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ENERGY SAVINGS ACT OF 2007

MAY 7, 2007.—Ordered to be printed

Mr. BINGAMAN, from the Committee on Energy and Natural Resources, submitted the following

R E P O R T

[To accompany S. 1321]

The Committee on Energy and Natural Resources, having considered the same, reports favorably thereon, an original bill (S. 1321) to enhance the energy security of the United States by promoting biofuels, energy efficiency, and carbon capture and storage, and for other purposes, and recommends that the bill do pass.

PURPOSE OF THE MEASURE

The purpose of the measure is to enhance the energy security of the United States by promoting biofuels, energy efficiency, and carbon capture and storage.

BACKGROUND AND NEED

Events unfolding on the world stage, continuing pressure on the price of vital energy commodities and the recognition that opportunity exists for the United States to become a global leader in the development of innovative energy technologies have combined to fashion an emerging consensus among American citizens and the Congress alike: the nation must move forward aggressively to enhance its energy security.

In 2005, the United States imported roughly 60 percent of the petroleum it consumed, a figure that is projected to approach 70 percent over the next two decades. More than 35 percent of the estimated increase in imports is expected to come from member-nations of the Organization of Petroleum Exporting Countries (OPEC). Meanwhile, petroleum prices have increased substantially in recent years—putting strain on the budgets of families, farmers and businesses across the nation, but also imposing costs on the

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American economy as a whole, adding an estimated $120 billion to the nation's trade deficit in 2005 and 2006.

As the nation's reliance on foreign supplies of petroleum has grown, so too has the need for federal policies that promote new technologies and more efficient use of energy, tap the potential of home-grown biofuels, and nurture America's talent for innovation. Such policies reinforce the security objectives of the United States, are consistent with principles of environmental stewardship, and hold the promise of new job-creation and enhanced competitiveness in an increasingly global economy. This legislation addresses three key areas in which the United States can make substantial strides toward improving its energy security: increased domestic production of renewable fuels; strengthened energy efficiency requirements; and critical research on technologies to reduce carbon emissions.

Biofuels for energy security and transportation

In recent years, a number of factors have sharpened public focus on the search for viable alternatives to conventional petroleum-based fuels. These factors include increased world oil prices, concerns regarding import dependence, and the environmental effects of vehicle emissions. Biofuels—a term which includes ethanol and biodiesel—can be derived from an array of crops and other biological materials available throughout the nation. Since the 1970s, all cars and light-trucks with gasoline engines built for the U.S. market have been able to run on ethanol blends of up to 10 percent (E10). A smaller yet increasing number of vehicles—estimated at about 6 million on American roads today—can run on fuel comprised of 85 percent ethanol, or E85. Meanwhile, existing diesel engines can run on biodiesel in any concentration. Due to concerns about quality standards, however, manufacturers may not honor warranties for engines running on biodiesel blends in excess of 5 percent (B5) or 20 percent (B20).

The passage of the Energy Policy Act of 2005 (Public Law Number 109–58) was a watershed event for the nation's biofuels industry, establishing the first federal Renewable Fuels Standard (RFS). The RFS created an escalating requirement for the amount of biofuels blended in U.S. gasoline, starting with 4 billion gallons in 2006, and accelerating to 7.5 billion gallons in 2012. However, increased use of biofuels is already surpassing the original RFS targets, with 5 billion gallons added to U.S. gasoline in 2006. Another 6 billion gallons of production capacity is expected to go into operation by 2009, bringing total domestic production capacity to approximately 11.7 billion gallons. According to the Energy Information Administration's 2007 Annual Energy Outlook, "the market potential for biofuel blends (E10, B5, and B20) remains significantly larger than current production levels and will continue to absorb the biofuel supply for the foreseeable future."

Yet, challenges remain if biofuels are to become a cornerstone of U.S. efforts to improve national energy security. Today, approximately 98 percent of domestic ethanol production is derived from cornstarch—creating upward pressure on commodity prices, restricting production to regions of the country where corn is grown, and posing challenges to efficient distribution of the fuel. Diversifying feedstocks to include a broader array of renewable biomass

can promote regional diversity in biofuels production and distribution, spreading economic benefits to rural communities across the country and relieving pressure on corn commodity prices. In addition, it can lead to greater efficiency in the fuel-production process and help save on fossil fuel emissions.

Another issue key to making biofuels a significant factor in displacing domestic petroleum use relates to existing infrastructure challenges. Of the nearly 170,000 vehicle fueling stations in the U.S., just one percent—about 1,767—carried E85 or biodiesel in 2006. Consumers must have access to these fuels, if they are to become a viable alternative.

The Committee believes that increasing and extending the existing RFS—with specific incentives for the production of biofuels from new sources of renewable biomass—is required, to provide market certainty to both the existing ethanol industry and the next generation of advanced biofuels producers. In addition, federal resources are needed to help break down infrastructure barriers to renewable fuel distribution, and address basic scientific challenges associated with the use of promising new feedstocks.

Energy efficiency

In addition to producing more domestic renewable energy, using existing resources more efficiently promises further to enhance U.S. energy security, provide environmental benefits, and save consumers money.

Improving efficiency in transportation remains one of the most important—and vexing—energy challenges facing the nation. Consumption of liquid fuels is currently projected to grow by more than 6 million barrels per day, from 2005 to 2030—5.8 million barrels per day attributable to transportation. As fuel consumption increases, so too do U.S. imports—a key concern for both economic and national security reasons.

A concerted federal effort is needed to reduce the transportation sector's consumption of liquid fuels in general, and gasoline in particular. This initiative will necessitate a serious plan and the concerted leadership of present and future Administrations. In addition, investments in advanced vehicle technology development, basic science related to energy storage, and public education are required.

The federal government itself represents the nation's largest energy consumer and, as such, can play a key role in bringing new renewable energy and efficiency technologies to market. In addition, improved federal efficiency can save taxpayers money. Even as the government has reduced its energy consumption—savings of 2.5 percent from Fiscal Year 2004 to Fiscal Year 2005—federal energy costs nevertheless increased 24.1 percent, to $14.5 billion. Rising energy prices have an impact on the federal budget, as on every consumer and business in America. To capture additional savings, federal efficiency requirements—from lighting procurement, to petroleum displacement, to energy management strategies across federal buildings—should be strengthened.

Individual consumers also realize the benefits of improved energy efficiency. That is particularly true when it comes to improving the performance of lighting technologies and appliances, which together can contribute as much as two-thirds of an average Amer-

ican household's electricity costs. Lighting alone is estimated to consume about 22 percent of all U.S. electricity generation. Refrigerators account for an estimated additional 12 percent of U.S. residential energy use. To maximize consumer benefits, the Department of Energy's standards-setting process should be streamlined and strengthened, and new federal requirements must be established for a number of different kinds of household appliances.

Carbon capture and storage research, development, and demonstration

Carbon capture and storage (CCS), often called carbon sequestration, has attracted interest as a measure for mitigating global climate change. While scientific and technological challenges remain, carbon sequestration holds particular promise related to the potentially large amounts of carbon dioxide emitted from the use of fossil fuels. Electric generating plants may be the most likely initial candidates for implementing carbon sequestration, given that they are predominantly large, single-point sources, and contribute an estimated one-third of U.S. carbon dioxide emissions from fossil fuels.

A viable, integrated CCS system would include three main components: (1) Capture and separation of carbon dioxide at the source of generation; (2) the transportation of captured carbon dioxide to a storage site; and (3) storage in a geological reservoir. There are many ways that carbon storage can occur, such as through direct geologic injection, forest and plant uptake (indirect), soil biomass accumulation (indirect), direct ocean injection, and many others.

The Energy Policy Act of 2005 directed the Secretary of Energy to carry out research and development on technologies designed to capture carbon dioxide, specifically with respect to combustion-based energy systems. However, given the critical nature of these efforts, the need to demonstrate emerging methodologies, and the potential to apply them to a wider variety of energy technologies, the existing program should be strengthened and further expanded. In addition, more research is needed to assess the characteristics of various geological formations, and their suitability as sites for carbon storage. Existing surveys do not provide a comprehensive account of potential geologic storage sites across the United States, and methodologies should be standardized.

In sum, the Committee supports moving forward expeditiously with groundbreaking research on carbon sequestration, spurring diverse, domestic renewable fuels production, and promoting energy efficiency throughout the economy. The Committee believes this legislation is needed to make substantial progress on all of these key initiatives, thereby improving the energy security of the United States and reducing the nation's dependence on imported oil.

LEGISLATIVE HISTORY

The Committee on Energy and Natural Resources held five oversight hearings on the subjects of biofuels, energy efficiency, and carbon capture and sequestration in the first three months of the 110th Congress. The five hearings were on fuel efficiency in the transportation sector (Full Committee hearing, January 30, 2007), biofuels (Full Committee conference, February 1, 2007), energy efficiency programs (Subcommittee on Energy hearing, February 12, 2007), advanced energy technologies (Full Committee hearing,

March 7, 2007), and coal (Full Committee hearing, March 22, 2007).

Subsequently, the Chairman and Ranking Member of the Committee introduced three bipartisan bills on the three subjects: S. 962, the Department of Energy Carbon Capture and Storage Research, Development, and Demonstration Act of 2007, on March 22, 2007; S. 987, the Biofuels for Energy Security and Transportation Act of 2007, on March 26, 2007; and S. 1115, the Energy Efficiency Promotion Act of 2007, on April 16, 2007. In addition, Senator Salazar introduced S. 731, the National Carbon Dioxide Storage Capacity Assessment Act of 2007, on March 1, 2007.

The Full Committee held legislative hearings on S. 987, the Biofuels for Energy Security and Transportation Act, on April 12, 2007; on S. 731, the National Carbon Dioxide Storage Capacity Assessment Act of 2007, and S. 962, the Department of Energy Carbon Capture and Storage Research, Development, and Demonstration Act of 2007, on April 16, 2007; and on S. 1115, the Energy Efficiency Promotion Act of 2007, on April 23, 2007.

On April 27, 2007, the Chairman and Ranking Member circulated to Members of the Committee a draft of an original bill drawn from the text of S. 987, S. 1115, and a combination of S. 731 and S. 962.

The Committee on Energy and Natural Resources met in open business session on May 2, 2007 to consider the draft, and ordered an original bill favorably reported.

COMMITTEE RECOMMENDATION AND TABULATION OF VOTES

The Senate Committee on Energy and Natural Resources, in open business session on May 2, 2007, by majority vote of a quorum present, recommends that the Senate pass an original bill, as described herein.

The rollcall vote on reporting the measure was 20 yeas, 3 nays, as follows:

YEAS	NAYS
Mr. Bingaman	Mr. Thomas
Mr. Akaka	Mr. Burr
Mr. Dorgan	Mr. DeMint
Mr. Wyden*	
Mr. Johnson*	
Ms. Landrieu	
Ms. Cantwell	
Mr. Salazar	
Mr. Menendez*	
Mrs. Lincoln	
Mr. Sanders	
Mr. Tester	
Mr. Domenici	
Mr. Craig	
Ms. Murkowski	
Mr. Corker	
Mr. Sessions*	
Mr. Smith*	
Mr. Bunning*	
Mr. Martinez*	

*Indicates vote by proxy.

SECTION-BY-SECTION ANALYSIS

Section 1. Short title; Table of Contents

Section 1 provides a short title and table of contents.

Section 2. Definition of Secretary

Section 2 defines "Secretary" for purposes of this Act as the Secretary of Energy.

TITLE I—BIOFUELS FOR ENERGY SECURITY AND TRANSPORTATION

Section 101. Short title

Section 101 names title I the "Biofuels for Energy Security and Transportation Act of 2007".

Section 102. Definitions

Section 102 defines the terms used in this title. These terms include "advanced biofuel," which means any fuel derived from a source of renewable biomass other than corn starch. The definition of "renewable biomass" included in this section clarifies that it does not include biomass harvested from Federal lands that is derived from the main stem of old-growth trees. The definition of "renewable biomass" further clarifies that certain Indian lands are to be considered "non-Federal lands" for purposes of the definition even though held or administered by the United States.

SUBTITLE A—RENEWABLE FUELS STANDARD

Section 111. Renewable fuels standard

Section 111 requires the President to promulgate regulations to ensure that renewable fuels are consumed for motor vehicles, home heating oil, and boiler fuels in amounts escalating from 8.5 billion gallons in 2008, to 36 billion gallons in 2022. It also requires that, of those amounts, advanced biofuels not derived from corn starch comprise volumes rising from 3 billion gallons in 2016, to 21 billion gallons in 2022. This section further stipulates that the regulations issued under this section must ensure that biofuels facilities built after the date of enactment achieve at least a 20 percent reduction in life cycle greenhouse gas emissions, compared to gasoline. It also contains provisions related to participation by small refiners, opportunities for the President to waive the program requirements, and provisions for a fuel producer credit trading program.

Section 112. Production of renewable fuel using renewable energy

Section 112 provides for the creation of a credit not to exceed the equivalent of 1.5 gallons, awarded under the trading program established pursuant to section 111, for facilities that use renewable energy to displace more than 90 percent of fossil fuel typically used in the production of renewable fuel.

SUBTITLE B—RENEWABLE FUELS INFRASTRUCTURE

Section 121. Infrastructure pilot program for renewable fuels

Section 121 directs the Secretary to establish up to 10 geographically-dispersed renewable fuels corridors through competitive

grants to state, local, tribal governments, metropolitan transportation authorities or partnerships, through the Department of Energy's Vehicle Technology Deployment Program.

Section 122. Bioenergy research and development

Section 122 amends the Energy Policy Act of 2005 to increase funding authorizations for bioenergy research and development by 50 percent for fiscal years 2008 and 2009.

Section 123. Bioresearch centers for systems biology program

Section 123 increases the number of bioresearch centers focused on biofuels to 11, to cover the range of climates, regions, and feedstocks in the United States.

Section 124. Loan guarantees for renewable fuel facilities

Section 124 stipulates that the first six loan guarantees for advanced biofuels facilities can be made in advance of DOE's rulemaking to implement Title 17 of the Energy Policy Act of 2005. It requires the Secretary to approve or disapprove applications for these six applications in 90 days, and to provide written explanations of those decisions to Congress. This section also clarifies underlying provisions of the Energy Policy Act of 2005, with respect to loan guarantee implementation.

Section 125. Grants for renewable fuel production research and development in certain States

Section 125 directs the Secretary to provide grants for research in renewable fuels technologies to certain institutions of higher education, tribal or local government agencies, or consortiums of such organizations, in states with low rates of ethanol production. It authorizes $25 million for this purpose in each of fiscal years 2008 through 2010.

