the 5-year period.

17 (2) SUBSEQUENT PERIODS.—Not later than 5
18 years after the date of enactment of this Act and
19 every 5 years thereafter, the Director shall competi-
20 tively select, and enter into 1 or more agreements
21 with, 1 or more consortia to develop and carry out
22 the Initiative during a 5-year period.

23 (3) AGREEMENTS.—In entering into an agree-
24 ment with a consortium under this subsection, the
25 Director shall, if appropriate, use the authority de-

1 scribed in section 646(g) of the Department of En-
2 ergy Organization Act (42 U.S.C. 7256(g)).

3 (e) GOALS.—The goals of the Initiative shall be—

4 (1) to develop and disseminate technologies,
5 practices, and policies for the development and es-
6 tablishment of zero-net-energy buildings; and

7 (2) to promote technologies and strategies that
8 will enable—

9 (A) the design and construction of zero-
10 net-energy buildings (including identification
11 and validation) by 2015; and

12 (B) any new residential building con-
13 structed on or after 2020 to be a cost-effective
14 zero-net-energy building.

15 (f) COMPONENTS.—In carrying out the Initiative, the
16 Director, in consultation with the consortium selected
17 under subsection (d) and leveraging existing resources and
18 initiatives to the maximum extent practicable, may—

19 (1) conduct research and development on build-
20 ing science, design, materials, components, equip-
21 ment and controls, operation and other practices, in-
22 tegration, energy use measurement, and
23 benchmarking;

24 (2) conduct pilot programs and demonstration
25 projects to evaluate replicable approaches to achiev-

1 ing energy-efficient residential buildings using re-
2 newable technologies for a variety of building types
3 in a variety of climate zones;

4 (3) consider the energy benefits of improved
5 land planning and transportation planning to maxi-
6 mize use of existing infrastructure;

7 (4) conduct deployment, dissemination, and
8 technical assistance activities to encourage wide-
9 spread adoption of technologies, practices, and poli-
10 cies to achieve energy efficient residential buildings;

11 (5) conduct other research, development, dem-
12 onstration, and deployment activities necessary to
13 achieve each goal of the Initiative, as determined by
14 the Director, in consultation with the consortium;

15 (6) develop training materials and courses for
16 building professionals and trades on achieving cost-
17 effective zero-net-energy buildings;

18 (7) develop and disseminate public education
19 materials to share information on the benefits and
20 cost-effectiveness of zero-net-energy buildings;

21 (8) support code-setting organizations and
22 State and local governments in developing minimum
23 performance standards in building codes that recog-
24 nize the ready availability of many technologies used
25 in zero-net-energy buildings;

1 (9) develop strategies for overcoming the split
 2 incentives between builders and purchasers, and
 3 landlords and tenants, to ensure that energy-effi-
 4 ciency and renewable technology investments are
 5 made that are cost-effective on a lifecycle basis; and

6 (10) develop improved means of measurement
 7 and verification of energy savings and performance
 8 for public dissemination.

9 (g) COST SHARING.—In carrying out this section, the
 10 Director shall require cost sharing in accordance with sec-
 11 tion 988 of the Energy Policy Act of 2005 (42 U.S.C.
 12 16352).

13 (h) AUTHORIZATION OF APPROPRIATIONS.—There
 14 are authorized to be appropriated to carry out this sec-
 15 tion—

16 (1) \$40,000,000 for fiscal year 2010;

17 (2) \$60,000,000 for each of fiscal years 2011
 18 and 2012; and

19 (3) \$100,000,000 for each of fiscal years 2013
 20 through 2020.

21 **Subtitle D—Electric Grid**

22 **SEC. 295. NATIONAL ELECTRIC SYSTEM EFFICIENCY AND** 23 **PEAK DEMAND REDUCTION GOAL.**

24 (a) DEFINITIONS.—In this section:

1 (1) APPLICABLE BASELINE.—The term “appli-
2 cable baseline” means the highest annual peak de-
3 mand during 1 or more years determined by the
4 Commission, in consultation with the Secretary and
5 the North American Electric Reliability Corporation.

6 (2) COMMISSION.—The term “Commission”
7 means Federal Energy Regulatory Commission.

8 (3) DEMAND REDUCTION.—The term “demand
9 reduction” means the reduction in annual peak de-
10 mand as compared to a previous baseline year or pe-
11 riod, expressed in megawatts.

12 (4) DYNAMIC PEAK MANAGEMENT CONTROL.—
13 The term “dynamic peak management control”
14 means the control of megawatts of electricity
15 through a demand response program or other means
16 that is directly capable of actively and dynamically
17 reducing peak demand.

18 (5) LOAD-SERVING ENTITY.—

19 (A) IN GENERAL.—The term “load-serving
20 entity” means an entity that provides electricity
21 directly to retail consumers with the responsi-
22 bility to ensure power quality and reliability.

23 (B) INCLUSIONS.—The term “load-serving
24 entity” includes an entity described in subpara-
25 graph (A) that is investor-owned, publicly-

1 owned, owned by a rural electric cooperative, or
2 owned by another entity.

3 (6) PEAK DEMAND.—The term “peak demand”
4 means electricity demand—

5 (A) during the highest hour on the system
6 of a load-serving entity during a calendar year,
7 expressed in megawatts;

8 (B) measured using an alternative calcula-
9 tion method determined by the Commission, in
10 consultation with the Secretary and the North
11 American Electric Reliability Corporation; and

12 (C) that takes into account monthly and
13 seasonal variations in peak demand for elec-
14 tricity.

15 (7) PEAK DEMAND PERIOD.—The term “peak
16 demand period” means the time period on the sys-
17 tem of a load-serving entity relative to peak demand
18 that may warrant special measures or electricity re-
19 sources to maintain system reliability or avoid excess
20 costs while meeting peak demand.

21 (8) REGIONAL TRANSMISSION ORGANIZATION.—
22 The term “Regional Transmission Organization”
23 means an entity that is approved as a Regional
24 Transmission Organization by the Commission.

1 (9) SMART GRID.—The term “smart grid”
2 means smart grid (within the meaning of title XIII
3 of the Energy Independence and Security Act of
4 2007 (42 U.S.C. 17381 et seq.)).

5 (10) SYSTEM LOAD FACTOR.—The term “sys-
6 tem load factor” means the ratio that the kilowatt
7 hours consumed on a system bear to the highest
8 level of demand in kilowatts on the system during a
9 given year.

10 (b) GOAL.—It is the policy of the United States
11 that—

12 (1) the national electric system efficiency goal
13 of the United States is to optimize and make more
14 efficient the planning and operation of national and
15 local electricity systems in a manner that the system
16 load factor of the systems will be improved by 1.5
17 percent per year during each of calendar years 2010
18 through 2030; and

19 (2) the goal described in paragraph (1) can be
20 met or exceeded by lessening the difference between
21 the periods of lowest and highest electricity demand,
22 with particular focus on reducing the frequency and
23 severity of peak demand periods, using smart grid
24 and demand response technologies, practices, and
25 activities, including—

1 (A) the reduction of overall electricity de-
2 mand through the adoption of energy-efficient
3 technologies or conservation practices;

4 (B) the use of demand response tech-
5 nologies, practices, and activities that allow dy-
6 namic control, load-shifting, and reduction of
7 time-based electricity consumption by load-serv-
8 ing entities and electricity customers, including
9 the wide-spread installation or use of—

10 (i) distributed generation;

11 (ii) smart meters and equipment with
12 smart grid capabilities;

13 (iii) energy storage; and

14 (iv) time-based pricing that reflects
15 marginal electricity generation costs; and

16 (C) the use of smart grid technologies,
17 practices, and activities (including activities de-
18 scribed in title XIII of the Energy Independ-
19 ence and Security Act of 2007 (42 U.S.C.
20 17381 et seq.)) that provide time-based infor-
21 mation on, and dynamic control of, the elec-
22 tricity grid allowing for the most cost-effective,
23 efficient, and reliable generation, transmission,
24 and distribution of electricity.

25 (c) ACTION PLAN.—

1 (1) IN GENERAL.—Not later than 180 days
2 after the date of enactment of this Act, the Sec-
3 retary, in cooperation with the Commission, Re-
4 gional Transmission Organizations, the National As-
5 sociation of Regulatory Utility Commissioners, and
6 heads of other appropriate Federal agencies, shall
7 develop an action plan to achieve or exceed the na-
8 tional goal established under subsection (a).

9 (2) PLAN CONTENTS.—The action plan shall—

10 (A) identify future regulatory, funding,
11 and policy priorities that would assist the
12 United States in meeting the national goal de-
13 scribed in paragraph (1);

14 (B) include data collection methodologies
15 and compilations used to establish baseline and
16 goal attainment data;

17 (C) include guidelines for the establish-
18 ment of dynamic peak management control
19 goals, including—

20 (i) the establishment of applicable
21 baselines in a consistent nationwide man-
22 ner; and

23 (ii) the use of a methodology that pro-
24 vides for adjustments to baseline and goals
25 for a load-serving entity to reflect changes

1 in the number of customers served, weath-
2 er conditions, and any other appropriate
3 factors;

4 (D) include a system and rules for meas-
5 urement and verification of demand reductions;
6 and

7 (E) coordinate with any existing com-
8 plementary programs or initiatives managed by
9 load-serving entities, Regional Transmission Or-
10 ganizations, and States.

11 (3) PUBLIC INPUT AND COMMENT.—The Sec-
12 retary shall develop the plan in a manner that pro-
13 vides appropriate opportunities for public input and
14 comment.

15 (4) ACTION PLAN UPDATES.—The Secretary
16 shall—

17 (A) update the action plan every 3 years;
18 and

19 (B) include the updated action plan in the
20 national energy policy plan required by section
21 801 of the Department of Energy Organization
22 Act (42 U.S.C. 7321).

23 (5) REPORT TO CONGRESS.—In updating the
24 national electric system efficiency goal established
25 under subsection (a), the Secretary shall submit to

1 the Committee on Energy and Natural Resources of
2 the Senate and the Committee on Energy and Com-
3 merce of the House of Representatives a report de-
4 scribing—

5 (A) progress made toward implementing
6 the necessary policies to meet the national goal;

7 (B) the resulting cost-savings to ratepayers
8 and the United States economy;

9 (C) the improvements to the reliability and
10 efficiency of the United States electricity grid;
11 and

12 (D) any additional legal authorities nec-
13 essary to achieve the national goal.

14 (6) PROGRESS REPORTING AND TRANSPARENCY
15 FOR RATEPAYERS.—Not later than 2 years after the
16 date of enactment of this Act, the Secretary shall es-
17 tablish a public domain website on which the Sec-
18 retary shall provide information and data dem-
19 onstrating progress by States, other jurisdictional
20 entities, and load-serving entities in meeting the na-
21 tional electric system efficiency goal established
22 under subsection (b).

23 (7) NO IMPACT ON EXISTING STATE GOALS AND
24 STANDARDS.—Nothing in this section diminishes
25 any authority of a State or political subdivision of a

1 State to adopt or enforce any law (including regula-
2 tions) that increases electricity grid efficiency, smart
3 grid and distributed generation deployment, dynamic
4 peak management control, demand response and dis-
5 tributed storage, or the regulation of load-serving
6 entities.

7 **SEC. 296. UNIFORM NATIONAL STANDARDS FOR INTER-**
8 **CONNECTION OF CERTAIN SMALL POWER**
9 **PRODUCTION FACILITIES.**

10 (a) FINDINGS.—Section 2 of the Public Utility Regu-
11 latory Policies Act of 1978 (16 U.S.C. 2601) is amend-
12 ed—

13 (1) in paragraph (5), by striking “and” at the
14 end;

15 (2) in paragraph (6), by striking the period at
16 the end and inserting “, and”; and

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

18 “(7) uniform national standards for the inter-
19 connection of certain small power production facili-
20 ties.”.

21 (b) STANDARDS FOR INTERCONNECTION.—

22 (1) IN GENERAL.—Subtitle B of title I of the
23 Public Utility Regulatory Policies Act of 1978 (16
24 U.S.C. 2621 et seq.) is amended by adding at the
25 end the following:

1 **“SEC. 118. INTERCONNECTION OF CERTAIN SMALL POWER**
2 **PRODUCTION FACILITIES.**

3 “(a) STANDARD FOR FACILITIES OF 15 KILOWATTS
4 OR LESS.—The Commission shall establish a standard by
5 which each electric utility shall make available, on request,
6 interconnection service to any electric consumer that the
7 electric utility serves with respect to any facility that gen-
8 erates up to 15 kilowatts of electric energy on the premises
9 of the electric consumer.

10 “(b) ENFORCEMENT.—

11 “(1) BY THE COMMISSION.—

12 “(A) IN GENERAL.—Except as provided in
13 paragraph (2), the Commission may enforce the
14 standard established under subsection (a)
15 against any electric utility.

16 “(B) ADMINISTRATION.—The require-
17 ments of the standard shall be treated as a rule
18 enforceable under the Federal Power Act (16
19 U.S.C. 791a et seq.).

20 “(2) BY A STATE REGULATORY AUTHORITY.—

21 The Commission may enter into an agreement with
22 a State regulatory authority to discontinue the en-
23 forcement of this section in the State by the Com-
24 mission if the Commission finds that the State or
25 the State regulatory authority has adopted and is
26 enforcing a standard for interconnection services

1 that is consistent with the standard established
2 under subsection (a).

3 “(3) RESUMPTION OF COMMISSION ENFORCE-
4 MENT.—The Commission may rescind an agreement
5 under paragraph (2) and resume enforcement of the
6 standard established under subsection (a) if, as de-
7 termined by the Commission, the State has failed to
8 enforce a consistent State standard.

9 “(c) EXPANDED STANDARD.—

10 “(1) REPORT.—Not later than 3 years after the
11 date of enactment of this section, the Commission
12 shall submit to Congress a report on whether the
13 standard established under subsection (a) should be
14 amended to apply to facilities that generate up to 50
15 kilowatts of electric energy on the premises of an
16 electric consumer.

17 “(2) AUTHORITY TO AMEND STANDARD.—

18 “(A) IN GENERAL.—Except as provided in
19 subparagraph (B), if the Commission makes an
20 affirmative determination under paragraph (1),
21 the Commission may, after public notice and
22 comment, amend the standard established
23 under subsection (a) to apply to facilities that
24 generate up to 50 kilowatts of electric energy
25 on the premises of an electric consumer.

1 “(B) DISAPPROVAL.—Subparagraph (A)
2 shall not apply if, during the first period of 90
3 calendar days (not counting days on which ei-
4 ther House is not in session because of an ad-
5 jourment of more than 3 days) of continuous
6 session of Congress (broken only by an adjourn-
7 ment sine die) after the date of the receipt of
8 the report under paragraph (1), a joint resolu-
9 tion is enacted disapproving the amendment of
10 the standard

11 “(d) MODEL STANDARD FOR FACILITIES OF UP TO
12 20 MEGAWATTS.—The Commission shall establish a
13 model standard for the interconnection of small power pro-
14 duction facilities with a capacity greater than 15 kilo-
15 watts, but not greater than 20 megawatts, for the consid-
16 eration of State regulatory authorities under section
17 111(d)(15).”.

18 (2) CONFORMING AMENDMENT.—The table of
19 contents in section 1(b) of the Public Utility Regu-
20 latory Policies Act of 1978 (16 U.S.C. prec. 2601)
21 is amended by adding at the end of the items relat-
22 ing to subtitle B of title I the following:

“Sec. 118. Interconnection of certain small power production facilities.”.

1 **TITLE III—IMPROVED ENERGY**
2 **SECURITY**
3 **Subtitle A—Cyber Security of the**
4 **Electric Transmission Grid**

5 **SEC. 301. CRITICAL ELECTRIC INFRASTRUCTURE.**

6 Part II of the Federal Power Act (16 U.S.C. 824 et
7 seq.) is amended by adding at the end the following:

8 **“SEC. 224. CRITICAL ELECTRIC INFRASTRUCTURE.**

9 “(a) DEFINITIONS.—In this section:

10 “(1) CRITICAL ELECTRIC INFRASTRUCTURE.—

11 The term ‘critical electric infrastructure’ means sys-
12 tems and assets, whether physical or virtual, used
13 for the generation, transmission, or distribution of
14 electric energy affecting interstate commerce that, as
15 determined by the Commission or the Secretary (as
16 appropriate), are so vital to the United States that
17 the incapacity or destruction of the systems and as-
18 sets would have a debilitating impact on national se-
19 curity, national economic security, or national public
20 health or safety.

21 “(2) CRITICAL ELECTRIC INFRASTRUCTURE IN-
22 FORMATION.—The term ‘critical electric infrastruc-
23 ture information’ means critical infrastructure infor-
24 mation relating to critical electric infrastructure.

1 “(3) CRITICAL INFRASTRUCTURE INFORMA-
2 TION.—The term ‘critical infrastructure information’
3 has the meaning given the term in section 212 of the
4 Critical Infrastructure Information Act of 2002 (6
5 U.S.C. 131).

6 “(4) CYBER SECURITY THREAT.—The term
7 ‘cyber security threat’ means the imminent danger
8 of an act that disrupts, attempts to disrupt, or poses
9 a significant risk of disrupting the operation of pro-
10 grammable electronic devices or communications net-
11 works (including hardware, software, and data) es-
12 sential to the reliable operation of critical electric in-
13 frastructure.

14 “(5) CYBER SECURITY VULNERABILITY.—The
15 term ‘cyber security vulnerability’ means a weakness
16 or flaw in the design or operation of any program-
17 mable electronic device or communication network
18 that exposes critical electric infrastructure to a cyber
19 security threat.

20 “(6) SECRETARY.—The term ‘Secretary’ means
21 the Secretary of Energy.

22 “(b) AUTHORITY OF COMMISSION.—

23 “(1) IN GENERAL.—The Commission shall issue
24 such rules or orders as are necessary to protect crit-

1 ical electric infrastructure from cyber security
2 vulnerabilities.

3 “(2) EXPEDITED PROCEDURES.—The Commis-
4 sion may issue a rule or order without prior notice
5 or hearing if the Commission determines the rule or
6 order must be issued immediately to protect critical
7 electric infrastructure from a cyber security vulner-
8 ability.

9 “(3) CONSULTATION.—Before issuing a rule or
10 order under paragraph (2), to the extent practicable,
11 taking into account the nature of the threat and ur-
12 gency of need for action, the Commission shall con-
13 sult with the entities described in subsection (e)(1)
14 and with officials at other Federal agencies, as ap-
15 propriate, regarding implementation of actions that
16 will effectively address the identified cyber security
17 vulnerabilities.

18 “(4) TERMINATION OF RULES OR ORDERS.—A
19 rule or order issued to address a cyber security vul-
20 nerability under this subsection shall expire on the
21 effective date of a standard developed and approved
22 pursuant to section 215 to address the cyber secu-
23 rity vulnerability.

24 “(c) EMERGENCY AUTHORITY OF SECRETARY.—

1 “(1) IN GENERAL.—If the Secretary determines
2 that immediate action is necessary to protect critical
3 electric infrastructure from a cyber security threat,
4 the Secretary may require, by order, with or without
5 notice, persons subject to the jurisdiction of the
6 Commission under this section to take such actions
7 as the Secretary determines will best avert or miti-
8 gate the cyber security threat.

9 “(2) COORDINATION WITH CANADA AND MEX-
10 ICO.—In exercising the authority granted under this
11 subsection, the Secretary is encouraged to consult
12 and coordinate with the appropriate officials in Can-
13 ada and Mexico responsible for the protection of
14 cyber security of the interconnected North American
15 electricity grid.

16 “(3) CONSULTATION.—Before exercising the
17 authority granted under this subsection, to the ex-
18 tent practicable, taking into account the nature of
19 the threat and urgency of need for action, the Sec-
20 retary shall consult with the entities described in
21 subsection (e)(1) and with officials at other Federal
22 agencies, as appropriate, regarding implementation
23 of actions that will effectively address the identified
24 cyber security threat.

1 “(4) COST RECOVERY.—The Commission shall
2 establish a mechanism that permits public utilities to
3 recover prudently incurred costs required to imple-
4 ment immediate actions ordered by the Secretary
5 under this subsection.

6 “(d) DURATION OF EXPEDITED OR EMERGENCY
7 RULES OR ORDERS.—Any rule or order issued by the
8 Commission without prior notice or hearing under sub-
9 section (b)(2) or any order issued by the Secretary under
10 subsection (c) shall remain effective for not more than 90
11 days unless, during the 90 day-period, the Commission—

12 “(1) gives interested persons an opportunity to
13 submit written data, views, or arguments (with or
14 without opportunity for oral presentation); and

15 “(2) affirms, amends, or repeals the rule or
16 order.

17 “(e) JURISDICTION.—

18 “(1) IN GENERAL.—Notwithstanding section
19 201, this section shall apply to any entity that owns,
20 controls, or operates critical electric infrastructure.

21 “(2) COVERED ENTITIES.—

22 “(A) IN GENERAL.—An entity described in
23 paragraph (1) shall be subject to the jurisdic-
24 tion of the Commission for purposes of—

25 “(i) carrying out this section; and

1 “(ii) applying the enforcement au-
2 thorities of this Act with respect to this
3 section.

4 “(B) JURISDICTION.—This subsection
5 shall not make an electric utility or any other
6 entity subject to the jurisdiction of the Commis-
7 sion for any other purpose.

8 “(3) ALASKA AND HAWAII EXCLUDED.—Except
9 as provided in subsection (f), nothing in this section
10 shall apply in the State of Alaska or Hawaii.

11 “(f) DEFENSE FACILITIES.—Not later than 1 year
12 after the date of enactment of this section, the Secretary
13 of Defense shall prepare, in consultation with the Sec-
14 retary, the States of Alaska and Hawaii, the Territory of
15 Guam, and the electric utilities that serve national defense
16 facilities in those States and Territory, a comprehensive
17 plan that identifies the emergency measures or actions
18 that will be taken to protect the reliability of the electric
19 power supply of the national defense facilities located in
20 those States and Territory in the event of an imminent
21 cybersecurity threat.

22 “(g) PROTECTION OF CRITICAL ELECTRIC INFRA-
23 STRUCTURE INFORMATION.—

24 “(1) IN GENERAL.—Section 214 of the Critical
25 Infrastructure Information Act of 2002 (6 U.S.C.

1 133) shall apply to critical electric infrastructure in-
2 formation submitted to the Commission or the Sec-
3 retary under this section to the same extent as that
4 section applies to critical infrastructure information
5 voluntarily submitted to the Department of Home-
6 land Security under that Act (6 U.S.C. 131 et seq.).

7 “(2) RULES PROHIBITING DISCLOSURE.—Not-
8 withstanding section 552 of title 5, United States
9 Code, the Secretary and the Commission shall pre-
10 scribe regulations prohibiting disclosure of informa-
11 tion obtained or developed in ensuring cyber security
12 under this section if the Secretary or Commission,
13 as appropriate, decides disclosing the information
14 would be detrimental to the security of critical elec-
15 tric infrastructure.

16 “(3) PROCEDURES FOR SHARING INFORMA-
17 TION.—

18 “(A) IN GENERAL.—The Secretary and the
19 Commission shall establish procedures on the
20 release of critical infrastructure information to
21 entities subject to this section, to the extent
22 necessary to enable the entities to implement
23 rules or orders of the Commission or the Sec-
24 retary.

1 “(B) REQUIREMENTS.—The procedures
2 shall—

3 “(i) limit the redissemination of infor-
4 mation described in subparagraph (A) to
5 ensure that the information is not used for
6 an unauthorized purpose;

7 “(ii) ensure the security and confiden-
8 tiality of the information;

9 “(iii) protect the constitutional and
10 statutory rights of any individuals who are
11 subjects of the information; and

12 “(iv) provide data integrity through
13 the timely removal and destruction of obso-
14 lete or erroneous names and information.”.

15 **Subtitle B—Nuclear Energy**

16 **SEC. 311. NATIONAL COMMISSION ON NUCLEAR WASTE.**

17 The Nuclear Waste Policy Act of 1982 (42 U.S.C.
18 10101 et seq.) is amended by adding at the end the fol-
19 lowing:

20 **“TITLE VI—NATIONAL COMMIS-** 21 **SION ON NUCLEAR WASTE**

22 **“SEC. 601. ESTABLISHMENT OF COMMISSION.**

23 “There is established a Federal advisory committee
24 to be known as the ‘National Commission on Nuclear

1 Waste' (referred to in this title as the 'National Commis-
2 sion').

3 **“SEC. 602. PURPOSES.**

4 “The purposes of the National Commission are—

5 “(1) to conduct a comprehensive study of alter-
6 native means of safely managing or disposing of
7 spent nuclear fuel and high-level radioactive waste
8 from civilian nuclear activity and atomic energy de-
9 fense activity; and

10 “(2) to recommend to Congress such legislative
11 or other action as may be necessary to manage or
12 dispose of spent nuclear fuel and high-level radio-
13 active waste successfully and safely.

14 **“SEC. 603. COMPOSITION OF THE NATIONAL COMMISSION.**

15 “(a) MEMBERS.—The National Commission shall be
16 composed of 11 members appointed by the President from
17 among prominent United States citizens with national rec-
18 ognition and significant depth of experience in such pro-
19 fessions as government service, public administration, nat-
20 ural or physical sciences, engineering, and public health
21 and safety.

22 “(b) EXCLUSION.—An officer or employee of the
23 Federal Government or any State or local government may
24 not serve as a member of the National Commission.

1 “(c) BALANCE.—The membership of the National
2 Commission shall be fairly balanced in terms of the points
3 of view represented and functions to be performed by the
4 National Commission. Not more than 6 members of the
5 National Commission shall be members of the same polit-
6 ical party.

7 “(d) INDEPENDENCE.—The advice and recommenda-
8 tions of the National Commission shall result from the Na-
9 tional Commission’s independent judgment and shall not
10 be inappropriately influenced by any special interest.

11 “(e) CHAIRMAN.—The President shall designate a
12 chairman (referred to in this title as the ‘Chairman’) from
13 among the members of the National Commission.

14 **“SEC. 604. FUNCTIONS.**

15 “(a) STUDY OF ALTERNATIVE WASTE MANAGEMENT
16 STRATEGIES.—The National Commission shall—

17 “(1) examine alternative means of safely man-
18 aging and disposing of spent nuclear fuel and high-
19 level radioactive waste from civilian nuclear activity
20 and atomic defense activity, including—

21 “(A) deep geologic disposal of spent nu-
22 clear fuel and high-level radioactive waste in a
23 repository;

1 “(B) long-term storage of spent nuclear
2 fuel and high-level radioactive waste at the sites
3 where it is currently stored or being generated;

4 “(C) long-term storage of spent nuclear
5 fuel and high-level radioactive waste at 1 or
6 more regional storage facilities;

7 “(D) chemical reprocessing of spent nu-
8 clear fuel with uranium and plutonium recy-
9 cling; and

10 “(E) such other alternatives or combina-
11 tion of alternatives to managing and disposing
12 of spent nuclear fuel and high-level radioactive
13 waste as the National Commission determines
14 to be reasonable; and

15 “(2) evaluate, for each of the alternatives con-
16 sidered under paragraph (1)—

17 “(A) the degree to which the alternative
18 will isolate spent nuclear fuel and high-level ra-
19 dioactive waste from the public and the environ-
20 ment;

21 “(B) the degree to which the alternative
22 will expose workers, the general public, and the
23 environment to radiation during the handling,
24 treatment, or processing of spent nuclear fuel

1 and high-level radioactive waste prior to final
2 disposition;

3 “(C) the degree to which the alternative
4 will be secure from attack or intrusion;

5 “(D) the risk of nuclear proliferation posed
6 by the alternative;

7 “(E) the total life cycle cost of the alter-
8 native;

9 “(F) the length of time needed to site, li-
10 cense, and construct necessary facilities;

11 “(G) the degree to which spent nuclear
12 fuel and high-level radioactive waste will need
13 to be transported between facilities; and

14 “(H) the cumulative effect of the alter-
15 native on the environment, and measures that
16 can be taken to avoid or minimize adverse ef-
17 fects of the alternative on the environment.

18 “(b) REVIEW OF PRIOR REPOSITORY PROGRAM.—

19 The National Commission shall—

20 “(1) review the efforts of the Department to
21 implement the programs under title I and identify
22 any deficiencies in the implementation of those pro-
23 grams; and

1 “(2) recommend any measures to ensure that
2 future efforts to site a repository or storage facility
3 will—

4 “(A) provide a reasonable assurance that
5 the public and the environment will be ade-
6 quately protected from the hazards posed by
7 spent nuclear fuel or high-level radioactive
8 waste stored or disposed of in the facility; and

9 “(B) be acceptable to the public.

10 “(c) REVIEW OF REPROCESSING AND ADVANCED
11 FUEL CYCLE PROGRAMS.—The National Commission
12 shall—

13 “(1) review foreign and domestic programs to
14 reprocess commercial spent nuclear fuel;

15 “(2) assess the technical challenges of devel-
16 oping and validating the safe operation of the proc-
17 esses and systems required to recycle commercial
18 spent nuclear fuel without separating plutonium, in-
19 cluding the time and funding resources likely to be
20 required;

21 “(3) evaluate the regulatory adequacy of health
22 and safety standards for radionuclide release from
23 recycling facilities and recycled fuel fabrication fa-
24 cilities;

1 “(4) assess the probable forms of the final
2 wastes resulting from reprocessing operations, in-
3 cluding how such wastes would be stored and main-
4 tained pending disposal; and

5 “(5) analyze the technical, economic, environ-
6 mental, and health and safety advantages and dis-
7 advantages of reprocessing spent nuclear fuel com-
8 pared to disposal in a geologic repository.

9 “(d) STUDY OF INCENTIVES PROGRAM.—The Na-
10 tional Commission shall—

11 “(1) examine the economic and other impacts of
12 hosting a nuclear waste repository, reprocessing fa-
13 cility, or regional storage facility on the host State,
14 any affected Indian tribe, and any affected unit of
15 local government; and

16 “(2) recommend measures it determines nec-
17 essary or advisable to provide economic compensa-
18 tion and incentives to a State, Indian tribe, or unit
19 of local government that agrees to host a repository,
20 reprocessing facility, or regional storage facility.

21 “(e) STUDY OF ALTERNATIVE MEANS OF MANAGING
22 AND OPERATING THE NUCLEAR WASTE PROGRAM.—The
23 National Commission shall—

24 “(1) study alternative approaches to managing
25 the construction and operation of civilian nuclear

1 waste management facilities, including the feasibility
2 of establishing a private corporation for such pur-
3 poses; and

4 “(2) recommend whether responsibility for
5 managing the siting, construction, and operation,
6 and monitoring of civilian nuclear waste manage-
7 ment facilities should continue to be vested in the
8 Secretary or whether it should be transferred to an
9 alternative Federal agency or entity.

