

One Hundred Tenth Congress
of the
United States of America

AT THE FIRST SESSION

*Begun and held at the City of Washington on Thursday,
the fourth day of January, two thousand and seven*

An Act

To move the United States toward greater energy independence and security, to increase the production of clean renewable fuels, to protect consumers, to increase the efficiency of products, buildings, and vehicles, to promote research on and deploy greenhouse gas capture and storage options, and to improve the energy performance of the Federal Government, and for other purposes.

*Be it enacted by the Senate and House of Representatives of
the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “Energy Independence and Security Act of 2007”.

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

- Sec. 1. Short title; table of contents.
- Sec. 2. Definitions.
- Sec. 3. Relationship to other law.

**TITLE I—ENERGY SECURITY THROUGH IMPROVED VEHICLE FUEL
ECONOMY**

Subtitle A—Increased Corporate Average Fuel Economy Standards

- Sec. 101. Short title.
- Sec. 102. Average fuel economy standards for automobiles and certain other vehicles.
- Sec. 103. Definitions.
- Sec. 104. Credit trading program.
- Sec. 105. Consumer information.
- Sec. 106. Continued applicability of existing standards.
- Sec. 107. National Academy of Sciences studies.
- Sec. 108. National Academy of Sciences study of medium-duty and heavy-duty truck fuel economy.
- Sec. 109. Extension of flexible fuel vehicle credit program.
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- Sec. 133. Inclusion of electric drive in Energy Policy Act of 1992.
- Sec. 134. Loan guarantees for fuel-efficient automobile parts manufacturers.
- Sec. 135. Advanced battery loan guarantee program.
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- Sec. 141. Federal vehicle fleets.
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- Sec. 202. Renewable fuel standard.
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- Sec. 204. Environmental and resource conservation impacts.
- Sec. 205. Biomass based diesel and biodiesel labeling.
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- Sec. 207. Grants for production of advanced biofuels.
- Sec. 208. Integrated consideration of water quality in determinations on fuels and fuel additives.
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- Sec. 221. Biodiesel.
- Sec. 222. Biogas.
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- Sec. 224. Biorefinery energy efficiency.
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- Sec. 228. Algal biomass.
- Sec. 229. Biofuels and biorefinery information center.
- Sec. 230. Cellulosic ethanol and biofuels research.
- Sec. 231. Bioenergy research and development, authorization of appropriation.
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- Sec. 242. Renewable fuel dispenser requirements.
- Sec. 243. Ethanol pipeline feasibility study.
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TITLE XVI—EFFECTIVE DATE

Sec. 1601. Effective date.

SEC. 2. DEFINITIONS.

In this Act:

(1) DEPARTMENT.—The term “Department” means the Department of Energy.

(2) INSTITUTION OF HIGHER EDUCATION.—The term “institution of higher education” has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

(3) SECRETARY.—The term “Secretary” means the Secretary of Energy.

SEC. 3. RELATIONSHIP TO OTHER LAW.

Except to the extent expressly provided in this Act or an amendment made by this Act, nothing in this Act or an amendment made by this Act supersedes, limits the authority provided or responsibility conferred by, or authorizes any violation of any provision of law (including a regulation), including any energy or environmental law or regulation.

TITLE I—ENERGY SECURITY THROUGH IMPROVED VEHICLE FUEL ECONOMY

Subtitle A—Increased Corporate Average Fuel Economy Standards

SEC. 101. SHORT TITLE.

This subtitle may be cited as the “Ten-in-Ten Fuel Economy Act”.

**SEC. 102. AVERAGE FUEL ECONOMY STANDARDS FOR AUTOMOBILES
AND CERTAIN OTHER VEHICLES.**

(a) INCREASED STANDARDS.—Section 32902 of title 49, United States Code, is amended—

(1) in subsection (a)—

(A) by striking “NON-PASSENGER AUTOMOBILES.—” and inserting “PRESCRIPTION OF STANDARDS BY REGULATION.—”;

(B) by striking “(except passenger automobiles)” in subsection (a); and

(C) by striking the last sentence;

(2) by striking subsection (b) and inserting the following:

“(b) STANDARDS FOR AUTOMOBILES AND CERTAIN OTHER VEHICLES.—

“(4) The Commission shall seek to take advantage of pre-existing research and ongoing work, and shall insure that there is no duplication of effort.

“(b) NATIONAL ACTION PLAN ON DEMAND RESPONSE.—The Commission shall further develop a National Action Plan on Demand Response, soliciting and accepting input and participation from a broad range of industry stakeholders, State regulatory utility commissioners, and non-governmental groups. The Commission shall seek consensus where possible, and decide on optimum solutions to issues that defy consensus. Such Plan shall be completed within 1 year after the completion of the National Assessment of Demand Response, and shall meet each of the following objectives:

“(1) Identification of requirements for technical assistance to States to allow them to maximize the amount of demand response resources that can be developed and deployed.

“(2) Design and identification of requirements for implementation of a national communications program that includes broad-based customer education and support.

“(3) Development or identification of analytical tools, information, model regulatory provisions, model contracts, and other support materials for use by customers, States, utilities and demand response providers.