Section 126. Grants for infrastructure for transportation of biomass to local biorefineries

Section 126 directs the Secretary to provide grants to local governments, tribes and other entities to promote the development of infrastructure to support the transportation of biomass to local biorefineries.

Section 127. Biorefinery information center

Section 127 directs the Secretary to cooperate with the Secretary of Agriculture to establish a biorefinery information center. The center must make available information on renewable fuel resources, producers, and users, programs and incentives related to biorefineries, through a website and call center.

Section 128. Alternative fuel database and materials

Section 128 directs the Secretary and Director of the National Institute of Standards and Technology (NIST) to establish a public database and standard reference materials for physical properties of renewable fuels.

Section 129. Fuel tank cap labeling requirement

Starting in model year 2010, section 129 requires labeling of fuel tank caps for alternative fuel vehicles to inform consumers the vehicles can operate on alternative fuels.

Section 130. Biodiesel

Section 130 requires the Secretary to submit to Congress within 180 days a study identifying any research and development challenges associated with increasing to 5 percent the amount of biodiesel contained in diesel fuel sold in the U.S. It further requires the President to promulgate regulations establishing uniform labeling of biodiesel blends, consistent with published standards of the American Society for Testing and Materials (ASTM). This section also requires the President to issue regulations within 180 days of enactment, to ensure that only biodiesel certified in compliance with the ASTM 6751 standard is introduced into interstate commerce, and authorizes $3 million in each of fiscal years 2008 through 2010 for these purposes.

SUBTITLE C—STUDIES

Section 141. Study of advanced biofuels technologies

Section 141 directs the Secretary to contract with the National Academy of Sciences, to study the state of technologies related to the production, transportation and distribution of advanced biofuels; assess whether technological development will be sufficient to meet requirements of the renewable fuels standard established under section 111, and make policy recommendations appropriate to further accelerate the development and commercialization of those technologies.

Section. 142. Study of increased consumption of ethanol-blended gasoline with higher levels of ethanol

Section 142 directs the Secretary, in coordination with the Secretary of Agriculture, Administrator of the Environmental Protection Agency, and the Secretary of Transportation, to study the feasibility of nationwide consumption of ethanol at levels between E10 and E40.

Section 143. Pipeline feasibility study

Section 143 directs the Secretary, in coordination with the Secretary of Agriculture and the Secretary of Transportation, to study the feasibility of dedicated ethanol pipelines.

Section 144. Study of optimization of alternative fueled vehicles to use E–85 fuel

Section 144 directs the Secretary to study optimization of alternative fueled vehicles, to reduce the efficiency loss those vehicles experience when fueled by E85.

Section 145. Study of credits for use of renewable electricity in electric vehicles

Section 145 directs the Secretary to study the feasibility of issuing credits under the program established in section 111 to electric vehicles powered by renewable electricity sources.

Section 146. Study of engine durability associated with the use of biodiesel

Section 146 directs the Secretary to study the effects of varying concentrations of biodiesel blends on engine durability.

Section 147. Study of incentives for renewable fuels

Section 147 directs the President to submit to Congress within one year a study of the renewable fuels industry and markets in the U.S., including costs for producing conventional and advanced biofuels; factors affecting market prices for biofuels; and financial incentives necessary to enhance the domestic biofuels industry and reduce dependence on foreign oil from 2011 through 2030.

Section 148. Study of streamlined lifecycle analysis tools for the evaluation of renewable carbon content of biofuels

Section 148 directs the Secretary to study published methods for evaluating lifecycle fossil and renewable carbon content of fuels, including conventional and advanced biofuels; and methods for performing simplified, streamlined lifecycle analyses of these factors.

Section 149. Study of the adequacy of railroad transportation of domestically-produced renewable fuel

Section 149 requires the Secretary, in consultation with the Secretary of Transportation, to conduct a study of the adequacy of railroad transportation for domestically-produced renewable fuels, including track locations, supply of tank cars, projected costs, impacts on marketability, competition, and related matters.

Section 150. Study on effects of ethanol-blended gasoline on off road vehicles

Section 150 requires the Secretary, in consultation with the Secretary of Transportation and Administrator of the Environmental Protection Agency, to study the effects of ethanol-blended gasoline on off-road vehicles and recreational boats.

TITLE II—ENERGY EFFICIENCY PROMOTION

Section 201. Short title

Section 201 names title II the "Energy Efficiency Promotion Act of 2007."

SUBTITLE A—PROMOTING ADVANCED LIGHTING TECHNOLOGIES

Section 211. Accelerated procurement of energy efficient lighting

Section 211 requires all general purpose lighting in Federal buildings to be Energy Star-rated or designated as efficient by the Federal Energy Management Program by October 1, 2013, pursuant to guidelines issued by the Secretary.

Section 212. Incandescent reflector lamp efficiency standards

Section 212 expands the types of incandescent reflector lamps covered by efficiency standards that will be effective January 1, 2008.

Section 213. Bright Tomorrow Lighting Prizes

Section 213 awards three prizes based on LED technology for (1) replacing the 60-watt incandescent ($10M), (2) the Type 38 Halogen Parabolic Reflector ($5M) and (3) a "twenty first century lamp," the performance and efficiency characteristics of which exceed any light source in current use ($5M). Upon achieving the prize metrics for replacing the 60-watt incandescent and the Type 38 Halogen Parabolic Reflector, the Secretary of Energy and the Administrator of the General Services Administration are directed to develop Federal purchase guidelines for government-wide purchase so that the U.S. Government becomes the first user of the technology.

Section 214. Sense of the Senate concerning efficient lighting standards

Section 214 expresses the Sense of the Senate that Federal policies to transform the U.S. market to more efficient lighting should be adopted.

Section 215. Renewable energy construction grants

Section 215 authorizes grants for construction of certain renewable energy projects, requiring eligible applicants to contribute not less than 50 percent of total project costs.

SUBTITLE B—EXPEDITING NEW ENERGY EFFICIENCY STANDARDS

Section 221. Definition of energy conservation standard

Section 221 expands the definition of "energy conservation standard" to include one or more design requirements as part of a consensus agreement reached under section 224, and to include performance standards for water use for residential clothes washers and residential dishwashers.

Section 222. Regional efficiency standards for heating and cooling products

Section 222 authorizes a process by which the Secretary may make a determination that more stringent Federal efficiency standards for heating and cooling products are appropriate for up to two additional regions. If such a determination is made, a State within the region may petition to have the more-stringent standard apply. This section requires the Secretary to make a decision within 180 days of a State petition. The petition may not be granted if the Secretary finds, after a comment process and consideration of factors, that the state regulation would significantly burden manufacturing, marketing, distribution, sale or servicing of a covered product on a national basis.

Section 223. Furnace fan rulemaking

Section 223 requires the Secretary to publish a final furnace fan efficiency rule by December 31, 2014.

Section 224. Expedited rulemakings

Section 224 allows the Secretary to conduct expedited energy conservation standard rulemakings if certain conditions are met—specifically, the filing of a joint comment or petition demonstrating

broad support for a consensus standard, and Secretarial determination that the legal criteria for the standard have been met.

Section 225. Periodic reviews

Section 225 establishes a schedule for Department of Energy review of energy conservation standards, to determine if the standards should be updated.

Section 226. Energy efficiency labeling for consumer products

Section 226 directs the Federal Trade Commission, in consultation with the Secretary and Administrator of the Environmental Protection Agency, to promulgate regulations to add personal computers, computer monitors, televisions, set-top boxes and digital video recorder devices to the Energy Guide labeling program.

Section 227. Energy conservation standards for residential boilers

Section 227 adopts a consensus agreement on minimum efficiency standards for residential gas, oil and electric boilers, effective September 1, 2012.

Section 228. Technical corrections

Section 228 makes technical corrections to a number of definitions and effective dates.

Section 229. Electric motor efficiency standards

Section 229 adopts a consensus agreement on new efficiency standards for three broad categories of electric motors, effective 36 months after enactment.

Section 230. Energy standards for home appliances

Section 230 adopts a consensus agreement on new efficiency standards and water conservation standards for residential clothes washers and dishwashers; adopts a new standard for residential dehumidifiers; and mandates a final rule on efficiency standards for residential refrigerators and freezers by 2011.

Section 231. Improved energy efficiency for appliances and buildings in cold climates

Section 231 authorizes research on technologies to improve the energy efficiency of buildings and appliances in extremely cold climates and includes relevant energy efficient products in the rebates program created in section 124 of the Energy Policy Act of 2005.

Section 232. Deployment of new technologies for high-efficiency consumer products

Section 232 directs the Secretary to competitively award financial incentives for the manufacture of high-efficiency consumer products, based on bids for dollar/megawatt-hour or million Btus saved.

Section 233. Industrial efficiency program

Section 233 directs the Secretary, in cooperation with materials manufacturers and energy-intensive industries, to establish a program that supports, develops and promotes the use of new mate-

rials manufacturing, industrial and commercial processes, technologies and techniques to optimize energy efficiency. It directs the Secretary to establish partnerships with eligible entities, to increase energy efficiency of industrial and commercial processes and facilities, research, develop and demonstrate advanced technologies to achieve these goals, and promote deployment of these technologies. It establishes requirements for entities submitting proposals to the Secretary under the program, and establishes cost-sharing requirements in accordance with section 988 of the Energy Policy Act of 2005. Funds are authorized for carrying out these purposes, in amounts beginning at $184 million in fiscal year 2008, escalating to $208 million in fiscal year 2012 and including such sums as necessary in subsequent years.

SUBTITLE C—PROMOTING HIGH EFFICIENCY VEHICLES, ADVANCED BATTERIES AND ENERGY STORAGE

Section 241. Lightweight materials research

Section 241 directs the Secretary to establish a research and development program on the use of lightweight materials such as advanced carbon composites and light-weight steel alloys, for use in the construction of vehicles. It authorizes $60 million for these purposes in each of fiscal years 2007 through 2012.

Section 242. Loan guarantees for fuel-efficient automobile manufacturers and suppliers

Section 242 authorizes the Secretary to issue loan guarantees for facilities that manufacture parts for fuel-efficient vehicles, including hybrid and advanced diesel vehicles, by amending sections 712 and 1703 of the Energy Policy Act of 2005.

Section 243. Advanced technology vehicles manufacturing incentive program

Section 243 authorizes awards for 30 percent of qualified investments for incremental costs incurred to re-equip, expand or establish a manufacturing facility to produce advanced technology vehicles (such as advanced diesels or electric drive vehicles), eligible components or any associated engineering costs. Advanced technology vehicles are defined as those that meet current and future emission standards established by the Administrator of the Environmental Protection Agency and achieve at least 125 percent of combined fuel economy for vehicles of a substantial similar footprint. Combined fuel economy is defined as the adjusted dynamometer values that must be displayed on window stickers, per 49 U.S.C. 32908, for standard vehicles; for electric drive vehicles that recharge from off-board supplied electricity, the mileage is adjusted to account for the reduced gasoline use, per 10 C.F.R. 474. Qualified facilities placed in service before December 30, 2017, are eligible for awards under this section.

Section 244. Energy storage competitiveness

Section 244 is titled the "United States Energy Storage Competitiveness Act of 2007". This section directs the Secretary to initiate a 10-year research, development and demonstration program to ensure U.S. competitiveness in global energy storage markets. An ad-

visory panel of energy storage industry experts is to make recommendations on 5-year roadmaps for energy storage technologies applicable to the transportation and electric distribution sectors. Four competitively selected centers of excellence for energy storage are authorized. The Department of Energy's nanoscience centers are directed to have as part of their mission overcoming grand challenges associated with energy storage. For each of fiscal years 2008 through 2017, it authorizes $50 million in funding for basic research in these areas; $80 million for applied research and $100 million for the energy storage research center program initiated under this section.

Section 245. Advanced transportation technology program

Section 245 directs the Secretary to establish a competitive program to provide grants for demonstrations of electric drive vehicles, placing priority on proposals that are most likely to lead to commercialization and production of electric drive vehicles and reduce petroleum usage. Electric drive vehicles are defined as light-, medium- or heavy-duty vehicles that draw power from batteries of at least 4 kilowatt-hours and can be recharged from an external electricity source. States, local governments, metropolitan transportation authorities, air pollution control districts, private and nonprofit entities are eligible to submit proposals under this section. Grant recipients must comply with cost-sharing requirements of section 988 of the Energy Policy Act of 2005, and report to the Secretary on an annual basis data related to vehicle performance, lifecycle costs and emissions, including greenhouse gases. This section authorizes for these purposes $60 million for each of fiscal years 2008 through 2012, and establishes that not less than $20 million of annual funds should comprise grants to local and municipal government entities.

This section also directs the Secretary to establish a near-term oil saving transportation deployment program. Competitive grants are authorized for: (1) any project that simultaneously reduces emissions of pollutants and greenhouse gas emissions, and reduces petroleum usage at least 40 percent compared to commercially available petroleum-based technologies used in non-road vehicles; and (2) oil-saving electrification projects involving on-road commercial trucks, rail transportation, ships, or any associated infrastructure. The cost-sharing requirements established under section 988 of the Energy Policy Act of 2005 are applied to grants made pursuant to this section, and $90 million is authorized to carry out its purposes for each of fiscal years 2008 through 2013.

SUBTITLE D—SETTING ENERGY EFFICIENCY GOALS

Section 251. National goals for energy savings in transportation

Section 251 establishes that it is the goal of the United States to reduce national gasoline usage 20 percent by 2017; 35 percent by 2025; and 45 percent by 2030, relative to projections for usage in these years contained in the Energy Information Administration's Annual Energy Outlook 2007. It requires the Secretary, in cooperation with the Administrator of the Environmental Protection Agency and other relevant Federal agency heads to submit to Congress a strategic plan that establishes regulatory, funding and pol-

icy priorities to ensure compliance with the national goals within one year of enactment. The plan must be updated biennially.

Section 252. National energy efficiency improvement goals

Section 252 establishes that it is the goal of the United States to achieve an improvement of the nation's overall energy productivity (measured as Gross Domestic Product per unit of energy input) of at least 2.5 percent by 2012, and each year thereafter through 2030. The Secretary, in cooperation with the Administrator of the Environmental Protection Agency and other relevant Federal agency heads, is required to submit to Congress a strategic plan that establishes regulatory, funding and policy priorities to ensure compliance with the national goals within one year of enactment. The plan must be updated biennially.