10 “(f) STUDY OF ALTERNATIVE MEANS OF FINANC-
11 ING.—The National Commission shall—

12 “(1) examine the cost of carrying out nuclear
13 waste management activities;

14 “(2) evaluate the adequacy of the Waste Fund;
15 and

16 “(3) recommend measures the National Com-
17 mission determines necessary or advisable for—

18 “(A) the disposition of balances remaining
19 in the Waste Fund; and

20 “(B) the collection and disposition of any
21 additional fees that may be needed to ensure
22 that the cost of carrying out nuclear waste dis-
23 posal activities are fully recovered from the per-
24 sons responsible for generating such waste.

1 **“SEC. 605. ADMINISTRATION.**

2 “(a) **COMPENSATION.**—Each member of the National
3 Commission shall be compensated at the daily equivalent
4 of the annual rate of basic pay in effect for a position
5 at level IV of the Executive Schedule under section 5315
6 of title 5, United States Code, for each day the member
7 is engaged in the work of the National Commission.

8 “(b) **TRAVEL EXPENSES.**—Each member of the Na-
9 tional Commission may receive travel expenses, including
10 per diem in lieu of subsistence, in the same manner as
11 person employed intermittently in the Federal Government
12 service under section 5703 of title 5, United States Code.

13 “(c) **STAFF.**—The Chairman is authorized to appoint
14 and fix the compensation of a staff director and such other
15 personnel as may be necessary to enable the National
16 Commission to carry out its functions, subject to the appli-
17 cable provisions of the Federal Advisory Committee Act
18 (5 U.S.C. App.) and title 5, United States Code.

19 “(d) **DETAILEES.**—

20 “(1) **IN GENERAL.**—Any Federal Government
21 employee may be detailed to the National Commis-
22 sion without reimbursement from the National Com-
23 mission.

24 “(2) **EXCEPTION.**—Notwithstanding paragraph
25 (1), no employee of the Department may be detailed
26 to the National Commission.

1 “(3) EFFECT ON DETAILEE.—Any such detailee
2 shall retain the rights, status, and privileges of his
3 or her regular employment without interruption.

4 “(e) CONSULTANTS.—The National Commission may
5 procure the services of experts and consultants in accord-
6 ance with section 3109 of title 5, United States Code.

7 “(f) CONTRACTING.—The National Commission may,
8 to the extent funds are available under this title or subse-
9 quent appropriation Acts, enter into contracts to enable
10 the National Commission to discharge its duties under this
11 title.

12 “(g) INFORMATION FROM FEDERAL AGENCIES.—
13 The National Commission may request any Federal agen-
14 cy, including the Nuclear Waste Technical Review Board,
15 to furnish such information, advice, or assistance as it de-
16 termines necessary to carry out its functions, and each
17 such agency shall, to the extent permitted by law, furnish
18 such information, advice, or assistance upon the request
19 of the Chairman.

20 “(h) ASSISTANCE FROM THE GENERAL SERVICES
21 ADMINISTRATION.—The Administrator of General Serv-
22 ices shall, upon the request of the Chairman, provide the
23 National Commission with necessary administrative serv-
24 ices, facilities, and support, on a reimbursable basis.

1 “(i) **POSTAL SERVICES.**—The National Commission
2 may use the United States mails in the same manner and
3 under the same conditions as a Federal agency.

4 **“SEC. 606. REPORT.**

5 “The National Commission shall submit to the Presi-
6 dent and Congress a final report containing the National
7 Commission’s findings, conclusions, and recommendations
8 not later than 2 years after the date of enactment of this
9 Act.

10 **“SEC. 607. FUNDING.**

11 “(a) **TRANSFER OF FUNDS.**—Notwithstanding sec-
12 tion 302(d), of the amounts authorized to be appropriated
13 to the Secretary from the Waste Fund under the heading
14 ‘NUCLEAR WASTE DISPOSAL’ under title III of division
15 C of the Omnibus Appropriations Act, 2009 (Public Law
16 111–8; 123 Stat. 618), \$3,000,000 shall be transferred
17 to the National Commission for purposes of carrying out
18 this title.

19 “(b) **DURATION OF AVAILABILITY.**—Except as pro-
20 vided in section 608(b), amounts made available to the
21 National Commission under subsection (a) shall remain
22 available until expended or the termination of the National
23 Commission.

1 **“SEC. 608. TERMINATION.**

2 “(a) IN GENERAL.—The National Commission, and
3 all authorities under this title, shall terminate 60 days
4 after the date on which the final report is submitted under
5 section 606.

6 “(b) UNEXPENDED FUNDS.—Any funds made avail-
7 able to the National Commission under section 607 that
8 are not expended by the National Commission by the date
9 on which the National Commission is terminated under
10 subsection (a) shall be deposited in the general fund of
11 the Treasury.”.

12 **SEC. 312. SENSE OF CONGRESS REGARDING THE STRA-**
13 **TEGIC ROLE OF NUCLEAR ENERGY.**

14 (a) FINDINGS.—Congress finds that—

15 (1) nuclear energy is a strategic technology and
16 should be recognized for—

17 (A) providing clean and secure domestic
18 energy for the United States; and

19 (B) reducing greenhouse gases;

20 (2) the use and expansion of nuclear energy
21 technology is essential for—

22 (A) the production of electricity and other
23 industrial applications; and

24 (B) the reduction of greenhouse gas emis-
25 sions;

1 (3) it is the continuing obligation of the Federal
2 Government to provide for the safe disposal of spent
3 nuclear fuel and high-level radioactive waste, includ-
4 ing the development of any analysis or assessment
5 that is required to establish a sustainable, long-term
6 program for the management of spent nuclear fuel
7 and high-level radioactive waste;

8 (4) spent nuclear fuel and high-level radioactive
9 waste should be stored in a limited number of se-
10 cure, centralized facilities;

11 (5) to encourage State and local support for the
12 establishment of centralized spent nuclear fuel and
13 high-level radioactive waste storage facilities, the
14 Federal Government should expedite the conduct of
15 a sustainable long-term management program;

16 (6) the reprocessing of spent nuclear fuel
17 may—

18 (A) reduce the burden on geological reposi-
19 tories for ultimate waste disposal; and

20 (B) provide additional fuel for nuclear re-
21 actors; and

22 (7) advanced technologies in spent fuel recy-
23 cling and advanced reactors may—

24 (A) further reduce the volume and radioac-
25 tivity of high-level radioactive waste; and

1 (B) provide for a closed fuel cycle that will
2 generate additional fuel for nuclear reactors.

3 (b) SENSE OF CONGRESS.—It is the sense of Con-
4 gress that the Federal Government should reaffirm the
5 policy of the United States—

6 (1) to support the use and expansion of nuclear
7 energy technology for—

8 (A) the production of electricity and other
9 industrial applications; and

10 (B) the reduction of greenhouse gas emis-
11 sions; and

12 (2) to fulfill the obligation of the Federal Gov-
13 ernment with respect to spent nuclear fuel and high-
14 level radioactive waste.

15 **SEC. 313. ADVANCED FUEL RECYCLING PROCESS DEVELOP-**
16 **MENT.**

17 Section 953 of the Energy Policy Act of 2005 (42
18 U.S.C. 16273) is amended—

19 (1) in subsection (b), by striking “Research”;
20 and

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

22 “(e) ADVANCED FUEL RECYCLING PROCESS DEVEL-
23 OPMENT.—

24 “(1) DEFINITION OF ADVANCED FUEL RECY-
25 CLING PROCESS.—In this subsection through sub-

1 section (g), the term ‘advanced fuel recycling process’ means an integrated, proliferation-resistant, spent nuclear fuel recycling or transmutation process that—

2 “(A) does not separate pure plutonium;

3 “(B) reduces the burden on geological repositories for ultimate waste disposal;

4 “(C) minimizes environmental and public health and safety impacts; and

5 “(D) is an alternative to reprocessing technologies deployed prior to the date of enactment of this subsection.

6 “(2) DESIGN, CRITERIA, AND EVALUATIONS.—

7 In addition to the activities authorized under subsection (a), the Secretary shall—

8 “(A) complete the development and testing of a complete and integrated process flowsheet for all steps involved in an advanced fuel recycling process;

9 “(B) characterize the waste streams resulting from all steps in the advanced fuel recycling process identified under subparagraph (A);

10 “(C) develop waste treatment processes and designs for disposal facilities for waste streams characterized under subparagraph (B);

1 “(D) on completion of sufficient technical
2 progress in the program, as evaluated under
3 subsection (g)—

4 “(i) develop a generic environmental
5 impact statement for the technologies de-
6 veloped under this subsection; and

7 “(ii) conduct design and engineering
8 work sufficient to develop firm cost esti-
9 mates with respect to the development of
10 advanced fuel recycling processes; and

11 “(E) cooperate with the Nuclear Regu-
12 latory Commission in making facilities of the
13 Department available to the Commission for
14 purposes of the Commission carrying out inde-
15 pendent, confirmatory research as part of the li-
16 censing process for facilities constructed or
17 used under the program.

18 “(f) REGULATORY STANDARDS.—

19 “(1) IN GENERAL.—The Nuclear Regulatory
20 Commission shall have licensing and related regu-
21 latory authority under the Atomic Energy Act of
22 1954 (42 U.S.C. 2011 et seq.) over facilities that
23 use an advanced fuel recycling process.

24 “(2) REVISION OF APPLICABLE STANDARDS.—

1 “(A) NUCLEAR REGULATORY COMMISS-
2 SION.—The Nuclear Regulatory Commission
3 shall establish standards for protection against
4 radiation (including occupational exposures) re-
5 sulting from activities at facilities that use an
6 advanced fuel recycling process, including facili-
7 ties to fabricate fuel enriched with actinide ele-
8 ments other than uranium.

9 “(B) ENVIRONMENTAL PROTECTION AGEN-
10 CY.—The Administrator of the Environmental
11 Protection Agency shall establish generally ap-
12 plicable environmental standards for the protec-
13 tion of the public and the general environment
14 from radioactive material released from facili-
15 ties that use an advanced fuel recycling process,
16 including facilities to fabricate fuel enriched
17 with actinide elements other than uranium.

18 “(g) COMPREHENSIVE EVALUATION.—

19 “(1) IN GENERAL.—On completion of sufficient
20 technical progress in the program under subsection
21 (e), the Secretary shall direct the Nuclear Energy
22 Advisory Committee and the Nuclear Waste Tech-
23 nical Review Board to evaluate and prepare reports
24 concerning the readiness of the program for detailed

1 design, engineering, licensing, and deployment of ad-
2 vanced fuel recycling processes.

3 “(2) REPORT.—The Secretary shall submit to
4 Congress the reports of the Nuclear Energy Advi-
5 sory Committee and the Nuclear Waste Technical
6 Review Board described in paragraph (1) with the
7 first budget request submitted to carry out activities
8 covered by the reports.”.

9 **Subtitle C—Improving United** 10 **States Strategic Reserves**

11 **SEC. 321. PETROLEUM PRODUCT RESERVE.**

12 (a) STRATEGIC PETROLEUM RESERVE.—Section
13 154(a) of the Energy Policy and Conservation Act (42
14 U.S.C. 6234(a)) is amended by striking “1 billion barrels
15 of petroleum products” and inserting “1,000,000,000 bar-
16 rels of petroleum products (including at least 30,000,000
17 barrels of refined petroleum products)”.

18 (b) PLAN.—Title I of the Energy Policy and Con-
19 servation Act is amended by inserting after section 154
20 (42 U.S.C. 6234) the following:

21 **“SEC. 155. PLAN.**

22 “Not later than 180 days after the date of enactment
23 of this section, the Secretary shall submit to the President
24 and, if the President approves, to Congress, a plan to in-

1 clude refined petroleum products in the Strategic Petro-
2 leum Reserve, including a description of—

3 “(1) the disposition of refined petroleum prod-
4 ucts that shall be stored in the Reserve, which shall
5 be selected—

6 “(A) to alleviate shortages that might be
7 expected to result from hurricanes, earth-
8 quakes, or other acts of nature; and

9 “(B) to minimize the number of different
10 kinds of refined petroleum products that shall
11 be stored;

12 “(2) the method of acquisition of refined petro-
13 leum products for storage in the Reserve, which
14 shall—

15 “(A) be intended to minimize both the cost
16 and market disruption associated with the ac-
17 quisition; and

18 “(B) include—

19 “(i) an analysis of the option of ex-
20 changing crude oil from the Reserve for re-
21 fined petroleum products; and

22 “(ii) the anticipated time requirement
23 for building the inventory of refined petro-
24 leum products;

1 “(3) storage facility options for the storage of
2 refined petroleum products, including the anticipated
3 location of existing or new facilities;

4 “(4) the estimated costs of establishment, main-
5 tenance, and operation of the refined petroleum
6 product component of the Reserve;

7 “(5) efforts the Department will take to ensure
8 that distributors and importers are not discouraged
9 from maintaining and increasing supplies of refined
10 petroleum products; and

11 “(6) actions that will be taken to ensure quality
12 of refined petroleum products in the Reserve, includ-
13 ing the rotation of products stored.”.

14 (c) DRAWDOWN AND SALE.—Section 161 of the En-
15 ergy Policy and Conservation Act (42 U.S.C. 6241) is
16 amended—

17 (1) by striking subsection (d) and inserting the
18 following:

19 “(d) LIMITATION ON DRAWDOWN AND SALE.—

20 “(1) IN GENERAL.—The drawdown and sale of
21 petroleum products from the Strategic Petroleum
22 Reserve may not be made unless the Secretary de-
23 termines that—

24 “(A) the drawdown and sale are required
25 by—

1 “(i) a severe energy market supply
2 disruption; or

3 “(ii) obligations of the United States
4 under the international energy program; or

5 “(B) in the case of the refined petroleum
6 product component of the Reserve, a sale of re-
7 fined petroleum products will mitigate the im-
8 pacts of weather-related events or other acts of
9 nature that have resulted in a severe energy
10 market supply disruption.

11 “(2) SEVERE ENERGY MARKET SUPPLY DISRUP-
12 TION.—For purpose of this subsection, a severe en-
13 ergy market supply disruption shall be considered to
14 exist if the Secretary determines that—

15 “(A) an emergency situation exists and
16 there is a disruption in global oil market sup-
17 plies of significant scope and duration;

18 “(B) a severe increase in the price of pe-
19 troleum products has resulted, or is likely to re-
20 sult, from the emergency situation; and

21 “(C) the price increase is likely to cause a
22 major adverse impact on the national econ-
23 omy.”; and

1 (2) in subsections (h)(1) and (i), by striking
2 “President” each place it appears and inserting
3 “Secretary”.

4 **SEC. 322. PETROLEUM EXCHANGE AUTHORITY.**

5 (a) PETROLEUM PRODUCTS FOR STORAGE IN STRA-
6 TEGIC PETROLEUM RESERVE.—Section 160(a) of the En-
7 ergy Policy and Conservation Act (42 U.S.C. 6240(a)) is
8 amended—

9 (1) by redesignating paragraphs (1) through
10 (3) as subparagraphs (A) through (C), respectively,
11 and indenting the subparagraphs appropriately;

12 (2) in subparagraph (A) (as redesignated by
13 paragraph (1)), by inserting a semicolon at the end;

14 (3) in subparagraph (C) (as redesignated by
15 paragraph (1)), by inserting “in accordance with
16 paragraph (2),” before “petroleum products”;

17 (4) by striking “(a) The Secretary” and insert-
18 ing the following:

19 “(a) AUTHORITY OF SECRETARY.—

20 “(1) IN GENERAL.—The Secretary”; and

21 (5) by adding at the end the following:

22 “(2) MONETARY COMPENSATION.—In acquiring
23 petroleum products under paragraph (1)(C), the
24 Secretary may accept monetary compensation for

1 differences in volume, quality, or time of delivery as
2 a result of—

3 “(A) exchanges or deferrals of deliveries in
4 the event that the reserve inventory is at the
5 rated capacity of the reserve inventory; or

6 “(B) discrepancies in delivered volumes
7 with respect to contractual volumes.”.

8 (b) SPR PETROLEUM ACCOUNT.—Section 167(b) of
9 the Energy Policy and Conservation Act (42 U.S.C.
10 6247(b)) is amended—

11 (1) by redesignating paragraphs (2) and (3) as
12 paragraphs (1) and (2), respectively;

13 (2) in paragraph (1) (as redesignated by para-
14 graph (1)), by striking “; and” and inserting a semi-
15 colon;

16 (3) in paragraph (2) (as redesignated by para-
17 graph (1)), by striking the period at the end and in-
18 serting “; and”; and

19 (4) by adding at the end the following:

20 “(3) notwithstanding section 660 of the Depart-
21 ment of Energy Organization Act (42 U.S.C. 7270),
22 for each fiscal year, in an aggregate amount equal
23 to the aggregate amount of the receipts to the
24 United States from any exchange of petroleum prod-

1 ucts or discrepancies in delivered volume under sec-
2 tion 160 (including section 160(a)(1)(C)).”.

3 **Subtitle D—Federal Oil and Gas**
4 **Development**

5 **PART I—OIL AND GAS LEASING**

6 **SEC. 331. OIL AND GAS PERMIT PROCESSING IMPROVE-**
7 **MENT FUND.**

8 Section 35(c) of the Mineral Leasing Act (30 U.S.C.
9 191(c)) is amended by adding at the end the following:

10 “(4) AUTHORIZATION OF APPROPRIATIONS.—

11 There is authorized to be appropriated from the
12 Fund, or to the extent adequate funds in the Fund
13 are not available from miscellaneous receipts of the
14 Treasury, for the coordination and processing of oil
15 and gas use authorizations and for oil and gas in-
16 spection and enforcement on onshore Federal land
17 under the jurisdiction of the Pilot Project offices de-
18 scribed in section 365(d) of the Energy Policy Act
19 of 2005 (42 U.S.C. 15924(d)) \$20,000,000 for each
20 of fiscal years 2016 through 2020, to remain avail-
21 able until expended.”.

1 **SEC. 332. FACILITATION OF COPRODUCTION OF GEO-**
2 **THERMAL ENERGY ON OIL AND GAS LEASES.**

3 Section 4(b) of the Geothermal Steam Act of 1970
4 (30 U.S.C. 1003(b)) is amended by adding at the end the
5 following:

6 “(4) LAND SUBJECT TO OIL AND GAS LEASE.—
7 Land under an oil and gas lease issued pursuant to
8 the Mineral Leasing Act (30 U.S.C. 181 et seq.) or
9 the Mineral Leasing Act for Acquired Lands (30
10 U.S.C. 351 et seq.) that is subject to an approved
11 application for permit to drill and from which oil
12 and gas production is occurring may be available for
13 leasing under subsection (c) by the holder of the oil
14 and gas lease—

15 “(A) on a determination that—

16 “(i) geothermal energy will be pro-
17 duced from a well producing or capable of
18 producing oil and gas; and

19 “(ii) the public interest will be served
20 by the issuance of such a lease; and

21 “(B) in order to provide for the coproduc-
22 tion of geothermal energy with oil and gas.”.

1 **PART II—OUTER CONTINENTAL SHELF**
2 **SEC. 341. IMPLEMENTATION OF INVENTORY OF OUTER**
3 **CONTINENTAL SHELF RESOURCES.**

4 (a) IN GENERAL.—Section 357 of the Energy Policy
5 Act of 2005 (42 U.S.C. 15912) is amended—

6 (1) in subsection (a)—

7 (A) by striking the first sentence of the
8 matter preceding paragraph (1) and inserting
9 the following: “The Secretary shall conduct a
10 seismic inventory of oil and natural gas, and
11 prepare a summary (the latter prepared with
12 the assistance of, and based on information pro-
13 vided by, the heads of appropriate Federal
14 agencies) of the information obtained under
15 paragraph (3), for the waters of the United
16 States Outer Continental Shelf (referred to in
17 this section as the ‘OCS’) in the Atlantic Re-
18 gion, the Eastern Gulf of Mexico, and the Alas-
19 ka Region.”;

20 (B) in paragraph (2)—

21 (i) by striking “3-D” and inserting
22 “2-D and 3-D”; and

23 (ii) by adding “and” at the end; and

24 (C) by striking paragraphs (3) through (5)
25 and inserting in the following:

1 “(3) use existing inventories and mapping of
2 marine resources undertaken by the National Ocean-
3 ographic and Atmospheric Administration and with
4 the assistance of and based on information provided
5 by the Department of Defense and other Federal
6 and State agencies possessing relevant data, and use
7 any available data regarding alternative energy po-
8 tential, navigation uses, fisheries, aquaculture uses,
9 recreational uses, habitat, conservation, and military
10 uses.”; and

11 (2) by striking subsection (b) and inserting the
12 following:

13 “(b) IMPLEMENTATION.—The Secretary shall carry
14 out the inventory and analysis under subsection (a) in 3
15 phases, with priority given to all or part of applicable plan-
16 ning areas of the outer Continental Shelf—

17 “(1) estimated to have the greatest potential for
18 energy development in barrel of oil equivalent; and

19 “(2) outside of any leased area or area sched-
20 uled for leasing prior to calendar year 2011 under
21 any outer Continental Shelf 5-year leasing program
22 or amendment to the program under section 18 of
23 the Outer Continental Shelf Lands Act (43 U.S.C.
24 1344).

25 “(c) REPORTS.—

1 “(1) IN GENERAL.—Not later than 90 days
2 after the date of enactment of this paragraph, the
3 Secretary shall submit to the Committee on Energy
4 and Natural Resources of the Senate and the Com-
5 mittee on Natural Resources of the House of Rep-
6 resentatives a report that provides a plan for exe-
7 cuting the seismic inventories required under this
8 section, including an estimate of the costs to com-
9 plete the seismic inventory by region and environ-
10 mental and permitting activities to facilitate expedi-
11 tious completion.

12 “(2) FIRST PHASE.—Not later than 2 years
13 after the date of enactment of this paragraph, the
14 Secretary shall submit to Congress a report describ-
15 ing the results of the first phase of the inventory
16 and analysis under subsection (a).

17 “(3) SUBSEQUENT PHASES.—Not later than 2
18 years after the date on which the report is submitted
19 under paragraph (2) and 2 years thereafter, the Sec-
20 retary shall submit to Congress a report describing
21 the results of the second and third phases, respec-
22 tively, of the inventory and analysis under subsection
23 (a).

24 “(4) PUBLIC AVAILABILITY.—A report sub-
25 mitted under paragraph (2) or (3) shall be—

1 “(A) made publicly available; and

2 “(B) updated not less frequently than once
3 every 5 years.”.

4 (b) RELATIONSHIP TO 5-YEAR PROGRAM.—The re-
5 quirement that the Secretary of the Interior carry out the
6 inventory required by the amendment made by subsection
7 (a) shall not be considered to require, authorize, or provide
8 a basis or justification for delay by the Secretary of the
9 Interior or any other agency of the issuance of any outer
10 Continental Shelf leasing program or amendment to the
11 program under section 18 of the Outer Continental Shelf
12 Lands Act (43 U.S.C. 1344), or any lease sale pursuant
13 to that section.

14 (c) PERMITS.—Nothing in this section or an amend-
15 ment made by this section precludes the issuance by the
16 Secretary of the Interior of a permit to conduct geological
17 and geophysical exploration of the outer Continental Shelf
18 in accordance with the Outer Continental Shelf Lands Act
19 (43 U.S.C. 1331 et seq.) and other applicable law.

20 (d) FUNDING.—Section 999H(d) of the Energy Pol-
21 icy Act of 2005 (42 U.S.C. 16378(d)) is amended—

22 (1) by striking paragraph (1) and inserting the
23 following:

24 “(1) 35 percent shall be used for activities
25 under section 999A(b)(1), except that for each of

1 fiscal years 2010 through 2015 the amount made
2 available under this paragraph shall be used to carry
3 out section 357 (for the completion of necessary en-
4 vironmental analyses under the National Environ-
5 mental Policy Act of 1969 (42 U.S.C. 4321 et seq.),
6 with a priority given to completion of programmatic
7 environmental impact statements necessary to carry
8 out the seismic inventory or portions of the inven-
9 tory required by section 357, and the use of seismic
10 technology to obtain accurate resource estimates).”;
11 and

12 (2) in paragraph (4)—

13 (A) by inserting “(A) except as provided in
14 subparagraph (B),” before “25”; and

15 (B) by adding at the end the following:

16 “(B) notwithstanding subparagraph (A),
17 for each of fiscal years 2010 through 2015—

18 “(i) 15 percent shall be used for the
19 purposes described in subparagraph (A);
20 and

21 “(ii) 10 percent shall be used for the
22 activities described in paragraph (1).”.

23 (e) AUTHORIZATION OF APPROPRIATIONS.—There
24 are authorized to be appropriated to carry out this section,

1 to be available until expended without fiscal year limita-
2 tion—

3 (1) \$100,000,000 for each of fiscal years 2010
4 through 2015; and

5 (2) \$50,000,000 for each of fiscal years 2016
6 through 2020.

7 **SEC. 342. ALASKA OCS PERMIT PROCESSING COORDINA-**
8 **TION OFFICE.**

9 (a) ESTABLISHMENT.—The Secretary of the Interior
10 (referred to in this section as the “Secretary”) shall estab-
11 lish a regional joint outer Continental Shelf lease and per-
12 mit processing office for the Alaska outer Continental
13 Shelf region.

14 (b) MEMORANDUM OF UNDERSTANDING.—

15 (1) IN GENERAL.—Not later than 90 days after
16 the date of enactment of this Act, the Secretary
17 shall enter into a memorandum of understanding for
18 the purposes of carrying out this section with—

19 (A) the Secretary of Commerce;

20 (B) the Chief of Engineers;

21 (C) the Administrator of the Environ-
22 mental Protection Agency; and

23 (D) any other Federal agency that may
24 have a role in permitting activities.

1 (2) STATE PARTICIPATION.—The Secretary
2 shall request that the Governor of Alaska be a signa-
3 tory to the memorandum of understanding.

4 (c) DESIGNATION OF QUALIFIED STAFF.—

5 (1) IN GENERAL.—Not later than 30 days after
6 the date of the signing of the memorandum of un-
7 derstanding under subsection (b), each Federal sig-
8 natory party shall, if appropriate, assign to the of-
9 fice described in subsection (a) an employee who has
10 expertise in the regulatory issues administered by
11 the office in which the employee is employed relating
12 to leasing and the permitting of oil and gas activities
13 on the outer Continental Shelf.

14 (2) DUTIES.—An employee assigned under
15 paragraph (1) shall—

16 (A) not later than 90 days after the date
17 of assignment, report to the office described in
18 subsection (a);

19 (B) be responsible for all issues relating to
20 the jurisdiction of the home office or agency of
21 the employee; and

22 (C) participate as part of the applicable
23 team of personnel working on proposed oil and
24 gas leasing and permitting, including planning
25 and environmental analyses.

1 (d) TRANSFER OF FUNDS.—For the purposes of co-
2 ordination and processing of oil and gas use authorizations
3 for the Alaska outer Continental Shelf region, the Sec-
4 retary may authorize the expenditure or transfer of such
5 funds as are necessary to—

6 (1) the Secretary of Commerce;

7 (2) the Chief of Engineers;

8 (3) the Administrator of the Environmental
9 Protection Agency;

10 (4) any other Federal agency having a role in
11 permitting activities; and

12 (5) the State of Alaska.

13 (e) SAVINGS PROVISION.—Nothing in this section af-
14 fects—

15 (1) the operation of any Federal or State law;

16 or

17 (2) any delegation of authority made by the
18 head of a Federal agency for employees that are as-
19 signed to the coordination office.

20 (f) AUTHORIZATION OF APPROPRIATIONS.—There is
21 authorized to be appropriated to carry out this section
22 \$2,000,000 for each of fiscal years 2009 through 2019,
23 to remain available until expended.

1 **SEC. 343. MORATORIUM OF OIL AND GAS LEASING IN CER-**
2 **TAIN AREAS OF THE GULF OF MEXICO.**

3 (a) MORATORIUM.—Section 104 of the Gulf of Mex-
4 ico Energy Security Act of 2006 (43 U.S.C. 1331 note;
5 Public Law 109–432) is amended—

6 (1) by striking subsection (a) and inserting the
7 following:

8 “(a) IN GENERAL.—Except as provided in subsection
9 (d), effective during the period beginning on the date of
10 enactment of this Act and ending on June 30, 2022, the
11 Secretary shall not offer for leasing, preleasing, or any re-
12 lated activity any area in the Eastern Planning Area that
13 is within 45 statute miles of the coastline of the State of
14 Florida.”; and

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

16 “(d) EXCEPTIONS.—

17 “(1) DEFINITIONS.—In this paragraph:

18 “(A) DESTIN DOME AREA.—The term
19 ‘Destin Dome Area’ means the area in the Cen-
20 tral and Eastern Planning Areas of the outer
21 Continental Shelf identified as ‘Destin Dome
22 (NH16-08)’ in the document entitled ‘MMS
23 Gulf of Mexico Region Planning Areas and Ac-
24 tive Leases’ and dated May 14, 2009.

25 “(B) PENSACOLA AREA.—The term ‘Pen-
26 sacola Area’ means the area in the Central and

1 Eastern Planning Areas of the outer Conti-
2 nental Shelf identified as ‘Pensacola (NH16-
3 05)’ in the document entitled ‘MMS Gulf of
4 Mexico Region Planning Areas and Active
5 Leases’ and dated May 14, 2009.

6 “(2) AUTHORIZED AREAS.—The Secretary may
7 offer for leasing any area in the Destin Dome Area
8 or the Pensacola Area.”.

9 (b) NATIONAL DEFENSE AREA.—Section 12(d) of
10 the Outer Continental Shelf Lands Act (43 U.S.C.
11 1341(d)) is amended—

12 (1) by striking “The United States” and insert-
13 ing the following:

14 “(1) IN GENERAL.—The United States”; and

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

16 “(2) REVIEW.—Annually, the Secretary of De-
17 fense shall—

18 “(A) review the areas of the outer Conti-
19 nental Shelf that have been designated as re-
20 stricted from exploration and operation to de-
21 termine whether the areas should remain under
22 restriction; and

23 “(B) based on the review under subpara-
24 graph (A), make recommendations to the Presi-
25 dent.”.

1 (c) LEASING OF MORATORIUM AREAS.—

2 (1) IN GENERAL.—Not later than 180 days
3 after the date on which any necessary environmental
4 analyses are completed under the National Environ-
5 mental Policy Act of 1969 (42 U.S.C. 4321 et seq.),
6 the Secretary shall offer for leasing under the Outer
7 Continental Shelf Lands Act (43 U.S.C. 1331 et
8 seq.) in accordance with the completed environ-
9 mental analyses any areas made available for leasing
10 as a result of this subtitle (including amendments
11 made by this subtitle).