“(c) Upon completion, the National Action Plan on Demand Response shall be published, together with any favorable and dissenting comments submitted by participants in its preparation. Six months after publication, the Commission, together with the Secretary of Energy, shall submit to Congress a proposal to implement the Action Plan, including specific proposed assignments of responsibility, proposed budget amounts, and any agreements secured for participation from State and other participants.

“(d) AUTHORIZATION.—There are authorized to be appropriated to the Commission to carry out this section not more than \$10,000,000 for each of the fiscal years 2008, 2009, and 2010.”.

(b) TABLE OF CONTENTS.—The table of contents for the National Energy Conservation Policy Act (42 U.S.C. 8201 note) is amended by adding after the items relating to part 4 of title V the following:

“PART 5—PEAK DEMAND REDUCTION

“Sec. 571. National Action Plan for Demand Response.”.

Subtitle D—Energy Efficiency of Public Institutions

SEC. 531. REAUTHORIZATION OF STATE ENERGY PROGRAMS.

Section 365(f) of the Energy Policy and Conservation Act (42 U.S.C. 6325(f)) is amended by striking “\$100,000,000 for each of the fiscal years 2006 and 2007 and \$125,000,000 for fiscal year 2008” and inserting “\$125,000,000 for each of fiscal years 2007 through 2012”.

SEC. 532. UTILITY ENERGY EFFICIENCY PROGRAMS.

(a) ELECTRIC UTILITIES.—Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding at the end the following:

“(16) INTEGRATED RESOURCE PLANNING.—Each electric utility shall—

“(A) integrate energy efficiency resources into utility, State, and regional plans; and

“(B) adopt policies establishing cost-effective energy efficiency as a priority resource.

“(17) RATE DESIGN MODIFICATIONS TO PROMOTE ENERGY EFFICIENCY INVESTMENTS.—

“(A) IN GENERAL.—The rates allowed to be charged by any electric utility shall—

“(i) align utility incentives with the delivery of cost-effective energy efficiency; and

“(ii) promote energy efficiency investments.

“(B) POLICY OPTIONS.—In complying with subparagraph (A), each State regulatory authority and each non-regulated utility shall consider—

“(i) removing the throughput incentive and other regulatory and management disincentives to energy efficiency;

“(ii) providing utility incentives for the successful management of energy efficiency programs;

“(iii) including the impact on adoption of energy efficiency as 1 of the goals of retail rate design, recognizing that energy efficiency must be balanced with other objectives;

“(iv) adopting rate designs that encourage energy efficiency for each customer class;

“(v) allowing timely recovery of energy efficiency-related costs; and

“(vi) offering home energy audits, offering demand response programs, publicizing the financial and environmental benefits associated with making home energy efficiency improvements, and educating homeowners about all existing Federal and State incentives, including the availability of low-cost loans, that make energy efficiency improvements more affordable.”.

(b) NATURAL GAS UTILITIES.—Section 303(b) of the Public Utility Regulatory Policies Act of 1978 (15 U.S.C. 3203(b)) is amended by adding at the end the following:

“(5) ENERGY EFFICIENCY.—Each natural gas utility shall—

“(A) integrate energy efficiency resources into the plans and planning processes of the natural gas utility; and

“(B) adopt policies that establish energy efficiency as a priority resource in the plans and planning processes of the natural gas utility.

“(6) RATE DESIGN MODIFICATIONS TO PROMOTE ENERGY EFFICIENCY INVESTMENTS.—

“(A) IN GENERAL.—The rates allowed to be charged by a natural gas utility shall align utility incentives with the deployment of cost-effective energy efficiency.

“(B) POLICY OPTIONS.—In complying with subparagraph (A), each State regulatory authority and each non-regulated utility shall consider—

“(i) separating fixed-cost revenue recovery from the volume of transportation or sales service provided to the customer;

“(ii) providing to utilities incentives for the successful management of energy efficiency programs, such

(5) The ability to detect, prevent, communicate with regard to, respond to, or recover from system security threats, including cyber-security threats and terrorism, using digital information, media, and devices.

(6) The ability of any appliance or machine to respond to such signals, measurements, or communications automatically or in a manner programmed by its owner or operator without independent human intervention.

(7) The ability to use digital information to operate functionalities on the electric utility grid that were previously electro-mechanical or manual.

(8) The ability to use digital controls to manage and modify electricity demand, enable congestion management, assist in voltage control, provide operating reserves, and provide frequency regulation.

(9) Such other functions as the Secretary may identify as being necessary or useful to the operation of a Smart Grid.

(e) The Secretary shall—

(1) establish and publish in the Federal Register, within 1 year after the enactment of this Act procedures by which applicants who have made qualifying Smart Grid investments can seek and obtain reimbursement of one-fifth of their documented expenditures;

(2) establish procedures to ensure that there is no duplication or multiple reimbursement for the same investment or costs, that the reimbursement goes to the party making the actual expenditures for Qualifying Smart Grid Investments, and that the grants made have significant effect in encouraging and facilitating the development of a smart grid;

(3) maintain public records of reimbursements made, recipients, and qualifying Smart Grid investments which have received reimbursements;

(4) establish procedures to provide, in cases deemed by the Secretary to be warranted, advance payment of moneys up to the full amount of the projected eventual reimbursement, to creditworthy applicants whose ability to make Qualifying Smart Grid Investments may be hindered by lack of initial capital, in lieu of any later reimbursement for which that applicant qualifies, and subject to full return of the advance payment in the event that the Qualifying Smart Grid investment is not made; and

(5) have and exercise the discretion to deny grants for investments that do not qualify in the reasonable judgment of the Secretary.