Section 253. National media campaign

Section 253 directs the Secretary, acting through the Assistant Secretary for Energy Efficiency and Renewable Energy, to develop and conduct a four-year national media campaign to educate consumers about means to achieve energy savings and decrease oil consumption in the United States. This section authorizes $5 million to be appropriated for these purposes, in each of fiscal years 2008 through 2012, with no less than 50 percent of these funds expended on efforts to educate the public about means to reduce oil consumption. It further requires that no less than 85 percent of annual funds be spent on advertising, rather than administrative functions, and mandates an annual report to Congress on the campaign's strategy, objectives and accomplishments.

Section 254. Modernization of Electricity Grid Systems

Section 254 declares that it is the policy of the United States that developing and deploying advanced technology to modernize and improve the efficiency of the domestic electricity grid is essential to maintaining reliable and secure supply that can meet future demand growth. In addition, this section authorizes the Secretary, the Federal Energy Regulatory Commission and other Federal agencies as appropriate to carry out programs in support of the use, development, and demonstration of advanced transmission and distribution technologies, including real-time monitoring and analytical software, in order to achieve a number of purposes related to efficiency and the promotion of distributed generation and demand-side management technologies.

SUBTITLE E—PROMOTING FEDERAL LEADERSHIP IN ENERGY EFFICIENCY AND RENEWABLE ENERGY

Section 261. Federal fleet conservation requirements

Section 261 requires the Secretary to issue regulations for Federal covered by the Energy Policy Act of 1992, to reduce petroleum consumption 20 percent by October 1, 2015 and increase by 10 percent annually the consumption of alternative fuels. The regulations must measure each requirement against a fiscal year 2005 baseline, and mandate the purchase of energy-efficient replacement tires for agency fleets to the maximum extent practicable, with exceptions provided for law enforcement, emergency vehicles, and ve-

hicles that the Secretary of Defense certifies as exempt for national security reasons. The regulations mandated under this section must also direct each Federal agency to develop an implementation plan to achieve these requirements.

This section further directs each Federal agency to actively promote incentive programs to reduce petroleum consumption through practices including the use of public transit, telecommuting, carpooling and bicycling, with monitoring and support by the Administrator of the General Services Administration, Director of the Office of Personnel Management and the Secretary. It also authorizes the Secretary to establish a program to recognize private sector employers, State and local governments for outstanding achievements in reducing petroleum consumption.

Sums are authorized in the amount of $10 million for fiscal years 2008 through 2013 to carry out the requirements of this section.

Section 262. Federal requirement to purchase electricity generated by renewable energy

Section 262 amends the Federal renewable electricity purchase goal established in section 203 of the Energy Policy Act of 2005, to establish a binding requirement, to the extent feasible and technically practicable, for the purchase of electricity from renewable sources, equivalent to not less than 10 percent by 2010, and 15 percent by 2015. The section requires the purchases to be made from facilities placed in service after January 1, 1999.

Section 262 also applies the Federal renewable electricity purchase requirement to the Capitol Complex.

Section 262 further provides the President authority to grant reductions or waivers of this section in any fiscal year, upon determinations that it would result in: negative impacts to military training or readiness of the Department of Defense; a negative impact on domestic preparedness activities conducted by the Department of Homeland Security; or negative impacts on a Federal agency's ability to provide emergency response services in the event of a natural disaster or terrorist attack.

Section 263. Energy savings performance contracts

Section 263 permanently authorizes the energy savings performance contract (ESPC) program. It clarifies that Federal agencies may retain 100 percent of the guaranteed savings under an ESPC, and expands the definition of energy savings to include those derived from on-site renewable energy generation. This section also expands financing flexibility for Federal agencies to reduce costs, and requires a study of opportunities to use ESPCs for transportation energy savings and other non-building applications. It also requires that the Secretary and Secretary of Defense jointly conduct and submit to Congress and the President a study of the potential for ESPCs to reduce energy consumption and provide cost savings in non-building applications.

Section 264. Energy management requirements for Federal buildings

Section 264 amends section 543 of the National Energy Conservation Policy Act, to require a 30 percent reduction in energy consumption in existing Federal buildings by 2015.

Section 265. Combined heat and power and district energy installation at Federal sites

Section 265 amends section 543 of the National Energy Conservation Policy Act, to require the identification of Federal sites that could achieve significant energy savings through the installation of combined heat and power or district energy systems. It directs the Secretary, in consultation with the Administrator of the General Services Administration and the Secretary of Defense, to complete this assessment not later than 18 months after enactment. It allows efficiency achieved through installations of combined heat and power or district energy systems to be counted towards requirements established in section 264 of this Act.

Section 266. Federal building performance standards

Section 266 requires new Federal buildings to reduce fossil fuel energy consumption, to eliminate it entirely by 2030. It mandates that Federal buildings, to the maximum extent economically feasible and technically practicable, be designed to reduce fossil fuel-generated energy consumption relative to a fiscal year 2003 baseline, in amounts starting at 50 percent in fiscal year 2007, 60 percent in 2010, with a 10 percent increase in savings every five years thereafter, until it is entirely eliminated.

Section 267. Application of international energy conservation code to public and assisted housing

Section 267 applies updated energy conservation codes to public and assisted housing administered by the Department of Housing and Urban Development.

Section 268. Energy Efficient Commercial Buildings Initiative

Section 268 directs the Secretary to enter into an agreement with a consortium of eligible stakeholders, to undertake an initiative to reduce the quantity of energy consumed by U.S. commercial buildings. This section establishes as goals of this initiative increased numbers of energy efficient commercial buildings in the U.S., including all newly-constructed buildings by 2030; 50 percent of the entire U.S. commercial building stock by 2040; and all commercial buildings by 2050.

To carry out the initiative, this section authorizes the Secretary, in collaboration with the consortium, to conduct: research and development on building design, materials and related energy efficient practices; demonstration projects to evaluate replicable approaches to energy savings in a variety of climates; deployment activities to encourage widespread adoption of efficient technologies and practices; and other activities necessary to achieve the goals of the initiative authorized under this section.

SUBTITLE F—ASSISTING STATE AND LOCAL GOVERNMENTS IN ENERGY EFFICIENCY

Section 271. Weatherization assistance for low-income persons

Section 271 reauthorizes the Federal Weatherization Assistance program through fiscal year 2012, and increases funding levels by $50 million per year, to $750 million for fiscal years 2008 through 2012.

Section 272. State energy conservation plans

Section 272 reauthorizes the state energy program through fiscal year 2012.

Section 273. Utility energy efficiency programs

Section 273 amends the Public Utility Regulatory Policies Act (PURPA) of 1978, to require each electric utility to integrate energy efficiency into utility, state and regional integrated resource plans, and adopt policies to establish cost-effective efficiency as a priority resource.

It further amends PURPA to establish that rates allowed to be charged by any electric or natural gas utility must align utility incentives with the delivery of cost-effective efficiency, and promote investments in efficiency. It requires State utility regulatory commissions and non-regulated utilities to consider: removing disincentives to efficiency inherent in some existing rate designs; providing utility incentives for effective management of efficiency programs, including the impact of adopting energy efficiency as one of the goals of rate design; and encouraging rate designs that promote efficiency gains for each class of retail customer.

Section 274. Energy efficiency and demand response assistance

Section 274 directs the Secretary, through the national laboratories, to provide technical assistance to State energy offices, public utility regulatory commissions and non-regulated utilities, with respect to implementation of energy efficiency and demand response programs established or updated under amendments to this title.

Section 275. Energy and environmental block grant

Section 275 authorizes block grants to States, eligible units of local governments and Indian tribes, for purposes of implementing energy efficiency programs. It directs the Secretary to develop formulae to distribute block grant funding to eligible units of local government and States, and places requirements on the use of funds distributed under the program.

Section 276. Energy sustainability and efficiency grants for institutions of higher learning

Section 276 authorizes grants to institutions of higher learning for energy efficiency and renewable energy demonstration projects.

Section 277. Workforce training

Section 277 authorizes a program to provide workforce training to meet the demand for skilled workers in the energy efficiency and renewable energy industries.

Section 278. Assistance to states to reduce school bus idling

Section 278 encourages local educational agencies to develop a policy to reduce the incidence of school bus idling. This section authorizes $5 million in funding for each of fiscal years 2007 through 2012 for the Secretary of Energy to work with the Secretary of Education to inform States and local educational agencies of ways to reduce bus idling and the attendant benefits.

TITLE III—CARBON CAPTURE AND STORAGE RESEARCH, DEVELOPMENT, AND DEMONSTRATION

Section 301. Short title

Section 301 names title III the "Carbon Capture and Sequestration Act of 2007".

Section 302. Carbon Capture and Storage Research, Development, and Demonstration Program

Section 302 amends section 963 of the Energy Policy Act of 2005, to expand and improve the Department of Energy's existing carbon capture and storage research and development program. This section directs the Secretary to conduct carbon sequestration demonstration projects, with an emphasis on large-scale geologic carbon dioxide injection. It also requires the Secretary to conduct fundamental science and engineering research in order to document new approaches to carbon dioxide capture and storage. It further expands the Department's existing program emphasis beyond combustion-based systems, to assess carbon capture technologies related to a wider array of energy systems, including refineries, chemical and biofuels plants. The Secretary is further directed under this section to promote regional partnerships and must conduct at least seven large-scale sequestration tests, including one in cooperation with an international partner.

Section 303. Carbon dioxide storage capacity assessment

Section 303 directs the Secretary of Interior to develop a methodology for conducting a national assessment of geological storage capacity for carbon dioxide within 270 days, and requires completion of the assessment within 2 years of the methodology's publication.

COST AND BUDGETARY CONSIDERATIONS

The Congressional Budget Office estimate of the costs of this measure has been requested but was not received at the time this report was filed. When the Congressional Budget Office completes its cost estimate, it will be posted on the Internet at *www.cbo.gov* and the Chairman will request that it be printed in the Congressional Record for the advice of the Senate.

REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out the legislation.

The bill establishes a renewable fuel content standard on fuel refineries, blenders, distributors, and importers. It also establishes energy efficiency standards on manufacturers of certain types of lighting, heating and cooling equipment, electric motors, and consumer appliances. There may be some economic costs associated with certain of these requirements, though these costs may be offset in whole or in part by reducing energy consumption and our dependence on foreign oil.

No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy.

Implementation of the renewable fuel standard involves the operation of a credit program, which may require fuel refineries, blenders, distributors, and importers to keep records and report information to the government. The bill directs the President to implement the credit program in a manner consistent with the existing program set up under the Energy Policy Act of 2005, and thus should not result in significant additional paperwork requirements. The bill requires federal agencies and, in one case, state public utility commissions, to conduct various studies or make various reports, and will require the reporting of certain information associated with grant and financial assistance programs. Little, if any, additional paperwork burdens on private industry or individuals should result from the enactment of the measure.

EXECUTIVE COMMUNICATIONS

Executive communications on the original bill have not been received.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, as ordered reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

TABLE OF CONTENTS OF EXISTING LAWS PROPOSED TO BE CHANGED

1. Energy Policy and Conservation Act, Public Law 94–63, as amended (42 U.S.C. 6201 et seq.)
2. Energy Conservation and Production Act, Public Law 94–385, as amended (42 U.S.C. 6801 et seq.)
3. Public Utility Regulatory Policies Act of 1978, Public Law 95–617, as amended (16 U.S.C. 2601 et seq.)
4. National Energy Conservation Policy Act, Public Law 95–619, as amended (42 U.S.C. 8201 et seq.)
5. Cranston-Gonzalez National Affordable Housing Act, Public Law 101–626, as amended (42 U.S.C. 12701 et seq.)
6. Energy Policy Act of 1992, Public Law 102–486, as amended (42 U.S.C. 13211 et seq.)
7. Energy Policy Act of 2005, Public Law 109–58 (42 U.S.C. 15801 et seq.)
8. Title 10, United States Code

ENERGY POLICY AND CONSERVATION ACT

Public Law 94–63, as Amended (42 U.S.C. 6201 et seq.)

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TITLE III—IMPROVING ENERGY EFFICIENCY

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PART J—ENCOURAGING THE USE OF ALTERNATIVE FUELS

Sec. 400AA. Alternative fuel use by light duty Federal vehicles.
Sec. 400BB. Alternative fuels truck commercial application program.
Sec. 400CC. Alternative fuels bus program.
Sec. 400DD. Interagency Commission on Alternative Motor Fuels.
Sec. 400EE. Studies and reports.
Sec. 400FF. Federal fleet conservation requirements.

TITLE III—IMPROVING ENERGY EFFICIENCY

PART B—ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS OTHER THAN AUTOMOBILES

DEFINITIONS

SEC. 321. For purposes of this part:

* * * * * * *

[(6) The term "energy conservation standard" means—

[(A) a performance standard which prescribes a minimum level of energy efficiency or a maximum quantity of energy use, or, in the case of showerheads, faucets, water closets, and urinals, water use, for a covered product, determined in accordance with test procedures prescribed under section 323; or

[(B) a design requirement for the products specified in paragraphs (6), (7), (8), (10), (15), (16), (17), and (19) of section 322(a); and includes any other requirements which the Secretary may prescribe under section 325(r).]

(6) The term "energy conservation standard" means—

(A) a performance standard which prescribes a minimum level of energy efficiency or a maximum quantity of energy use, and, in the case of residential clothes washers, residential dishwashers, showerheads, faucets, water closets, and urinals, water use, for a covered product, determined in accordance with test procedures prescribed under section 323; or

(B) a design requirement for the products specified in paragraphs (6), (7), (8), (10), (15), (16), (17), and (19) of section 322(a); and includes 1 or more design requirements, as part of a consensus agreement under section 325 (hh); and any other requirements which the Secretary may prescribe under section 325(r).

* * * * * * *

(30)(A) Except as provided in subparagraph (E), the term "fluorescent lamp" means a low pressure mercury electric-discharge source in which a fluorescing coating transforms some of the ultraviolet energy generated by the mercury discharge into light, including only the following:

* * * * * * *

(B) The term "general service fluorescent lamp" means fluorescent lamps which can be used to satisfy the majority of fluorescent applications, but does not include any lamp designed and marketed for the following nongeneral lighting applications:

(i) Fluorescent lamps designed to promote plant growth.

(ii) Fluorescent lamps specifically designed for cold temperature installations.

(iii) Colored fluorescent lamps.

(iv) Impact-resistant fluorescent lamps.

(v) Reflectorized or aperture lamps.

(vi) Fluorescent lamps designed for use in reprographic equipment.