12 (2) ADMINISTRATION.—Notwithstanding the
13 omission of the areas made available for leasing
14 under paragraph (1) from the applicable 5-year plan
15 developed by the Secretary pursuant to section 18 of
16 the Outer Continental Shelf Lands Act (43 U.S.C.
17 1344), the areas shall be offered for leasing under
18 this section, in accordance with the completed envi-
19 ronmental analyses referred to in paragraph (1).

20 (d) CONFORMING AMENDMENT.—Section 105 of the
21 Department of the Interior, Environment, and Related
22 Agencies Appropriations Act, 2006 (Public Law 109–54;
23 119 Stat. 521) (as amended by section 103(d) of the Gulf
24 of Mexico Energy Security Act of 2006 (43 U.S.C. 1331
25 note; Public Law 109–432)) is amended by inserting “and

1 any other area that the Secretary of the Interior may offer
2 for leasing, preleasing, or any related activity under sec-
3 tion 104 of that Act” after “2006)”.

4 **SEC. 344. REPEAL OF OUTER CONTINENTAL SHELF DEEP**
5 **WATER AND DEEP GAS ROYALTY RELIEF.**

6 (a) IN GENERAL.—Sections 344 and 345 of the En-
7 ergy Policy Act of 2005 (42 U.S.C. 15904, 15905) are
8 repealed.

9 (b) ADMINISTRATION.—The Secretary of the Interior
10 shall not be required to provide for royalty relief in the
11 lease sale terms beginning with the first lease sale held
12 on or after the date of enactment of this Act for which
13 a final notice of sale has not been published.

14 **PART III—MISCELLANEOUS**

15 **SEC. 351. MINERALS MANAGEMENT SERVICE.**

16 Title III of the Federal Oil and Gas Royalty Manage-
17 ment Act of 1982 (30 U.S.C. 1751 et seq.) is amended
18 by adding at the end the following:

19 **“SEC. 310. MINERALS MANAGEMENT SERVICE.**

20 “(a) DIRECTOR.—Any Director of the Minerals Man-
21 agement Service shall be appointed by the President, by
22 and with the advice and consent of the Senate.

23 “(b) DISCRETION.—Nothing in this section affects
24 the discretion granted to the Secretary by Reorganization

1 Plan No. 3 of 1950 (43 U.S.C. 1451 note; 64 Stat. 1262;
2 85 Stat. 76).”.

3 **SEC. 352. PRESERVATION OF GEOLOGICAL AND GEO-**
4 **PHYSICAL DATA.**

5 Section 351(k) of the Energy Policy Act of 2005 (42
6 U.S.C. 15908(k)) is amended by striking “2010” and in-
7 serting “2020”.

8 **SEC. 353. ALASKA NATURAL GAS PIPELINE.**

9 Section 116 of the Alaska Natural Gas Pipeline Act
10 (15 U.S.C. 720n) is amended—

11 (1) in subsection (a)(3)—

12 (A) in the first sentence, by inserting be-
13 fore the period at the end the following: “, ex-
14 cept that a holder of a certificate may request
15 the Secretary to extend the period to issue Fed-
16 eral guarantee instruments for not more than
17 180 days following the date of resolution of any
18 reopening, contest, or other proceeding relating
19 to the certificate”; and

20 (B) in the second sentence, by inserting
21 before the period at the end the following: “, or
22 connecting to pipeline infrastructure capable of
23 delivering commercially economic quantities of
24 natural gas to the continental United States”;

25 (2) in subsection (b)—

1 (A) by striking paragraph (2);

2 (B) by redesignating paragraphs (3) and
3 (4) as paragraphs (2) and (3), respectively; and

4 (C) in paragraph (2) (as so redesignated),
5 by striking “and completion guarantees”;

6 (3) in subsection (c)(2), by striking
7 “\$18,000,000,000” and inserting
8 “\$30,000,000,000”;

9 (4) in subsection (d)—

10 (A) in the first sentence of paragraph (1),
11 by inserting before the period at the end the
12 following: “, except that an issued loan guar-
13 antee instrument shall apply to not less than 80
14 percent of project costs unless by previous con-
15 sent of the borrower”; and

16 (B) in paragraph (2), by striking “An eli-
17 gible” and inserting “A”; and

18 (5) in subsection (g)—

19 (A) by striking paragraph (2);

20 (B) by redesignating paragraphs (3) and
21 (4) as paragraphs (2) and (3), respectively; and

22 (C) in paragraph (2) (as so redesignated),
23 by inserting before the period at the end the
24 following: “under subsection (a)(3), including
25 direct lending from the Federal Financing

1 Bank of all or a part of the amount to the hold-
2 er, in lieu of a guarantee”.

3 **SEC. 354. DENALI NATIONAL PARK AND PRESERVE NAT-
4 URAL GAS PIPELINE.**

5 (a) DEFINITIONS.—In this section:

6 (1) APPURTENANCE.—

7 (A) IN GENERAL.—The term “appur-
8 tenance” includes cathodic protection or test
9 stations, valves, signage, and buried commu-
10 nication and electric cables relating to the oper-
11 ation of high-pressure natural gas transmission.

12 (B) EXCLUSIONS.—The term “appur-
13 tenance” does not include compressor stations.

14 (2) PARK.—The term “Park” means the Denali
15 National Park and Preserve in the State of Alaska.

16 (3) SECRETARY.—The term “Secretary” means
17 the Secretary of the Interior.

18 (b) PERMIT.—The Secretary may issue right-of-way
19 permits for—

20 (1) a high-pressure natural gas transmission
21 pipeline (including appurtenances) in non-wilderness
22 areas within the boundary of Denali National Park
23 within, along, or near the approximately 7-mile seg-
24 ment of the George Parks Highway that runs
25 through the Park; and

1 (2) any distribution and transmission pipelines
2 and appurtenances that the Secretary determines to
3 be necessary to provide natural gas supply to the
4 Park.

5 (c) TERMS AND CONDITIONS.—A permit authorized
6 under subsection (b)—

7 (1) may be issued only—

8 (A) if the permit is consistent with the
9 laws (including regulations) generally applicable
10 to utility rights-of-way within units of the Na-
11 tional Park System;

12 (B) in accordance with section 1106(a) of
13 the Alaska National Interest Lands Conserva-
14 tion Act (16 U.S.C. 3166(a)); and

15 (C) if, following an appropriate analysis
16 prepared in compliance with the National Envi-
17 ronmental Policy Act of 1969 (42 U.S.C. 4321
18 et seq.), the route of the right-of-way is the
19 route through the Park with the least adverse
20 environmental effects for the Park; and

21 (2) shall be subject to such terms and condi-
22 tions as the Secretary determines to be necessary.

1 **SEC. 355. EXEMPTION OF TRANS-ALASKA OIL PIPELINE**
2 **SYSTEM FROM CERTAIN REQUIREMENTS.**

3 The Trans-Alaska Pipeline Authorization Act (43
4 U.S.C. 1651 et seq.) is amended by adding at the end
5 the following:

6 **“SEC. 208. EXEMPTION OF TRANS-ALASKA OIL PIPELINE**
7 **SYSTEM FROM CERTAIN REQUIREMENTS.**

8 “(a) IN GENERAL.—Except as provided in subsection
9 (b), no part of the trans-Alaska oil pipeline system shall
10 be considered to be a district, site, building, structure, or
11 object for purposes of section 106 of the National Historic
12 Preservation Act (16 U.S.C. 470f), regardless of whether
13 all or part of the trans-Alaska oil pipeline system may oth-
14 erwise be listed on, or eligible for listing on, the National
15 Register of Historic Places.

16 “(b) INDIVIDUAL ELEMENTS.—

17 “(1) IN GENERAL.—Subject to subsection (c),
18 the Secretary of the Interior may identify up to 3
19 sections of the trans-Alaska oil pipeline system that
20 possess national or exceptional historic significance,
21 and that should remain after the pipeline is no
22 longer used for the purpose of oil transportation.

23 “(2) HISTORIC SITE.—Any sections identified
24 under paragraph (1) shall be considered to be a his-
25 toric site.

1 “(3) VIEWS.—In making the identification
2 under this subsection, the Secretary shall consider
3 the views of—

4 “(A) the owners of the pipeline;

5 “(B) the State Historic Preservation Offi-
6 cer;

7 “(C) the Advisory Council on Historic
8 Preservation; and

9 “(D) the Federal Coordinator for Alaska
10 Natural Gas Transportation Projects.

11 “(c) CONSTRUCTION, MAINTENANCE, RESTORATION,
12 AND REHABILITATION ACTIVITIES.—Subsection (b) does
13 not prohibit the owners of the trans-Alaska oil pipeline
14 system from carrying out construction, maintenance, res-
15 toration, or rehabilitation activities on or for a section of
16 the system described in subsection (b).”.

17 **SEC. 356. PROCUREMENT AND ACQUISITION OF ALTER-**
18 **NATIVE FUELS.**

19 Section 526 of the Energy Independence and Security
20 Act of 2007 (42 U.S.C. 17142) is amended to read as
21 follows:

22 **“SEC. 526. PROCUREMENT AND ACQUISITION OF ALTER-**
23 **NATIVE FUELS.**

24 “(a) IN GENERAL.—Except as provided in subsection
25 (b), no Federal agency shall enter into a contract for pro-

1 curement of an alternative or synthetic fuel, including a
2 fuel produced from nonconventional petroleum sources, for
3 any mobility-related use other than for research or testing,
4 unless the contract specifies that the lifecycle greenhouse
5 gas emissions associated with the production and combus-
6 tion of the fuel supplied under the contract, on an ongoing
7 basis, be less than or equal to such emissions from the
8 equivalent conventional fuel produced from conventional
9 petroleum sources.

10 “(b) EXCEPTIONS.—Subsection (a) shall not prohibit
11 a Federal agency from entering into a contract to pur-
12 chase a generally available fuel that is produced, in whole
13 or in part, from a nonconventional petroleum source if—

14 “(1) the contract does not specifically require
15 the contractor to provide a fuel from a nonconven-
16 tional petroleum source;

17 “(2) the purpose of the contract is not to obtain
18 a fuel from a nonconventional petroleum source; and

19 “(3) the contract does not provide incentives
20 (excluding compensation at market prices for the
21 purchase of fuel purchased) for a refinery upgrade
22 or expansion to allow a refinery to use or increase
23 the use by the refinery of fuel from a nonconven-
24 tional petroleum source.”.

1 **SEC. 357. GEOLOGIC MATERIALS ARCHIVING GRANT PRO-**
2 **GRAM.**

3 (a) FINDINGS.—Congress finds that—

4 (1) the collection of rock core samples and the
5 well logs relating to the collection of the rock core
6 samples are vital for the exploration, analysis, and
7 eventual production of the oil, natural gas, shale oil,
8 coal, and geothermal resources of the United States;

9 (2) the collection and storage of rock core sam-
10 ples over time is expensive and requires large stor-
11 age facilities;

12 (3) because of current fiscal constraints, States
13 are finding it increasingly difficult to afford the stor-
14 age and maintenance of the geologic record of the
15 United States;

16 (4) the loss of any core samples or logs harms
17 the ability of the United States to pinpoint the loca-
18 tion of energy sources by downgrading the geologic
19 knowledge;

20 (5) the retention of core samples—

21 (A) provides critical data for—

22 (i) the geologic sequestration of car-
23 bon dioxide;

24 (ii) groundwater and aquifer studies
25 for regional water supplies; and

26 (iii) tracking potential contamination;

1 (B) is important for the siting of deep geo-
2 logic repositories for the storage of hazardous
3 materials;

4 (C) is vital for—

5 (i) infrastructure development;

6 (ii) the location of construction mate-
7 rials; and

8 (iii) geohazards mitigation; and

9 (D) provides important data for climate
10 and other historical geology studies; and

11 (6) it is unknown what core sample data would
12 be needed for in the future as—

13 (A) new technology becomes available; and

14 (B) our understanding of the “sub-surface
15 frontier” evolves.

16 (b) GRANT PROGRAM.—

17 (1) IN GENERAL.—There is established in the
18 Department of the Interior a grant program under
19 which the Secretary of the Interior (referred to in
20 this section as the “Secretary”) shall provide grants
21 to individual States, State Geologic Surveys, or Re-
22 gional Consortiums to build, maintain, and operate
23 centers to store geologic samples (including core
24 samples, surface samples, micropaleontology sam-
25 ples, well cuttings, and geochemical samples) col-

1 lected as a result of oil and gas exploration, mineral
2 exploration, and geotechnical studies and research.

3 (2) APPLICATION.—To be eligible to receive a
4 grant under paragraph (1), a State shall submit to
5 the Secretary an application in such form, at such
6 time, and containing such information as the Sec-
7 retary may require.

8 (3) REQUIRED MAINTENANCE.—The Secretary
9 shall not provide a grant to a State under paragraph
10 (1) unless the State agrees to maintain any center
11 provided assistance under this section for at least 20
12 years after the date on which the grant is provided.

13 (4) AMOUNT OF GRANT.—The maximum
14 amount of a grant provided to a State under para-
15 graph (1) shall be \$15,000,000.

16 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
17 authorized to be appropriated to provide grants under this
18 section \$100,000,000.

19 **Subtitle E—Public Land**
20 **Renewable Energy Deployment**

21 **SEC. 361. RENEWABLE ENERGY FEDERAL PERMIT COORDI-**
22 **NATION.**

23 Section 365 of the Energy Policy Act of 2005 (42
24 U.S.C. 15924) is amended by adding at the end the fol-
25 lowing:

1 “(k) PILOT PROJECT OFFICES TO IMPROVE FED-
2 ERAL PERMIT COORDINATION FOR RENEWABLE EN-
3 ERGY.—

4 “(1) DEFINITION OF RENEWABLE ENERGY.—In
5 this subsection, the term ‘renewable energy’ means
6 energy derived from a wind, solar, or geothermal
7 source.

8 “(2) FIELD OFFICES.—As part of the Pilot
9 Project, the Secretary shall designate 1 field office
10 of the Bureau of Land Management in each of the
11 following States to serve as Renewable Energy Per-
12 mit Coordination Offices for coordination of Federal
13 permits for renewable energy projects and trans-
14 mission involving Federal land facilitating the devel-
15 opment of renewable energy:

16 “(A) Alaska.

17 “(B) Arizona.

18 “(C) California.

19 “(D) Colorado.

20 “(E) Idaho.

21 “(F) Oregon.

22 “(G) New Mexico.

23 “(H) Nevada.

24 “(I) Montana.

25 “(J) Utah.

1 “(K) Washington.

2 “(L) Wyoming.

3 “(3) MEMORANDUM OF UNDERSTANDING.—

4 “(A) IN GENERAL.—Not later than 90
5 days after the date of enactment of this sub-
6 section, the Secretary shall enter into an
7 amended memorandum of understanding under
8 subsection (b) to provide for the inclusion of the
9 additional Renewable Energy Pilot Project Of-
10 fices in the Pilot Project.

11 “(B) SIGNATURE OF SECRETARY.—The
12 Secretary shall be a signatory of the amended
13 memorandum of understanding.

14 “(C) SIGNATURES BY GOVERNORS.—The
15 Secretary shall request that the Governors of
16 each of the States described in paragraph (2)
17 be signatories to the amended memorandum of
18 understanding.

19 “(4) DESIGNATION OF QUALIFIED STAFF.—Not
20 later than 30 days after the date of the signing of
21 the amended memorandum of understanding, all
22 Federal signatory parties shall, if appropriate, as-
23 sign to each Renewable Energy Pilot Project Office
24 designated under paragraph (2) an employee de-

1 scribed in subsection (e) to carry out duties de-
2 scribed in that subsection.

3 “(5) ADDITIONAL PERSONNEL.—The Secretary
4 shall assign to each Renewable Energy Pilot Project
5 Office additional personnel under subsection (f).

6 “(6) TRANSFER OF FUNDS.—To coordinate and
7 process renewable energy authorizations on Federal
8 land under the jurisdiction of a Pilot Project Office
9 designated under paragraph (2), the Secretary may
10 authorize the expenditure or transfer of such funds
11 as are necessary to—

12 “(A) any Federal agency described in sub-
13 section (h); and

14 “(B) any State described in paragraph (2).

15 “(7) FUNDING.—

16 “(A) IN GENERAL.—The Federal share of
17 any royalties, fees, rentals, bonus bids, or other
18 payments from wind or solar development on
19 land administered by the Secretary shall be de-
20 posited in a special fund in the Treasury to be
21 known as the ‘BLM Wind and Solar Energy
22 Permit Processing Improvement Fund’ (re-
23 ferred to in this subsection as ‘Fund’).

24 “(B) AUTHORIZATION OF APPROPRIA-
25 TIONS.—There is authorized to be appropriated

1 from the Fund or, to the extent amounts are
2 not available in the Fund, from the Treasury
3 for the costs of administering program oper-
4 ations for wind and solar development under
5 the Public Land Renewable Energy Deployment
6 and Adjustment Act of 2009 and the Federal
7 Land Policy and Management Act of 1976 (43
8 U.S.C. 1701 et seq.) \$10,000,000 for each of
9 fiscal years 2009 through 2019, to remain
10 available without fiscal year limitation until ex-
11 pended.”.

12 **SEC. 362. EXTENSION OF FUNDING FOR IMPLEMENTATION**
13 **OF GEOTHERMAL STEAM ACT OF 1970.**

14 (a) IN GENERAL.—Section 234(a) of the Energy Pol-
15 icy Act of 2005 (42 U.S.C. 15873(a)) is amended by strik-
16 ing “in the first 5 fiscal years beginning after the date
17 of enactment of this Act” and inserting “for each fiscal
18 year through fiscal year 2020”.

19 (b) AUTHORIZATION.—Section 234(b) of the Energy
20 Policy Act of 2005 (42 U.S.C. 15873(b)) is amended—

21 (1) by striking “Amounts” and inserting the
22 following:

23 “(1) IN GENERAL.—Amounts”; and

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

1 “(2) AUTHORIZATION.—Effective for fiscal year
2 2011 and each fiscal year thereafter, amounts de-
3 posited under subsection (a) shall be available to the
4 Secretary of the Interior for expenditure, subject to
5 appropriation and without fiscal year limitation, to
6 implement the Geothermal Steam Act of 1970 (30
7 U.S.C. 1001 et seq.) and this Act.”.

8 **SEC. 363. PROGRAMMATIC ENVIRONMENTAL IMPACT**
9 **STATEMENTS AND LAND USE PLANNING.**

10 (a) PUBLIC LAND.—Not later than 1 year after the
11 date of enactment of this Act, the Secretary of the Interior
12 shall—

13 (1) complete a programmatic environmental im-
14 pact statement in accordance with the National En-
15 vironmental Policy Act of 1969 (42 U.S.C. 4321 et
16 seq.) to analyze the potential impacts of—

17 (A) a program to develop solar energy on
18 land administered by the Secretary, acting
19 through the Bureau of Land Management; and

20 (B) any necessary amendments to land use
21 plans for the land; and

22 (2) amend any land use plans as appropriate to
23 provide for the development of renewable energy in
24 areas considered appropriate by the Secretary.

1 (b) NATIONAL FOREST SYSTEM LAND.—As soon as
2 practicable but not later than 18 months after the date
3 of enactment of this Act, the Secretary of Agriculture
4 shall—

5 (1) complete a programmatic environmental im-
6 pact statement in accordance with the National En-
7 vironmental Policy Act of 1969 (42 U.S.C. 4321 et
8 seq.) to analyze the potential impacts of—

9 (A) a program to develop solar and wind
10 energy on National Forest System land admin-
11 istered by the Secretary; and

12 (B) any necessary amendments to land use
13 plans for the land; and

14 (2) amend any land use plans as appropriate to
15 provide for the development of renewable energy in
16 areas considered appropriate by the Secretary imme-
17 diately on completion of the programmatic environ-
18 mental impact statement.

19 (c) EFFECT ON PROCESSING APPLICATIONS.—The
20 requirement for completion of programmatic environ-
21 mental impact statements under this section shall not re-
22 sult in any delay in processing applications for wind or
23 solar development on land administered by the Secretary
24 of the Interior, acting through the Bureau of Land Man-
25 agement, or on National Forest System land.

1 **SEC. 364. REPORT.**

2 (a) STUDY.—

3 (1) IN GENERAL.—Not later than 180 days
4 after the date of enactment of this Act, the Sec-
5 retary of the Interior, in consultation with the Sec-
6 retary of Agriculture, shall enter into an arrange-
7 ment with the National Academy of Sciences under
8 which the Academy shall conduct a study on the
9 siting, development, and management of projects for
10 the production of wind and solar energy on—

11 (A) land available for energy development
12 that is administered by the Secretary of the In-
13 terior, acting through the Bureau of Land Man-
14 agement; and

15 (B) National Forest System land adminis-
16 tered by the Secretary of Agriculture that is
17 available for energy development.

18 (2) MATTERS TO BE ADDRESSED.—The study
19 shall address—

20 (A) the effectiveness of—

21 (i) laws (including regulations) and
22 policies in effect on the date of enactment
23 of this Act in—

24 (I) facilitating the development of
25 wind and solar energy projects on the
26 land; and

- 1 (II) ensuring the public receives
2 a fair return for the use of the land;
- 3 (ii) policies designed to discourage
4 speculation in the development of wind and
5 solar projects on the land;
- 6 (iii) the land use planning process in
7 siting wind and solar facilities;
- 8 (iv) mitigation planning for wind and
9 solar projects on the land, particularly with
10 respect to fish and wildlife and water re-
11 sources;
- 12 (v) best management practices devel-
13 oped by the Secretary of the Interior and
14 the Secretary of Agriculture for wind and
15 solar projects; and
- 16 (vi) adaptive management of the im-
17 pacts associated with wind and solar
18 projects on the land; and
- 19 (B) the advantages and disadvantages of
20 using—
- 21 (i) rights-of-way as a means of au-
22 thORIZING the use of the Federal land de-
23 scribed in paragraph (1) for wind and
24 solar energy development; and

1 (ii) a competitive or noncompetitive
2 leasing system as a means of authorizing
3 the use of the Federal land described in
4 paragraph (1) for wind and solar energy
5 development.

6 (b) RECOMMENDATIONS.—The study shall—

7 (1) analyze the matters described in subsection
8 (a)(2); and

9 (2) make recommendations as to—

10 (A) whether a competitive or noncompeti-
11 tive leasing system would be a more effective
12 means than the system in effect on the date of
13 enactment of this Act to authorize the use of
14 Federal land described in subsection (a)(1) to
15 meet the goals of facilitating the development of
16 wind and solar energy projects while achieving
17 a fair return to the public;

18 (B) the most effective system to authorize
19 the use of Federal land described in subsection
20 (a)(1) to meet the goals of facilitating the de-
21 velopment of wind and solar energy projects
22 while achieving a fair return to the public; and

23 (C) changes, if any, to Federal law (includ-
24 ing regulations) or policy necessary to address
25 more effectively the siting, development, and

1 management of solar and wind projects on the
2 land.

3 (c) COMPLETION OF STUDY.—Not later than 18
4 months after the date of enactment of this Act, the Na-
5 tional Academy of Sciences shall—

6 (1) submit to the Secretary of the Interior and
7 the Secretary of Agriculture the findings and rec-
8 ommendations of the study required under sub-
9 sections (a) and (b); and

10 (2) on completion of the study, make the results
11 of the study available to the public.

12 (d) REPORT TO CONGRESS.—Not later than 180 days
13 after the date of receipt of the findings and recommenda-
14 tions of the study under subsection (c)(1), the Secretary
15 of the Interior, in consultation with the Secretary of Agri-
16 culture, shall submit to Congress a report on—

17 (1) the findings and recommendations of the
18 study;

19 (2) the agreement or disagreement of the Secre-
20 taries with respect to each of the findings and rec-
21 ommendations of the National Academy of Sciences;

22 (3) the administrative actions to be taken by
23 each of the Secretaries in response to the findings
24 and recommendations; and

25 (4) any recommended changes in law.

1 **SEC. 365. RENEWABLE ENERGY DEVELOPMENT ON**
2 **BROWNFIELD SITES.**

3 (a) DEFINITIONS.—In this section:

4 (1) ADMINISTRATOR.—The term “Adminis-
5 trator” means the Administrator of the Environ-
6 mental Protection Agency.

7 (2) RENEWABLE ENERGY.—The term “renew-
8 able energy” has the meaning given the terms “ex-
9 isting renewable energy” and “new renewable en-
10 ergy” in section 610 of the Public Utility Regulatory
11 Policies Act of 1978 (as added by section __01(a)).

12 (b) DEPARTMENT OF ENERGY AND ENVIRONMENTAL
13 PROTECTION AGENCY EFFORTS.—The Secretary, in con-
14 junction with the Administrator, shall—

15 (1) in partnership with the National Renewable
16 Energy Laboratory, identify opportunities to
17 prioritize renewable energy development on
18 brownfield sites;

19 (2) provide to States, units of local govern-
20 ments, project developers, and other stakeholders
21 publicly available resources identifying potential
22 brownfield sites for renewable energy development,
23 with an emphasis on non-Federal land; and

24 (3) provide technical assistance to State and
25 local officials, interested project developers, and
26 other stakeholders to expedite renewable energy pro-

1 duction from brownfield sites identified under this
2 subsection, with an emphasis on non-Federal land.

3 (c) REPORT.—Not later than 1 year after the date
4 of enactment of this Act, the Secretary and Administrator
5 shall submit to Congress a report that includes—

6 (1) proposals for Federal policies, incentives, or
7 other means of encouraging renewable energy pro-
8 duction on sites identified under subsection (b); and

9 (2) data on existing and potential job creation
10 from, environmental benefits of, and energy produc-
11 tion from renewable energy on brownfield sites.

12 (d) STAKEHOLDER FORUMS.—The Secretary, in con-
13 junction with the Administrator, shall conduct stakeholder
14 forums in each region of the United States to assist State
15 and local officials, project developers, and other stake-
16 holders with renewable energy project siting on brownfield
17 sites, with an emphasis on non-Federal land.

18 (e) EFFECT.—Nothing in this section affects existing
19 Federal efforts to promote the reuse and redevelopment
20 of brownfield sites.

21 (f) AUTHORIZATION OF APPROPRIATIONS.—There
22 are authorized to be appropriated such sums as are nec-
23 essary to carry out this section for each of fiscal years
24 2011 through 2015.

1 **SEC. 366. DEVELOPMENT OF SOLAR AND WIND ENERGY ON**
2 **PUBLIC LAND.**

3 (a) DEFINITIONS.—In this section:

4 (1) COVERED LAND.—The term “covered land”
5 means land that is—

6 (A)(i) public land administered by the Sec-
7 retary; or

8 (ii) National Forest System land adminis-
9 tered by the Secretary of Agriculture; and

10 (B) designated for the development of solar or
11 wind energy under a land use plan established
12 under—

13 (i) the Federal Land Policy and Manage-
14 ment Act of 1976 (43 U.S.C. 1701 et seq.); or

15 (ii) the National Forest Management Act
16 of 1976 (16 U.S.C. 1600 et seq.).

17 (2) PILOT PROGRAM.—The term “pilot pro-
18 gram” means the wind and solar leasing pilot pro-
19 gram established under subsection (b).

20 (3) PUBLIC LAND.—The term “public land”
21 has the meaning given the term “public lands” in
22 section 103 of the Federal Land Policy and Manage-
23 ment Act of 1976 (43 U.S.C. 1702).

24 (4) SECRETARY.—The term “Secretary” means
25 the Secretary of the Interior.

26 (b) PILOT PROGRAM.—

1 (1) IN GENERAL.—Not later than 180 days
2 after the date of enactment of this Act, the Sec-
3 retary shall establish a wind and solar leasing pilot
4 program.

5 (2) SELECTION OF SITES.—

6 (A) IN GENERAL.—Not later than 90 days
7 after the date the pilot program is established
8 under this subsection, the Secretary shall select
9 2 sites that are appropriate for the development
10 of a solar energy project, and 2 sites that are
11 appropriate for the development of a wind en-
12 ergy project, on covered land as part of the
13 pilot program.

14 (B) SITE SELECTION.—In carrying out
15 subparagraph (A), the Secretary shall seek to
16 select sites—

17 (i) for which there is likely to be a
18 high level of industry interest; and

19 (ii) that are representative of sites on
20 which solar or wind energy is likely to be
21 developed on covered land.

22 (C) INELIGIBLE SITES.—The Secretary
23 shall not select as part of the pilot program any
24 site for which a right-of way for site testing or
25 construction has been issued.

1 (3) LEASE SALES.—

2 (A) IN GENERAL.—Except as provided in
3 subparagraph (C)(ii), not later than 180 days
4 after the date sites are selected under para-
5 graph (2), the Secretary shall offer each site for
6 competitive leasing to qualified bidders under
7 such terms and conditions as are required by
8 the Secretary.

9 (B) BIDDING SYSTEMS.—In offering the
10 sites for lease, the Secretary—

11 (i) may vary the bidding systems to be
12 used at each lease sale; but

13 (ii) shall limit bidding to 1 round in
14 any lease sale.

15 (C) LEASE TERMS.—

16 (i) IN GENERAL.—As part of the pilot
17 program, the Secretary may vary the
18 length of the lease terms and establish
19 such other lease terms and conditions as
20 the Secretary considers appropriate.

21 (ii) DATA COLLECTION.—As part of
22 the pilot program, the Secretary shall—

23 (I) offer on a noncompetitive
24 basis on at least 1 site a short-term
25 lease for data collection; and

1 (II) on the expiration of the
2 short-term lease, offer on a competi-
3 tive basis a long-term lease, giving
4 credit toward the bonus bid to the
5 holder of the short-term lease for any
6 qualified expenditures to collect data
7 to develop the site during the short-
8 term lease.

9 (4) COMPLIANCE WITH LAWS.—In offering for
10 lease the selected sites under paragraph (3), the Sec-
11 retary shall comply with all applicable environmental
12 and other laws.

13 (5) REPORT.—The Secretary shall—

14 (A) compile a report of the results of each
15 lease sale under the pilot program, including—

16 (i) the level of competitive interest;

17 and

18 (ii) a summary of bids and revenues
19 received; and

20 (B) not later than 90 days after the final
21 lease sale, submit to the Committee on Energy
22 and Natural Resources of the Senate and the
23 Committee on Natural Resources of the House
24 of Representatives the report described in sub-
25 paragraph (A).

1 (6) RIGHTS-OF-WAY.—During the pendency of
2 the pilot program, the Secretary shall continue to
3 issue rights-of-way, in compliance with authority in
4 effect on the date of enactment of this Act, for avail-
5 able sites not selected for the pilot program.