(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary such sums as are necessary for the administration of this section and the grants to be made pursuant to this section for fiscal years 2008 through 2012.

SEC. 1307. STATE CONSIDERATION OF SMART GRID.

(a) Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding at the end the following:

“(16) CONSIDERATION OF SMART GRID INVESTMENTS.—

“(A) IN GENERAL.—Each State shall consider requiring that, prior to undertaking investments in nonadvanced grid technologies, an electric utility of the State demonstrate

to the State that the electric utility considered an investment in a qualified smart grid system based on appropriate factors, including—

- “(i) total costs;
- “(ii) cost-effectiveness;
- “(iii) improved reliability;
- “(iv) security;
- “(v) system performance; and
- “(vi) societal benefit.

“(B) RATE RECOVERY.—Each State shall consider authorizing each electric utility of the State to recover from ratepayers any capital, operating expenditure, or other costs of the electric utility relating to the deployment of a qualified smart grid system, including a reasonable rate of return on the capital expenditures of the electric utility for the deployment of the qualified smart grid system.

“(C) OBSOLETE EQUIPMENT.—Each State shall consider authorizing any electric utility or other party of the State to deploy a qualified smart grid system to recover in a timely manner the remaining book-value costs of any equipment rendered obsolete by the deployment of the qualified smart grid system, based on the remaining depreciable life of the obsolete equipment.

“(17) SMART GRID INFORMATION.—

“(A) STANDARD.—All electricity purchasers shall be provided direct access, in written or electronic machine-readable form as appropriate, to information from their electricity provider as provided in subparagraph (B).

“(B) INFORMATION.—Information provided under this section, to the extent practicable, shall include:

“(i) PRICES.—Purchasers and other interested persons shall be provided with information on—

“(I) time-based electricity prices in the wholesale electricity market; and

“(II) time-based electricity retail prices or rates that are available to the purchasers.

“(ii) USAGE.—Purchasers shall be provided with the number of electricity units, expressed in kwh, purchased by them.

“(iii) INTERVALS AND PROJECTIONS.—Updates of information on prices and usage shall be offered on not less than a daily basis, shall include hourly price and use information, where available, and shall include a day-ahead projection of such price information to the extent available.

“(iv) SOURCES.—Purchasers and other interested persons shall be provided annually with written information on the sources of the power provided by the utility, to the extent it can be determined, by type of generation, including greenhouse gas emissions associated with each type of generation, for intervals during which such information is available on a cost-effective basis.

“(C) ACCESS.—Purchasers shall be able to access their own information at any time through the Internet and on other means of communication elected by that utility

for Smart Grid applications. Other interested persons shall be able to access information not specific to any purchaser through the Internet. Information specific to any purchaser shall be provided solely to that purchaser.”

(b) COMPLIANCE.—

(1) TIME LIMITATIONS.—Section 112(b) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(b)) is amended by adding the following at the end thereof:

“(6)(A) Not later than 1 year after the enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) and each nonregulated utility shall commence the consideration referred to in section 111, or set a hearing date for consideration, with respect to the standards established by paragraphs (17) through (18) of section 111(d).

“(B) Not later than 2 years after the date of the enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority), and each nonregulated electric utility, shall complete the consideration, and shall make the determination, referred to in section 111 with respect to each standard established by paragraphs (17) through (18) of section 111(d).”

(2) FAILURE TO COMPLY.—Section 112(c) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(c)) is amended by adding the following at the end:

“In the case of the standards established by paragraphs (16) through (19) of section 111(d), the reference contained in this subsection to the date of enactment of this Act shall be deemed to be a reference to the date of enactment of such paragraphs.”

(3) PRIOR STATE ACTIONS.—Section 112(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(d)) is amended by inserting “and paragraphs (17) through (18)” before “of section 111(d)”.

SEC. 1308. STUDY OF THE EFFECT OF PRIVATE WIRE LAWS ON THE DEVELOPMENT OF COMBINED HEAT AND POWER FACILITIES.

(a) STUDY.—

(1) IN GENERAL.—The Secretary, in consultation with the States and other appropriate entities, shall conduct a study of the laws (including regulations) affecting the siting of privately owned electric distribution wires on and across public rights-of-way.

(2) REQUIREMENTS.—The study under paragraph (1) shall include—

(A) an evaluation of—

(i) the purposes of the laws; and

(ii) the effect the laws have on the development of combined heat and power facilities;

(B) a determination of whether a change in the laws would have any operating, reliability, cost, or other impacts on electric utilities and the customers of the electric utilities; and

(C) an assessment of—

(i) whether privately owned electric distribution wires would result in duplicative facilities; and