(vii) Lamps primarily designed to produce radiation in the ultra-violet region of the spectrum.

(viii) Lamps with a color rendering index of [82] *87* or greater.

(C) Except as provided in subparagraph (E), the term "incandescent lamp" means a lamp in which light is produced by a filament heated to incandescence by an electric current, including only the following:

(i) Any lamp (commonly referred to as lower wattage non-reflector general service lamps, including any tungsten-halogen lamp) that has a rated wattage between 30 and 199 watts, has an E26 medium screw base, has a rated voltage or voltage range that lies at least partially within 115 and 130 volts, and is not a reflector lamp.

(ii) Any lamp (commonly referred to as a reflector lamp) which is not colored or designed for rough or vibration service applications, that contains an inner reflective coating on the outer bulb to direct the light, an R, PAR, [or similar bulb shapes (excluding ER or BR)] *ER,BR,BPAR, or similar bulb shapes* with E26 medium screw bases, a rated voltage or voltage range that lies at least partially within 115 and 130 volts, a diameter which exceeds [2.75] *2.25* inches, and [is either—

(I) a low(er) wattage reflector lamp which has a rated wattage between 40 and 205 watts; or

(II) a high(er) wattage reflector lamp which has a rated wattage above 205 watts] *has a rated wattage that is 40 watts or higher.*

(iii) Any general service incandescent lamp (commonly referred to as a high- or higher-wattage lamp) that has a rated wattage above 199 watts (above 205 watts for a high wattage reflector lamp).

* * * * * * *

(46)(A) The term "high intensity discharge lamp" means an electric-discharge lamp in which—

(i) the light-producing arc is stabilized by [bulb] *the arc tube* wall temperature; and

(ii) the arc tube [has a bulb] *wall loading is* in excess of 3 Watts/cm2.

(B) The term "high intensity discharge lamp" includes mercury vapor, metal halide, and high-pressure sodium lamps described in subparagraph (A).

(47)(A) The term "mercury vapor lamp" means a high intensity discharge lamp in which the major portion of the light is produced by radiation from mercury [operating at a partial] *typically operating at a partial vapor* pressure in excess of 100,000 Pa (approximately 1 atm).

(B) The term "mercury vapor lamp" includes clear, phosphor-coated, and self- ballasted lamps described in subparagraph (A).

(48) The term "mercury vapor lamp ballast" means a device that is designed and marketed to start and operate mercury vapor

lamps intended for general illumination by providing the necessary voltage and current.

* * * * * * *

(51) The term "medium screw base" means an Edison screw base identified with the prefix E 0926 in the "American National Standard for Electric Lamp Bases", ANSI/IEC C81.61 092003, published by the American National Standards Institute.

(52) BPAR INCANDESCENT REFLECTOR LAMP.—The term "BPAR incandescent reflector lamp" means a reflector lamp as shown in figure C78.21–278 on page 32 of ANSI C78.21–2003.

(53) BR INCANDESCENT REFLECTOR LAMP; BR30; BR40.—

(A) BR INCANDESCENT REFLECTOR LAMP.—The term "BR incandescent reflector lamp" means a reflector lamp that has—

(i) a bulged section below the major diameter of the bulb and above the approximate baseline of the bulb, as shown in figure 1 (RB) on page 7 of ANSI C79.1–1994, incorporated by reference in section 430.22 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this paragraph); and

(ii) a finished size and shape shown in ANSI C78.21–1989, including the referenced reflective characteristics in part 7 of ANSI C78.21–1989, incorporated by reference in section 430.22 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this paragraph).

(B) BR30.—The term "BR30" means a BR incandescent reflector lamp with a diameter of 30/8ths of an inch.

(C) BR40.—The term "BR40" means a BR incandescent reflector lamp with a diameter of 40/8ths of an inch.

(54) ER INCANDESCENT REFLECTOR LAMP; ER30; ER40.—

(A) ER INCANDESCENT REFLECTOR LAMP.—The term "ER incandescent reflector lamp" means a reflector lamp that has—

(i) an elliptical section below the major diameter of the bulb and above the approximate baseline of the bulb, as shown in figure 1 (RE) on page 7 of ANSI C79.1–1994, incorporated by reference in section 430.22 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this paragraph); and

(ii) a finished size and shape shown in ANSI C78.21–1989, incorporated by reference in section 430.22 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this paragraph).

(B) ER30.—The term "ER30" means an ER incandescent reflector lamp with a diameter of 30/8ths of an inch.

(C) ER40.—The term "ER40" means an ER incandescent reflector lamp with a diameter of 40/8ths of an inch.

(55) R20 INCANDESCENT REFLECTOR LAMP.—The term "R20 incandescent reflector lamp" means a reflector lamp that has a face diameter of approximately 2.5 inches, as shown in figure 1(R) on page 7 of ANSI C79.1–1994.

(56) The term "specialty application mercury vapor lamp ballast" means a mercury vapor lamp ballast that—

(A) is designed and marketed for medical use, optical comparators, quality inspection, industrial processing, or scientific use, including fluorescent microscopy, ultraviolet curing, and

the manufacture of microchips, liquid crystal displays, and printed circuit boards; and

(B) in the case of a specialty application mercury vapor lamp ballast, is labeled as a specialty application mercury vapor lamp ballast.

* * * * * * *

TEST PROCEDURES

SEC. 323. (a) GENERAL RULE.—All test procedures and related determinations prescribed or made by the Secretary with respect to any covered product (or class thereof) which are in effect on the date of enactment of the National Appliance Energy Conservation Act of 1987 shall remain in effect until the Secretary amends such test procedures and related determinations under subsection (b).

(b) AMENDED AND NEW PROCEDURES.—**[**(1)(A) The Secretary may amend test procedures with respect to any covered product if the Secretary determines that amended test procedures would more accurately or fully comply with the requirements of paragraph (3).**]**

(1) TEST PROCEDURES.—

(A) AMENDMENT.—At least once every 7 years, the Secretary shall review test procedures for all covered products and—

(i) amend test procedures with respect to any covered product, if the Secretary determines that amended test procedures would more accurately or fully comply with the requirements of paragraph (3); or

(ii) publish notice in the Federal Register of any determination not to amend a test procedure.

* * * * * * *

ENERGY STAR PROGRAM

SEC. 324A. (a) IN GENERAL.—There is established within the Department of Energy and the Environmental Protection Agency a voluntary program to identify and promote energy-efficient products and buildings in order to reduce energy consumption, improve energy security, and reduce pollution through voluntary labeling of, or other forms of communication about, products and buildings that meet the highest energy conservation standards.

* * * * * * *

(d) DEADLINES.—The Secretary shall establish new qualifying levels—

(1) not later than January 1, 2006, for clothes washers and dishwashers, effective beginning January 1, 2007; and

(2) not later than January 1, 2008, for clothes washers, effective beginning January 1, **[**2010**]** *2009*.

ENERGY CONSERVATION STANDARDS

SEC. 325. (a) PURPOSES.—The purposes of this section are to—

(1) provide Federal energy conservation standards applicable to covered products; and

(2) authorize the Secretary to prescribe amended or new energy conservation standards for each type (or class) of covered product.

(b) STANDARDS FOR REFRIGERATORS, REFRIGERATOR-FREEZERS, AND FREEZERS.—(1) The following is the maximum energy use allowed in kilowatt hours per year for the following products (other than those described in paragraph (2)) manufactured on or after January 1, 1990:

* * * * * * *

(4) REFRIGERATORS, REFRIGERATOR-FREEZERS, AND FREEZERS MANUFACTURED ON OR AFTER JANUARY 1, 2014.—Not later than December 31, 2010, the Secretary shall publish a final rule determining whether to amend the standards in effect for refrigerators, refrigerator-freezers, and freezers manufactured on or after January 1, 2014, and including any amended standards.

* * * * * * *

(f) STANDARDS FOR FURNACES.—

* * * * * * *

(3) BOILERS.—

(A) IN GENERAL.—Subject to subparagraphs (B) and (C), boilers manufactured on or after September 1, 2012, shall meet the following requirements:

Boiler type	*Minimum annual fuel utilization efficiency (percent)*	*Design requirements*
Gas Hot Water	*82*	*No constant burning pilot, automatic means for adjusting water temperature.*
Gas Steam	*80*	*No constant burning pilot.*
Oil Hot Water	*84*	*Automatic means for adjusting temperature.*
Oil Steam	*82*	*None.*
Electric Hot Water	*None*	*Automatic means for adjusting temperature.*
Electric Steam	*None*	*None.*

(B) PILOTS.—The manufacturer shall not equip gas hot water or steam boilers with constant-burning pilot lights.

(C) AUTOMATIC MEANS FOR ADJUSTING WATER TEMPERATURE.—

(i) IN GENERAL.—The manufacturer shall equip each gas, oil, and electric hot water boiler (other than a boiler equipped with tankless domestic water heating coils) with an automatic means for adjusting the temperature of the water supplied by the boiler to ensure that an incremental change in inferred heat load produces a corresponding incremental change in the temperature of water supplied.

(ii) CERTAIN BOILERS.—For a boiler that fires at 1 input rate, the requirements of this subparagraph may be satisfied by providing an automatic means that allows the burner or heating element to fire only when the means has determined that the inferred heat load cannot be met by the residual heat of the water in the system.

(iii) NO INFERRED HEAT LOAD.—When there is no inferred heat load with respect to a hot water boiler, the automatic means described in clauses (i) and (ii) shall limit the temperature of the water in the boiler to not more than 140 degrees Fahrenheit.

(iv) OPERATION.—A boiler described in clause (i) or (ii) shall be operable only when the automatic means described in clauses (i), (ii), and (iii) is installed.

[(3)] *(4)* (A) The Secretary shall publish a final rule no later than January 1, 1992, to determine whether the standards established by paragraph (2) for mobile home furnaces should be amended. Such rule shall provide that any amendment shall apply to products manufactured on or after January 1, 1994.

* * * * * * *

(D) Notwithstanding any other provision of this Act, if the requirements of subsection (o) are met, the Secretary may consider and prescribe energy conservation standards or energy use standards for electricity used for purposes of circulating air through duct work.

(E) FINAL RULE.—

(i) IN GENERAL.—The Secretary shall publish a final rule to carry out this subsection not later than December 31, 2014.

(ii) CRITERIA.—The standards shall meet the criteria established under subsection (o).

* * * * * * *

(g) STANDARDS FOR DISHWASHERS; CLOTHES WASHERS; CLOTHES DRYERS; FLUORESCENT LAMP BALLASTS.—

* * * * * * *

(4)(A) The Secretary shall publish final rules no later than January 1, 1990, to determine if the standards established under this subsection for products described in paragraphs (1), (2), and (3) should be amended. Such rules shall provide that any amendment shall apply to products the manufacture of which is completed on or after January 1, 1993.

* * * * * * *

(D) CLOTHES WASHERS.—

(i) CLOTHES WASHERS MANUFACTURED ON OR AFTER JANUARY 1, 2011.—A residential clothes washer manufactured on or after January 1, 2011, shall have—

(I) a modified energy factor of at least 1.26; and

(II) a water factor of not more than 9.5.

(ii) CLOTHES WASHERS MANUFACTURED ON OR AFTER JANUARY 1, 2012.—Not later than January 1, 2012, the Secretary shall publish a final rule determining whether to amend the standards in effect for residential clothes washers manufactured on or after January 1, 2012, and including any amended standards.

(E) DISHWASHERS.—

(i) DISHWASHERS MANUFACTURED ON OR AFTER JANUARY 1, 2010.—A dishwasher manufactured on or after January 1, 2010, shall use not more than—

(I) in the case of a standard-size dishwasher, 355 kWh per year or 6.5 gallons of water per cycle; and

(II) in the case of a compact-size dishwasher, 260 kWh per year or 4.5 gallons of water per cycle.

(ii) DISHWASHERS MANUFACTURED ON OR AFTER JANUARY 1, 2018.—Not later than January 1, 2015, the Secretary shall publish a final rule determining whether to amend

the standards for dishwashers manufactured on or after January 1, 2018, and including any amended standards.

* * * * * * *

(i) GENERAL SERVICE FLUORESCENT LAMPS AND INCANDESCENT REFLECTOR LAMPS.—[(1)(A) Each of the following general service fluorescent lamps and incandescent reflector lamps manufactured after the effective date specified in the tables listed in this paragraph shall meet or exceed the following lamp efficacy and CRI standards:

[FLUORESCENT LAMPS

Lamp type	Nominal lamp wattage	Minimum CRI	Minimum average lamp efficacy (LPW)	Effective date (months)
4-foot medium bi-pin	>35W	69	75.0	36
	≤35W	45	75.0	36
2-foot U-shaped	>35W	69	68.0	36
	≤35W	45	64.0	36
8-foot slimline	>65W	69	80.0	18
	≤65W	45	80.0	18
8-foot high output	>100W	69	80.0	18
	≤100W	45	80.0	18

[INCANDESCENT REFLECTOR LAMPS

Nominal lamp wattage	Minimum average lamp efficacy (LPW)	Effective date (months)
40–50	10.5	36
51–66	11.0	36
67–85	12.5	36
86–115	14.0	36
116–155	14.5	36
156–205	15.0	36]

[(B) For the purposes of the tables set forth in subparagraph (A), the term "effective date" means the last day of the month set forth in the table which follows the date of the enactment of the Energy Policy Act of 1992.]

(1) STANDARDS.—

(A) DEFINITION OF EFFECTIVE DATE.—In this paragraph (other than subparagraph (D)), the term 'effective date' means, with respect to each type of lamp specified in a table contained in subparagraph (B), the last day of the period of months corresponding to that type of lamp (as specified in the table) that follows October 24, 1992.

(B) MINIMUM STANDARDS.—Each of the following general service fluorescent lamps and incandescent reflector lamps manufactured after the effective date specified in the tables contained in this paragraph shall meet or exceed the following lamp efficacy and CRI standards:

FLUORESCENT LAMPS

Lamp type	*Nominal lamp wattage*	*Minimum CRI*	*Minimum average lamp efficacy (LPW)*	*Effective date (Period of months)*
4-foot medium bi-pin	*>35 W*	*69*	*75.0*	*36*
	≤35 W	*45*	*75.0*	*36*
2-foot U-shaped	*>35 W*	*69*	*68.0*	*36*
	≥35W	*45*	*64.0*	*36*
8-foot slimline	*>65 W*	*69*	*80.0*	*18*
	≤65 W	*45*	*80.0*	*18*
8-foot high output	*>100 W*	*69*	*80.0*	*18*
	≤100 W	*45*	*80.0*	*18*

INCANDESCENT REFLECTOR LAMPS

Nominal lamp wattage	*Minimum average lamp efficacy (LPW)*	*Effective date (Period of months)*
40–50	*10.5*	*36*
51–66	*11.0*	*36*
67–85	*12.5*	*36*
86–115	*14.0*	*36*
116–155	*14.5*	*36*
156–205	*15.0*	*36*

(C) EXEMPTIONS.—The standards specified in subparagraph (B) shall not apply to the following types of incandescent reflector lamps:

(i) Lamps rated at 50 watts or less that are ER30, BR30, BR40, or ER40 lamps.