6 (c) SECRETARIAL DETERMINATION.—

7 (1) IN GENERAL.—Not later than 30 months
8 after the date of enactment of this Act, the Sec-
9 retary shall determine whether to establish a leasing
10 program under this section for wind or solar energy.

11 (2) ESTABLISHMENT.—The Secretary shall es-
12 tablish a leasing program if the Secretary deter-
13 mines that the program—

14 (A) is in the public interest; and

15 (B) provides an effective means of devel-
16 oping wind or solar energy on covered land.

17 (3) CONSULTATION.—In making the determina-
18 tions required under this subsection, the Secretary
19 shall consult with—

20 (A) the Secretary of Agriculture;

21 (B) the heads of other relevant Federal
22 agencies;

23 (C) affected States and Indian tribes;

24 (D) representatives of the solar and wind
25 industry;

1 (E) representatives of the environmental
2 and conservation community; and

3 (F) the public.

4 (4) CONSIDERATIONS.—In making the deter-
5 minations required under this subsection, the Sec-
6 retary shall consider the results of the report pro-
7 vided under subsection (b)(5) and the results of the
8 pilot program.

9 (5) REGULATIONS.—Not later than 180 days
10 after the date on which any determination is made
11 to establish a leasing program, the Secretary shall
12 promulgate final regulations to implement the pro-
13 gram.

14 (6) REPORT.—If the Secretary determines that
15 a leasing program should not be established, not
16 later than 60 days after the date of the determina-
17 tion, the Secretary shall submit to the Committee on
18 Energy and Natural Resources of the Senate and
19 the Committee on Natural Resources of the House
20 of Representatives a report describing the reasons
21 and findings for the determination.

22 (d) TRANSITION.—

23 (1) IN GENERAL.—If the Secretary determines
24 that a leasing program should be established, the
25 Secretary shall continue to provide for the issuance

1 of rights-of-way for the development of wind or solar
2 energy in accordance with each requirement de-
3 scribed in title V of the Federal Land Policy and
4 Management Act of 1976 (43 U.S.C. 1761 et seq.)
5 until the program is established and final regula-
6 tions for the program are promulgated.

7 (2) ADMINISTRATION.—The Secretary shall by
8 regulation provide for a reasonable transition from
9 the use of rights-of-way to leases, taking into ac-
10 count the status of the project (including whether
11 rights-of-way for testing or construction have been
12 granted or whether a plan of development has been
13 submitted).

14 (e) LEASING PROGRAM.—If the Secretary determines
15 under subsection (c) that a leasing program should be es-
16 tablished, the program shall be established in accordance
17 with subsections (f) through (l).

18 (f) COMPETITIVE LEASES.—

19 (1) IN GENERAL.—Except as provided in para-
20 graph (2), leases for wind or solar energy develop-
21 ment under this section shall be issued on a competi-
22 tive basis with a single round of bidding in any lease
23 sale.

24 (2) EXCEPTIONS.—Paragraph (1) shall not
25 apply if the Secretary determines that—

1 (A) no competitive interest exists;

2 (B) the public interest would not be served
3 by the competitive issuance of a lease or right-
4 of-way; or

5 (C) the lease is for the placement and op-
6 eration of a meteorological or data collection fa-
7 cility or for the development or demonstration
8 of a new wind or solar technology and has a
9 term of not more than 5 years.

10 (g) PAYMENTS.—

11 (1) IN GENERAL.—The Secretary shall establish
12 royalties, fees, rentals, bonuses, or other payments
13 to ensure a fair return to the United States for any
14 lease issued under this section.

15 (2) BONUS BIDS.—The Secretary may grant
16 credit toward any bonus bid for a qualified expendi-
17 ture by the holder of a lease described in subsection
18 (f)(2)(C) in any competitive lease sale held for a
19 long-term lease covering the same land covered by
20 the lease described in subsection (f)(2)(C).

21 (3) ROYALTIES.—Any lease shall require the
22 payment of a royalty established by the Secretary
23 pursuant to rulemaking that shall be a percentage of
24 the gross proceeds from the sale of electricity at a
25 rate that—

1 (A) encourages production of solar or wind
2 energy; and

3 (B) ensures a fair return to the public
4 comparable to the return that would be ob-
5 tained on State and private land.

6 (4) ROYALTY RELIEF.—To promote the great-
7 est generation of renewable energy, the Secretary
8 may—

9 (A) reduce any royalty otherwise required
10 on a showing by clear and convincing evidence
11 by the person holding a lease under which the
12 generation of energy has occurred that, without
13 the reduction in royalty, generation would not
14 occur; or

15 (B) provide that no royalty or a reduced
16 royalty is required under a lease for a period
17 not to exceed 5 years beginning on the date
18 that generation initially commences.

19 (h) ELIGIBILITY.—To be eligible to hold a lease
20 under this section, a person shall meet the eligibility re-
21 quirements for leasing under the first section of the Min-
22 eral Leasing Act (30 U.S.C. 181).

23 (i) REQUIREMENTS.—The Secretary shall ensure that
24 any activity under a leasing program is carried out in a
25 manner that—

1 (1) is consistent with all applicable land use
2 planning, environmental, and other laws; and

3 (2) provides for—

4 (A) safety;

5 (B) protection of the environment;

6 (C) prevention of waste;

7 (D) diligent development of the resource;

8 (E) coordination with applicable Federal
9 agencies;

10 (F) a fair return to the United States for
11 any lease;

12 (G) use of best management practices, in-
13 cluding planning and practices for mitigation of
14 impacts;

15 (H) public notice and comment on any pro-
16 posal submitted for a lease under this section;
17 and

18 (I) oversight, inspection, research, moni-
19 toring, and enforcement relating to a lease
20 under this section.

21 (j) LEASE DURATION, SUSPENSION, AND CANCELLA-
22 TION.—The Secretary shall establish terms and conditions
23 for the duration, issuance, transfer, renewal, suspension,
24 and cancellation of a lease under this section.

1 (k) SECURITY.—The Secretary shall require the hold-
2 er of a lease issued under this section—

3 (1) to furnish a surety bond or other form of
4 security, as prescribed by the Secretary;

5 (2) to provide for the reclamation and restora-
6 tion of the area covered by the lease; and

7 (3) to comply with such other requirements as
8 the Secretary considers necessary to protect the in-
9 terests of the public and the United States.

10 (l) DISPOSITION OF REVENUES.—The Secretary shall
11 provide for the payment of 5 percent of the revenues re-
12 ceived by the Federal Government as a result of leasing
13 under this section or the issuance of rights-of-way for wind
14 or solar development under title V of the Federal Land
15 Policy and Management Act of 1976 (43 U.S.C. 1761 et
16 seq.) to the State within which the boundaries of the
17 leased land or right-of-way are located.

18 **Subtitle F—Carbon Capture**

19 **SEC. 371. LARGE-SCALE CARBON STORAGE PROGRAM.**

20 (a) IN GENERAL.—Subtitle F of title IX of the En-
21 ergy Policy Act of 2005 (42 U.S.C. 16291 et seq.) is
22 amended by inserting after section 963 (42 U.S.C. 16293)
23 the following:

24 **“SEC. 963A. LARGE-SCALE CARBON STORAGE PROGRAM.**

25 “(a) DEFINITIONS.—In this section:

1 “(1) INDUSTRIAL SOURCE.—The term ‘indus-
2 trial source’ means any source of carbon dioxide that
3 is not naturally occurring.

4 “(2) LARGE-SCALE.—The term ‘large-scale’
5 means the injection of over 1,000,000 tons of carbon
6 dioxide each year from industrial sources into a geo-
7 logical formation.

8 “(3) SECRETARY CONCERNED.—The term ‘Sec-
9 retary concerned’ means—

10 “(A) the Secretary of Agriculture (acting
11 through the Chief of the Forest Service), with
12 respect to National Forest System land; and

13 “(B) the Secretary of the Interior, with re-
14 spect to land managed by the Bureau of Land
15 Management (including land held for the ben-
16 efit of an Indian tribe).

17 “(b) PROGRAM.—In addition to the research, develop-
18 ment, and demonstration program authorized by section
19 963, the Secretary shall carry out a program to dem-
20 onstrate the commercial application of integrated systems
21 for the capture, injection, monitoring, and long-term geo-
22 logical storage of carbon dioxide from industrial sources.

23 “(c) AUTHORIZED ASSISTANCE.—In carrying out the
24 program, the Secretary may enter into cooperative agree-

1 ments to provide financial and technical assistance to up
2 to 10 demonstration projects.

3 “(d) PROJECT SELECTION.—The Secretary shall
4 competitively select recipients of cooperative agreements
5 under this section from among applicants that—

6 “(1) provide the Secretary with sufficient geo-
7 logical site information (including hydrogeological
8 and geophysical information) to establish that the
9 proposed geological storage unit is capable of long-
10 term storage of the injected carbon dioxide, includ-
11 ing—

12 “(A) the location, extent, and storage ca-
13 pacity of the geological storage unit at the site
14 into which the carbon dioxide will be injected;

15 “(B) the principal potential modes of
16 geomechanical failure in the geological storage
17 unit;

18 “(C) the ability of the geological storage
19 unit to retain injected carbon dioxide; and

20 “(D) the measurement, monitoring, and
21 verification requirements necessary to ensure
22 adequate information on the operation of the
23 geological storage unit during and after the in-
24 jection of carbon dioxide;

1 “(2) possess the land or interests in land nec-
2 essary for—

3 “(A) the injection and storage of the car-
4 bon dioxide at the proposed geological storage
5 unit; and

6 “(B) the closure, monitoring, and long-
7 term stewardship of the geological storage unit;

8 “(3) possess or have a reasonable expectation of
9 obtaining all necessary permits and authorizations
10 under applicable Federal and State laws (including
11 regulations); and

12 “(4) agree to comply with each requirement of
13 subsection (e).

14 “(e) TERMS AND CONDITIONS.—The Secretary shall
15 condition receipt of financial assistance pursuant to a co-
16 operative agreement under this section on the recipient
17 agreeing to—

18 “(1) comply with all applicable Federal and
19 State laws (including regulations), including a cer-
20 tification by the appropriate regulatory authority
21 that the project will comply with Federal and State
22 requirements to protect drinking water supplies;

23 “(2) in the case of industrial sources subject to
24 the Clean Air Act (42 U.S.C. 7401 et seq.), inject

1 only carbon dioxide captured from industrial sources
2 in compliance with that Act;

3 “(3) comply with all applicable construction and
4 operating requirements for deep injection wells;

5 “(4) measure, monitor, and test to verify that
6 carbon dioxide injected into the injection zone is
7 not—

8 “(A) escaping from or migrating beyond
9 the confinement zone; or

10 “(B) endangering an underground source
11 of drinking water;

12 “(5) comply with applicable well-plugging, post-
13 injection site care, and site closure requirements, in-
14 cluding—

15 “(A)(i) maintaining financial assurances
16 during the post-injection closure and monitoring
17 phase until a certificate of closure is issued by
18 the Secretary; and

19 “(ii) promptly undertaking remediation ac-
20 tivities for any leak from the geological storage
21 unit that would endanger public health or safe-
22 ty or natural resources; and

23 “(B) complying with subsection (f);

24 “(6) comply with applicable long-term care re-
25 quirements;

1 “(7) maintain financial protection in a form
2 and in an amount acceptable to—

3 “(A) the Secretary;

4 “(B) the Secretary with jurisdiction over
5 the land; and

6 “(C) the Administrator of the Environ-
7 mental Protection Agency; and

8 “(8) provide the assurances described in section
9 963(c)(4)(B).

10 “(f) POST INJECTION CLOSURE AND MONITORING
11 ELEMENTS.—In assessing whether a project complies with
12 site closure requirements under subsection (e)(5), the Sec-
13 retary, in consultation with the Administrator of the Envi-
14 ronmental Protection Agency, shall determine whether the
15 recipient of financial assistance has demonstrated contin-
16 uous compliance with each of the following over a period
17 of not less than 10 consecutive years after the plume of
18 carbon dioxide has stabilized within the geologic formation
19 that comprises the geologic storage unit following the ces-
20 sation of injection activities:

21 “(1) The estimated location and extent of the
22 project footprint (including the detectable plume of
23 carbon dioxide and the area of elevated pressure re-
24 sulting from the project) has not substantially

1 changed and is contained within the geologic storage
2 unit.

3 “(2) The injection zone formation pressure has
4 ceased to increase following cessation of carbon diox-
5 ide injection into the geologic storage unit.

6 “(3) There is no leakage of either carbon diox-
7 ide or displaced formation fluid from the geologic
8 storage unit that is endangering public health and
9 safety, including underground sources of drinking
10 water and natural resources.

11 “(4) The injected or displaced formation fluids
12 are not expected to migrate in the future in a man-
13 ner that encounters a potential leakage pathway.

14 “(5) The injection wells at the site completed
15 into or through the injection zone or confining zone
16 are plugged and abandoned in accordance with the
17 applicable requirements of Federal or State law gov-
18 erning the wells.

19 “(g) INDEMNIFICATION AGREEMENTS.—

20 “(1) DEFINITION OF LIABILITY.—In this sub-
21 section, the term ‘liability’ means any legal liability
22 for—

23 “(A) bodily injury, sickness, disease, or
24 death;

1 “(B) loss of or damage to property, or loss
2 of use of property; or

3 “(C) injury to or destruction or loss of nat-
4 ural resources, including fish, wildlife, and
5 drinking water supplies.

6 “(2) AGREEMENTS.—Not later than 1 year
7 after the date of the receipt by the Secretary of a
8 completed application for a demonstration project,
9 the Secretary may agree to indemnify and hold
10 harmless the recipient of a cooperative agreement
11 under this section from liability arising out of or re-
12 sulting from a demonstration project in excess of the
13 amount of liability covered by financial protection
14 maintained by the recipient under subsection (e)(7).

15 “(3) EXCEPTION FOR GROSS NEGLIGENCE AND
16 INTENTIONAL MISCONDUCT.—Notwithstanding para-
17 graph (1), the Secretary may not indemnify the re-
18 cipient of a cooperative agreement under this section
19 from liability arising out of conduct of a recipient
20 that is grossly negligent or that constitutes inten-
21 tional misconduct.

22 “(4) COLLECTION OF FEES.—

23 “(A) IN GENERAL.—The Secretary shall
24 collect a fee from any person with whom an
25 agreement for indemnification is executed under

1 this subsection in an amount that is equal to
2 the net present value of payments made by the
3 United States to cover liability under the in-
4 demnification agreement.

5 “(B) AMOUNT.—The Secretary shall estab-
6 lish, by regulation, criteria for determining the
7 amount of the fee, taking into account—

8 “(i) the likelihood of an incident re-
9 sulting in liability to the United States
10 under the indemnification agreement; and

11 “(ii) other factors pertaining to the
12 hazard of the indemnified project.

13 “(C) USE OF FEES.—Fees collected under
14 this paragraph shall be deposited in the Treas-
15 ury and credited to miscellaneous receipts.

16 “(5) CONTRACTS IN ADVANCE OF APPROPRIA-
17 TIONS.—

18 “(A) IN GENERAL.—Subject to subpara-
19 graph (B), the Secretary The Secretary may
20 enter into agreements of indemnification under
21 this subsection in advance of appropriations
22 and incur obligations without regard to section
23 1341 of title 31, United States Code (commonly
24 known as the ‘Anti-Deficiency Act’), or section
25 11 of title 41, United States Code (commonly

1 known as the ‘Adequacy of Appropriations
2 Act’).

3 “(B) LIMITATION.—The amount of indem-
4 nification under this subsection shall not exceed
5 \$10,000,000,000 (adjusted not less than once
6 during each 5-year period following the date of
7 enactment of this section, in accordance with
8 the aggregate percentage change in the Con-
9 sumer Price Index since the previous adjust-
10 ment under this subparagraph), in the aggre-
11 gate, for all persons indemnified in connection
12 with an agreement and for each project, includ-
13 ing such legal costs as are approved by the Sec-
14 retary.

15 “(6) CONDITIONS OF AGREEMENTS OF INDEM-
16 NIFICATION.—

17 “(A) IN GENERAL.—An agreement of in-
18 demnification under this subsection may con-
19 tain such terms as the Secretary considers ap-
20 propriate to carry out the purposes of this sec-
21 tion.

22 “(B) ADMINISTRATION.—The agreement
23 shall provide that, if the Secretary makes a de-
24 termination the United States will probably be

1 required to make indemnity payments under the
2 agreement, the Attorney General—

3 “(i) shall collaborate with the recipi-
4 ent of an award under this subsection; and

5 “(ii) may—

6 “(I) approve the payment of any
7 claim under the agreement of indem-
8 nification;

9 “(II) appear on behalf of the re-
10 cipient;

11 “(III) take charge of an action;

12 and

13 “(IV) settle or defend an action.

14 “(C) SETTLEMENT OF CLAIMS.—

15 “(i) IN GENERAL.—The Attorney
16 General shall have final authority on behalf
17 of the United States to settle or approve
18 the settlement of any claim under this sub-
19 section on a fair and reasonable basis with
20 due regard for the purposes of this sub-
21 section.

22 “(ii) EXPENSES.—The settlement
23 shall not include expenses in connection
24 with the claim incurred by the recipient.

25 “(h) FEDERAL LAND.—

1 “(1) IN GENERAL.—The Secretary concerned
2 may authorize the siting of a project on Federal
3 land under the jurisdiction of the Secretary con-
4 cerned in a manner consistent with applicable laws
5 and land management plans and subject to such
6 terms and conditions as the Secretary concerned de-
7 termines to be necessary.

8 “(2) FRAMEWORK FOR GEOLOGICAL CARBON
9 SEQUESTRATION ON PUBLIC LAND.—In determining
10 whether to authorize a project on Federal land, the
11 Secretary concerned shall take into account the
12 framework for geological carbon sequestration on
13 public land prepared in accordance with section 714
14 of the Energy Independence and Security Act of
15 2007 (Public Law 110–140; 121 Stat. 1715).

16 “(i) ACCEPTANCE OF TITLE AND LONG-TERM MONI-
17 TORING.—

18 “(1) IN GENERAL.—As a condition of a cooper-
19 ative agreement under this section, the Secretary
20 may accept title to, or transfer of administrative ju-
21 risdiction from another Federal agency over, any
22 land or interest in land necessary for the monitoring,
23 remediation, or long-term stewardship of a project
24 site.

1 “(2) LONG-TERM MONITORING ACTIVITIES.—
2 After accepting title to, or transfer of, a site closed
3 in accordance with this section, the Secretary shall
4 monitor the site and conduct any remediation activi-
5 ties to ensure the geological integrity of the site and
6 prevent any endangerment of public health or safety.

7 “(3) FUNDING.—There is appropriated to the
8 Secretary, out of funds of the Treasury not other-
9 wise appropriated, such sums as are necessary to
10 carry out paragraph (2).”.

11 (b) CONFORMING AMENDMENTS.—

12 (1) Section 963 of the Energy Policy Act of
13 2005 (42 U.S.C. 16293) is amended—

14 (A) by redesignating subsections (a)
15 through (d) as subsections (b) through (e), re-
16 spectively;

17 (B) by inserting before subsection (b) (as
18 so redesignated) the following:

19 “(a) DEFINITIONS.—In this section:

20 “(1) INDUSTRIAL SOURCE.—The term ‘indus-
21 trial source’ means any source of carbon dioxide that
22 is not naturally occurring.

23 “(2) LARGE-SCALE.—The term ‘large-scale’
24 means the injection of over 1,000,000 tons of carbon

1 dioxide from industrial sources over the lifetime of
2 the project.”;

3 (C) in subsection (b) (as so redesignated),
4 by striking “IN GENERAL” and inserting “PRO-
5 GRAM”;

6 (D) in subsection (c) (as so redesignated),
7 by striking “subsection (a)” and inserting “sub-
8 section (b)”;

9 (E) in subsection (d)(3) (as so redesign-
10 ated), by striking subparagraph (D).

11 (2) Sections 703(a)(3) and 704 of the Energy
12 Independence and Security Act of 2007 (42 U.S.C.
13 17251(a)(3), 17252) are amended by striking “sec-
14 tion 963(c)(3) of the Energy Policy Act of 2005 (42
15 U.S.C. 16293(c)(3))” each place it appears and in-
16 serting “section 963(d)(3) of the Energy Policy Act
17 of 2005 (42 U.S.C. 16293(d)(3))”.

18 **SEC. 372. TRAINING PROGRAM FOR STATE AGENCIES.**

19 (a) ESTABLISHMENT.—The Secretary of Energy, in
20 consultation with the Administrator of the Environmental
21 Protection Agency and the Secretary of Transportation,
22 shall establish a program to provide grants for employee
23 training purposes to State agencies involved in permitting,
24 management, inspection, and oversight of carbon capture,
25 transportation, and storage projects.

1 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
2 authorized to be appropriated to the Secretary of Energy
3 to carry out this section \$10,000,000 for each of fiscal
4 years 2010 through 2020.

5 **Subtitle G—Island Energy**

6 **SEC. 381. AFFILIATED ISLAND ENERGY INDEPENDENCE**

7 **TEAM.**

8 (a) DEFINITIONS.—In this section:

9 (1) AFFILIATED ISLAND.—The term “affiliated
10 island” means—

11 (A) the Commonwealth of Puerto Rico;

12 (B) Guam;

13 (C) American Samoa;

14 (D) the Commonwealth of the Northern
15 Mariana Islands;

16 (E) the Federated States of Micronesia;

17 (F) the Republic of the Marshall Islands;

18 (G) the Republic of Palau; and

19 (H) the United States Virgin Islands.

20 (2) SECRETARY.—The term “Secretary” means
21 the Secretary of Energy (acting through the Assist-
22 ant Secretary of Energy Efficiency and Renewable
23 Energy), in consultation with the Secretary of the
24 Interior and the Secretary of State.

1 (3) TEAM.—The term “team” means the team
2 established by the Secretary under subsection (b).

3 (b) ESTABLISHMENT.—As soon as practicable after
4 the date of enactment of this Act, the Secretary shall as-
5 semble a team of technical, policy, and financial experts
6 to address the energy needs of each affiliated island—

7 (1) to reduce the reliance and expenditure of
8 each affiliated island on imported fossil fuels;

9 (2) to increase the use by each affiliated island
10 of indigenous, nonfossil fuel energy sources;

11 (3) to improve the performance of the energy
12 infrastructure of the affiliated island through
13 projects—

14 (A) to improve the energy efficiency of
15 power generation, transmission, and distribu-
16 tion; and

17 (B) to increase consumer energy efficiency;

18 (4) to improve the performance of the energy
19 infrastructure of each affiliated island through en-
20 hanced planning, education, and training;

21 (5) to adopt research-based and public-private
22 partnership-based approaches as appropriate;

23 (6) to stimulate economic development and job
24 creation; and

1 (7) to enhance the engagement by the Federal
2 Government in international efforts to address island
3 energy needs.

4 (c) DUTIES OF TEAM.—

5 (1) ENERGY ACTION PLANS.—

6 (A) IN GENERAL.—In accordance with
7 subparagraph (B), the team shall provide tech-
8 nical, programmatic, and financial assistance to
9 each utility of each affiliated island, and the
10 government of each affiliated island, as appro-
11 priate, to develop and implement an energy Ac-
12 tion Plan for each affiliated island to reduce the
13 reliance of each affiliated island on imported
14 fossil fuels through increased efficiency and use
15 of indigenous clean-energy resources.

16 (B) REQUIREMENTS.—Each Action Plan
17 described in subparagraph (A) for each affili-
18 ated island shall require and provide for—

19 (i) the conduct of 1 or more studies to
20 assess opportunities to reduce fossil fuel
21 use through—

22 (I) the improvement of the en-
23 ergy efficiency of the affiliated island;
24 and

- 1 (II) the increased use by the af-
2 filiated island of indigenous clean-en-
3 ergy resources;
- 4 (ii) the identification and implementa-
5 tion of the most cost-effective strategies
6 and projects to reduce the dependence of
7 the affiliated island on fossil fuels;
- 8 (iii) the promotion of education and
9 training activities to improve the capacity
10 of the local utilities of the affiliated island,
11 and the government of the affiliated island,
12 as appropriate, to plan for, maintain, and
13 operate the energy infrastructure of the af-
14 filiated island through the use of local or
15 regional institutions, as appropriate;
- 16 (iv) the coordination of the activities
17 described in clause (iii) to leverage the ex-
18 pertise and resources of international enti-
19 ties, the Department of Energy, the De-
20 partment of the Interior, and the regional
21 utilities of the affiliated island;
- 22 (v) the identification, and develop-
23 ment, as appropriate, of research-based
24 and private-public, partnership approaches
25 to implement the Action Plan; and

1 (vi) any other component that the
2 Secretary determines to be necessary to re-
3 duce successfully the use by each affiliated
4 island of fossil fuels.

5 (2) REPORTS TO SECRETARY.—Not later than
6 1 year after the date on which the Secretary estab-
7 lishes the team and biannually thereafter, the team
8 shall submit to the Secretary a report that contains
9 a description of the progress of each affiliated island
10 in—

11 (A) implementing the Action Plan of the
12 affiliated island developed under paragraph
13 (1)(A); and

14 (B) reducing the reliance of the affiliated
15 island on fossil fuels.

16 (d) USE OF REGIONAL UTILITY ORGANIZATIONS.—
17 To provide expertise to affiliated islands to assist the af-
18 filiated islands in meeting the purposes of this section, the
19 Secretary shall consider—

20 (1) including regional utility organizations in
21 the establishment of the team; and

22 (2) providing assistance through regional utility
23 organizations.

24 (e) ANNUAL REPORTS TO CONGRESS.—Not later
25 than 30 days after the date on which the Secretary re-

1 ceives a report submitted by the team under subsection
 2 (c)(2), the Secretary shall submit to the appropriate com-
 3 mittees of Congress a report that contains a summary of
 4 the report of the team.

5 (f) AUTHORIZATION OF APPROPRIATIONS.—There
 6 are authorized to be appropriated such sums as are nec-
 7 essary to carry out this section.

8 **TITLE IV—ENERGY INNOVATION**
 9 **AND WORKFORCE DEVELOP-**
 10 **MENT**

11 **Subtitle A—Funding**

12 **SEC. 401. AUTHORIZATION OF APPROPRIATIONS FOR EN-**
 13 **ERGY RESEARCH, DEVELOPMENT, DEM-**
 14 **ONSTRATION, AND COMMERCIAL APPLICA-**
 15 **TION ACTIVITIES.**

16 (a) ENERGY EFFICIENCY; DISTRIBUTED ENERGY
 17 AND ELECTRIC ENERGY SYSTEMS; RENEWABLE EN-
 18 ERGY.—

19 (1) IN GENERAL.—There are authorized to be
 20 appropriated to the Secretary to carry out research,
 21 development, demonstration, and commercial appli-
 22 cation activities described in paragraph (2)—

23 (A) \$1,974,000,000 for fiscal year 2010;

24 (B) \$2,388,000,000 for fiscal year 2011;

1 (C) \$2,821,000,000 for fiscal year 2012;

2 and

3 (D) \$3,258,000,000 for fiscal year 2013.

4 (2) ACTIVITIES.—Paragraph (1) applies to—

5 (A) energy efficiency and conservation re-
6 search, development, demonstration, and com-
7 mercial application activities, including activi-
8 ties authorized under subtitle A of title IX of
9 the Energy Policy Act of 2005 (42 U.S.C.
10 16191 et seq.);

11 (B) distributed energy and electric energy
12 system activities, including activities authorized
13 under subtitle B of title IX of that Act (42
14 U.S.C. 16211 et seq.); and

15 (C) renewable energy research, develop-
16 ment, demonstration, and commercial applica-
17 tion activities, including activities authorized
18 under subtitle C of title IX of that Act (42
19 U.S.C. 16231 et seq.).

20 (b) NUCLEAR ENERGY.—Section 951 of the Energy
21 Policy Act of 2005 (42 U.S.C. 16271) is amended by
22 striking subsection (b) and inserting the following:

23 “(b) AUTHORIZATION OF APPROPRIATIONS FOR
24 CORE PROGRAMS.—There are authorized to be appro-
25 priated to the Secretary to carry out nuclear energy re-

1 search, development, demonstration, and commercial ap-
2 plication activities, including activities authorized under
3 this subtitle—

4 “(1) \$998,000,000 for fiscal year 2010;

5 “(2) \$1,196,000,000 for fiscal year 2011;

6 “(3) \$1,394,000,000 for fiscal year 2012; and

7 “(4) \$1,592,000,000 for fiscal year 2013.”.

8 (c) FOSSIL ENERGY.—Section 961(b) of the Energy
9 Policy Act of 2005 (42 U.S.C. 16291(b)) is amended—

10 (1) in paragraph (2), by striking “and” after
11 the semicolon at the end;

12 (2) in paragraph (3), by striking the period at
13 the end and inserting a semicolon; and

14 (3) by adding at the end the following:

15 “(4) \$1,074,000,000 for fiscal year 2010;

16 “(5) \$1,272,000,000 for fiscal year 2011;

17 “(6) \$1,470,000,000 for fiscal year 2012; and

18 “(7) \$1,668,000,000 for fiscal year 2013.”.

19 (d) OFFICE OF SCIENCE.—Section 971(b) of the En-
20 ergy Policy Act of 2005 (42 U.S.C. 16311(b)) is amend-
21 ed—

22 (1) in paragraph (3), by striking “and” after
23 the semicolon at the end; and

24 (2) by striking paragraph (4) and inserting the
25 following:

- 1 “(4) \$5,800,000,000 for fiscal year 2010;
2 “(5) \$6,468,740,000 for fiscal year 2011;
3 “(6) \$7,214,586,000 for fiscal year 2012; and
4 “(7) \$8,046,427,000 for fiscal year 2013.”.

5 **Subtitle B—Grand Energy**
6 **Challenges Research Initiative**

7 **SEC. 411. GRAND ENERGY CHALLENGES RESEARCH INITIA-**
8 **TIVE.**

9 (a) ESTABLISHMENT.—The Secretary, acting
10 through the Under Secretary for Science and the Under
11 Secretary for Energy (referred to in this section as the
12 “Under Secretaries”), shall establish a Grand Energy
13 Challenges Research Initiative for the purposes of accel-
14 erating the solutions to Grand Energy Challenges through
15 the establishment of large-scale, multidisciplinary activi-
16 ties that blend research in basic, applied, and engineering
17 sciences, technology development, and other relevant dis-
18 ciplines.

19 (b) ADMINISTRATION.—The Under Secretaries shall
20 initiate large-scale research activities that bring together
21 the skills and talents of multiple investigators to enable
22 high-risk, cross-cutting research of a scope and complexity
23 that would not be practicable with individual investigators.