(ii) Lamps rated at 65 watts that are BR30, BR40, or ER40 lamps.

(iii) R20 incandescent reflector lamps rated 45 watts or less.

(D) EFFECTIVE DATES.—

(i) ER, BR, AND BPAR LAMPS.—The standards specified in subparagraph (B) shall apply with respect to ER incandescent reflector lamps, BR incandescent reflector lamps, BPAR incandescent reflector lamps, and similar bulb shapes on and after January 1, 2008.

(ii) LAMPS BETWEEN 2.25–2.75 INCHES IN DIAMETER.—The standards specified in subparagraph (B) shall apply with respect to incandescent reflector lamps with a diameter of more than 2.25 inches, but not more than 2.75 inches, on and after January 1, 2008.

* * * * * * *

[(m) FURTHER RULEMAKING.—After issuance of the last final rules required under subsections (b) through (i) of this section, the Secretary may publish final rules to determine whether standards for a covered product should be amended. An amendment prescribed under this subsection shall apply to products manufactured after a date which is 5 years after—

[(A) the effective date of the previous amendment made pursuant to this part; or

[(B) if the previous final rule published under this part did not amend the standard, the earliest date by which a

previous amendment could have been in effect, except that in no case may an amended standard apply to products manufactured within 3 years (for refrigerators, refrigerator-freezers, and freezers, room air conditioners, dishwashers, clothes washers, clothes dryers, fluorescent lamp ballasts, and kitchen ranges and ovens) or 5 years (for central air conditioners and heat pumps, water heaters, pool heaters, direct heating equipment and furnaces) after publication of the final rule establishing a standard.]

(m) FURTHER RULEMAKING.—

(1) IN GENERAL.—After issuance of the last final rules required for a product under this part, the Secretary shall, not later than 5 years after the date of issuance of a final rule establishing or amending a standard or determining not to amend a standard, publish a final rule to determine whether standards for the product should be amended based on the criteria described in subsection (n)(2).

(2) ANALYSIS.—Prior to publication of the determination, the Secretary shall publish a notice of availability describing the analysis of the Department and provide opportunity for written comment.

(3) FINAL RULE.—Not later than 3 years after a positive determination under paragraph (1), the Secretary shall publish a final rule amending the standard for the product.

(4) APPLICATION OF AMENDMENT.—An amendment prescribed under this subsection shall apply to a product manufactured after a date that is 5 years after—

(A) the effective date of the previous amendment made pursuant to this part; or

(B) if the previous final rule published under this part did not amend the standard, the earliest date by which a previous amendment could have been in effect, except that in no case may an amended standard apply to products manufactured within 3 years after publication of the final rule establishing a standard.

* * * * * * *

(cc) DEHUMIDIFIERS.—(1) Dehumidifiers manufactured on or after October 1, 2007 *and before October 1, 2012,* shall have an Energy Factor that meets or exceeds the following values:

Product capacity (pints/day):	Minimum energy factor (Liters/kWh)
25.00 or less	1.00
25.01–35.00	1.20
35.01–54.00	1.30
54.01–74.99	1.50
75.00 or more	2.25.

[(2)(A) Not later than October 1, 2009, the Secretary shall publish a final rule in accordance with subsections (o) and (p), to determine whether the energy conservation standards established under paragraph (1) should be amended.

[(B) The final rule published under subparagraph (A) shall—

[(i) contain any amendment by the Secretary; and

[(ii) provide that the amendment applies to products manufactured on or after October 1, 2012.]

(2) DEHUMIDIFIERS MANUFACTURED ON OR AFTER OCTOBER 1, 2012.—Dehumidifiers manufactured on or after October 1, 2012,

shall have an Energy Factor that meets or exceeds the following values:

Product capacity (pints/day):	*Minimum energy factor liters/kWh*
Up to 35.00	*1.35*
35.01–45.00	*1.50*
45.01–54.00	*1.60*
54.01–75.00	*1.70*
Greater than 75.00	*2.5."*

(hh) EXPEDITED RULEMAKING FOR CONSENSUS STANDARDS.—

(1) IN GENERAL.—The Secretary shall conduct an expedited rulemaking based on an energy conservation standard or test procedure recommended by interested persons, if—

(A) the interested persons (demonstrating significant and broad support from manufacturers of a covered product, States, utilities, and environmental, energy efficiency, and consumer advocates) submit a joint comment or petition recommending a consensus energy conservation standard or test procedure; and

(B) the Secretary determines that the joint comment or petition includes evidence that (assuming no other evidence were considered) provides an adequate basis for determining that the proposed consensus energy conservation standard or test procedure proposed in the joint comment or petition complies with the provisions and criteria of this Act (including subsection (o)) that apply to the type or class of covered products covered by the joint comment or petition.

(2) PROCEDURE.—

(A) IN GENERAL.—Notwithstanding subsection (p) or section 336(a), if the Secretary receives a joint comment or petition that meets the criteria described in paragraph (1), the Secretary shall conduct an expedited rulemaking with respect to the standard or test procedure proposed in the joint comment or petition in accordance with this paragraph.

(B) ADVANCED NOTICE OF PROPOSED RULEMAKING.—If no advanced notice of proposed rulemaking has been issued under subsection (p)(1) with respect to the rulemaking covered by the joint comment or petition, the requirements of subsection (p) with respect to the issuance of an advanced notice of proposed rulemaking shall not apply.

(C) PUBLICATION OF DETERMINATION.—Not later than 60 days after receipt of a joint comment or petition described in paragraph (1)(A), the Secretary shall publish a description of a determination as to whether the proposed standard or test procedure covered by the joint comment or petition meets the criteria described in paragraph (1).

(D) PROPOSED RULE.—

(i) PUBLICATION.—If the Secretary determines that the proposed consensus standard or test procedure covered by the joint comment or petition meets the criteria described in paragraph (1), not later than 30 days after the determination, the Secretary shall publish a proposed rule proposing the consensus standard or test procedure covered by the joint comment or petition.

(ii) PUBLIC COMMENT PERIOD.—Notwithstanding paragraphs (2) and (3) of subsection (p), the public comment period for the proposed rule shall be the 30-day period beginning on the date of the publication of the proposed rule in the Federal Register.

(iii) PUBLIC HEARING.—Notwithstanding section 336(a), the Secretary may waive the holding of a public hearing with respect to the proposed rule.

(E) FINAL RULE.—Notwithstanding subsection (p)(4), the Secretary—

(i) may publish a final rule at any time after the 60-day period beginning on the date of publication of the proposed rule in the Federal Register; and

(ii) shall publish a final rule not later than 120 days after the date of publication of the proposed rule in the Federal Register.

* * * * * * *

SEC. 327. (a) PREEMPTION OF TESTING AND LABELING REQUIREMENTS.

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(b) GENERAL RULE OF PREEMPTION FOR ENERGY CONSERVTION STANDARDS BEFORE FEDERAL STANDARD BECOMES EFFECTIVE FOR A PRODUCT.—

* * * * * * *

(2) is a State procurement regulation described in [subsection (e)] *subsection (f)*;

(3) is a regulation described in [subsection (f)(1)] *subsection (g)(1)* or is prescribed or enacted in a building code for new construction described in [subsection (f)(2)] *subsection (g)(2)*;

* * * * * * *

(c) GENERAL RULE OF PREEMPTION FOR ENERGY CONSERVATION STANDARDS WHEN FEDERAL STANDARD BECOMES EFFECTIVE FOR A PRODUCT.—

* * * * * * *

(3) is in a building code for new construction described in subsection [(f)(3)] *(g)(3)*;

* * * * * * *

(e) REGIONAL EFFICIENCY STANDARDS FOR HEATING AND COOLING PRODUCTS.—

(1) IN GENERAL.—

(A) DETERMINATION.—The Secretary may determine, after notice and comment, that more stringent Federal energy conservation standards are appropriate for furnaces, boilers, or central air conditioning equipment than applicable Federal energy conservation standards.

(B) FINDING.—The Secretary may determine that more stringent standards are appropriate for up to 2 different regions only after finding that the regional standards—

(i) would contribute to energy savings that are substantially greater than that of a single national energy standard; and

(ii) are economically justified.

(C) REGIONS.—On making a determination described in subparagraph (B), the Secretary shall establish the regions so that the more stringent standards would achieve the maximum level of energy savings that is technologically feasible and economically justified.

(D) FACTORS.—In determining the appropriateness of 1 or more regional standards for furnaces, boilers, and central and commercial air conditioning equipment, the Secretary shall consider all of the factors described in paragraphs (1) through (4) of section 325(o).

(2) STATE PETITION.—After a determination made by the Secretary under paragraph (1), a State may petition the Secretary requesting a rule that a State regulation that establishes a standard for furnaces, boilers, or central air conditioners become effective at a level determined by the Secretary to be appropriate for the region that includes the State.

(3) RULE.—Subject to paragraphs (4) through (7), the Secretary may issue the rule during the period described in paragraph (4) and after consideration of the petition and the comments of interested persons.

(4) PROCEDURE.—

(A) NOTICE.—The Secretary shall provide notice of any petition filed under paragraph (2) and afford interested persons a reasonable opportunity to make written comments, including rebuttal comments, on the petition.

(B) DECISION.—Except as provided in subparagraph (C), during the 180-day period beginning on the date on which the petition is filed, the Secretary shall issue the requested rule or deny the petition.

(C) EXTENSION.—The Secretary may publish in the Federal Register a notice—

(i) extending the period to a specified date, but not longer than 1 year after the date on which the petition is filed; and

(ii) describing the reasons for the delay.

(D) DENIALS.—If the Secretary denies a petition under this subsection, the Secretary shall publish in the Federal Register notice of, and the reasons for, the denial.

(5) FINDING OF SIGNIFICANT BURDEN ON MANUFACTURING, MARKETING, DISTRIBUTION, SALE, OR SERVICING OF COVERED PRODUCT ON NATIONAL BASIS.—

(A) IN GENERAL.—The Secretary may not issue a rule under this subsection if the Secretary finds (and publishes the finding) that interested persons have established, by a preponderance of the evidence, that the State regulation will significantly burden manufacturing, marketing, distribution, sale, or servicing of a covered product on a national basis.

(B) FACTORS.—In determining whether to make a finding described in subparagraph (A), the Secretary shall evaluate all relevant factors, including—

(i) the extent to which the State regulation will increase manufacturing or distribution costs of manufacturers, distributors, and others;

(ii) the extent to which the State regulation will disadvantage smaller manufacturers, distributors, or dealers or lessen competition in the sale of the covered product in the State; and

(iii) the extent to which the State regulation would cause a burden to manufacturers to redesign and produce the covered product type (or class), taking into consideration the extent to which the regulation would result in a reduction—

(I) in the current models, or in the projected availability of models, that could be shipped on the effective date of the regulation to the State and within the United States; or

(II) in the current or projected sales volume of the covered product type (or class) in the State and the United States.

(6) APPLICATION.—No State regulation shall become effective under this subsection with respect to any covered product manufactured before the date specified in the determination made by the Secretary under paragraph (1).

(7) PETITION TO WITHDRAW FEDERAL RULE FOLLOWING AMENDMENT OF FEDERAL STANDARD.—

(A) IN GENERAL.—If a State has issued a rule under paragraph (3) with respect to a covered product and subsequently a Federal energy conservation standard concerning the product is amended pursuant to section 325, any person subject to the State regulation may file a petition with the Secretary requesting the Secretary to withdraw the rule issued under paragraph (3) with respect to the product in the State.

(B) BURDEN OF PROOF.—The Secretary shall consider the petition in accordance with paragraph (5) and the burden shall be on the petitioner to show by a preponderance of the evidence that the rule received by the State under paragraph (3) should be withdrawn as a result of the amendment to the Federal standard.

(C) WITHDRAWAL.—If the Secretary determines that the petitioner has shown that the rule issued by the Secretary under paragraph (3) should be withdrawn in accordance with subparagraph (B), the Secretary shall withdraw the rule.

[*(e)***]** *(f) EXCEPTION FOR CERTAIN STATE PROCUREMENT STANDARDS.—Any State regulation which sets forth procurement standards for a State (or political subdivision thereof) shall not be superseded by the provisions of this part if such standards are more stringent than the corresponding Federal energy conservation standards.*

[(f)**]** *(g)* EXCEPTION FOR CERTAIN BUILDING CODE REQUIREMENTS.—(1) A regulation or other requirement enacted or prescribed before January 8, 1987, that is contained in a State or local building code for new construction concerning the energy efficiency or energy use of a covered product is not superseded by this part until the effective date of the energy conservation standard established in or prescribed under section 325 for such covered product.

* * * * * * *

[(g)**]** *(h)* NO WARRANTY.—Any disclosure with respect to energy use, energy efficiency, or estimated annual operating cost which is required to be made under the provisions of this part shall not create an express or implied warranty under State or Federal law that such energy efficiency will be achieved or that such energy use or estimated annual operating cost will not be exceeded under conditions of actual use.

* * * * * * *

PART C—CERTAIN INDUSTRIAL EQUIPMENT

DEFINITIONS

SEC. 340. For purposes of this part—

* * * * * * *

(13) **[**(A) The term "electric motor" means any motor which is a general purpose T-frame, single-speed, foot-mounting, polyphase squirrel-cage induction motor of the National Electrical Manufacturers Association, Design A and B, continuous rated, operating on 230/460 volts and constant 60 Hertz line power as defined in NEMA Standards Publication MG1 091987.**]**

(A)(i) The term 'electric motor' means—

(I) a general purpose electric motor—subtype i; and

(II) a general purpose electric motor—subtype i i.

(ii) The term 'general purpose electric motor—subtype I' means any motor that is considered a general purpose motor under section 431.12 of title 10, Code of Federal Regulations (or successor regulations).

(iii) The term 'general purpose electric motor—subtype II' means a motor that, in addition to the design elements for a general purpose electric motor- subtype I, incorporates the design elements (as established in National Electrical Manufacturers Association MG–1 (2006)) for any of the following:

(I) A U-Frame Motor.

(II) A Design C Motor.

(III) A close-coupled pump motor.

(IV) A footless motor.

(V) A vertical solid shaft normal thrust (tested in a horizontal configuration).

(VI) An 8-pole motor.

(VII) A poly-phase motor with voltage of not more than 600 volts (other than 230 or 460 volts).

* * * * * * *

STANDARDS

SEC. 342. (a) SMALL, LARGE, AND VERY LARGE COMMERCIAL PACKAGE AIR CONDITIONING AND HEATING EQUIPMENT, PACKAGED TERMINAL AIR CONDITIONERS AND HEAT PUMPS, WARM-AIR FURNACES, PACKAGED BOILERS, STORAGE WATER HEATERS, INSTANTANEOUS WATER HEATERS, AND UNFIRED HOT WATER STORAGE TANKS.—(1) Each small commercial package air conditioning and heating equipment manufactured on or after January 1, 1994, [but before January 1, 2010,] shall meet the following standard levels:

* * * * * * *

[(6)(A)(i) If ASHRAE/IES Standard 90.1, as in effect on January 1, 2010, is amended with respect to any small commercial package air conditioning and heating equipment, large commercial package air conditioning and heating equipment, and very large commercial package air conditioning and heating equipment, or if ASHRAE/IES Standard 90.1, as in effect on October 24, 1992, is amended with respect to any packaged terminal air conditioners, packaged terminal heat pumps, warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, or unfired hot water storage tanks, the Secretary shall establish an amended uniform national standard for that product at the minimum level for each effective date specified in the amended ASHRAE/IES Standard 90.1, unless the Secretary determines, by rule published in the Federal Register and supported by clear and convincing evidence, that adoption of a uniform national standard more stringent than such amended ASHRAE/IES Standard 90.1 for such product would result in significant additional conservation of energy and is technologically feasible and economically justified.

[(ii) If ASHRAE/IES Standard 90.1 is not amended with respect to small commercial package air conditioning and heating equipment, large commercial package air conditioning and heating equipment, and very large commercial package air conditioning and heating equipment during the 5-year period beginning on the effective date of a standard, the Secretary may initiate a rulemaking to determine whether a more stringent standard—

[(I) would result in significant additional conservation of energy; and

[(II) is technologically feasible and economically justified.

[(B)(i) If the Secretary issues a rule containing such a determination, the rule shall establish such amended standard. In determining whether a standard is economically justified for the purposes of subparagraph (A), the Secretary shall, after receiving views and comments furnished with respect to the proposed standard, determine whether the benefits of the standard exceed its burdens by, to the greatest extent practicable, considering—

[(I) the economic impact of the standard on the manufacturers and on the consumers of the products subject to such standard;

[(II) the savings in operating costs throughout the estimated average life of the product in the type (or class) compared to any increase in the price of, or in the initial charges for, or maintenance expenses of, the products which are likely to result from the imposition of the standard;

[(III) the total projected amount of energy savings likely to result directly from the imposition of the standard;

[(IV) any lessening of the utility or the performance of the products likely to result from the imposition of the standard;

[(V) the impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the imposition of the standard;

[(VI) the need for national energy conservation; and

[(VII) other factors the Secretary considers relevant.

[(ii) The Secretary may not prescribe any amended standard under this paragraph which increases the maximum allowable energy use, or decreases the minimum required energy efficiency, of

a covered product. The Secretary may not prescribe an amended standard under this subparagraph if the Secretary finds (and publishes such finding) that interested persons have established by a preponderance of the evidence that a standard is likely to result in the unavailability in the United States in any product type (or class) of performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as those generally available in the United States at the time of the Secretary's finding. The failure of some types (or classes) to meet this criterion shall not affect the Secretary's determination of whether to prescribe a standard for other types or classes.

[(C) A standard amended by the Secretary under this paragraph shall become effective for products manufactured—

[(i) with respect to small commercial package air conditioning and heating equipment, packaged terminal air conditioners, packaged terminal heat pumps, warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, and unfired hot water storage tanks, on or after a date which is two years after the effective date of the applicable minimum energy efficiency requirement in the amended ASHRAE/IES standard referred to in subparagraph (A); and

[(ii) with respect to large commercial package air conditioning and heating equipment and very large commercial package air conditioning and heating equipment, on or after a date which is three years after the effective date of the applicable minimum energy efficiency requirement in the amended ASHRAE/IES standard referred to in subparagraph (A);

[except that an energy conservation standard amended by the Secretary pursuant to a rule under subparagraph (B) shall become effective for products manufactured on or after a date which is four years after the date such rule is published in the Federal Register.]

(6) AMENDED ENERGY EFFICIENCY STANDARDS.—

(A) ANALYSIS OF POTENTIAL ENERGY SAVINGS.—If ASHRAE/IES Standard 90.1 is amended with respect to any small commercial package air conditioning and heating equipment, large commercial package air conditioning and heating equipment, packaged terminal central and commercial air conditioners, packaged terminal heat pumps, warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, or unfired hot water storage tanks, not later than 180 days after the amendment of the standard, the Secretary shall publish in the Federal Register for public comment an analysis of the energy savings potential of amended energy efficiency standards.

(B) AMENDED UNIFORM NATIONAL STANDARD FOR PRODUCTS.—

(i) IN GENERAL.—Except as provided in clause (ii), not later than 18 months after the date of publication of the amendment to the ASHRAE/IES Standard 90.1 for a product described in subparagraph (A), the Secretary shall establish an amended uniform national standard for the product at the minimum level for the applicable effective date specified in the amended ASHRAE/IES Standard 90.1.

(ii) MORE STRINGENT STANDARD.—Clause (i) shall not apply if the Secretary determines, by rule published in the

Federal Register, and supported by clear and convincing evidence, that adoption of a uniform national standard more stringent than the amended ASHRAE/IES Standard 90.1 for the product would result in significant additional conservation of energy and is technologically feasible and economically justified.

(C) RULE.—If the Secretary makes a determination described in subparagraph (B)(ii) for a product described in subparagraph (A), not later than 30 months after the date of publication of the amendment to the ASHRAE/IES Standard 90.1 for the product, the Secretary shall issue the rule establishing the amended standard.

(D) AMENDMENT OF STANDARDS.—

(i) IN GENERAL.—After issuance of the most recent final rule for a product under this subsection, not later than 5 years after the date of issuance of a final rule establishing or amending a standard or determining not to amend a standard, the Secretary shall publish a final rule to determine whether standards for the product should be amended based on the criteria described in subparagraph (A).

(ii) ANALYSIS.—Prior to publication of the determination, the Secretary shall publish a notice of availability describing the analysis of the Department and provide opportunity for written comment.

(iii) FINAL RULE.—Not later than 3 years after a positive determination under clause (i), the Secretary shall publish a final rule amending the standard for the product.

* * * * * * *

(b) ELECTRIC MOTORS.—**[**(1) Except for definite purpose motors, special purpose motors, and those motors exempted by the Secretary under paragraph (2), each electric motor manufactured (alone or as a component of another piece of equipment) after the 60-month period beginning on the date of the enactment of this subsection, or in the case of an electric motor which requires listing or certification by a nationally recognized safety testing laboratory, after the 84-month period beginning on such date, shall have a nominal full load efficiency of not less than the following:

[Number of poles	Nominal full-load efficiency					
	Open motors			Closed motors		
	6	4	2	6	4	2
Motor Horsepower						
1	80.0	82.5	.....	80.0	82.5	75.5
1.5	84.0	84.0	82.5	85.5	84.0	82.5
2	85.5	84.0	84.0	86.5	84.0	84.0
3	86.5	86.5	84.0	87.5	87.5	85.5
5	87.5	87.5	85.5	87.5	87.5	87.5
7.5	88.5	88.5	87.5	89.5	89.5	88.5
10	90.2	89.5	88.5	89.5	89.5	89.5
15	90.2	91.0	89.5	90.2	91.0	90.2
20	91.0	91.0	90.2	90.2	91.0	90.2
25	91.7	91.7	91.0	91.7	92.4	91.0
30	92.4	92.4	91.0	91.7	92.4	91.0
40	93.0	93.0	91.7	93.0	93.0	91.7
50	93.0	93.0	92.4	93.0	93.0	92.4
60	93.6	93.6	93.0	93.6	93.6	93.0
75	93.6	94.1	93.0	93.6	94.1	93.0

[Number of poles	Nominal full-load efficiency					
	Open motors			Closed motors		
	6	4	2	6	4	2
100	94.1	94.1	93.0	94.1	94.5	93.6
125	94.1	94.5	93.6	94.1	94.5	94.5
150	94.5	95.0	93.6	95.0	95.0	94.5
200	94.5	95.0	94.5	95.0	95.0	95.0]

(1) STANDARDS.—

(A) GENERAL PURPOSE ELECTRIC MOTORS—SUBTYPE I.—

(i) IN GENERAL.—Except as otherwise provided in this subparagraph, a general purpose electric motor—subtype I with a power rating of not less than 1, and not more than 200, horsepower manufactured (alone or as a component of another piece of equipment) after the 3-year period beginning on the date of enactment of this subparagraph, shall have a nominal full load efficiency established in Table 12–12 of National Electrical Manufacturers Association (referred to in this paragraph as 'NEMA') MG–1 (2006).

(ii) FIRE PUMP MOTORS.—A fire pump motor shall have a nominal full load efficiency established in Table 12–11 of NEMA MG–1 (2006).

(B) GENERAL PURPOSE ELECTRIC MOTORS—SUBTYPE II.—A general purpose electric motor—subtype II with a power rating of not less than 1, and not more than 200, horsepower manufactured (alone or as a component of another piece of equipment) after the 3-year period beginning on the date of enactment of this subparagraph, shall have a nominal full load efficiency established in Table 12–11 of NEMA MG–1 (2006).

(C) DESIGN B, GENERAL PURPOSE ELECTRIC MOTORS.—A NEMA Design B, general purpose electric motor with a power rating of not less than 201, and not more than 500, horsepower manufactured (alone or as a component of another piece of equipment) after the 3-year period beginning on the date of the enactment of this subparagraph shall have a nominal full load efficiency established in Table 12–11 of NEMA MG–1 (2006).

* * * * * * *

TEST PROCEDURES

SEC. 343. [(a)(1) The Secretary may conduct an evaluation of a class of covered equipment and may prescribe test procedures for such class in accordance with the provisions of this section.]

(a) PRESCRIPTION BY SECRETARY; REQUIREMENTS.—

(1) TEST PROCEDURES.—

(A) AMENDMENT.—At least once every 7 years, the Secretary shall conduct an evaluation of each class of covered equipment and—

(i) if the Secretary determines that amended test procedures would more accurately or fully comply with the requirements of paragraphs (2) and (3), shall prescribe test procedures for the class in accordance with this section; or

(ii) shall publish notice in the Federal Register of any determination not to amend a test procedure.

* * * * * * *

ADMINISTRATION, PENALTIES, ENFORCEMENT, AND PREEMPTION

SEC. 345. (a) The provisions of section 326(a), (b), and (d), the provisions of subsections (l) through (s) of section 325, and section 327 through 336 shall apply with respect to this part (other than the equipment specified in subparagraphs (B), (C), (D), (E), and (F) of section 340(1)) to the same extent and in the same manner as they apply in part B. In applying such provisions for the purposes of this part—

* * * * * * *

(b)(1) The provisions of section 326(a), (b), and (d), section 327(a), and sections 328 through 336 shall apply with respect to the equipment specified in subparagraphs (B), (C), (D), (E), and (F) of section 340(1) to the same extent and in the same manner as they apply in part A. In applying such provisions for the purposes of such equipment, paragraphs (1), (2), (3), and (4) of subsection (a) shall apply.

(2)(A) A standard prescribed or established under section 342(a) shall, beginning on the effective date of such standard, supersede any State or local regulation concerning the energy efficiency or energy use of a product for which a standard is prescribed or established pursuant to such section.

* * * * * * *

(E) RELATIONSHIP TO CERTAIN STATE REGULATIONS.—Notwithstanding subparagraph (A), a standard prescribed or established under section 342(a) with respect to the equipment specified in subparagraphs (B), (C), (D), (H), (I), and (J) of section 340 shall not supersede a State regulation that is effective under the terms, conditions, criteria, procedures, and other requirements of section 327(e).

* * * * * * *

GENERAL PROVISIONS

SEC. 365. (a) The Secretary may prescribe such rules as may be necessary or appropriate to carry out his authority under this part.

* * * * * * *

(f) For the purpose of carrying out this part, there are authorized to be appropriated $100,000,000 for each of the fiscal years 2006 and 2007 and $125,000,000 for ⟦fiscal year 2008⟧ *each of fiscal years 2008 through 2012.*

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PART J—ENCOURAGING THE USE OF ALTERNATIVE FUELS

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SEC. 400EE. STUDIES AND REPORTS.

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SEC. 400FF. FEDERAL FLEET CONSERVATION REQUIREMENTS.

(a) MANDATORY REDUCTION IN PETROLEUM CONSUMPTION.—

(1) IN GENERAL.—The Secretary shall issue regulations (including provisions for waivers from the requirements of this section) for Federal fleets subject to section 400AA requiring that not later than October 1, 2015, each Federal agency achieve at least a 20 percent reduction in petroleum consumption, and that each Federal agency increase alternative fuel consumption by 10 percent annually, as calculated from the baseline established by the Secretary for fiscal year 2005.

(2) PLAN.—

(A) REQUIREMENT.—The regulations shall require each Federal agency to develop a plan to meet the required petroleum reduction levels and the alternative fuel consumption increases.

(B) MEASURES.—The plan may allow an agency to meet the required petroleum reduction level through—

(i) the use of alternative fuels;

(ii) the acquisition of vehicles with higher fuel economy, including hybrid vehicles, neighborhood electric vehicles, electric vehicles, and plug-in hybrid vehicles if the vehicles are commercially available;

(iii) the substitution of cars for light trucks;

(iv) an increase in vehicle load factors;

(v) a decrease in vehicle miles traveled;

(vi) a decrease in fleet size; and

(vii) other measures.

(b) FEDERAL EMPLOYEE INCENTIVE PROGRAMS FOR REDUCING PETROLEUM CONSUMPTION.—

(1) IN GENERAL.—Each Federal agency shall actively promote incentive programs that encourage Federal employees and contractors to reduce petroleum usage through the use of practices such as—

(A) telecommuting;

(B) public transit;

(C) carpooling; and

(D) bicycling.