24 (c) GRAND ENERGY CHALLENGES.—Not later than
25 180 days after the date of enactment of this Act, the

1 Under Secretaries shall publish in the Federal Register
2 a description of Grand Challenges in Energy that in-
3 cludes—

4 (1) the Challenges described in the Basic Re-
5 search Needs Workshops reports published by the
6 Office of Basic Energy Sciences of the Office of
7 Science of the Department of Energy;

8 (2) the Challenges described in the reports enti-
9 tled “Directing Matter and Energy: Five Challenges
10 for Science and the Imagination” and “New Science
11 for a Secure and Sustainable Energy Future” of the
12 Basic Energy Sciences Advisory Committee of the
13 Department of Energy; and

14 (3) the energy-related Challenges described in
15 the report entitled “Grand Challenges for Engineer-
16 ing” of the National Academy of Engineering.

17 (d) GRAND CHALLENGE RESEARCH GRANTS.—

18 (1) IN GENERAL.—The Department of Energy
19 shall carry out the research activities of the Initia-
20 tive by competitively awarding grants to, entering
21 into cooperative agreements with, or executing other
22 transactions with (consistent with section 1007(g) of
23 the Energy Policy Act of 2005 (42 U.S.C. 7256(g))
24 consortiums that clearly indicate to the Department
25 the manner by which the proposed research—

1 (A) is motivated by and is designed to ad-
2 dress 1 or more of the Grand Energy Chal-
3 lenges described in subsection (c);

4 (B) will contribute to fundamental sci-
5 entific, engineering, and technology under-
6 standing; and

7 (C) will integrate diverse approaches to
8 solving 1 or more of the Grand Energy Chal-
9 lenges through a robust management plan de-
10 signed to achieve success.

11 (2) CONSORTIUMS.—To be eligible for a Grand
12 Energy Challenge research grant, cooperative agree-
13 ment, or other transaction, a consortium shall—

14 (A) be made up of 1 or more of the fol-
15 lowing groups—

16 (i) institutions of higher education;

17 (ii) National Laboratories of the De-
18 partment of Energy;

19 (iii) Federally-funded research and de-
20 velopment centers;

21 (iv) private industry; and

22 (v) not-for-profit institutions;

23 (B) be comprised of at least 1 non-Federal
24 entity; and

1 (C) develop a multiyear road map that pro-
2 vides achievable metrics for overcoming the
3 Grand Energy Challenges described in sub-
4 section (c).

5 (e) AUTHORIZATION OF APPROPRIATIONS.—There
6 are authorized to be appropriated to such sums as are nec-
7 essary to carry out this section for each of fiscal years
8 2010 through 2019.

9 **Subtitle C—Improvements to Exist-**
10 **ing Energy Research and Devel-**
11 **opment Programs**

12 **SEC. 421. ADVANCED RESEARCH PROJECTS AGENCY—EN-**
13 **ERGY.**

14 Section 5012 of the America COMPETES Act (42
15 U.S.C. 16538) is amended—

16 (1) in subsection (a)(3), by striking “subsection
17 (m)(1)” and inserting “subsection (n)(1)”;

18 (2) in subsection (c)(1)(A)—

19 (A) in the matter preceding clause (i), by
20 striking “energy technologies” and inserting
21 “technologies”; and

22 (B) in clause (ii), by striking “, including
23 greenhouse gases” and inserting “and green-
24 house gas emissions from all sources”;

1 (3) in subsection (e)(1), by striking “all” and
2 inserting “the initiation of”;

3 (4) by redesignating subsections (f) through
4 (m) as subsections (g) through (n), respectively;

5 (5) by inserting after subsection (e) the fol-
6 lowing:

7 “(f) ADMINISTRATION.—In carrying out this section,
8 ARPA-E may initiate and execute grants, contracts, coop-
9 erative agreements, and other transactions separate from
10 the Department of Energy.”;

11 (6) in subsection (g)(1)(B)(iv) (as redesignated
12 by paragraph (4)), by striking “subsection (j)” and
13 inserting “subsection (k)”;

14 (7) in subsection (h)(2) (as redesignated by
15 paragraph (4))—

16 (A) by striking “2008” and inserting
17 “2009”; and

18 (B) by striking “2011” and inserting
19 “2012”; and

20 (8) in subsection (l)(1) (as redesignated by
21 paragraph (4)), by striking “4 years” and inserting
22 “7 years”; and

23 (9) in subsection (n)(2)(B) (as redesignated by
24 paragraph (4)), by striking “and 2010” and insert-
25 ing “through 2020”.

1 **SEC. 422. DOMESTIC VEHICLE BATTERY MANUFACTURING**
2 **RESEARCH.**

3 The United States Energy Storage Competitiveness
4 Act of 2007 (42 U.S.C. 17231) is amended—

5 (1) by redesignating subsections (l) through (p)
6 as subsections (m) through (q), respectively;

7 (2) by inserting after subsection (k) the fol-
8 lowing:

9 “(l) DOMESTIC VEHICLE BATTERY MANUFACTURING
10 RESEARCH.—

11 “(1) IN GENERAL.—The Secretary, acting
12 through the Assistant Secretary for Energy Effi-
13 ciency and Renewable Energy, shall conduct a re-
14 search program on manufacturing batteries and bat-
15 tery systems to support electric drive vehicles.

16 “(2) PURPOSES.—The purpose of the program
17 shall be to improve existing processes, or develop
18 new manufacturing processes, to enable higher qual-
19 ity and less expensive energy batteries for electric
20 drive vehicles.

21 “(3) PARTICIPANTS.—The program shall be
22 conducted by teams of researchers, which may in-
23 clude—

24 “(A) energy storage systems manufactur-
25 ers;

1 “(B) material and equipment suppliers of
2 battery and battery system manufacturers;

3 “(C) electric drive vehicle manufacturers;

4 “(D) National Laboratories;

5 “(E) other Federal agencies;

6 “(F) State and local governments; and

7 “(G) institutions of higher education.”;

8 (3) in subsection (n) (as redesignated by para-
9 graph (1)), by striking “and (k)” and inserting “(k),
10 and (l)”;

11 (4) in subsection (q) (as redesignated by para-
12 graph (1))—

13 (A) in paragraph (5), by striking “and” at
14 the end;

15 (B) in paragraph (6), by striking the pe-
16 riod at the end and inserting “; and”;

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

18 “(7) the domestic vehicle energy storage manu-
19 facturing research program under subsection (l)
20 such sums as are necessary for each of fiscal years
21 2009 through 2018.”.

1 **SEC. 423. LIGHTWEIGHT MATERIALS RESEARCH AND DE-**
2 **VELOPMENT.**

3 Section 651 of the Energy Independence and Security
4 Act of 2007 (42 U.S.C. 17241) is amended by striking
5 subsection (b) and inserting the following:

6 “(b) AUTHORIZATION OF APPROPRIATIONS.—There
7 are authorized to be appropriated to carry out this section
8 \$100,000,000 for the period of fiscal years 2010 through
9 2013.”.

10 **SEC. 424. AMENDMENTS TO THE METHANE HYDRATE RE-**
11 **SEARCH AND DEVELOPMENT ACT OF 2000.**

12 (a) FINDINGS.—Section 2 of the Methane Hydrate
13 Research and Development Act of 2000 (30 U.S.C. 2001)
14 is amended—

15 (1) in paragraph (4), by striking “and” at the
16 end;

17 (2) in paragraph (5), by striking the period at
18 the end and inserting a semicolon; and

19 (3) by adding at the end the following:

20 “(6) methane is a powerful greenhouse gas that
21 may be exchanged between terrestrial methane hy-
22 drate reservoirs and the atmosphere by natural or
23 anthropogenic processes; and

24 “(7) the short- and long-term release of meth-
25 ane from arctic or marine reservoirs may have sig-

1 nificant environmental effects, including global cli-
2 mate change.”.

3 (b) METHANE HYDRATE RESEARCH AND DEVELOP-
4 MENT PROGRAM.—

5 (1) IN GENERAL.—Section 4 of the Methane
6 Hydrate Research and Development Act of 2000 (30
7 U.S.C. 2003) is amended by striking subsection (b)
8 and inserting the following:

9 “(b) GRANTS, CONTRACTS, COOPERATIVE AGREE-
10 MENTS, INTERAGENCY FUNDS TRANSFER AGREEMENTS,
11 AND FIELD WORK PROPOSALS.—

12 “(1) ASSISTANCE AND COORDINATION.—In car-
13 rying out the program of methane hydrate research
14 and development authorized by this section, the Sec-
15 retary may award grants to, or enter into contracts
16 or cooperative agreements with, institutions that—

17 “(A) conduct basic and applied research to
18 identify, explore, assess, and develop methane
19 hydrate as a commercially viable source of en-
20 ergy;

21 “(B) identify and characterize methane hy-
22 drate resources using remote sensing and seis-
23 mic data;

1 “(C) develop technologies required for effi-
2 cient and environmentally sound development of
3 methane hydrate resources;

4 “(D) conduct basic and applied research to
5 assess and mitigate the environmental impact of
6 hydrate degassing (including natural degassing
7 and degassing associated with commercial de-
8 velopment);

9 “(E) develop technologies to reduce the
10 risks of drilling through methane hydrates;

11 “(F) conduct exploratory drilling, well test-
12 ing, and production testing operations on per-
13 mafrost and nonpermafrost gas hydrates in
14 support of the activities authorized by this
15 paragraph, including drilling of 3 or more full-
16 scale production test wells; or

17 “(G) expand education and training pro-
18 grams in methane hydrate resource research
19 and resource development through fellowships
20 or other means for graduate education and
21 training.

22 “(2) ENVIRONMENTAL MONITORING.—The Sec-
23 retary shall conduct a long-term environmental mon-
24 itoring program to study the effects of production
25 from methane hydrate reservoirs.

1 “(3) COMPETITIVE PEER REVIEW.—Funds
2 made available under paragraphs (1) and (2) shall
3 be made available based on a competitive process
4 using external scientific peer review of proposed re-
5 search.”.

6 (2) CONFORMING AMENDMENT.—Section 4(e)
7 of the Methane Hydrate Research and Development
8 Act of 2000 (30 U.S.C. 2003(e)) is amended in the
9 matter preceding paragraph (1) by striking “sub-
10 section (b)(1)” and inserting “paragraphs (1) and
11 (2) of subsection (b)”.

12 (c) AUTHORIZATION OF APPROPRIATIONS.—The
13 Methane Hydrate Research and Development Act of 2000
14 is amended by striking section 7 (30 U.S.C. 2006) and
15 inserting the following:

16 **“SEC. 7. AUTHORIZATION OF APPROPRIATIONS.**

17 “There are authorized to be appropriated to the Sec-
18 retary to carry out this Act, to remain available until ex-
19 pended—

20 “(1) for use in carrying out section 4(b)(1)—

21 “(A) \$60,000,000 for fiscal year 2011;

22 “(B) \$70,000,000 for fiscal year 2012;

23 “(C) \$80,000,000 for fiscal year 2013;

24 “(D) \$90,000,000 for fiscal year 2014;

25 and

1 “(E) \$90,000,000 for fiscal year 2015; and
2 “(2) for use in carrying out section 4(b)(2),
3 \$10,000,000 for each of fiscal years 2010 through
4 2015.”.

5 **SEC. 425. PROGRAM TO EXPLOIT LOW-BTU GAS AND CON-**
6 **SERVE HELIUM RESOURCES.**

7 (a) DEFINITION OF LOW-BTU GAS.—In this section,
8 the term “low-Btu gas” means a fuel gas with a heating
9 value of less than 250 Btu per cubic foot measured as
10 the higher heating value resulting from the inclusion of
11 noncombustible gases, including nitrogen, helium, argon,
12 and carbon dioxide.

13 (b) AUTHORIZATION.—The Secretary shall support
14 programs of research, development, commercial applica-
15 tion, and conservation to expand the domestic production
16 of low-Btu gas and helium resources, including the pro-
17 grams described in subsection (c).

18 (c) PROGRAMS.—

19 (1) MEMBRANE TECHNOLOGY RESEARCH.—The
20 Secretary, in consultation with other appropriate
21 agencies, shall support a civilian research program
22 to develop advanced membrane technology that is
23 used in the separation of gases from applications, in-
24 cluding those that—

1 (A) pull off constituent gases that lower
2 the Btu content of natural gas; or

3 (B) pull gases from landfills and separate
4 out methane.

5 (2) HELIUM SEPARATION TECHNOLOGY.—The
6 Secretary shall support a research program to de-
7 velop technologies for separating, gathering, and
8 processing helium in low concentrations that occurs
9 naturally in geologic reservoirs or formations, includ-
10 ing low-Btu gas production streams.

11 (3) INDUSTRIAL HELIUM PROGRAM.—The Sec-
12 retary, working through the Industrial Technologies
13 Program of the Department of Energy, shall support
14 a research program—

15 (A) to develop technologies for recycling,
16 reprocessing, and reusing helium; and

17 (B) to develop industrial gathering tech-
18 nologies to capture helium from other chemical
19 processing, including ammonia processing.

20 (d) INCENTIVES FOR INNOVATIVE TECHNOLOGIES.—
21 Section 1703(b) of the Energy Policy Act of 2005 (42
22 U.S.C. 16513(b)) is amended by adding at the end the
23 following:

1 “(11) Low-Btu gas (as defined in section
2 425(a) of the American Clean Energy Leadership
3 Act of 2009) and helium gas projects.”.

4 **SEC. 426. OFFICE OF ARCTIC ENERGY.**

5 (a) IN GENERAL.—Title II of the Department of En-
6 ergy Organization Act (42 U.S.C. 7131 et seq.) is amend-
7 ed by adding at the end the following:

8 **“SEC. 218. OFFICE OF ARCTIC ENERGY.**

9 “(a) ESTABLISHMENT.—The Secretary may establish
10 within the Department an Office of Arctic Energy (re-
11 ferred to in this section as the ‘Office’).

12 “(b) PURPOSES.—The purposes of the Office shall
13 be—

14 “(1) to promote research, development, and de-
15 ployment of electric power technology that is cost-ef-
16 fective and especially well suited to meet the needs
17 of rural and remote regions of the United States, es-
18 pecially regions in which permafrost is present or lo-
19 cated nearby;

20 “(2) to promote research, development, and de-
21 ployment in regions described in paragraph (1) of—

22 “(A) enhanced oil recovery technology, in-
23 cluding heavy oil recovery, reinjection of carbon,
24 and extended reach drilling technologies;

1 “(B) gas-to-liquids technology and lique-
2 fied natural gas (including associated transpor-
3 tation systems);

4 “(C) small hydroelectric facilities, river
5 turbines, and tidal power; and

6 “(D) natural gas hydrates, coal bed meth-
7 ane, and shallow bed natural gas; and

8 “(3) to promote research, development, and de-
9 ployment in those regions of cold weather of alter-
10 native energy research, including wind, geothermal,
11 fuel cells, biomass, ocean hydrokinetic energy, and
12 solar energy.

13 “(c) LOCATION.—The Secretary shall locate the Of-
14 fice at an institution of higher education with expertise
15 and experience in the matters described in subsection (b).

16 “(d) ANNUAL REPORTS.—The Secretary shall submit
17 to Congress an annual report that describes the research
18 program that is proposed to carry out subsection (b)(3).

19 “(e) AUTHORIZATION OF APPROPRIATIONS.—There
20 are authorized to be appropriated to the Secretary to carry
21 out this section—

22 “(1) \$15,000,000 for fiscal year 2010;

23 “(2) \$20,000,000 for fiscal year 2011; and

24 “(3) \$22,500,000 for fiscal year 2012 and each
25 fiscal year thereafter.”.

1 (b) CONFORMING AMENDMENTS.—

2 (1) Section 3197 of the Floyd D. Spence Na-
3 tional Defense Authorization Act for Fiscal Year
4 2001 (42 U.S.C. 7144d) is repealed.

5 (2) The table of contents in the first section of
6 the Department of Energy Organization Act (42
7 U.S.C. 7101) is amended by adding at the end of
8 the items relating to title II the following:

“Sec. 218. Office of Arctic Energy.”.

9 **SEC. 427. ULTRA-DEEPWATER AND UNCONVENTIONAL NAT-**
10 **URAL GAS AND OTHER PETROLEUM RE-**
11 **SOURCES PROGRAM.**

12 (a) PROGRAM.—Section 999A(a) of the Energy Pol-
13 icy Act of 2005 (42 U.S.C. 16371(a)) is amended—

14 (1) by striking “The Secretary” and inserting
15 the following:

16 “(1) ESTABLISHMENT.—The Secretary”; and

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

18 “(2) NAME.—The program established under
19 this section shall be known as the ‘Unconventional
20 Domestic Natural Gas and Other Petroleum Re-
21 sources Program’.”.

22 (b) PURPOSES.—Section 999A of the Energy Policy
23 Act of 2005 (42 U.S.C. 16371) is amended by adding at
24 the end the following:

1 “(f) PURPOSES.—In carrying out the program au-
2 thORIZED by this subtitle, the Secretary shall seek to estab-
3 lish partnerships with research performers in institutions
4 of higher education and the private sector to undertake
5 research and development not likely otherwise to be under-
6 taken in the absence of support from the program.”.

7 (c) ANNUAL PLAN.—Section 999B(e)(3) of the En-
8 ergy Policy Act of 2005 (42 U.S.C. 16372(e)(3)) is
9 amended by striking “The Secretary” and inserting “Not
10 later than February 1 of each year, the Secretary”.

11 (d) FORM OF AWARD.—Section 999B(f) of the En-
12 ergy Policy Act of 2005 (42 U.S.C. 16372(f)) is amended
13 by adding at the end the following:

14 “(4) FORM OF AWARD.—The program consor-
15 tium may make awards in the form of grants, con-
16 tracts, cooperative agreements, or other trans-
17 actions.”.

18 (e) EXTENSION.—Section 999F of the Energy Policy
19 Act of 2005 (42 U.S.C. 16376) is amended by striking
20 “2014” and inserting “2017”.

21 (f) DEFINITION OF PROGRAM ADMINISTRATION
22 FUNDS.—Section 999G(3) of the Energy Policy Act of
23 2005 (42 U.S.C. 16377(3)) is amended by inserting “the
24 greater of \$4,000,000 or” after “not to exceed”.

1 (g) FUNDING.—Section 999H(e) of the Energy Pol-
2 icy Act of 2005 (42 U.S.C. 16378(e)) is amended by strik-
3 ing “\$100,000,000” and inserting “\$350,000,000”.

4 **Subtitle D—Energy Workforce** 5 **Development**

6 **SEC. 431. BEST PRACTICES FOR ENERGY CAREER ACAD-** 7 **EMIES.**

8 Section 3164 of the Department of Energy Science
9 Education Enhancement Act (42 U.S.C. 7381a) is amend-
10 ed—

11 (1) by redesignating subsections (e) through (f)
12 as subsections (d) through (g), respectively; and

13 (2) by inserting after subsection (b) the fol-
14 lowing:

15 “(c) ENERGY CAREER ACADEMIES.—The Director of
16 Science, Engineering, and Mathematics Education shall
17 disseminate best practices for career pathway programs
18 at public secondary schools that—

19 “(1) prepare students for careers in the energy
20 technology industry (as defined in section 1101 of
21 the Energy Policy Act of 2005 (42 U.S.C. 16411);
22 and

23 “(2) provide sufficient training to allow acad-
24 emy graduates to secure entry-level employment or
25 apprenticeships in the energy technology industry.”.

1 **SEC. 432. ENERGY CAREER ACADEMIES.**

2 The Department of Energy Science Education En-
3 hancement Act is amended—

4 (1) by redesignating sections 3168 and 3169
5 (42 U.S.C. 7381d, 7381e) as sections 3169 and
6 3170, respectively; and

7 (2) by inserting after section 3167 (42 U.S.C.
8 7381e-1) the following:

9 **“SEC. 3168. ENERGY CAREER ACADEMIES.**

10 “(a) PURPOSE.—The purpose of this section is to es-
11 tablish a program of grants to State educational agencies
12 to help local educational agencies create or expand energy
13 career academies.

14 “(b) DEFINITIONS.—In this section:

15 “(1) COMMUNITY COLLEGE.—The term ‘com-
16 munity college’ means—

17 “(A) a junior or community college (as de-
18 fined in section 312(f) of the Higher Education
19 Act of 1965 (20 U.S.C. 1058(f)); and

20 “(B) an institution of higher education at
21 which more than 35 percent of all degrees are
22 awarded at the 2-year level or below.

23 “(2) DIRECTOR.—The term ‘Director’ means
24 the Director of Science, Engineering, and Mathe-
25 matics Education.

1 “(3) ENERGY CAREER ACADEMY.—The term
2 ‘energy career academy’ means a public secondary
3 school that meets the best practices determined by
4 the Director under section 3164(c).

5 “(4) LOCAL EDUCATIONAL AGENCY.—The term
6 ‘local educational agency’ has the meaning given the
7 term in section 9101 of the Elementary and Sec-
8 ondary Education Act of 1965 (20 U.S.C. 7801).

9 “(5) SECONDARY SCHOOL.—The term ‘sec-
10 ondary school’ has the meaning given the term in
11 section 9101 of the Elementary and Secondary Edu-
12 cation Act of 1965 (20 U.S.C. 7801).

13 “(6) STATE EDUCATIONAL AGENCY.—The term
14 ‘State educational agency’ has the meaning given the
15 term in section 9101 of the Elementary and Sec-
16 ondary Education Act of 1965 (20 U.S.C. 7801).

17 “(c) GRANTS.—From the amounts made available
18 under subsection (h), the Secretary, acting through the
19 Director and in consultation with the Secretary of Labor,
20 shall award renewable 5-year grants to State educational
21 agencies on a competitive basis, to provide assistance to
22 local educational agencies for the costs of establishing or
23 expanding energy career academies.

24 “(d) FEDERAL AND NON-FEDERAL SHARES.—

1 “(1) FEDERAL SHARE.—The Federal share of
2 the costs described in subsection (c) shall not exceed
3 33 percent.

4 “(2) NON-FEDERAL SHARE.—The non-Federal
5 share of the costs described in subsection (c) shall
6 be—

7 “(A) not less than 67 percent; and

8 “(B) provided from non-Federal sources,
9 in cash or in kind, fairly evaluated, including
10 services.

11 “(3) MAINTENANCE OF EFFORT.—A State edu-
12 cational agency shall provide assurances to the Sec-
13 retary that funds provided to the State under this
14 section will be used only to supplement, not to sup-
15 plant, the amount of Federal, State, and local funds
16 otherwise expended for activities covered by this sec-
17 tion in the State.

18 “(e) APPLICATION.—To be eligible to receive a grant
19 under this section, a State educational agency shall submit
20 to the Director an application at such time, in such man-
21 ner, and containing such information as the Director may
22 require that describes—

23 “(1) the process by which, and selection criteria
24 with which, the State educational agency will select

1 and designate a public secondary school to host the
2 proposed energy career academy;

3 “(2) how the State educational agency will en-
4 sure that funds made available under this section
5 are used to establish or expand an energy career
6 academy;

7 “(3) how the State educational agency will use
8 technical assistance and support from the Depart-
9 ment, industry partners, community colleges, and
10 other entities with experience and expertise in en-
11 ergy workforce training;

12 “(4) the curricula and materials to be used in
13 the energy career academy;

14 “(5) the availability of funds from non-Federal
15 sources for the costs of the activities authorized
16 under this section; and

17 “(6) a plan to sustain the program without
18 Federal funding.

19 “(f) DISTRIBUTION.—In awarding grants under this
20 section, the Director shall ensure a wide, equitable dis-
21 tribution of grants among regions of the United States.

22 “(g) EVALUATION AND REPORT.—

23 “(1) EVALUATION.—Each State educational
24 agency that receives a grant under this section shall
25 develop and carry out an evaluation and account-

1 ability plan for the activities funded through the
2 grant that measures the impact of the activities, in-
3 cluding measurable objectives for student academic
4 achievement, and job placement statistics for acad-
5 emy graduates.

6 “(2) REPORT TO DIRECTOR.—The State edu-
7 cational agency shall submit to the Director a report
8 describing the results of the evaluation and account-
9 ability plan.

10 “(3) REPORT TO CONGRESS.—Not later than 2
11 years after the date of enactment of the American
12 Clean Energy Leadership Act of 2009, the Director
13 shall submit a report describing the impact of the
14 activities assisted with funds made available under
15 this section to—

16 “(A) the Committee on Science and Tech-
17 nology of the House of Representatives;

18 “(B) the Committee on Energy and Com-
19 merce of the House of Representatives;

20 “(C) the Committee on Education and
21 Labor of the House of Representatives;

22 “(D) the Committee on Energy and Nat-
23 ural Resources of the Senate; and

24 “(E) the Committee on Health, Education,
25 Labor, and Pensions of the Senate.

1 “(h) AUTHORIZATION OF APPROPRIATIONS.—There
 2 are authorized to be appropriated to carry out this sec-
 3 tion—

4 “(1) \$14,000,000 for fiscal year 2009;

5 “(2) \$22,500,000 for fiscal year 2010; and

6 “(3) \$30,000,000 for fiscal year 2011.”.

7 **SEC. 433. ENERGY UTILITY TRADES PROGRAM FOR COMMU-**
 8 **NITY COLLEGES.**

9 The Protecting America’s Competitive Edge Through
 10 Energy Act (42 U.S.C. 16531 et seq.) is amended—

11 (1) by redesignating sections 5006 through
 12 5012 (42 U.S.C. 16534 through 16538) as sections
 13 5007 through 5013, respectively; and

14 (2) by inserting after section 5005 (42 U.S.C.
 15 16533) the following:

16 **“SEC. 5006. ENERGY UTILITY TRADES PROGRAM FOR COM-**
 17 **MUNITY COLLEGES.**

18 “(a) PURPOSE.—The purpose of this section is to ad-
 19 dress the decline in the number of qualified employees for
 20 the energy utility industry.

21 “(b) DEFINITION OF COMMUNITY COLLEGE.—In this
 22 section, the term ‘community college’ means—

23 “(1) a junior or community college (as defined
 24 in section 312(f) of the Higher Education Act of
 25 1965 (20 U.S.C. 1058(f))); and

1 “(2) an institution of higher education at which
2 more than 35 percent of all degrees are awarded at
3 the 2-year level or below.

4 “(c) ESTABLISHMENT.—The Secretary shall estab-
5 lish, in accordance with this section, a program to expand
6 and enhance the educational capabilities of community col-
7 leges to prepare students for careers in trades relevant to
8 the energy utility industry.

9 “(d) GRANTS.—The Secretary shall award competi-
10 tive grants to community colleges that establish or expand
11 academic degree programs in the energy utility trades, in-
12 cluding technicians in the nuclear utilities industry.

13 “(e) PRIORITY.—In evaluating grants under this sec-
14 tion, the Secretary shall give priority to proposals that in-
15 volve existing or new partnerships with private industry
16 or other eligible energy utility entities or involve schools
17 with underserved populations, as determined by the Sec-
18 retary.

19 “(f) CRITERIA.—Criteria for a grant awarded under
20 this section shall be based on—

21 “(1) the potential to attract students to the
22 program;

23 “(2) the ability to offer hands-on learning op-
24 portunities (including internships and apprentice-
25 ship) in the energy utility sector;

1 “(3) a demonstrated commitment to partner
2 with secondary schools to promote careers in the en-
3 ergy utility industry; and

4 “(4) the long-term sustainability of the program
5 without Federal funding.

6 “(g) DURATION AND AMOUNT.—

7 “(1) DURATION.—A grant under this section
8 may be—

9 “(A) up to 5 years in duration; and

10 “(B) renewed subject to the criteria de-
11 scribed in subsection (f).

12 “(2) AMOUNT.—A community college that re-
13 ceives a grant under this section shall be eligible for
14 up to \$500,000 for each year of the grant period.

15 “(h) USE OF FUNDS.—A community college that re-
16 ceives a grant under this section may use the grant to—

17 “(1) recruit and retain new faculty;

18 “(2) develop core and specialized course con-
19 tent;

20 “(3) encourage collaboration between faculty
21 and industry partners;

22 “(4) support outreach efforts to recruit stu-
23 dents; and

24 “(5) provide scholarships to participating stu-
25 dents.”.

1 **SEC. 434. STUDENT AWARENESS OF ENERGY CAREER OP-**
2 **PORTUNITIES.**

3 Section 1101 of the Energy Policy Act of 2005 (42
4 U.S.C. 16411) is amended—

5 (1) in subsection (a)—

6 (A) by redesignating paragraphs (1) and
7 (2) as paragraphs (2) and (3), respectively; and

8 (B) by inserting before paragraph (2) (as
9 so redesignated) the following:

10 “(1) **COMMUNITY COLLEGE.**—The term ‘com-
11 munity college’ means—

12 “(A) a junior or community college (as de-
13 fined in section 312(f) of the Higher Education
14 Act of 1965 (20 U.S.C. 1058(f)); and

15 “(B) an institution of higher education at
16 which more than 35 percent of all degrees are
17 awarded at the 2-year level or below.”;

18 (2) by redesignating subsection (d) as sub-
19 section (f); and

20 (3) by inserting after subsection (c) the fol-
21 lowing:

22 “(d) **CAREER COUNSELOR OUTREACH.**—The Sec-
23 retary, in consultation with the Secretary of Labor, shall
24 establish a program to communicate information collected
25 under subsection (b) on a nationwide basis to—

26 “(1) guidance counselors at secondary schools;

1 “(2) career development offices at community
2 colleges and institutions of higher education; and

3 “(3) principals and district superintendents.

4 “(e) STUDENT AWARENESS OF ENERGY CAREER OP-
5 PORTUNITIES.—The Secretary shall create and maintain
6 a website, and interface with Federal Trio programs,
7 GEAR UP programs, or similar programs, to provide sec-
8 ondary and postsecondary school students with informa-
9 tion on careers in energy technology industries, includ-
10 ing—

11 “(1) career information and job descriptions for
12 the energy technology industry;

13 “(2) projected workforce shortages in the en-
14 ergy technology industry;

15 “(3) a comprehensive listing and description of
16 institutions of higher education providing degrees
17 with a specific focus on the energy technology indus-
18 try;

19 “(4) a comprehensive listing and description of
20 community colleges and career training programs
21 with a particular focus on the energy technology in-
22 dustry; and

23 “(5) sources of scholarships and other forms of
24 financial aid with particular relevance to the energy
25 technology industry.”.