(2) MONITORING AND SUPPORT FOR INCENTIVE PROGRAMS.—The Administrator of General Services, the Director of the Office of Personnel Management, and the Secretary of Energy shall monitor and provide appropriate support to agency programs described in paragraph (1).

(3) RECOGNITION.—The Secretary may establish a program under which the Secretary recognizes private sector employers and State and local governments for outstanding programs to reduce petroleum usage through practices described in paragraph (1).

(c) REPLACEMENT TIRES.—

(1) IN GENERAL.—Except as provided in paragraph (2), the regulations issued under subsection (a)(1) shall include a requirement that, to the maximum extent practicable, each Federal agency purchase energy-efficient replacement tires for the respective fleet vehicles of the agency.

(2) EXCEPTIONS.—This section does not apply to—

(A) law enforcement motor vehicles;

(B) emergency motor vehicles; or

(C) motor vehicles acquired and used for military purposes that the Secretary of Defense has certified to the Secretary must be exempt for national security reasons.

(d) ANNUAL REPORTS ON COMPLIANCE.—The Secretary shall submit to Congress an annual report that summarizes actions taken by Federal agencies to comply with this section.

ENERGY CONSERVATION AND PRODUCTION ACT

Public Law 94–385, as amended

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TITLE III—ENERGY CONSERVATION STANDARDS FOR NEW BUILDINGS

* * * * * * *

SEC. 305. FEDERAL BUILDING ENERGY EFFICIENCY STANDARDS.

(a)(1) IN GENERAL.—* * *

(3)(A) Not later than 1 year after the date of enactment of [this paragraph] *the Energy Efficiency Promotion Act of 2007,* the Secretary shall establish, by rule, revised Federal building energy efficiency performance standards that require that—

(i) if life-cycle cost-effective for new Federal buildings—

(I) the buildings be designed to achieve energy consumption levels that are at least 30 percent below the levels established in the version of the ASHRAE Standard or the International Energy Conservation Code, as appropriate, that is in effect as of the date of enactment of this paragraph; [and]

(II) the buildings be designed, to the extent economically feasible and technically practicable, so that the fossil fuel-generated energy consumption of the buildings is reduced, as compared with the fossil fuel-generated energy consumption by a similar Federal building in fiscal year 2003 (as measured by Commercial Buildings Energy Consumption Survey or Residential Energy Consumption Survey data from the Energy Information Agency), by the percentage specified in the following table:

Fiscal Year	*Percentage Reduction*
2007	*50*
2010	*60*
2015	*70*
2020	*80*
2025	*90*
2030	*100*

; and".

[(II)] *(III)* sustainable design principles are applied to the siting, design, and construction of all new and replacement buildings; and

(ii) if water is used to achieve energy efficiency, water conservation technologies shall be applied to the extent that the technologies are life-cycle cost-effective.

* * * * * * *

AUTHORIZATION OF APPROPRIATIONS

SEC. 422. For the purpose of carrying out the weatherization program under this part, there are authorized to be appropriated $500,000,000 for fiscal year 2006, $600,000,000 for fiscal year 2007, and [$700,000,000 for fiscal year 2008] *$750,000,000 for each of fiscal years 2008 through 2012.*

PUBLIC UTILITY REGULATORY POLICIES ACT OF 1978

Public Law 95–617, as amended

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TITLE I—RETAIL REGULATORY POLICIES FOR ELECTRIC UTILITIES

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Subtitle B—Standards for Electric Utilities

SEC. 111. CONSIDERATION AND DETERMINATION RESPECTING CERTAIN RATEMAKING STANDARDS.

(a) CONSIDERATION AND DETERMINATION.—Each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) and each nonregulated electric utility shall consider each standard established by subsection (d) and make a determination concerning whether or not it is appropriate to implement such standard to carry out the purposes of this title. For purposes of such consideration and determination in accordance with subsections (b) and (c), and for purposes of any review of such consideration and determination in any court in accordance with section 123, the purposes of this title supplement otherwise applicable State law. Nothing in this subsection prohibits any State regulatory authority or nonregulated electric utility from making any determination that it is not appropriate to implement any such standard, pursuant to its authority under otherwise applicable State law.

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(d) ESTABLISHMENT.—The following Federal standards are hereby established—

* * * * * * *

(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 nonregulated 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; and

(v) allowing timely recovery of energy efficiency-related costs.

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TITLE III—RETAIL POLICIES FOR NATURAL GAS UTILITIES

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SEC. 303. ADOPTION OF CERTAIN STANDARDS.

(a) ADOPTION OF STANDARDS.—Not later than 2 years after the date of the enactment of this Act (or after the enactment of the Energy Policy Act of 1992 in the case of standards under paragraphs (3),1 and (4) of subsection (b)), each State regulatory authority (with respect to each gas utility for which it has ratemaking authority) and each nonregulated gas utility shall provide public notice and conduct a hearing respecting the standards established by subsection (b) and, on the basis of such hearing, shall—

(1) adopt the standard established by subsection (b)(1) if, and to the extent, such authority or nonregulated utility determines that such adoption is appropriate and is consistent with otherwise applicable State law, and

(2) adopt the standards established by paragraphs (2), (3) and (4) of subsection (b) if, and to the extent, such authority or nonregulated utility determines that such adoption is appropriate to carry out the purposes of this title, is otherwise appropriate, and is consistent with otherwise applicable State law.

For purposes of any determination under paragraphs (1) and (2) and any review of such determination in any court under section 307, the purposes of this title supplement State law. Nothing in this subsection prohibits any State regulatory authority or nonregulated utility from making any determination that it is not appropriate to implement any such standard, pursuant to its authority under otherwise applicable State law.

(b) ESTABLISHMENT.—The following Federal standards are hereby established:

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(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 nonregulated 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 as allowing utilities to retain a portion of the cost-reducing benefits accruing from the programs;

(iii) promoting 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; and

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

NATIONAL ENERGY CONSERVATION POLICY ACT

Public Law 95–619, as amended

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TITLE V—FEDERAL ENERGY INITIATIVES

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PART 3—FEDERAL ENERGY MANAGEMENT

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SEC. 543. ENERGY MANAGEMENT REQUIREMENTS.

(a) ENERGY PERFORMANCE REQUIREMENT FOR FEDERAL BUILDINGS.—(1) Subject to paragraph (2), each agency shall apply energy conservation measures to, and shall improve the design for the construction of, the Federal buildings of the agency (including each industrial or laboratory facility) so that the energy consumption per gross square foot of the Federal buildings of the agency in fiscal years 2006 through 2015 is reduced, as compared with the energy consumption per gross square foot of the Federal buildings of the agency in fiscal year 2003, by the percentage specified in the following table:

[*Fiscal Year*	*Percentage reduction*
2006	2
2007	4
2008	6
2009	8
2010	10
2011	12
2012	14
2013	16

[Fiscal Year	Percentage reduction
2014	18
2015	20.]

Fiscal Year	*Percentage reduction*
2006	*2*
2007	*4*
2008	*9*
2009	*12*
2010	*15*
2011	*18*
2012	*21*
2013	*24*
2014	*27*
2015	*30.]*

(f) COMBINED HEAT AND POWER AND DISTRICT ENERGY INSTALLATIONS AT FEDERAL SITES.—

(1) IN GENERAL.—Not later than 18 months after the date of enactment of this subsection, the Secretary, in consultation with the Administrator of General Services and the Secretary of Defense, shall identify Federal sites that could achieve significant cost-effective energy savings through the use of combined heat and power or district energy installations.

(2) INFORMATION AND TECHNICAL ASSISTANCE.—The Secretary shall provide agencies with information and technical assistance that will enable the agencies to take advantage of the energy savings described in paragraph (1).

(3) ENERGY PERFORMANCE REQUIREMENTS.—Any energy savings from the installations described in paragraph (1) may be applied to meet the energy performance requirements for an agency under subsection (a)(1).

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SEC. 546. INCENTIVES FOR AGENCIES.

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(c) UTILITY INCENTIVE PROGRAM.—(1) Agencies are authorized and encouraged to participate in programs to increase energy efficiency and for water conservation or the management of electricity demand conducted by gas, water, or electric utilities and generally available to customers of such utilities.

* * * * * * *

[(5)(A) An amount equal to fifty percent of the energy and water cost savings realized by an agency (other than the Department of Defense) with respect to funds appropriated for any fiscal year beginning after fiscal year 1992 (including financial benefits resulting from energy savings performance contracts under title VIII and utility energy efficiency rebates) shall, subject to appropriation, remain available for expenditure by such agency for additional energy efficiency measures which may include related employee incentive programs, particularly at those facilities at which energy savings were achieved.

[(B) Agencies shall establish a fund and maintain strict financial accounting and controls for savings realized and expenditures made under this subsection. Records maintained pursuant to this subparagraph shall be made available for public inspection upon request.]

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SEC. 548. REPORTS.

(a) REPORTS TO THE SECRETARY.—Each agency shall transmit a report to the Secretary, at times specified by the Secretary but at least annually, with complete information on its activities under this part, including information on—

(1) the agency's progress in achieving the goals established by section 543; and

(2) the procedures being used by the agency pursuant to section 546(a)(2), the number of contracts entered into by such agency under title VIII of this Act, the energy and cost savings that have resulted from such contracts *and any termination penalty exposure,* the use of such cost savings under section 546(c), and any problem encountered in entering into such contracts and otherwise implementing section 546.

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TITLE VIII—ENERGY SAVINGS PERFORMANCE CONTRACTS

SEC. 801. AUTHORITY TO ENTER INTO CONTRACTS.

(a) IN GENERAL.—(1) The head of a Federal agency may enter into contracts under this title solely for the purpose of achieving energy savings and benefits ancillary to that purpose. Each such contract may, notwithstanding any other provision of law, be for a period not to exceed 25 years. Such contract shall provide that the contractor shall incur costs of implementing energy savings measures, including at least the cost (if any) incurred in making energy audits, acquiring and installing equipment, and training personnel, in exchange for a share of any energy savings directly resulting from implementation of such measures during the term of the contract.

(2)(A) Contracts under this title shall be energy savings performance contracts and shall require an annual energy audit and specify the terms and conditions of any Government payments and performance guarantees. Any such performance guarantee shall provide that the contractor is responsible for maintenance and repair services for any energy related equipment, including computer software systems.

(B) Aggregate annual payments by an agency to both utilities and energy savings performance contractors, under an energy savings performance contract, may not exceed the amount that the agency would have paid for utilities without an energy savings performance contract (as estimated through the procedures developed pursuant to this section) during contract years. The contract shall provide for a guarantee of savings to the agency, and shall establish payment schedules reflecting such guarantee, taking into account any capital costs under the contract.

(C) Federal agencies may incur obligations pursuant to such contracts to finance energy conservation measures provided guaranteed savings exceed the debt service requirements.

(D) A Federal agency may enter into a multiyear contract under this title for a period not to exceed 25 years, without funding of cancellation charges before cancellation, if—

(i) such contract was awarded in a competitive manner pursuant to subsection (b)(2), using procedures and methods established under this title;

(ii) funds are available and adequate for payment of the costs of such contract for the first fiscal year; *and*

[(iii) 30 days before the award of any such contract that contains a clause setting forth a cancellation ceiling in excess of $10,000,000, the head of such agency gives written notification of such proposed contract and of the proposed cancellation ceiling for such contract to the appropriate authorizing and appropriating committees of the Congress; and]

[(iv)] *(iii)* such contract is governed by part 17.1 of the Federal Acquisition Regulation promulgated under section 25 of the Office of Federal Procurement Policy Act (41 U.S.C. 421) or the applicable rules promulgated under this title.

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[(c) SUNSET AND REPORTING REQUIREMENTS.—The authority to enter into new contracts under this section shall cease to be effective on October 1, 2016.]

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SEC. 804. DEFINITIONS.

For purposes of this title, the following definitions apply:

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(2) The term "energy savings" [means a reduction] *means—*

(A) a reduction in the cost of energy, water, or wastewater treatment, from a base cost established through a methodology set forth in the contract, used in an existing federally owned building or buildings or other federally owned facilities as a result of—

[(A)] *(i)* the lease or purchase of operating equipment, improvements, altered operation and maintenance, or technical services;

[(B)] *(ii)* the increased efficient use of existing energy sources by cogeneration or heat recovery, excluding any cogeneration process for other than a federally owned building or buildings or other federally owned facilities; or

[(C)] *(iii)* the increased efficient use of existing water sources in either interior or exterior applications[.]*;*

(B) the increased efficient use of an existing energy source by cogeneration or heat recovery, and installation of renewable energy systems;

(C) if otherwise authorized by Federal or State law (including regulations), the sale or transfer of electrical or thermal energy generated on-site from renewable energy sources or cogeneration, but in excess of Federal needs, to utilities or non-Federal energy users; and

(D) the increased efficient use of existing water sources in interior or exterior applications.

THE ENERGY POLICY ACT OF 1992

Public Law 102–486; 106 Stat. 2776 et seq.

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TITLE IV—ALTERNATIVE FUELS—NON-FEDERAL PROGRAMS

SEC. 406. LABELING REQUIREMENTS.

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(a) ESTABLISHMENT OF REQUIREMENTS.—[The Federal Trade Commission]

(1) IN GENERAL.—*The Federal Trade Commission*, in consultation with the Secretary, the Administrator of the Environmental Protection Agency, and the Secretary of Transportation, shall, within 18 months after the date of enactment of this Act, issue a notice of proposed rulemaking for a rule to establish uniform labeling requirements, to the greatest extent practicable, for alternative fuels and alternative fueled vehicles, including requirements for appropriate information with respect to costs and benefits, so as to reasonably enable the consumer to make choices and comparisons. Required labeling under the rule shall be simple and, where appropriate, consolidated with other labels providing information to the consumer. In formulating the rule, the Federal Trade Commission shall give consideration to the problems associated with developing and publishing useful and timely cost and benefit information, taking into account lead time, costs, the frequency of changes in costs and benefits that may occur, and other relevant factors. The Commission shall obtain the views of affected industries, consumer organizations, Federal and State agencies, and others in formulating the rule. A final rule shall be issued within 1 year after the notice of proposed rulemaking is issued. Such rule shall be updated periodically to reflect the most recent available information.

(2) FUEL TANK CAP LABELING REQUIREMENT.—Beginning with model year 2010, the fuel tank cap of each alternative fueled vehicle manufactured for sale in the United States shall be clearly labeled to inform consumers that such vehicle can operate on alternative fuel.