1 **SEC. 435. COORDINATION OF ENERGY WORKFORCE TRAIN-**
2 **ING PROGRAMS.**

3 (a) IN GENERAL.—Not later than 1 year after the
4 date of enactment of this Act, the Director of the Office
5 of Science and Technology Policy shall submit to Congress
6 a report that surveys energy workforce training programs
7 funded by Federal agencies, including—

8 (1) programs for training skilled technical per-
9 sonnel (as defined in section 1101(a) of the Energy
10 Policy Act of 2005 (42 U.S.C. 16411(a)));

11 (2) undergraduate and graduate degree pro-
12 grams with course curricula related to the produc-
13 tion, transmission, and use of energy; and

14 (3) secondary school programs with course cur-
15 ricula relating to the production, transmission, and
16 use of energy.

17 (b) COORDINATION PLAN.—The plan shall provide—

18 (1) a coordinated Federal strategy for sup-
19 porting the training of a domestic workforce to sup-
20 port the production, transmission, and use of energy
21 in the United States; and

22 (2) a 5-year budget profile to support the strat-
23 egy.

24 **SEC. 436. DIRECT HIRE AUTHORITY.**

25 (a) IN GENERAL.—Notwithstanding sections 3304
26 and 3309 through 3318 of title 5, United States Code,

1 the Secretary may, upon a determination that there is a
2 severe shortage of candidates or a critical hiring need for
3 particular positions, recruit and directly appoint highly
4 qualified scientists, engineers, or critical technical per-
5 sonnel into the competitive service.

6 (b) EXCEPTION.—The authority granted under sub-
7 section (a) shall not apply to positions in the excepted
8 service or the Senior Executive Service.

9 (c) REQUIREMENTS.—In exercising the authority
10 granted under subsection (a), the Secretary shall ensure
11 that any action taken by the Secretary—

12 (1) is consistent with the merit principles of
13 section 2301 of title 5, United States Code; and

14 (2) complies with the public notice requirements
15 of section 3327 of title 5, United States Code.

16 (d) TERMINATION OF EFFECTIVENESS.—The au-
17 thority provided by this section terminates effective on the
18 date that is 2 years after the date of enactment of this
19 Act.

20 **SEC. 437. CRITICAL PAY AUTHORITY.**

21 (a) IN GENERAL.—Notwithstanding section 5377 of
22 title 5, United States Code, and without regard to the pro-
23 visions of that title governing appointments in the com-
24 petitive service or the Senior Executive Service and chap-
25 ters 51 and 53 of that title (relating to classification and

1 pay rates), the Secretary may establish, fix the compensa-
2 tion of, and appoint individuals to critical positions needed
3 to carry out the functions of the Department of Energy,
4 if the Secretary certifies that—

5 (1) the positions—

6 (A) require expertise of an extremely high
7 level in a scientific or technical field; and

8 (B) the Department of Energy would not
9 successfully accomplish an important mission
10 without such an individual; and

11 (2) exercise of the authority is necessary to re-
12 cruit an individual exceptionally well qualified for
13 the position.

14 (b) LIMITATIONS.—The authority granted under sub-
15 section (a) shall be subject to the following conditions:

16 (1) The number of critical positions authorized
17 by subsection (a) may not exceed 40 at any 1 time
18 in the Department of Energy.

19 (2) The term of an appointment under sub-
20 section (a) may not exceed 4 years.

21 (3) An individual appointed under subsection
22 (a) may not have been a Department of Energy em-
23 ployee within the 2 years prior to the date of ap-
24 pointment.

1 (4) Total annual compensation for any indi-
2 vidual appointed under subsection (a) may not ex-
3 ceed the highest total annual compensation payable
4 at the rate determined under section 104 of title 3,
5 United States Code.

6 (5) An individual appointed under subsection
7 (a) may not be considered to be an employee for
8 purposes of subchapter II of chapter 75 of title 5,
9 United States Code.

10 (c) NOTIFICATION.—Each year, the Secretary shall
11 submit to Congress a notification that lists each individual
12 appointed under this section.

13 **SEC. 438. REEMPLOYMENT OF CIVILIAN RETIREES.**

14 (a) IN GENERAL.—Notwithstanding part 553 of title
15 5, Code of Federal Regulations (relating to reemployment
16 of civilian retirees to meet exceptional employment needs),
17 or successor regulations, the Secretary may approve the
18 reemployment of an individual to a particular position
19 without reduction or termination of annuity if the hiring
20 of the individual is necessary to carry out a critical func-
21 tion of the Department of Energy for which suitably quali-
22 fied candidates do not exist.

23 (b) LIMITATIONS.—An annuitant hired with full sal-
24 ary and annuities under the authority granted by sub-
25 section (a)—

1 (2) primarily awards associate degrees.

2 (b) WORKFORCE TRAINING AND EDUCATION IN SUS-
3 TAINABLE ENERGY.—From funds made available under
4 subsection (d), the Secretary of Energy, in coordination
5 with the Secretary of Labor, shall carry out a joint sus-
6 tainable energy workforce training and education pro-
7 gram. In carrying out the program, the Secretary of En-
8 ergy, in coordination with the Secretary of Labor, shall
9 award grants to community colleges to provide workforce
10 training and education in industries and practices such
11 as—

12 (1) alternative energy, including wind, geo-
13 thermal, biomass, ocean hydrokinetic energy, and
14 solar energy;

15 (2) energy efficient construction, retrofitting,
16 and design;

17 (3) sustainable energy technologies, including
18 chemical technology, nanotechnology, and electrical
19 technology;

20 (4) water and energy conservation;

21 (5) recycling and waste reduction;

22 (6) sustainable agriculture and farming; and

23 (7) nuclear energy technology.

24 (c) AWARD CONSIDERATIONS.—Of the funds made
25 available under subsection (d) for a fiscal year, not less

1 than one-half of such funds shall be awarded to commu-
 2 nity colleges with existing (as of the date of the award)
 3 sustainability programs that lead to certificates or degrees
 4 in 1 or more of the industries and practices described in
 5 paragraphs (1) through (6) of subsection (b).

6 (d) AUTHORIZATION OF APPROPRIATIONS.—There is
 7 authorized to be appropriated to carry out this section
 8 \$100,000,000 for each of the fiscal years 2010 through
 9 2015.

10 **Subtitle E—Strengthening Edu-**
 11 **cation and Training in the Sub-**
 12 **surface Geosciences and Engi-**
 13 **neering for Energy Develop-**
 14 **ment**

15 **SEC. 451. DEFINITIONS.**

16 In this subtitle:

17 (1) ABET.—The term “ABET” means ABET,
 18 Inc., a nationally recognized accreditation organiza-
 19 tion for college and university engineering programs.

20 (2) ADVISORY COMMITTEE.—The term “Advi-
 21 sory Committee” means the Advisory Committee es-
 22 tablished under section 457.

23 (3) CONSORTIUM.—The term “consortium”
 24 means a research and educational partnership that
 25 may include—

- 1 (A) institutions of higher education;
- 2 (B) professional societies or foundations;
- 3 (C) industry associations;
- 4 (D) individual business entities;
- 5 (E) State agencies;
- 6 (F) federally recognized multistate com-
- 7 missions and regional organizations;
- 8 (G) Federal agencies;
- 9 (H) national laboratories;
- 10 (I) nongovernmental organizations; and
- 11 (J) individuals.

12 (4) INSTITUTION OF HIGHER EDUCATION.—The
13 term “institution of higher education” has the
14 meaning given the term in section 101(a) of the
15 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

16 (5) MINORITY-SERVING INSTITUTION.—The
17 term “minority-serving institution” means—

18 (A) a part B institution (as defined in sec-
19 tion 322 of the Higher Education Act of 1965
20 (20 U.S.C. 1061));

21 (B) a Hispanic-serving institution (as de-
22 fined in section 502(a) of that Act (20 U.S.C.
23 1101a(a)));

24 (C) a Tribal College or University;

1 (D) an Alaska Native-serving institution
2 (as defined in section 317(b) of that Act (20
3 U.S.C. 1059d(b)));

4 (E) a Native Hawaiian-serving institution
5 (as defined in section 317(b) of that Act (20
6 U.S.C. 1059d(b))); and

7 (F) a Native American-serving, nontribal
8 institution (as defined in section 319(b) of that
9 Act (20 U.S.C. 1059f(b))).

10 (6) RECOGNIZED PROGRAM.—The term “recog-
11 nized program” means a program at an institution
12 of higher education that is—

13 (A) an engineering program with sub-
14 surface applications that is—

15 (i) accredited by the Engineering Ac-
16 creditation Committee or Technology Ac-
17 creditation Commission of ABET; and

18 (ii) focused on petroleum or natural
19 gas production, ground water, geothermal
20 resources, the production of mineral re-
21 sources, the development of permanent un-
22 derground workings, and the long-term
23 storage of carbon dioxide in subsurface
24 areas, as demonstrated by the curriculum
25 and the expertise of its faculty; or

1 (B) a program in geology or geophysics
2 that—

3 (i) includes undergraduate or grad-
4 uate programs of research and education
5 applicable to energy, ground water, and
6 mineral development;

7 (ii) includes programs of research or
8 education in exploration for, and produc-
9 tion of, such deposits and resources; and

10 (iii) the Secretary, after review by the
11 Advisory Committee of the program and
12 its outcomes, determines to be appropriate
13 for funding under this subtitle.

14 (7) SECRETARY.—The term “Secretary” means
15 the Secretary of the Interior.

16 (8) TRIBAL COLLEGE OR UNIVERSITY.—The
17 term “Tribal College or University” has the meaning
18 given the term in section 316(b) of the Higher Edu-
19 cation Act of 1965 (20 U.S.C. 1059c(b)).

20 **SEC. 452. POLICY.**

21 It is the policy of the United States to maintain and
22 expand the human capital needed to preserve and foster
23 the security of economically viable clean energy, ground
24 water, and mineral resources of the United States,
25 through financial assistance for science and technology

1 programs that educate, train, and retrain the personnel
2 needed for United States energy, ground water, and min-
3 eral resources security.

4 **SEC. 453. RESEARCH PERSONNEL AND PROGRAMS.**

5 (a) IN GENERAL.—In support of the policy described
6 in section 452, the Secretary shall provide research funds
7 to institutions of higher education to assist recognized pro-
8 grams in subsurface geosciences and engineering, includ-
9 ing programs in energy (including geological carbon stor-
10 age), petroleum, ground water, economic geology, mining,
11 and mineral and geological engineering education and re-
12 search.

13 (b) CONDITIONS.—All funds provided under sub-
14 section (a) shall be—

15 (1) directed only to programs recognized by the
16 Secretary; and

17 (2) subject to this subtitle.

18 (c) TYPES OF RESEARCH.—Research conducted
19 using funds provided under subsection (a) shall include
20 studies and research—

21 (1) to enhance basic science and engineering;

22 (2) to provide data to test and improve sci-
23 entific or engineering hypotheses; and

24 (3) to determine scientific or engineering feasi-
25 bility to enhance discovery, development, and pro-

1 duction of energy, ground water, and mineral re-
2 sources while minimizing environmental impacts.

3 (d) DURATION OF PROGRAM; NUMBER OF STU-
4 DENTS.—Each institution of higher education receiving
5 funds under subsection (a) shall—

6 (1) maintain the program for which the funds
7 are provided for a period of at least 10 years begin-
8 ning on the date of the last receipt of those funds;
9 and

10 (2) take steps described in the application for
11 research funding submitted to the Secretary to in-
12 crease the number of undergraduate students en-
13 rolled in and completing the programs of study in
14 recognized programs with subsurface applications.

15 (e) MINORITY-SERVING INSTITUTIONS.—The Sec-
16 retary shall give particular consideration to minority-serv-
17 ing institutions that have an established recognized pro-
18 gram or that propose to establish a recognized program,
19 including by—

20 (1) assigning appropriate employees to serve as
21 mentors and adjunct faculty;

22 (2) transferring appropriate equipment to the
23 programs; and

1 (3) allowing faculty or students at those institu-
2 tions free access to appropriate Department train-
3 ing.

4 (f) CONSORTIA.—Where appropriate, the Secretary
5 may make funds available to consortia to conduct projects
6 of broad application that could not otherwise be under-
7 taken, including national and regional projects in sub-
8 surface geosciences and engineering, on the condition that
9 funds provided to any consortium shall be given only to
10 a single eligible institution of higher education with a rec-
11 ognized program which shall be responsible for distribu-
12 tion, monitoring, and reporting on the activities of the con-
13 sortium, as required by the Secretary.

14 **SEC. 454. SCHOLARSHIPS AND FELLOWSHIPS.**

15 (a) IN GENERAL.—The Secretary shall provide funds
16 to institutions of higher education with recognized pro-
17 grams for the purpose of providing merit-based scholar-
18 ships for undergraduate geoscience or engineering edu-
19 cation with general subsurface applications, and graduate
20 fellowships in the applied geosciences and subsurface engi-
21 neering, including applications relating to—

22 (1) petroleum, chemical, mining, geological
23 (such as geological carbon storage), geophysical,
24 ground water, or mineral engineering;

25 (2) petroleum geology;

- 1 (3) geothermal geology;
- 2 (4) mining and economic geology;
- 3 (5) petroleum, ground water, and mining geo-
- 4 physics;
- 5 (6) mineral economics;
- 6 (7) hydrogeology or ground water science; or
- 7 (8) produced water treatment and reuse.

8 (b) VETERANS AND SERVICE MEMBERS.—In award-

9 ing scholarships and fellowships under this section, an in-

10 stitution of higher education shall give preference to appli-

11 cations from veterans and service members who have re-

12 ceived or will receive the Afghanistan Campaign Medal or

13 the Iraq Campaign Medal as authorized by Public Law

14 108–234 (10 U.S.C. 1121 note; 118 Stat. 655) and Exec-

15 utive Order No. 13363.

16 (c) REQUIREMENTS FOR RECEIPT OF SCHOLARSHIP

17 OR FELLOWSHIP.—To receive a scholarship or a graduate

18 fellowship, an individual student shall—

- 19 (1) be a lawful permanent resident of the
- 20 United States or a United States citizen or national;
- 21 and
- 22 (2) agree in writing to complete a course of
- 23 studies and receive a degree in a recognized program
- 24 in an area specified in subsection (a).

1 (d) REQUIREMENTS FOR RETENTION OF SCHOLAR-
2 SHIP OR FELLOWSHIP.—

3 (1) IN GENERAL.—To retain a scholarship or
4 graduate fellowship awarded under this section, an
5 individual shall, as determined by the applicable in-
6 stitution of higher education—

7 (A) continue in 1 of the courses of studies
8 authorized by this section; and

9 (B) remain in good academic standing.

10 (2) REINSTATEMENT.—An institution of higher
11 education may allow for reinstatement of a scholar-
12 ship or graduate fellowship in a case in which an in-
13 dividual failed to maintain good academic standing
14 but subsequently regained such standing.

15 (e) APPLICATION OF INSTITUTION OF HIGHER EDU-
16 CATION.—An institution of higher education seeking funds
17 under this section shall describe, in the application of the
18 institution of higher education submitted to the Secretary
19 for the funding—

20 (1) the number of students that would be
21 awarded scholarships or fellowships if the application
22 were to be approved;

23 (2) the manner in which those students would
24 be selected; and

1 (3) the ways in which the requirements of this
2 section would be enforced.

3 **SEC. 455. CAREER TECHNICAL AND COMMUNITY COLLEGE**
4 **EDUCATION.**

5 (a) IN GENERAL.—The Secretary shall support pro-
6 grams in subsurface geosciences and engineering that—

7 (1) are focused on technology or skill develop-
8 ment and the use of that technology or skills in en-
9 ergy, ground water science or hydrogeology, and
10 mineral production, and related maintenance, oper-
11 ational safety, or energy infrastructure protection
12 and security;

13 (2) prepare students for advanced or super-
14 visory roles in the geothermal, petroleum, mining,
15 geological carbon storage, ground water, or mineral
16 mining industries;

17 (3) grant an associate's degree, a certificate, or
18 a baccalaureate degree; and

19 (4) prepare students for further higher edu-
20 cation in the recognized programs.

21 (b) ELIGIBLE PROGRAMS.—

22 (1) IN GENERAL.—Programs that are eligible to
23 receive support under this section are those that
24 provide training for individuals seeking to enter the
25 industries described in subsection (a)(2), such as—

- 1 (A) joint apprenticeship programs;
- 2 (B) internships in industry, Federal, State,
3 or tribal offices;
- 4 (C) research experiences at national lab-
5 oratories authorized by Federal law; and
- 6 (D) other programs at institutions of high-
7 er education (including community colleges).

8 (2) CONSIDERATION.—The Secretary shall give
9 particular consideration to supporting programs that
10 provide training for a progressive career path in the
11 industries described in subsection (a)(2).

12 (3) ESSENTIAL SUPPORT.—The Secretary, after
13 consultation with the Advisory Committee, may offer
14 support to programs that grant degrees or certifi-
15 cates in programs that provide training in disciplines
16 that provide essential support for the industries de-
17 scribed in subsection (a)(2), including the disciplines
18 listed in paragraph (4), even if those programs are
19 not purposely designed to provide personnel for the
20 industries described in subsection (a)(2).

21 (4) DISCIPLINES.—The disciplines referred to
22 in paragraph (3) are—

- 23 (A) power transmission and operation;
- 24 (B) pipeline construction and operation;

- 1 (C) maintenance and maintenance logis-
2 tics;
3 (D) construction;
4 (E) manufacturing;
5 (F) transportation and warehousing;
6 (G) technical support activities (including
7 data collection, reduction, and analysis) and
8 laboratory support; and
9 (H) produced water treatment or distribu-
10 tion.

11 (c) ADDITIONAL REQUIREMENTS.—An institution of
12 higher education that receives funds under this section—

13 (1) shall demonstrate to the Secretary evi-
14 dence—

15 (A) of an institutional commitment for the
16 purposes of career technical education; and

17 (B) that the institution of higher education
18 has received or will receive industry cooperation
19 in the form of equipment, employee time, or do-
20 nations of funds to support the activities car-
21 ried out under this section;

22 (2) shall agree to maintain the programs for
23 which the funding is sought for a period of 10 years
24 beginning on the date on which the institution of
25 higher education receives the funds, unless the Sec-

1 retary finds that a shorter period of time is appro-
2 priate for the local labor market or is required by
3 State authorities; and

4 (3) may combine the funds with State funds,
5 and other Federal funds as allowed by applicable
6 law, to carry out programs described in this section,
7 on the condition that the use of funds received under
8 this section is reported to the Secretary not less
9 than annually.

10 (d) ADVICE.—The Secretary shall seek the advice of
11 the Advisory Committee in determining the criteria used
12 to carry out this section.

13 **SEC. 456. USE OF FUNDS BY INSTITUTIONS.**

14 (a) COST-SHARING.—The Secretary—

15 (1) shall not require cost-sharing by a non-Fed-
16 eral source for—

17 (A) any research activity that is of a basic
18 or fundamental nature, as determined by the
19 appropriate officer of the Department of the In-
20 terior; or

21 (B) any scholarship or fellowship program;
22 and

23 (2) shall require appropriate cost-sharing for
24 research and development activities that are of an

1 applied, demonstration, or commercial nature, as so
2 determined.

3 (b) PROHIBITED USES OF FUNDS.—No funds made
4 available under this subtitle shall be applied to—

5 (1) the acquisition by purchase or lease of any
6 land or interest in land; or

7 (2) the rental, purchase, construction, preserva-
8 tion, or repair of any building.

9 (c) MAINTENANCE AND UPGRADING.—Funds made
10 available under this subtitle may be used—

11 (1) with the express approval of the Secretary,
12 for proposals to maintain or upgrade existing labora-
13 tories, laboratory equipment, or field equipment re-
14 lated to the funded research; and

15 (2) for maintaining and upgrading mines, oil
16 and gas drilling rigs, and other appropriate equip-
17 ment that are used for undergraduate and graduate
18 training and worker safety training and that are
19 owned by—

20 (A) a recognized program funded under
21 this subtitle; or

22 (B) by the institution of higher education
23 in which the recognized program is located.

24 (d) OFFICER.—Each institution of higher education
25 that receives funds under this subtitle shall have an officer

1 appointed by the governing authority of the institution of
2 higher education who shall—

3 (1) receive and account for all funds paid under
4 this subtitle; and

5 (2) submit to the Secretary, on or before the
6 first day of September of each year, an annual re-
7 port that includes—

8 (A) a description of work accomplished and
9 the status of projects underway, together with
10 a detailed statement of the amounts received
11 under this subtitle, during the preceding fiscal
12 year; and

13 (B) an accounting of amounts disbursed on
14 schedules prescribed by the Secretary.

15 (e) PUBLIC AVAILABILITY OF INFORMATION.—All
16 uses, products, processes, and other developments result-
17 ing from any research, demonstration, or experiment fund-
18 ed in whole or in part under this subtitle shall be made
19 available promptly to the general public, subject to—

20 (1) such exceptions or limitations as the Sec-
21 retary may determine to be necessary in the interest
22 of national security; and

23 (2) the applicable Federal law governing pat-
24 ents.

1 **SEC. 457. ADVISORY COMMITTEE.**

2 (a) ESTABLISHMENT OF ADVISORY COMMITTEE.—

3 (1) IN GENERAL.—The Secretary shall establish
4 an Advisory Committee on Geosciences and
5 Geoengineering Education to advise the Secretary in
6 carrying out this subtitle.

7 (2) MEMBERSHIP.—

8 (A) VOTING MEMBERS.—The Advisory
9 Committee shall be composed of 19 voting
10 members, including—

11 (i) the Deputy Secretary of the Inte-
12 rior who shall serve as the Chairperson of
13 the Advisory Committee; and

14 (ii) not more than 18 additional indi-
15 viduals, appointed by the Secretary, in con-
16 sultation with interested parties, who are
17 knowledgeable in the fields of energy, pe-
18 troleum, geothermal, ground water, min-
19 ing, and mineral resources research, in-
20 cluding—

21 (I) 2 individuals who are univer-
22 sity leaders from an institution of
23 higher education with at least 1 recog-
24 nized program;

25 (II) 1 individual who is a commu-
26 nity or technical college administrator;

- 1 (III) 1 individual who is a Tribal
2 College or University administrator;
- 3 (IV) 1 individual who is a career
4 technical education educator;
- 5 (V) 5 individuals who are rep-
6 resentatives equally distributed from
7 the energy, mining, and aggregate or
8 ground water industries;
- 9 (VI) 1 individual who is a work-
10 ing miner;
- 11 (VII) 1 individual who is a work-
12 ing oilfield worker;
- 13 (VIII) 1 individual who is a rep-
14 resentative of the Interstate Oil and
15 Gas Compact Commission;
- 16 (IX) 1 individual who is a rep-
17 resentative of the Interstate Mining
18 Compact Commission;
- 19 (X) 1 individual who is a rep-
20 resentative of State geologists;
- 21 (XI) 2 individuals who are rep-
22 resentatives of the general public; and
- 23 (XII) 1 individual who is an ad-
24 ministrator of a part B institution (as
25 defined in section 322 of the Higher

1 Education Act of 1965 (20 U.S.C.
2 1061)).

3 (B) NONVOTING ADVISORS.—The Chair-
4 person of the Advisory Committee may have
5 present during meetings individuals who shall
6 serve as nonvoting, technical advisors to the
7 Advisory Committee, such as representatives of
8 Federal agencies with responsibility for—

9 (i) energy, ground water, and min-
10 erals resources management;

11 (ii) energy, ground water, and mineral
12 resource investigations;

13 (iii) energy, ground water, and min-
14 eral commodity information;

15 (iv) international trade in energy,
16 ground water, and mineral commodities;

17 (v) mining safety regulation and mine
18 safety research; and

19 (vi) research into the development,
20 production, and use of energy, ground
21 water, and mineral commodities.

22 (C) PROHIBITION ON FEDERAL GOVERN-
23 MENT EMPLOYMENT.—The member of the Ad-
24 visory Committee appointed under subpara-

1 graph (A)(ii) shall not be an employee of the
2 Federal Government.

3 (3) TERM; VACANCIES.—

4 (A) TERM.—Subject to subparagraph (B),
5 the term of a member the Advisory Committee
6 shall be 3 years.

7 (B) REAPPOINTMENT.—A member of the
8 Advisory Committee may be appointed for not
9 more than 2 3-year terms.

10 (C) VACANCIES.—A vacancy on the Advi-
11 sory Committee—

12 (i) shall not affect the powers of the
13 Advisory Committee; and

14 (ii) shall be filled in the same manner
15 as the original appointment was made.

16 (4) INITIAL MEETING.—Not later than 45 days
17 after the date on which all members of the Advisory
18 Committee have been appointed, the Advisory Com-
19 mittee shall hold the initial meeting of the Advisory
20 Committee.

21 (5) MEETINGS.—The Advisory Committee shall
22 meet at the call of the Chairperson but not less than
23 once per year.

24 (6) QUORUM.—A majority of the members of
25 the Advisory Committee shall constitute a quorum,

1 but a lesser number of members may hold meetings
2 and hearings.

3 (b) DUTIES.—The Advisory Committee—

4 (1) shall advise the Secretary on the develop-
5 ment and implementation of programs under this
6 subtitle;

7 (2) shall, following completion of the report re-
8 quired by section 385(c) of the Energy Policy Act of
9 2005 (Public Law 109–58; 119 Stat. 744)—

10 (A) consider the recommendations of the
11 report;

12 (B) formulate and recommend a national
13 plan for using the fiscal resources provided
14 under this subtitle; and

15 (C) submit the plan to the Secretary for
16 approval and use by the Secretary, as deter-
17 mined by the Secretary, in carrying out this
18 subtitle;

19 (3) shall make recommendations to the Sec-
20 retary regarding the long-term and short-term viabil-
21 ity of the faculty at schools with recognized pro-
22 grams; and

23 (4) may recommend the awarding of graduate
24 fellowships and postdoctoral fellowships to those stu-

1 dents who declare their intent to seek roles as future
2 faculty at the recognized programs.

3 (c) INFORMATION FROM FEDERAL AGENCIES.—

4 (1) IN GENERAL.—The Advisory Committee
5 may secure directly from a Federal agency such in-
6 formation as the Advisory Committee considers nec-
7 essary to carry out this subtitle.

8 (2) PROVISION OF INFORMATION.—On request
9 of the Chairperson of the Advisory Committee, the
10 head of the agency shall provide the information to
11 the Advisory Committee.

12 (d) ADVISORY COMMITTEE PERSONNEL MATTERS.—

13 (1) TRAVEL EXPENSES.—A member of the Ad-
14 visory Committee shall be allowed travel expenses,
15 including per diem in lieu of subsistence, at rates
16 authorized for an employee of an agency under sub-
17 chapter I of chapter 57 of title 5, United States
18 Code, while away from the home or regular place of
19 business of the member in the performance of the
20 duties of the Advisory Committee.

21 (2) DETAIL OF FEDERAL GOVERNMENT EM-
22 PLOYEES.—

23 (A) IN GENERAL.—An employee of the
24 Federal Government may be detailed to the Ad-
25 visory Committee without reimbursement.

1 (B) CIVIL SERVICE STATUS.—The detail of
2 the employee shall be without interruption or
3 loss of civil service status or privilege.

4 (3) PROCUREMENT OF TEMPORARY AND INTER-
5 MITTENT SERVICES.—The Chairperson of the Advi-
6 sory Committee may procure temporary and inter-
7 mittent services in accordance with section 3109(b)
8 of title 5, United States Code, at rates for individ-
9 uals that do not exceed the daily equivalent of the
10 annual rate of basic pay prescribed for level V of the
11 Executive Schedule under section 5316 of that title.

12 **SEC. 458. OFFICE; REGULATIONS.**

13 Not later than 1 year after the date of enactment
14 of this Act, the Secretary shall establish a separate office
15 to administer, and to promulgate such regulations as are
16 necessary to carry out, this subtitle.

17 **SEC. 459. AUTHORIZATION OF APPROPRIATIONS.**

18 There is authorized to be appropriated to carry out
19 this subtitle \$200,000,000 for each of fiscal years 2010
20 through 2020, to remain available until expended.

21 **SEC. 460. STUDY OF AVAILABILITY OF SKILLED WORKERS.**

22 Section 1830 of the Energy Policy Act of 2005 (Pub-
23 lic Law 109–58; 119 Stat. 1137) is amended to read as
24 follows:

1 **“SEC. 1830. STUDY OF AVAILABILITY OF SKILLED WORK-**
2 **ERS.**

3 “(a) IN GENERAL.—The Secretary of the Interior, in
4 cooperation with the Secretary of Labor, shall enter into
5 an arrangement with the National Academies under which
6 the National Academies shall conduct a study of the short-
7 term and long-term availability of skilled workers to meet
8 the energy and mineral security requirements of the
9 United States.

10 “(b) INCLUSIONS.—The study shall include—

11 “(1) an analysis of the need for and availability
12 of workers for the oil, natural gas, coal, nonfuel
13 mineral, ground water, nuclear, geothermal, solar,
14 wind, and electric utility industries;

15 “(2) an analysis of the availability of skilled
16 labor at both entry level and more senior levels;

17 “(3) recommendations for actions needed to
18 meet future labor requirements;

19 “(4) a description of current and projected edu-
20 cation and training programs for those workers at
21 community and technical colleges and universities or
22 through other job-specific training initiatives;

23 “(5) an analysis of the potential for skilled for-
24 eign labor to meet projected sectoral labor require-
25 ments;

1 “(6) an assessment of potential job health and
2 safety impacts, national security, and domestic eco-
3 nomic impacts of a long-term workforce shortage or
4 surplus; and

5 “(7) a description and evaluation of data
6 sources available, Federal data collection and coordi-
7 nation, and potential research initiatives for future
8 decisionmaking relating to workforce issues.

9 “(c) REPORT.—Not later than December 31, 2012,
10 the Secretary shall submit to Congress a report that de-
11 scribes the results of the study.

12 “(d) AUTHORIZATION OF APPROPRIATIONS.—There
13 is authorized to be appropriated to the Secretary to carry
14 out this section \$2,000,000.”.

15 **Subtitle F—Miscellaneous**

16 **SEC. 471. OTHER TRANSACTIONS AUTHORITY.**

17 (a) IN GENERAL.—Section 646 of the Department of
18 Energy Organization Act (42 U.S.C. 7256) is amended
19 by striking subsection (g) and inserting the following:

20 “(g) AUTHORITY TO ENTER INTO OTHER TRANS-
21 ACTIONS.—

22 “(1) IN GENERAL.—In addition to any other
23 authority granted to the Secretary to enter into pro-
24 curement contracts, leases, cooperative agreements,
25 grants, and certain arrangements, the Secretary may

1 enter into other transactions with public agencies,
2 private organizations, or other persons on such
3 terms as the Secretary considers appropriate to fur-
4 ther functions vested in the Secretary, including re-
5 search, development, or demonstration projects.

6 “(2) ADVANCE PROJECTS.—Notwithstanding
7 any other provision of law, the Secretary may exer-
8 cise authority provided under paragraph (1) without
9 regard to section 3324 of title 31, United States
10 Code.

11 “(3) RELATIONSHIP TO OTHER LAW.—The au-
12 thority of the Secretary under paragraph (1) shall
13 not be subject to—

14 “(A) section 9 of the Federal Nonnuclear
15 Energy Research and Development Act of 1974
16 (42 U.S.C. 5908); or

17 “(B) section 152 of the Atomic Energy Act
18 of 1954 (42 U.S.C. 2182).

19 “(4) PROTECTION OF CERTAIN INFORMATION
20 FROM DISCLOSURE.—

21 “(A) IN GENERAL.—Notwithstanding any
22 other provision of law, disclosure of information
23 described in subparagraph (B) is not required,
24 and may not be compelled, under section 552 of
25 title 5, United States Code, during the 5-year

1 period beginning on the date on which the in-
2 formation is received by the Department.

3 “(B) AWARD INFORMATION.—The infor-
4 mation described in this subparagraph is infor-
5 mation in the records of the Department that—

6 “(i) was submitted—

7 “(I) to the Department as part
8 of a competitive or noncompetitive
9 process with the potential to result in
10 an award to the person submitting the
11 information; and

12 “(II) in conjunction with a trans-
13 action entered into by the Secretary
14 pursuant to paragraph (1); and

15 “(ii) is—

16 “(I) a proposal, proposal ab-
17 stract, and supporting documents;

18 “(II) a business plan submitted
19 on a confidential basis; or

20 “(III) technical information sub-
21 mitted on a confidential basis.

22 “(5) REQUIREMENTS.—

23 “(A) SELECTION PROCEDURES.—In enter-
24 ing into transactions under paragraph (1), the
25 Secretary shall use such competitive, merit-

1 based selection procedures as the Secretary de-
2 termines in writing to be practicable.

3 “(B) DETERMINATION.—Before entering
4 into a transaction under paragraph (1), the
5 Secretary shall determine in writing that the
6 use of a standard contract, grant, or coopera-
7 tive agreement for the project is not feasible or
8 appropriate.

9 “(C) COST SHARING.—A transaction under
10 paragraph (1) shall be subject to cost sharing
11 in accordance with section 988 of the Energy
12 Policy Act of 2005 (42 U.S.C. 16352).

13 “(D) LIMITATION ON DELEGATION.—The
14 authority of the Secretary under this subsection
15 may be delegated only to an officer of the De-
16 partment who is appointed by the President by
17 and with the advice and consent of the Senate
18 and may not be redelegated to any other per-
19 son.

20 “(6) ANNUAL REPORTS.—The Secretary shall
21 submit to Congress an annual report on the use by
22 the Department of authorities under this section.

23 “(7) REPORT.—

24 “(A) DEFINITION OF NONTRADITIONAL
25 GOVERNMENT CONTRACTOR.—In this para-

1 graph, the term ‘nontraditional Government
2 contractor’ has the meaning given the term
3 ‘nontraditional defense contractor’ in section
4 845(f) of the National Defense Authorization
5 Act for Fiscal Year 1994 (Public Law 103–160;
6 10 U.S.C. 2371 note).

7 “(B) REPORT.—Not later than 2 years
8 after the date of enactment of this subpara-
9 graph, and 2 years thereafter, the Comptroller
10 General of the United States shall submit to
11 Congress a report describing—

12 “(i) the use by the Department of au-
13 thorities under this section, including the
14 ability to attract nontraditional Govern-
15 ment contractors; and

16 “(ii) whether additional safeguards
17 are necessary to carry out the authori-
18 ties.”.

19 (b) IMPLEMENTATION.—

20 (1) IN GENERAL.—The final rule of the Depart-
21 ment of Energy entitled “Assistance Regulations”
22 (71 Fed. Reg. 27158 (May 9, 2006)) shall be appli-
23 cable to transactions under section 646 of the De-
24 partment of Energy Organization Act (42 U.S.C.
25 7256) (as amended by subsection (a)).

1 (2) REGULATIONS.—The Secretary may revise,
2 supplement, or replace such regulations as the Sec-
3 retary determines necessary to implement the
4 amendment made by subsection (a).

5 **SEC. 472. DEFINITION OF NATIONAL LABORATORY.**

6 Section 2(3) of the Energy Policy Act of 2005 (42
7 U.S.C. 15801(3)) is amended by striking subparagraph
8 (P) and inserting the following:

9 “(P) SLAC National Accelerator Labora-
10 tory.”.

11 **SEC. 473. PROTECTION OF RESULTS.**

12 (a) IN GENERAL.—Subject to subsection (b) and not-
13 withstanding any other provision of law, during a period
14 of not more than 5 years after the development of infor-
15 mation in any transaction authorized to be entered into
16 by the Department of Energy, the Secretary may provide
17 appropriate protections against the dissemination of the
18 information, including exemption from subchapter II of
19 chapter 5 of title 5, United States Code.

20 (b) APPLICABLE INFORMATION.—This section ap-
21 plies to information that—

22 (1) results from a transaction entered into by
23 the Secretary pursuant to this title or an amend-
24 ment made by this title; and

1 (2) is of a character that would be protected
 2 from disclosure under section 552(b)(4) of title 5,
 3 United States Code, if the information had been ob-
 4 tained from a person other than an agent or em-
 5 ployee of the Federal Government.

6 **SEC. 474. MARINE AND HYDROKINETIC RENEWABLE EN-**
 7 **ERGY RESEARCH AND DEVELOPMENT.**

8 (a) DEFINITION OF MARINE AND HYDROKINETIC
 9 RENEWABLE ENERGY.—In this section, the term “marine
 10 and hydrokinetic renewable energy” has the meaning
 11 given the term in section 632 of the Energy Independence
 12 and Security Act of 2007 (42 U.S.C. 17211).

13 (b) RESEARCH AND DEVELOPMENT PROGRAM.—Sec-
 14 tion 633(a) of the Energy Independence and Security Act
 15 of 2007 (42 U.S.C. 17212(a)) is amended—

16 (1) in paragraph (13), by striking “; and” and
 17 inserting a semicolon;

18 (2) in paragraph (14), by striking the period at
 19 the end and inserting “; and”; and

20 (3) by adding at the end the following:

21 “(15)(A) apply advanced systems engineering
 22 and system integration methods to identify critical
 23 interfaces and develop open standards for marine
 24 and hydrokinetic renewable energy;

1 “(B) transfer the resulting intellectual property
2 to industry stakeholders as public information
3 through published interface definitions, standards,
4 and demonstration projects; and

5 “(C) develop incentives for industry to comply
6 with the standards.”.

7 (c) MARINE-BASED ENERGY DEVICE VERIFICATION
8 PROGRAM.—

9 (1) ESTABLISHMENT.—The Secretary shall es-
10 tablish a marine-based energy device verification
11 program to provide a bridge from the marine and
12 hydrokinetic renewable energy capture device design
13 and development efforts underway across the indus-
14 try to commercial deployment of marine and
15 hydrokinetic renewable energy devices.

16 (2) PURPOSES.—The purposes of the program
17 are to fund, facilitate the development and installa-
18 tion of, and evaluate marine and hydrokinetic renew-
19 able energy projects, in partnership with Federally
20 Funded Research and Development Centers, and in
21 conjunction with universities and other institutions
22 of higher education, private business entities, and
23 other appropriate organizations, in order—

24 (A) to increase marine and hydrokinetic re-
25 newable energy experience; and

1 (B) to build and operate enough candidate
2 devices to obtain statistically significant oper-
3 ating and maintenance data.

4 (3) OBJECTIVES.—The objectives of the pro-
5 gram include—

6 (A) verifying the performance, reliability,
7 maintainability, and cost of new marine and
8 hydrokinetic renewable energy device designs
9 and system components in an operating envi-
10 ronment;

11 (B) providing States, regulators, utilities,
12 and other stakeholders with a valid opportunity
13 to test and evaluate marine and hydrokinetic
14 renewable energy technology in new areas;

15 (C) documenting and communicating the
16 experience from those projects for the benefit of
17 utilities, independent power producers, other
18 nonutility generators, device suppliers, and oth-
19 ers in the marine and hydrokinetic renewable
20 energy development community; and

21 (D) resolving environmental issues through
22 robust characterization, reliable impact pre-
23 diction, effective monitoring, development and
24 use of adaptive management, and informing en-

1 gineering design to improve environmental per-
2 formance.

3 (d) ADAPTIVE MANAGEMENT AND ENVIRONMENTAL
4 GRANT PROGRAM.—

5 (1) FINDINGS.—Congress finds that—

6 (A) the use of marine and hydrokinetic re-
7 newable energy technologies can reduce con-
8 tributions to global warming;

9 (B) marine and hydrokinetic renewable en-
10 ergy technologies can be produced domestically;

11 (C) marine and hydrokinetic renewable en-
12 ergy is a nascent industry; and

13 (D) the United States must work to pro-
14 mote new renewable energy technologies that
15 reduce contributions to global warming gases
16 and improve domestic energy production.

17 (2) GRANT PROGRAM.—

18 (A) IN GENERAL.—As soon as practicable
19 after the date of enactment of this Act, the Sec-
20 retary shall establish a program under which
21 the Secretary shall award grants to eligible en-
22 tities—

23 (i) to advance the development of ma-
24 rine and hydrokinetic renewable energy;

1 (ii) to help fund the costs of evalu-
2 ating the environmental effects of marine
3 and hydrokinetic renewables before and
4 during the deployment of demonstration
5 projects;

6 (iii) to help enable the eligible enti-
7 ties—

8 (I) to gather and collect the types
9 of environmental data that are re-
10 quired when working in a public re-
11 source (including the waterways and
12 oceans of the United States); and

13 (II) to monitor the impacts of
14 demonstration projects and make the
15 resulting information available for
16 widespread dissemination to aid fu-
17 ture projects; and

18 (iv) to help fund the cost of advancing
19 renewable marine and hydrokinetic tech-
20 nologies in ocean and riverine environ-
21 ments from demonstration projects to de-
22 velopment and deployment.

23 (B) APPLICATION.—To be eligible to re-
24 ceive a grant under this paragraph, an entity
25 shall submit to the Secretary an application at

1 such time, in such manner, and containing such
2 information as the Secretary may require.

3 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
4 authorized to be appropriated to carry out this section
5 \$250,000,000 for each of fiscal years 2010 through 2021.

6 **TITLE V—ENERGY MARKETS**

7 **SEC. 501. ENHANCED INFORMATION ON CRITICAL ENERGY** 8 **SUPPLIES.**

9 (a) IN GENERAL.—Section 205 of the Department of
10 Energy Organization Act (42 U.S.C. 7135) (as amended
11 by section 145) is amended by adding at the end the fol-
12 lowing:

13 “(o) COLLECTION OF INFORMATION ON CRITICAL
14 ENERGY SUPPLIES.—

15 “(1) IN GENERAL.—To ensure transparency of
16 information relating to energy infrastructure and
17 product ownership in the United States and improve
18 the ability to evaluate the energy security of the
19 United States, the Administrator, in consultation
20 with other Federal agencies (as necessary), shall—

21 “(A) not later than 120 days after the date
22 of enactment of this subsection, develop and
23 provide notice of a plan to collect, in coopera-
24 tion with the Commodity Futures Trade Com-
25 mission, information identifying all oil inven-

1 tories, and other physical oil assets (including
2 all petroleum-based products and the storage of
3 such products in off-shore tankers), that are
4 owned by the 50 largest traders of oil contracts
5 (including derivative contracts), as determined
6 by the Commodity Futures Trade Commission;
7 and

8 “(B) not later than 90 days after the date
9 on which notice is provided under subparagraph
10 (A), implement the plan described in that sub-
11 paragraph.

12 “(2) INFORMATION.—The plan required under
13 paragraph (1) shall include a description of the plan
14 of the Administrator for collecting company-specific
15 data, including—

16 “(A) volumes of product under ownership;
17 and

18 “(B) storage and transportation capacity
19 (including owned and leased capacity).

20 “(3) PROTECTION OF PROPRIETARY INFORMA-
21 TION.—Section 12(f) of the Federal Energy Admin-
22 istration Act of 1974 (15 U.S.C. 771(f)) shall apply
23 to information collected under this subsection.

24 “(p) COLLECTION OF INFORMATION ON STORAGE
25 CAPACITY FOR OIL AND NATURAL GAS.—

1 “(1) IN GENERAL.—Not later than 90 days
2 after the date of enactment of this subsection, the
3 Administrator of the Energy Information Adminis-
4 tration shall collect information quantifying the com-
5 mercial storage capacity for oil and natural gas in
6 the United States.

7 “(2) UPDATES.—The Administrator shall up-
8 date annually the information required under para-
9 graph (1).

10 “(3) PROTECTION OF PROPRIETARY INFORMA-
11 TION.—Section 12(f) of the Federal Energy Admin-
12 istration Act of 1974 (15 U.S.C. 771(f)) shall apply
13 to information collected under this subsection.

14 “(q) FINANCIAL MARKET ANALYSIS OFFICE.—

15 “(1) ESTABLISHMENT.—There shall be within
16 the Energy Information Administration a Financial
17 Market Analysis Office, headed by a director, who
18 shall report directly to the Administrator of the En-
19 ergy Information Administration.

20 “(2) DUTIES.—The Office shall—

21 “(A) be responsible for analysis of the fi-
22 nancial aspects of energy markets;

23 “(B) review the reports required by section
24 503(c) of the American Clean Energy Leader-

1 ship Act of 2009 in advance of the submission
2 of the reports to Congress; and

3 “(C) not later than 1 year after the date
4 of enactment of this subsection—

5 “(i) make recommendations to the
6 Administrator of the Energy Information
7 Administration that identify and quantify
8 any additional resources that are required
9 to improve the ability of the Energy Infor-
10 mation Administration to more fully inte-
11 grate financial market information into the
12 analyses and forecasts of the Energy Infor-
13 mation Administration, including the role
14 of energy futures contracts, energy com-
15 modity swaps, and derivatives in price for-
16 mation for oil; and

17 “(ii) notify the Committee on Energy
18 and Natural Resources, and the Committee
19 on Appropriations, of the Senate and the
20 Committee on Energy and Commerce, and
21 the Committee on Appropriations, of the
22 House of Representatives of the rec-
23 ommendations described in clause (i).

24 “(3) ANALYSES.—The Administrator of the En-
25 ergy Information Administration shall take analyses

1 by the Office into account in conducting analyses
2 and forecasting of energy prices.”.

3 (b) CONFORMING AMENDMENT.—Section 645 of the
4 Department of Energy Organization Act (42 U.S.C. 7255)
5 is amended by inserting “(15 U.S.C. 3301 et seq.) and
6 the Natural Gas Act (15 U.S.C. 717 et seq.)” after “Nat-
7 ural Gas Policy Act of 1978”.

8 **SEC. 502. WORKING GROUP ON ENERGY MARKETS.**

9 (a) ESTABLISHMENT.—There is established a Work-
10 ing Group on Energy Markets (referred to in this title as
11 the “Working Group”).

12 (b) COMPOSITION.—The Working Group shall be
13 composed of—

14 (1) the Secretary;

15 (2) the Secretary of the Treasury;

16 (3) the Chairman of the Federal Energy Regu-
17 latory Commission;

18 (4) the Chairman of Federal Trade Commis-
19 sion;

20 (5) the Chairman of the Securities and Ex-
21 change Commission;

22 (6) the Chairman of the Commodity Futures
23 Trading Commission; and

24 (7) the Administrator of the Energy Informa-
25 tion Administration.

1 (c) CHAIRPERSON.—The Secretary shall serve as the
2 Chairperson of the Working Group.

3 (d) COMPENSATION.—A member of the Working
4 Group shall serve without additional compensation for the
5 work of the member of the Working Group.

6 (e) PURPOSE AND FUNCTION.—The Working Group
7 shall—

8 (1) investigate the effect of increased financial
9 investment in energy commodities on energy prices
10 and the energy security of the United States;

11 (2) recommend to the President and Congress
12 laws (including regulations) that may be needed to
13 prevent excessive speculation in energy commodity
14 markets in order to prevent or minimize the adverse
15 impact of excessive speculation on energy prices on
16 consumers and the economy of the United States;
17 and

18 (3) review energy security implications of devel-
19 opments in international energy markets.

20 (f) ADMINISTRATION.—The Secretary shall provide
21 the Working Group with such administrative and support
22 services as may be necessary for the performance of the
23 functions of the Working Group.

24 (g) COOPERATION OF OTHER AGENCIES.—The heads
25 of Executive departments, agencies, and independent in-

1 strumentalities shall, to the extent permitted by law, pro-
2 vide the Working Group with such information as the
3 Working Group requires to carry out this section.

4 (h) CONSULTATION.—The Working Group shall con-
5 sult, as appropriate, with representatives of the various
6 exchanges, clearinghouses, self-regulatory bodies, other
7 major market participants, consumers, and the general
8 public.

9 **SEC. 503. STUDY OF REGULATORY FRAMEWORK FOR EN-**
10 **ERGY MARKETS.**

11 (a) STUDY.—The Working Group shall conduct a
12 study—

13 (1) to identify the factors that affect the pricing
14 of crude oil and refined petroleum products, includ-
15 ing an examination of the effects of market specula-
16 tion on prices; and

17 (2) to review and assess—

18 (A) existing statutory authorities relating
19 to the oversight and regulation of markets crit-
20 ical to the energy security of the United States;
21 and

22 (B) the need for additional statutory au-
23 thority for the Federal Government to effec-
24 tively oversee and regulate markets critical to
25 the energy security of the United States.

1 (b) ELEMENTS OF STUDY.—The study shall in-
2 clude—

3 (1) an examination of price formation of crude
4 oil and refined petroleum products;

5 (2) an examination of relevant international
6 regulatory regimes; and

7 (3) an examination of the degree to which
8 changes in energy market transparency, liquidity,
9 and structure have influenced or driven abuse, ma-
10 nipulation, excessive speculation, or inefficient price
11 formation.

12 (c) REPORT AND RECOMMENDATIONS.—The Sec-
13 retary shall submit to the Committee on Energy and Nat-
14 ural Resources of the Senate and the Committee on En-
15 ergy and Commerce of the House of Representatives quar-
16 terly progress reports during the conduct of the study
17 under this section, and a final report not later than 1 year
18 after the date of enactment of this Act, that—

19 (1) describes the results of the study; and

20 (2) provides options and the recommendations
21 of the Working Group for appropriate Federal co-
22 ordination of oversight and regulatory actions to en-
23 sure transparency of crude oil and refined petroleum
24 product pricing and the elimination of excessive
25 speculation, including recommendations on data col-

1 lection and analysis to be carried out by the Finan-
2 cial Market Analysis Office established by section
3 205(p) of the Department of Energy Organization
4 Act (42 U.S.C. 7135(p)).

5 (d) AUTHORIZATION OF APPROPRIATIONS.—There
6 are authorized to be appropriated such sums as are nec-
7 essary to carry out this section.

8 **SEC. 504. METADATA FORMATS FOR ENERGY PRICES.**

9 (a) PURPOSE.—The purpose of this section is to im-
10 prove the ability of retail rate utility customers to compare
11 tariff options by making the most up-to-date electric util-
12 ity tariffs available in an online format that can be read
13 and manipulated electronically.

14 (b) TARIFF ANALYSIS PROJECT EXPANSION.—The
15 Secretary shall expand the Tariff Analysis Project—

16 (1) to ensure that the online database of that
17 project can be periodically updated and expanded, as
18 necessary; and

19 (2) by redesigning the web interface for the
20 Tariff Analysis Project database (including nec-
21 essary security) to allow individuals and institutions
22 other than the Lawrence Berkeley National Labora-
23 tory to enter tariff data.

1 (c) METADATA FORMATS.—The Secretary and the
2 Federal Energy Regulatory Commission shall coordinate
3 to—

4 (1) not later than 14 months after the date of
5 enactment of this Act, develop metadata formats for
6 online publication in consultation with the National
7 Laboratories, the utility industry, large energy con-
8 sumers, the information technology industry, regu-
9 latory commissions, and nongovernmental organiza-
10 tions;

11 (2) after formats are developed, assist States in
12 adopting and implementing the metadata formats
13 for utility reporting of rate data in the jurisdictions
14 of the utilities (including by working with State pub-
15 lic utility commissions and other potential early
16 adopters of the standards);

17 (3) develop procedures and supporting software
18 to incorporate tariff data submitted by utilities on a
19 regular basis, convert the tariff data to a metadata
20 format, and compile all available data in a central
21 database based on metadata formats; and

22 (4) develop an online web interface site to make
23 available to the public, at no cost, the metadata for-
24 mats and all data converted to those formats.

1 (d) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated to the Secretary—

3 (1) to carry out subsection (b) \$500,000 for
4 each of fiscal years 2010 and 2011; and

5 (2) to carry out subsection (c) such sums as are
6 necessary for each fiscal year.

7 **SEC. 505. EMERGENCY ORDERS UNDER THE FEDERAL**
8 **POWER ACT.**

9 Section 202 of the Federal Power Act (16 U.S.C.
10 824a) is amended by adding at the end the following:

11 “(h) EMERGENCY ORDERS.—

12 “(1) DEFINITION OF EMERGENCY.—In this
13 subsection, the term ‘emergency’ means a major dis-
14 turbance in wholesale electric markets regulated by
15 the Commission that—

16 “(A) substantially disrupts, or threatens to
17 substantially disrupt, the reliability of service to
18 electric consumers; or

19 “(B) is characterized by sudden and exces-
20 sive price fluctuations in wholesale electric mar-
21 kets regulated by the Commission.

22 “(2) ORDERS.—In an emergency, the Commis-
23 sion may, either on the motion of the Commission or
24 on complaint, without notice or hearing, require by
25 order the temporary suspension or modification of

1 any rate, term, or condition of service on file with
2 the Commission pursuant to this Act that the Com-
3 mission determines to be necessary—

4 “(A) to ensure reliability of service to elec-
5 tric consumers; or

6 “(B) to protect electric consumers from
7 potential abuse of market power or market ma-
8 nipulation in wholesale electric markets regu-
9 lated by the Commission.

10 “(3) EFFECTIVE PERIOD.—An order under this
11 subsection may remain in effect for not more than
12 10 days unless extended under paragraph (4).

13 “(4) EXTENSION.—An order under this sub-
14 section may be extended for additional periods of not
15 more than 10 days if the Commission determines
16 that—

17 “(A) the emergency still exists; and

18 “(B) the continuation of the order is nec-
19 essary—

20 “(i) to ensure reliability of service to
21 electric consumers; or

22 “(ii) to protect electric consumers
23 from potential abuse of market power or
24 market manipulation in wholesale electric
25 markets regulated by the Commission.

1 “(5) LIMITATION.—In no event shall an order
2 of the Commission under this subsection continue in
3 effect for more than 30 days.

4 “(6) REVIEW OF ORDERS.—

5 “(A) IN GENERAL.—An order under this
6 subsection shall be subject to review as provided
7 in section 313(b).

8 “(B) STANDARD OF REVIEW.—The review-
9 ing court shall not enter a stay, writ of man-
10 damus, or similar relief unless the court finds,
11 after notice and hearing before a panel of the
12 court, that the action of the Commission is ar-
13 bitrary, capricious, an abuse of discretion, or
14 otherwise not in accordance with law.

15 “(7) TERMINATION BY PRESIDENT.—The Presi-
16 dent may direct that action taken by the Commis-
17 sion under this subsection shall not continue in ef-
18 fect.”.

19 **SEC. 506. CEASE-AND-DESIST AUTHORITY UNDER THE FED-**
20 **ERAL POWER ACT.**

21 Section 222 of the Federal Power Act (16 U.S.C.
22 824v) is amended by adding at the end the following:

23 “(c) CEASE-AND-DESIST ORDERS.—

24 “(1) IN GENERAL.—If the Commission finds,
25 on a proper showing, after notice and opportunity

1 for a hearing, that any entity is manipulating or at-
2 tempting to manipulate or has manipulated or at-
3 tempted to manipulate any market for the sale of
4 electric energy at wholesale in interstate commerce
5 in violation of a rule or regulation prescribed by the
6 Commission under subsection (a), the Commission
7 may enter an order requiring the entity to cease and
8 desist from committing the violation.

9 “(2) PROPER SHOWING REQUIRED.—For pur-
10 poses of this subsection, a proper showing is made
11 by demonstrating that—

12 “(A) an entity has violated a rule or regu-
13 lation under subsection (a); and

14 “(B) there is a likelihood of future viola-
15 tions in the absence of an order under this sub-
16 section.

17 “(d) TEMPORARY ORDERS.—

18 “(1) IN GENERAL.—If, in any proceeding under
19 subsection (c), the Commission finds that a violation
20 of a rule or regulation prescribed under subsection
21 (a) is likely to result in significant dissipation or
22 conversion of assets, significant harm to electric con-
23 sumers, or substantial harm to the public interest,
24 the Commission may enter a temporary order requir-
25 ing the respondent—

1 “(A) to cease and desist from the violation;
2 and

3 “(B) to take such action as the Commis-
4 sion determines appropriate pending completion
5 of the proceeding—

6 “(i) to prevent the violation; and

7 “(ii) to prevent dissipation or conver-
8 sion of assets, significant harm to electric
9 consumers, or substantial harm to the pub-
10 lic interest.

11 “(2) NOTICE AND HEARING.—A temporary
12 order under this subsection shall be entered only
13 after notice and opportunity for a hearing unless the
14 Commission determines that notice and hearing
15 prior to entry would be impracticable or contrary to
16 the public interest.

17 “(3) EFFECTIVE DATE.—A temporary order
18 shall—

19 “(A) become effective on the date of serv-
20 ice on the respondent; and

21 “(B) unless set aside, limited, or sus-
22 pended by the Commission or a court of com-
23 petent jurisdiction, remain effective and en-
24 forceable pending the completion of the pro-
25 ceedings.

1 “(4) COMMISSION REVIEW.—

2 “(A) IN GENERAL.—At any time after the
3 respondent has been served with a temporary
4 order under this subsection, the respondent
5 may apply to the Commission to have the order
6 set aside, limited, or suspended.

7 “(B) TEMPORARY ORDERS WITHOUT
8 HEARINGS.—If the respondent has been served
9 with a temporary order entered without a prior
10 Commission hearing—

11 “(i) the respondent may, within 10
12 days after the date on which the order was
13 served, request a hearing on the applica-
14 tion; and

15 “(ii) the Commission shall hold a
16 hearing and render a decision on the appli-
17 cation at the earliest possible time.

18 “(5) JUDICIAL REVIEW.—

19 “(A) IN GENERAL.—The respondent may
20 apply to an appropriate United States district
21 court for an order setting aside, limiting, or
22 suspending the effectiveness or enforcement of
23 the order, within—

24 “(i) 10 days after the date the re-
25 spondent was served with a temporary

1 order entered with a prior Commission
2 hearing; or

3 “(ii) 10 days after the Commission
4 renders a decision on an application and
5 hearing under paragraph (4) with respect
6 to any temporary order entered without a
7 prior Commission hearing.

8 “(B) JURISDICTION.—The United States
9 District Court for the district in which the re-
10 spondent resides or has its principal place of
11 business, or for the District of Columbia, shall
12 have jurisdiction to enter an order under this
13 paragraph.”.

14 **SEC. 507. CEASE-AND-DESIST AUTHORITY UNDER THE NAT-**
15 **URAL GAS ACT.**

16 Section 4A of the Natural Gas Act (15 U.S.C. 717c-
17 1) is amended—

18 (1) by striking the section heading and all that
19 follows through “It” and inserting the following:

20 **“SEC. 4A. PROHIBITION ON MARKET MANIPULATION.**

21 “(a) IN GENERAL.—It”; and

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

23 “(b) CEASE-AND-DESIST ORDERS.—

24 “(1) IN GENERAL.—If the Commission finds,
25 on a proper showing, after notice and opportunity

1 for a hearing, that any entity is manipulating or at-
2 tempting to manipulate or has manipulated or at-
3 tempted to manipulate the market for the purchase
4 or sale of natural gas or the purchase or sale of
5 transportation services subject to the jurisdiction of
6 the Commission in violation of a rule or regulation
7 prescribed by the Commission under subsection (a),
8 the Commission may make and enter an order re-
9 quiring the entity to cease and desist from commit-
10 ting the violation.

11 “(2) PROPER SHOWING REQUIRED.—For pur-
12 poses of this subsection, a proper showing is made
13 by demonstrating that—

14 “(A) an entity has violated a rule or regu-
15 lation under subsection (a); and

16 “(B) there is a likelihood of future viola-
17 tions in the absence of an order under this sub-
18 section.

19 “(c) TEMPORARY ORDERS.—

20 “(1) IN GENERAL.—If, in any proceeding under
21 subsection (b), the Commission finds that a violation
22 of a rule or regulation prescribed under subsection
23 (a) is likely to result in significant dissipation or
24 conversion of assets, significant harm to natural gas
25 consumers, or substantial harm to the public inter-

1 est, the Commission may enter a temporary order
2 requiring the respondent—

3 “(A) to cease and desist from the violation;

4 and

5 “(B) to take such action as the Commis-
6 sion determines appropriate pending completion
7 of the proceeding—

8 “(i) to prevent the violation; and

9 “(ii) to prevent dissipation or conver-
10 sion of assets, significant harm to natural
11 gas consumers, or substantial harm to the
12 public interest.

13 “(2) NOTICE AND HEARING.—A temporary
14 order under this subsection shall be entered only
15 after notice and opportunity for a hearing unless the
16 Commission determines that notice and hearing
17 prior to entry would be impracticable or contrary to
18 the public interest.

19 “(3) EFFECTIVE DATE.—A temporary order
20 shall—

21 “(A) become effective on the date of serv-
22 ice on the respondent; and

23 “(B) unless set aside, limited, or sus-
24 pended by the Commission or a court of com-
25 petent jurisdiction, remain effective and en-

1 forceable pending the completion of the pro-
2 ceedings.

3 “(4) COMMISSION REVIEW.—

4 “(A) IN GENERAL.—At any time after the
5 respondent has been served with a temporary
6 order under this subsection, the respondent
7 may apply to the Commission to have the order
8 set aside, limited, or suspended.

9 “(B) TEMPORARY ORDERS WITHOUT
10 HEARINGS.—If the respondent has been served
11 with a temporary order entered without a prior
12 Commission hearing—

13 “(i) the respondent may, within 10
14 days after the date on which the order was
15 served, request a hearing on the applica-
16 tion; and

17 “(ii) the Commission shall hold a
18 hearing and render a decision on such ap-
19 plication at the earliest possible time.

20 “(5) JUDICIAL REVIEW.—

21 “(A) IN GENERAL.—The respondent may
22 apply to an appropriate United States district
23 court for an order setting aside, limiting, or
24 suspending the effectiveness or enforcement of
25 the order, within—

1 “(i) 10 days after the date the re-
2 spondent was served with a temporary
3 order entered with a prior Commission
4 hearing; or

5 “(ii) 10 days after the Commission
6 renders a decision on an application and
7 hearing under paragraph (4) with respect
8 to any temporary order entered without a
9 prior Commission hearing.

10 “(B) JURISDICTION.—The United States
11 District Court for the district in which the re-
12 spondent resides or has its principal place of
13 business, or for the District of Columbia, shall
14 have jurisdiction to enter an order under this
15 paragraph.”.

16 **SEC. 508. DE NOVO REVIEW OF CIVIL PENALTIES UNDER**
17 **THE NATURAL GAS ACT.**

18 Section 22(b) of the Natural Gas Act (15 U.S.C.
19 717t–1(b)) is amended by inserting before the period at
20 the end the following: “, in accordance with the same pro-
21 visions as are applicable under section 31(d) of the Fed-
22 eral Power Act (16 U.S.C. 823b(d)) in the case of civil
23 penalties assessed under section 31 of the Federal Power
24 Act (16 U.S.C. 823b)”.

1 **TITLE VI—POLICY STUDIES AND**
2 **REPORTS**

3 **SEC. 601. HELIUM GAS RESOURCE ASSESSMENT.**

4 (a) IN GENERAL.—Not later than 2 years after the
5 date of enactment of this Act, the Secretary of the Inte-
6 rior, acting through the Director of the United States Geo-
7 logical Survey, shall—

8 (1) in coordination with appropriate heads of
9 State geological surveys, complete a comprehensive
10 national helium gas assessment that identifies and
11 quantifies the quantity of helium in each reservoir,
12 including assessments of the constituent gases found
13 in each helium resource, such as carbon dioxide, ni-
14 trogen, and natural gas; and

15 (2) submit to the Committee on Energy and
16 Natural Resources of the Senate and the Committee
17 on Natural Resources of the House of Representa-
18 tives a report describing the results of the assess-
19 ment.

20 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
21 authorized to be appropriated to the Secretary of the Inte-
22 rior to carry out this section \$10,000,000 for the period
23 of fiscal years 2010 through 2012.

1 **SEC. 602. POTASH MINERAL RESOURCE ASSESSMENT.**

2 (a) IN GENERAL.—The Secretary of the Interior, act-
3 ing through the Director of the United States Geological
4 Survey (referred to in this section as the “Secretary”),
5 shall, in coordination with appropriate heads of State geo-
6 logical surveys, complete a comprehensive national potash
7 assessment that—

8 (1) identifies and quantifies known potash de-
9 posits; and

10 (2) provides a quantitative assessment of the lo-
11 cation and size of undiscovered potash deposits
12 throughout the United States using all available
13 public and private information and data sets.

14 (b) DRILLING PROGRAM.—As part of the assessment
15 under this section, the Secretary may carry out a drilling
16 program to supplement the geological data relevant to de-
17 termining the existence of potash.

18 (c) REVIEW OF METHODOLOGY.—As part of the as-
19 sessment, the Secretary, in consultation with the National
20 Academies, shall—

21 (1) review the current methodology used to de-
22 termine measured and indicated reserves of potash
23 on public land; and

24 (2) provide recommendations for updating the
25 methodology using the best available technology.

1 (d) REPORT.—Not later than 2 years after the date
2 of enactment of this Act, the Secretary shall submit to
3 the Committee on Energy and Natural Resources, and the
4 Committee on Agriculture, Nutrition, and Forestry, of the
5 Senate and the Committee on Natural Resources, and the
6 Committee on Agriculture, of the House of Representa-
7 tives a report describing the results of the assessment
8 under this section.

9 (e) AUTHORIZATION OF APPROPRIATIONS.—There
10 are authorized to be appropriated to the Secretary such
11 sums as are necessary to carry out this section for each
12 of fiscal years 2010 through 2012.

13 **SEC. 603. BETTER ENERGY STRATEGY FOR TOMORROW.**

14 (a) IMPROVED ENERGY POLICY PLANNING.—Section
15 801 of the Department of Energy Organization Act (42
16 U.S.C. 7321) is amended—

17 (1) in subsection (a)—

18 (A) in paragraph (2), by inserting “and”
19 after the semicolon at the end; and

20 (B) by striking paragraph (3) and insert-
21 ing the following:

22 “(3) ensure the participation and cooperation of
23 all relevant Federal agencies in the preparation of
24 the proposed Plan.”;

25 (2) in subsection (b)—

1 (A) in the matter preceding paragraph (1),
2 by striking “April 1, 1979, and biennially there-
3 after,” and inserting “February 1, 2010, and
4 quadrennially thereafter,”;

5 (B) in paragraph (1)—

6 (i) by striking “conservation” and in-
7 serting “energy efficiency”; and

8 (ii) by inserting “reduction or seques-
9 tration of greenhouse gas emissions,” after
10 “environmental protection,”;

11 (C) in paragraph (2), by striking “con-
12 servation” and inserting “efficiency”;

13 (D) by redesignating paragraphs (2) and
14 (3) as paragraphs (3) and (4), respectively; and

15 (E) by inserting after paragraph (1) the
16 following:

17 “(2) analyze the policies of the Federal Govern-
18 ment (including mandates, subsidies, tariffs, and tax
19 policies) that encourage, or have the potential to en-
20 courage—

21 “(A) energy production in the United
22 States;

23 “(B) energy efficiency in the United
24 States;

1 “(C) the reduction, avoidance, or seques-
2 tration of greenhouse gases in the United
3 States; or

4 “(D) the reduction of air pollutants in the
5 environment;”;

6 (3) in subsection (c)(4), by striking “conserva-
7 tion practices,” and inserting “energy efficiency
8 practices, to reduce or sequester greenhouse gas
9 emissions, to reduce the quantity of air pollutants in
10 the environment, to promote domestic energy pro-
11 duction,”;

12 (4) in subsection (d), by striking “insure” and
13 inserting “ensure”; and

14 (5) by adding at the end the following:

15 “(e) NATIONAL ACADEMY OF SCIENCES.—The Presi-
16 dent, acting through the Secretary, shall enter into appro-
17 priate arrangements with the National Academy of
18 Sciences under which the Academy shall—

19 “(1) prepare reports and analyses that may
20 contribute to the development of the proposed Plan;

21 “(2) review the proposed Plan; and

22 “(3) submit to the President and to Congress
23 a report that describes the results of the review of
24 the proposed Plan by the Academy.”.

1 (b) AUTHORIZATION OF APPROPRIATIONS.—Title
 2 VIII of the Department of Energy Organization Act (42
 3 U.S.C. 7321 et seq.) is amended by adding at the end
 4 the following:

5 **“SEC. 803. AUTHORIZATION OF APPROPRIATIONS.**

6 “There are authorized to be appropriated—

7 “(1) to the Executive Office of the President,
 8 such sums as may be necessary to carry out—

9 “(A) this title; and

10 “(B) other activities to provide coordina-
 11 tion and integration of national energy and cli-
 12 mate policy; and

13 “(2) to the Secretary, such sums as are nec-
 14 essary to carry out section 801(e).”.

15 (c) CONFORMING AMENDMENTS.—The table of con-
 16 tents of the Department of Energy Organization Act (42
 17 U.S.C. prec. 7101) is amended by adding at the end of
 18 the items relating to title VIII the following:

“Sec. 803. Authorization of appropriations.”.

19 **SEC. 604. ADDRESSING CLIMATE CHANGE IN CHINA AND**
 20 **INDIA.**

21 (a) FINDINGS.—Congress finds that—

22 (1) the United States, the People’s Republic of
 23 China, and the Republic of India are some of the
 24 world’s largest emitters of greenhouse gases;

1 (2) a global solution to climate change requires
2 action by all 3 countries that is commensurate with
3 their national circumstances and level of economic
4 development;

5 (3) awareness of steps each country is taking to
6 reducing emissions is critical in building confidence
7 in a cooperative approach to climate change; and

8 (4) understanding challenges each country faces
9 in reducing emissions can help identify areas of po-
10 tential collaboration.

11 (b) PURPOSES.—The purposes of this section are—

12 (1) to provide Congress and the American pub-
13 lic with a better understanding of the steps China
14 and India are taking to reduce greenhouse gas emis-
15 sions; and

16 (2) to identify the means by which the United
17 States can assist China and India in achieving such
18 a reduction.

19 (c) REPORT.—The Secretary, working with the inter-
20 agency task force established under subsection (d), shall
21 prepare an interagency report on climate change and en-
22 ergy policy in the People’s Republic of China and in the
23 Republic of India.

24 (d) INTERAGENCY TASK FORCE.—

1 (1) COMPOSITION.—The Secretary shall estab-
2 lish an interagency task force, which shall consist
3 of—

4 (A) the Secretary;

5 (B) the Secretary of State;

6 (C) the Secretary of Commerce;

7 (D) the Administrator of the Environ-
8 mental Protection Agency;

9 (E) the Secretary of the Treasury; and

10 (F) the head of any other agency or de-
11 partment who has been selected by the Sec-
12 retary to participate in the task force.

13 (2) CHAIRPERSON.—The Secretary shall serve
14 as chairperson of the interagency task force.

15 (e) REPORT CONTENTS.—In preparing the report
16 under subsection (c), the interagency task force shall
17 evaluate and include in the report, with respect to the Peo-
18 ple’s Republic of China and the Republic of India—

19 (1) the national or subnational plans, policies,
20 programs, laws, regulations, incentive mechanisms,
21 and other measures that are expected to result in,
22 or have resulted in, reductions in energy use and
23 greenhouse gas emissions, including—

1 (A) a list of such plans, policies, programs,
2 laws, regulations, incentive mechanisms, and
3 other measures;

4 (B) a description of progress made or ex-
5 pected in implementing such plans, policies,
6 programs, laws, regulations, incentive mecha-
7 nisms, and other measures;

8 (C) estimates of the reductions in energy
9 use and greenhouse gas emissions achieved or
10 expected to be achieved as a result of such
11 plans, policies, programs, laws, regulations, in-
12 centive mechanisms, and other measures; and

13 (D) recommended areas in which United
14 States capacity building or other support could
15 assist the People's Republic of China and the
16 Republic of India to improve implementation or
17 compliance with such plans, policies, programs,
18 laws, regulations, incentive mechanisms, or
19 other measures, including proposals for funding
20 such joint activities;

21 (2) estimates, based on the most recent infor-
22 mation available to the interagency task force from
23 reliable public sources, of the quantity and types of
24 energy used and greenhouse gas emissions;

1 (3) a description of the tools, methods, and pro-
2 cedures that are used for collecting and analyzing
3 data regarding energy use and greenhouse gas emis-
4 sions at the national, provincial, sectoral, and facility
5 level, including—

6 (A) a comparison to the methodologies
7 used by the United States and prevailing inter-
8 national practices;

9 (B) the expected levels of uncertainty re-
10 garding the data so collected;

11 (C) the current transparency of such tools,
12 methods, and procedures; and

13 (D) recommended areas in which United
14 States capacity building or other support could
15 assist the People's Republic of China and the
16 Republic of India to improve such tools, meth-
17 ods, and procedures, increase data trans-
18 parency, and strengthen the relevant govern-
19 ance framework, including proposals for fund-
20 ing such joint activities;

21 (4) an assessment of the state of knowledge of
22 international, Chinese, and Indian best and current
23 technologies and practices to—

24 (A) improve the efficiency of coal use in
25 electricity generation;

1 (B) reduce the energy use in industrial fa-
2 cilities, buildings, appliances, electronic equip-
3 ment, and other sectors, as appropriate;

4 (C) capture and store carbon from facili-
5 ties that utilize fossil fuels for energy produc-
6 tion;

7 (D) produce renewable energy, including
8 wind, solar, small hydro, and geothermal en-
9 ergy; and

10 (E) implement more sustainable transport
11 systems and technologies; and

12 (5) the current status of, and opportunities and
13 recommendations for—

14 (A) cooperation on technology transfer,
15 joint research, development, deployment, and
16 clean energy technology trade between the
17 United States, the People’s Republic of China,
18 and the Republic of India; and

19 (B) joint opportunities for the development
20 of intellectual property, including proposals for
21 financing such joint activities.

22 (f) SUBMISSION TO CONGRESS.—Not later than 6
23 months after the date of enactment of this Act, the Sec-
24 retary shall submit the report prepared under this section
25 to—

1 (1) the Committee on Energy and Natural Re-
2 sources of the Senate;

3 (2) the Committee on Commerce, Science, and
4 Transportation of the Senate;

5 (3) the Committee on Environment and Public
6 Works of the Senate;

7 (4) the Committee on Foreign Relations of the
8 Senate;

9 (5) the Committee on Energy and Commerce of
10 the House of Representatives;

11 (6) the Committee on Natural Resources of the
12 House of Representatives; and

13 (7) the Committee on Foreign Affairs of the
14 House of Representatives.

15 (g) AUTHORIZATION OF APPROPRIATIONS.—There
16 are authorized to be appropriated to the Secretary such
17 sums as may be necessary to carry out this section.

18 **SEC. 605. CARBON LEAKAGE MITIGATION STUDY.**

19 (a) DEFINITIONS.—In this section:

20 (1) CAP-AND-TRADE PROGRAM.—The term
21 “cap-and-trade program” means an economy-wide
22 program enacted by Congress under which green-
23 house gas emission allowances are distributed or
24 auctioned to control those emissions under the Clean
25 Air Act (42 U.S.C. 7401 et seq.).

1 (2) CARBON LEAKAGE.—The term “carbon
2 leakage” means any substantial increase (as deter-
3 mined by the Secretary) in greenhouse gas emis-
4 sions—

5 (A) by a manufacturing facility located in
6 a country without a greenhouse gas emission
7 regulation commensurate to a cap-and-trade
8 program; or

9 (B) that is caused by an incremental cost
10 of production increase in the United States as
11 a result of a domestic cap-and-trade program.

12 (3) GREENHOUSE GAS.—The term “greenhouse
13 gas” means any gas designated as a greenhouse gas
14 under a cap-and-trade program.

15 (4) OUTPUT.—The term “output” means the
16 total tonnage or other standard unit of production
17 (as determined by the Secretary) produced by a
18 manufacturing facility.

19 (b) INDUSTRY PRODUCTIVITY AND CARBON LEAK-
20 AGE STUDY.—

21 (1) IN GENERAL.—Not later than 120 days
22 after the date of enactment of this Act, the Sec-
23 retary, in consultation with the Secretary of Com-
24 merce, the Administrator of the Environmental Pro-
25 tection Agency, and the heads of other appropriate

1 Federal departments and agencies, shall conduct a
2 study to characterize the relative risk of carbon leak-
3 age and changes in output and investment in United
4 States industrial sectors and subsectors caused by a
5 potential cap-and-trade program implemented in the
6 United States, in the absence of commensurate
7 greenhouse gas emission regulations in other coun-
8 tries.

9 (2) INCLUSIONS.—To the maximum extent
10 practicable, the study under paragraph (1) shall in-
11 clude an assessment of—

12 (A) the direct and indirect energy intensity
13 and greenhouse gas intensity of United States
14 industries in relation to gross value-added, cost
15 of production, and total shipment values;

16 (B) the price elasticity of United States in-
17 dustries;

18 (C) the trade elasticity of United States in-
19 dustries;

20 (D) the trade intensity (calculated as im-
21 ports plus exports, relative to domestic con-
22 sumption) of United States industries;

23 (E) other qualitative indicators of the abil-
24 ity of United States industries to pass on cost
25 increases to consumers, such as—

1 (i) market structure and concentra-
2 tion;

3 (ii) level of product differentiation;

4 (iii) the availability of close sub-
5 stitutes for customers; and

6 (iv) factors that constrain the re-
7 sponse of foreign producers to an increase
8 in United States production costs;

9 (F) the overall risk of carbon leakage, ex-
10 pressed in list form by sector and subsector of
11 the United States economy, resulting from a
12 cap-and-trade program;

13 (G) the manner in which the economic im-
14 pacts of climate change policies compare to
15 changes over time in other factors affecting
16 production and investment by industries, such
17 as currency exchange rates and other factors
18 the Secretary determines to be relevant; and

19 (H) the highest-priority trading partners
20 of the industries at risk of carbon leakage, list-
21 ed in order of priority.

22 (3) REPORT.—On completion of the study
23 under this subsection, the Secretary shall submit to
24 Congress a report describing the results of the
25 study, including recommendations regarding data

1 collection activities and subsequent studies by the
2 Secretary, if any.

3 (c) STUDY OF MEASURES TO MITIGATE CARBON
4 LEAKAGE.—

5 (1) IN GENERAL.—Not later than 180 days
6 after the date of enactment of this Act, but not ear-
7 lier than the date of submission to Congress of the
8 report regarding the competitiveness study under
9 subsection (b)(3), the Secretary, in consultation with
10 the Secretary of Commerce, the Administrator of the
11 Environmental Protection Agency, and the heads of
12 other appropriate Federal departments and agencies,
13 shall conduct a study to evaluate the impact of po-
14 tential measures, such as emission allowance alloca-
15 tion, border tax adjustments, or other measures, to
16 prevent carbon leakage resulting from a cap-and-
17 trade program.

18 (2) INCLUSIONS.—The study under paragraph
19 (1) shall include an assessment of—

20 (A) measures used by other jurisdictions to
21 prevent carbon leakage under regional, national,
22 or multinational climate policies;

23 (B)(i) the projected risk of carbon leakage
24 from United States industries under potential
25 prices on greenhouse gas emissions;

1 (ii) the potential for that risk to be miti-
2 gated using measures to prevent leakage; and

3 (iii) realistic scenarios for international cli-
4 mate policy; and

5 (C) the consistency of measures with inter-
6 national trade commitments (including prin-
7 ciples of the World Trade Organization).

8 (3) REPORT.—On completion of the study
9 under this subsection, the Secretary shall submit to
10 Congress a report describing the results of the
11 study, including recommendations of the Secretary,
12 if any.

13 **SEC. 606. STUDY OF FOREIGN FUEL SUBSIDIES.**

14 (a) IN GENERAL.—The Secretary in consultation
15 with the Secretary of State and the Secretary of Com-
16 merce, shall conduct a study of foreign fuel subsidies, in-
17 cluding—

18 (1) the impact of the subsidies on global energy
19 supplies, global energy demand, and global economic
20 impacts; and

21 (2) recommendations on actions that should be
22 taken to reduce the impact of the subsidies.

23 (b) REPORT.—Not later than 18 months after the
24 date of enactment of this Act, the Secretary shall submit
25 to the appropriate committees of Congress a report that

1 describes the results of the study conducted under this sec-
2 tion, including any recommendations.

3 **SEC. 607. ASSESSMENT OF RENEWABLE ENERGY RE-**
4 **SOURCES.**

5 Section 201(b) of the Energy Policy Act of 2005 (42
6 U.S.C. 15851(b)) is amended—

7 (1) in paragraph (1), by striking “; and” and
8 inserting a semicolon;

9 (2) by redesignating paragraph (2) as para-
10 graph (4); and

11 (3) by inserting after paragraph (1) the fol-
12 lowing:

13 “(2) with respect to biomass energy resources,
14 consideration of—

15 “(A) the quantity of biomass needed for
16 thermal applications, biofuels, and biomass-
17 based electricity;

18 “(B) the highest efficiency energy use of
19 biomass resources; and

20 “(C) the requirements and costs associated
21 with deployment of biomass energy resources
22 for each application described in subparagraph
23 (A);

24 “(3) estimates of the market penetration for
25 each renewable energy resource that could be accom-

1 plished by January 1, 2030, by investigating mul-
 2 tiple alternative scenarios, including—

3 “(A) estimates with respect to each renew-
 4 able energy resource;

5 “(B) an analysis of the potential of all re-
 6 newable energy resources; and

7 “(C) potential impacts associated with the
 8 development of each resource and all renewable
 9 energy resources in combination; and”.

10 **SEC. 608. EFFICIENCY REVIEW OF ELECTRIC GENERATION**

11 **FACILITIES.**

12 (a) **DEFINITIONS.**—In this section:

13 (1) **EFFICIENCY.**—The term “efficiency” means
 14 the operating efficiency of an electric generation fa-
 15 cility as determined by the average annual heat rate
 16 of the facility, measured in British thermal units re-
 17 quired to generate a kilowatt-hour of electricity from
 18 the facility.

19 (2) **ELECTRIC GENERATION FACILITY.**—The
 20 term “electric generation facility” means a coal-fired
 21 or natural gas-fired electric generation facility in the
 22 United States with a generating capacity that is
 23 greater than 50 megawatts.

24 (b) **REVIEW.**—

1 (1) IN GENERAL.—Not later than 120 days
2 after the date of enactment of this Act, the Sec-
3 retary, in consultation with relevant stakeholders,
4 shall complete an efficiency review to quantify the
5 efficiencies of, and annual carbon dioxide and other
6 emissions from, electric generation facilities in the
7 United States.

8 (2) ADMINISTRATION.—In conducting the re-
9 view, the Secretary shall—

10 (A) analyze efficiency trends over the 5-
11 year period ending on December 31 of the year
12 preceding the year of enactment of this Act;
13 and

14 (B) to the maximum extent practicable,
15 use existing data and information.

16 (3) CONFIDENTIALITY OF INFORMATION.—

17 (A) IN GENERAL.—In the case of informa-
18 tion obtained under this section, the Secretary
19 (including any other officer, employee, or agent
20 of the Department of Energy) and any other
21 person shall not—

22 (i) use the information for a purpose
23 other than the development or reporting of
24 aggregate data in a manner such that—

1 (I) the identity of the person who
2 supplied the information is not dis-
3 cernible and is not material to the in-
4 tended uses of the information; and

5 (II) no proprietary information,
6 trade secret, or other confidential in-
7 formation is disclosed; or

8 (ii) disclose the information to the
9 public, unless the information has been
10 transformed into a statistical or aggregate
11 form that does not—

12 (I) allow the identification of the
13 person who supplied particular infor-
14 mation; or

15 (II) disclose any proprietary in-
16 formation, trade secret, or other con-
17 fidential information.

18 (B) PENALTY.—Any person that violates
19 subparagraph (A) shall be fined or imprisoned,
20 and removed from office or employment, in ac-
21 cordance with section 1905 of title 18, United
22 States Code.

23 (c) REPORT.—After providing notice and an oppor-
24 tunity for comment but not later than 120 days after the
25 date of completion of the review under subsection (b), the

1 Secretary, in consultation with the Administrator of the
2 Environmental Protection Agency, shall submit to the
3 Committee on Energy and Natural Resources and the
4 Committee on Environment and Public Works of the Sen-
5 ate and the Committee on Energy and Commerce and the
6 Committee on Science and Technology of the House of
7 Representatives a report that—

8 (1) identifies technologies, equipment, and proc-
9 esses that are adequately demonstrated to be com-
10 mercially deployed and could increase the efficiency
11 of the electric generation facilities reviewed;

12 (2) identifies the technical, economic, regu-
13 latory, environmental, and other obstacles to electric
14 generation facilities undertaking the installation or
15 implementation of the technologies, equipment, or
16 processes described in paragraph (1);

17 (3) identifies legislative, administrative, and
18 other actions that could reduce or eliminate the ob-
19 stacles identified under paragraph (2);

20 (4) calculates the effect on total greenhouse gas
21 and other emissions from electric generation facili-
22 ties that would result from installation or implemen-
23 tation of the technologies, equipment, and processes
24 identified under paragraph (1), assuming output is
25 held constant for the United States in the aggregate

1 and the obstacles identified under paragraph (2) are
2 reduced or eliminated; and

3 (5) calculates the effect on greenhouse gas and
4 other emissions per megawatt-hour from electric
5 generation facilities that would result from installa-
6 tion or implementation of the technologies, equip-
7 ment, and processes identified under paragraph (1),
8 assuming the obstacles identified under paragraph
9 (2) are reduced or eliminated.

10 (d) AUTHORIZATION OF APPROPRIATIONS.—There is
11 authorized to be appropriated to carry out this section
12 \$3,000,000 to remain available until expended.

13 **SEC. 609. REPORT ON EMISSIONS OF ALTERNATIVE TRANS-**
14 **PORTATION FUELS.**

15 (a) IN GENERAL.—In cooperation with the Adminis-
16 trator of the Environmental Protection Agency, the Sec-
17 retary of Defense, the Administrator of the Federal Avia-
18 tion Administration, and the Secretary of Health and
19 Human Services, the Secretary shall—

20 (1) carry out a research and demonstration pro-
21 gram to evaluate the emissions from the use of alter-
22 native transportation fuels;

23 (2) evaluate the effect of using alternative
24 transportation fuels on land and air engine exhaust
25 emissions; and

1 (3) in accordance with subsection (e), submit to
2 Congress a report on the effect on air quality and
3 public health of using alternative fuels in the trans-
4 portation sector.

5 (b) GUIDANCE AND TECHNICAL SUPPORT.—The Sec-
6 retary shall issue any guidance or technical support docu-
7 ments necessary to facilitate the effective use of alter-
8 native transportation fuels and blends under this section.

9 (c) FACILITIES.—For the purpose of evaluating the
10 emissions of alternative transportation fuels, the Secretary
11 shall engage research centers for alternative fuels in the
12 evaluation and preparation of the report required under
13 subsection (a)(3).

14 (d) REQUIREMENTS.—The program described in sub-
15 section (a)(1) shall consider—

16 (1) the use of alternative transportation fuels
17 and blends for heavy-duty and light-duty diesel en-
18 gines and the aviation sector; and

19 (2) the production costs associated with domes-
20 tic production of those fuels and prices for con-
21 sumers.

22 (e) REPORTS.—The Secretary shall submit to the
23 Committee on Energy and Natural Resources of the Sen-
24 ate and the Committee on Energy and Commerce of the
25 House of Representatives—

1 (1) not later than 180 days after the date of
2 enactment of this Act, an interim report on actions
3 taken to carry out this section; and

4 (2) not later than 1 year after the date of en-
5 actment of this Act, a final report on actions taken
6 to carry out this section.

7 (f) AUTHORIZATION OF APPROPRIATIONS.—There
8 are authorized to be appropriated such sums as are nec-
9 essary to carry out this section.

10 **SEC. 610. OIL SAVINGS.**

11 (a) FINDINGS.—Congress finds that—

12 (1) the United States imports more foreign oil
13 from the Middle East today than before the attacks
14 on the United States on September 11, 2001;

15 (2) the United States remains the most oil-de-
16 pendent industrialized nation in the world, con-
17 suming approximately 25 percent of the oil supply of
18 the world;

19 (3) the ongoing dependence of the United
20 States on foreign oil is one of the greatest threats
21 to the national security and economy of the United
22 States; and

23 (4) the United States needs to take trans-
24 formative steps to wean itself from its addiction to
25 foreign oil.

1 (b) POLICY ON REDUCING OIL DEPENDENCE.—It is
2 the policy of the United States to reduce the dependence
3 of the United States on foreign oil, and thereby—

4 (1) alleviate the strategic dependence of the
5 United States on foreign oil-producing countries;

6 (2) reduce the economic vulnerability of the
7 United States; and

8 (3) reduce the greenhouse gas emissions associ-
9 ated with oil use.

10 (c) OIL SAVINGS REPORT.—

11 (1) IN GENERAL.—Not later than 270 days
12 after the date of enactment of this Act and every 3
13 years thereafter, an interagency task force composed
14 of the Secretary of Energy and the head of any
15 other agency that the President determines to be ap-
16 propriate (referred to in this section as the “Inter-
17 agency Task Force”) shall submit to Congress a re-
18 port that—

19 (A) describes options for agency action
20 that, when taken together, would save from the
21 baseline determined under paragraph (4)—

22 (i) 2,500,000 barrels of oil per day on
23 average during calendar year 2016;

24 (ii) 7,000,000 barrels of oil per day
25 on average during calendar year 2026; and

1 (iii) 10,000,000 barrels of oil per day
2 on average during calendar year 2030; and

3 (B) analyzes for all Federal agencies—

4 (i) the expected oil savings from the
5 baseline to be accomplished by—

6 (I) chapter 329 of title 49,
7 United States Code (including regula-
8 tions promulgated to carry out that
9 chapter); and

10 (II) section 211(o) of the Clean
11 Air Act (42 U.S.C. 7545(o)) (includ-
12 ing regulations promulgated to carry
13 out section 211(o) of that Act); and

14 (ii) whether the options described in
15 subparagraph (A), taken together with ex-
16 pected oil savings described in clause (i),
17 will achieve the oil savings specified in sub-
18 paragraph (A).

19 (2) CONTENTS.—Each report shall—

20 (A) be consistent with the policy under
21 subsection (b);

22 (B) include only options directly related to
23 reduced oil consumption;

1 (C) include a description of the advantages
2 and disadvantages (including implications for
3 national security) for each option; and

4 (D) not include options that would increase
5 lifecycle greenhouse gas emissions above levels
6 in effect on the date of enactment of this Act.

7 (3) ADDITIONAL LEGISLATIVE AUTHORITY.—
8 Each report may include a request to Congress for
9 any additional legislative authority that is necessary
10 to implement any recommendations made in the re-
11 port.

12 (4) BASELINE.—In performing the analyses re-
13 quired for the report, the Interagency Task Force
14 shall—

15 (A) determine oil savings as the projected
16 reduction in oil consumption from the baseline
17 established by the reference case contained in
18 the report of the Energy Information Adminis-
19 tration entitled “Annual Energy Outlook
20 2009”;

21 (B) determine the oil savings projections
22 required on an annual basis for each of cal-
23 endar years 2009 through 2030; and

24 (C) account for any overlap among imple-
25 mentation actions to ensure that the projected

1 oil savings from all the recommendations, taken
2 together, are as accurate as practicable.

3 (d) ANNUAL REPORT ON OIL SAVINGS MEASURES.—

4 Not later than 1 year after the date of initial oil savings
5 report under subsection (c) and annually thereafter, the
6 Secretary of Energy shall submit to Congress a report that
7 estimates the quantity of oil actually saved by the oil sav-
8 ings measures that the Federal Government has imple-
9 mented during the prior year.

10 (e) RELATIONSHIP TO OTHER LAWS.—Nothing in
11 this section affects the authority provided or responsibility
12 delegated under any other law.

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111TH CONGRESS
1ST Session

S. 1462

[Report No. 111-48]

A BILL

To promote clean energy technology development, enhanced energy efficiency, improved energy security, and energy innovation and workforce development, and for other purposes.

JULY 16, 2009

Read twice and placed on the calendar