(b) TECHNICAL ASSISTANCE AND COORDINATION.—The Secretary shall provide technical assistance to the Federal Trade Commission in developing labeling requirements under subsection (a). The Secretary shall coordinate activities under this section with activities under section 405.

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THE ENERGY POLICY ACT OF 2005

Public Law 109–58; 119 Stat. 594 et seq.

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TITLE I—ENERGY EFFICIENCY

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Subtitle B—Energy Assistance and State Programs

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SEC. 124. ENERGY EFFICIENT APPLIANCE REBATE PROGRAMS.

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE STATE.—The term "eligible State" means a State that meets the requirements of subsection (b).

(2) ENERGY STAR PROGRAM.—The term "Energy Star program" means the program established by section 324A of the Energy Policy and Conservation Act.

(3) RESIDENTIAL ENERGY STAR PRODUCT.—The term "residential Energy Star product" means a product for a residence that is rated for energy efficiency under the Energy Star program.

(4) STATE ENERGY OFFICE.—The term "State energy office" means the State agency responsible for developing State energy conservation plans under section 362 of the Energy Policy and Conservation Act (42 U.S.C. 6322).

(5) STATE PROGRAM.—The term "State program" means a State energy efficient appliance rebate program described in subsection (b)(1).

(b) ELIGIBLE STATES.—A State shall be eligible to receive an allocation under subsection (c) if the State—

(1) establishes (or has established) a State energy efficient appliance rebate program to provide rebates to residential consumers for the purchase of residential Energy Star products, *or products with improved energy efficiency in cold climates* to replace used appliances of the same type;

(2) submits an application for the allocation at such time, in such form, and containing such information as the Secretary may require; and

(3) provides assurances satisfactory to the Secretary that the State will use the allocation to supplement, but not supplant, funds made available to carry out the State program.

(c) AMOUNT OF ALLOCATIONS.—

(1) IN GENERAL.—Subject to paragraph (2), for each fiscal year, the Secretary shall allocate to the State energy office of each eligible State to carry out subsection (d) an amount equal to the product obtained by multiplying the amount made available under subsection (f) for the fiscal year by the ratio that the population of the State in the most recent calendar year for which data are available bears to the total population of all eligible States in that calendar year.

(2) MINIMUM ALLOCATIONS.—For each fiscal year, the amounts allocated under this subsection shall be adjusted proportionately so that no eligible State is allocated a sum that is less than an amount determined by the Secretary.

(d) USE OF ALLOCATED FUNDS.—The allocation to a State energy office under subsection (c) may be used to pay up to 50 percent of the cost of establishing and carrying out a State program.

(e) ISSUANCE OF REBATES.—Rebates may be provided to residential consumers that meet the requirements of the State program. The amount of a rebate shall be determined by the State energy office, taking into consideration—

(1) the amount of the allocation to the State energy office under subsection (c);

(2) the amount of any Federal or State tax incentive available for the purchase of the residential Energy Star product *or product with improved energy efficiency in a cold climate*; and

(3) the difference between the cost of the residential Energy Star product *or product with improved energy efficiency in a cold climate* and the cost of an appliance that is not a residential Energy Star product *or product with improved energy efficiency in a cold climate*, but is of the same type as, and is the nearest capacity, performance, and other relevant characteristics (as determined by the State energy office) to, the residential Energy Star product *or product with improved energy efficiency in a cold climate*.

(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section $50,000,000 for each of the fiscal years 2006 through 2010.

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TITLE II—RENEWABLE ENERGY

Subtitle A—General Provisions

SEC. 203. FEDERAL PURCHASE REQUIREMENT.

[(a) REQUIREMENT.—The President, acting through the Secretary, shall seek to ensure that, to the extent economically feasible and technically practicable, of the total amount of electric energy the Federal Government consumes during any fiscal year, the following amounts shall be renewable energy:

[(1) Not less than 3 percent in fiscal years 2007 through 2009.

[(2) Not less than 5 percent in fiscal years 2010 through 2012.

[(3) Not less than 7.5 percent in fiscal year 2013 and each fiscal year thereafter.**]**

(a) REQUIREMENT.—

(1) IN GENERAL.—The President, acting through the Secretary, shall require that, to the extent economically feasible and technically practicable, of the total quantity of domestic electric energy the Federal Government consumes during any fiscal year, the following percentages shall be renewable energy from facilities placed in service after January 1, 1999:

(A) Not less than 10 percent in fiscal year 2010.

(B) Not less than 15 percent in fiscal year 2015.

(2) CAPITOL COMPLEX.—The Architect of the Capitol, in consultation with the Secretary, shall ensure that, of the total quantity of electric energy the Capitol complex consumes during any fiscal year, the percentages prescribed in paragraph (1) shall be renewable energy.

(3) WAIVER AUTHORITY.—The President may reduce or waive the requirement under paragraph (1) on a fiscal-year basis if the President determines that complying with paragraph (1) for a fiscal year would result in—

(A) a negative impact on military training or readiness activities conducted by the Department of Defense;

(B) a negative impact on domestic preparedness activities conducted by the Department of Homeland Security; or

(C) a requirement that a Federal agency provide emergency response services in the event of a natural disaster or terrorist attack.

(b) DEFINITIONS.—In this section:

(1) BIOMASS.—The term "biomass" means any lignin waste material that is segregated from other waste materials and is determined to be nonhazardous by the Administrator of the Environmental Protection Agency and any solid, nonhazardous, cellulosic material that is derived from—

(A) any of the following forest-related resources: mill residues, precommercial thinnings, slash, and brush, or nonmerchantable material;

(B) solid wood waste materials, including waste pallets, crates, dunnage, manufacturing and construction wood wastes (other than pressure-treated, chemically-treated, or painted wood wastes), and landscape or right-of-way tree trimmings, but not including municipal solid waste (garbage), gas derived from the biodegradation of solid waste, or paper that is commonly recycled;

(C) agriculture wastes, including orchard tree crops, vineyard, grain, legumes, sugar, and other crop by-products or residues, and livestock waste nutrients; or

((D) a plant that is grown exclusively as a fuel for the production of electricity.

(2) RENEWABLE ENERGY.—The term "renewable energy" means electric energy generated from solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project.

(c) CALCULATION.—For purposes of determining compliance with the requirement of this section, the amount of renewable energy shall be doubled if—

(1) the renewable energy is produced and used on-site at a Federal facility;

(2) the renewable energy is produced on Federal lands and used at a Federal facility; or

(3) the renewable energy is produced on Indian land as defined in title XXVI of the Energy Policy Act of 1992 (25 U.S.C. 3501 et seq.) and used at a Federal facility.

(d) REPORT.—Not later than April 15, 2007, and every 2 years thereafter, the Secretary shall provide a report to Congress on the progress of the Federal Government in meeting the goals established by this section.

(e) CONTRACTS FOR RENEWABLE ENERGY FROM PUBLIC UTILITY SERVICES.—Notwithstanding section 501(b)(1)(B) of title 40, United States Code, a contract for renewable energy from a public utility service may be made for a period of not more than 50 years.

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TITLE VII—VEHICLES AND FUELS

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Subtitle B—Hybrid Vehicles, Advanced Vehicles, and Fuel Cell Buses

PART 1—HYBRID VEHICLES

SEC. 711. HYBRID VEHICLES.

The Secretary shall accelerate efforts directed toward the improvement of batteries and other rechargeable energy storage systems, power electronics, hybrid systems integration, and other technologies for use in hybrid vehicles.

SEC. 712. EFFICIENT HYBRID AND ADVANCED DIESEL VEHICLES.

(a) PROGRAM.—The Secretary shall establish a program to encourage domestic production and sales of efficient hybrid and advanced diesel vehicles. The program shall include **[** grants to automobile manufacturers **]** *grants and loan guarantees under section 1703 to automobile manufacturers and suppliers* to encourage domestic production of efficient hybrid and advanced diesel vehicles.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary for carrying out this section such sums as may be necessary for each of the fiscal years 2006 through 2015.

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TITLE IX—RESEARCH AND DEVELOPMENT

SEC. 901. SHORT TITLE.

This title may be cited as the "Energy Research, Development, Demonstration, and Commercial Application Act of 2005".

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Subtitle A—Energy Efficiency

SEC. 911. ENERGY EFFICIENCY.

(a) IN GENERAL.—

(1) OBJECTIVES.—The Secretary shall conduct programs of energy efficiency research, development, demonstration, and commercial application, including activities described in this subtitle. Such programs shall take into consideration the following objectives:

(A) Increasing the energy efficiency of vehicles, buildings, and industrial processes.

(B) Reducing the demand of the United States for energy, especially energy from foreign sources.

(C) Reducing the cost of energy and making the economy more efficient and competitive.

(D) Improving the energy security of the United States.

(E) Reducing the environmental impact of energy-related activities.

(2) PROGRAMS.—Programs under this subtitle shall include research, development, demonstration, and commercial application of—

(A) advanced, cost-effective technologies to improve the energy efficiency and environmental performance of vehicles, including—

(i) hybrid and electric propulsion systems;

(ii) plug-in hybrid systems;
(iii) advanced combustion engines;
(iv) weight and drag reduction technologies;
(v) whole-vehicle design optimization; and
(vi) advanced drive trains;

(B) cost-effective technologies, for new construction and retrofit, to improve the energy efficiency and environmental performance of buildings, using a whole-buildings approach, including onsite renewable energy generation;

(C) advanced technologies to improve the energy efficiency, environmental performance, and process efficiency of energy-intensive and waste-intensive industries; **[**and**]**

(D) advanced control devices to improve the energy efficiency of electric motors, including those used in industrial processes, heating, ventilation, and cooling **[**.**]** *; and*

(E) technologies to improve the energy efficiency of appliances and mechanical systems for buildings in cold climates, including combined heat and power units and increased use of renewable resources, including fuel.

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Subtitle C—Renewable Energy

SEC. 931. RENEWABLE ENERGY.

(a) IN GENERAL.—

(1) OBJECTIVES.—The Secretary shall conduct programs of renewable energy research, development, demonstration, and commercial application, including activities described in this subtitle. Such programs shall take into consideration the following objectives:

(A) Increasing the conversion efficiency of all forms of renewable energy through improved technologies.

(B) Decreasing the cost of renewable energy generation and delivery.

(C) Promoting the diversity of the energy supply.

(D) Decreasing the dependence of the United States on foreign energy supplies.

(E) Improving United States energy security.

(F) Decreasing the environmental impact of energy-related activities.

(G) Increasing the export of renewable generation equipment from the United States.

(2) PROGRAMS.—

(A) SOLAR ENERGY.—The Secretary shall conduct a program of research, development, demonstration, and commercial application for solar energy, including—

(i) photovoltaics;
(ii) solar hot water and solar space heating;
(iii) concentrating solar power;
(iv) lighting systems that integrate sunlight and electrical lighting in complement to each other in common lighting fixtures for the purpose of improving energy efficiency;
(v) manufacturability of low cost, high quality solar systems; and

(vi) development of products that can be easily integrated into new and existing buildings.

(B) WIND ENERGY.—The Secretary shall conduct a program of research, development, demonstration, and commercial application for wind energy, including—

(i) low speed wind energy;

(ii) offshore wind energy;

(iii) testing and verification (including construction and operation of a research and testing facility capable of testing wind turbines); and

(iv) distributed wind energy generation.

(C) GEOTHERMAL.—The Secretary shall conduct a program of research, development, demonstration, and commercial application for geothermal energy. The program shall focus on developing improved technologies for reducing the costs of geothermal energy installations, including technologies for—

(i) improving detection of geothermal resources;

(ii) decreasing drilling costs;

(iii) decreasing maintenance costs through improved materials;

(iv) increasing the potential for other revenue sources, such as mineral production; and

(v) increasing the understanding of reservoir life cycle and management.

(D) HYDROPOWER.—The Secretary shall conduct a program of research, development, demonstration, and commercial application for cost competitive technologies that enable the development of new and incremental hydropower capacity, adding to the diversity of the energy supply of the United States, including:

(i) Fish-friendly large turbines.

(ii) Advanced technologies to enhance environmental performance and yield greater energy efficiencies.

(E) MISCELLANEOUS PROJECTS.—The Secretary shall conduct research, development, demonstration, and commercial application programs for—

(i) ocean energy, including wave energy;

(ii) the combined use of renewable energy technologies with one another and with other energy technologies, including the combined use of wind power and coal gasification technologies;

(iii) renewable energy technologies for cogeneration of hydrogen and electricity; and

(iv) kinetic hydro turbines.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out renewable energy research, development, demonstration, and commercial application activities, including activities authorized under this subtitle—

(1) $632,000,000 for fiscal year 2007;

(2) $743,000,000 for fiscal year 2008; and

(3) $852,000,000 for fiscal year 2009.

(c) BIOENERGY.—From the amounts authorized under subsection (b), there are authorized to be appropriated to carry out section 932—

(1) $213,000,000 for fiscal year 2007, of which $100,000,000 shall be for section 932(d);

(2) [$251,000,000] *$377,000,000* for fiscal year 2008, of which $125,000,000 shall be for section 932(d); and

(3) [$274,000,000] *$398,000,000* for fiscal year 2009, of which $150,000,000 shall be for section 932(d).

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Subtitle F—Fossil Energy

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SEC. 963. CARBON CAPTURE [RESEARCH AND DEVELOPMENT] *AND STORAGE RESEARCH, DEVELOPMENT, AND DEMONSTRATION* PROGRAM.

(a) IN GENERAL.—The Secretary shall carry out a 10-year carbon capture [research and development] *and storage research, development, and demonstration* program to develop carbon dioxide [capture technologies on combustion-based systems] *capture and storage technologies related to energy systems* for use—

(1) in new coal utilization facilities; and

(2) on the fleet of coal-based units in existence on the date of enactment of this Act.

(b) OBJECTIVES.—The objectives of the program under subsection (a) shall be—

(1) to develop carbon dioxide capture technologies, including adsorption and absorption techniques and chemical processes, to remove the carbon dioxide from gas streams containing carbon dioxide potentially amenable to sequestration;

(2) to develop technologies that would directly produce concentrated streams of carbon dioxide potentially amenable to sequestration;

(3) to increase the efficiency of the overall system to reduce the quantity of carbon dioxide emissions released from the system per megawatt generated; [and]

(4) in accordance with the carbon dioxide capture program, to promote a robust carbon sequestration program and continue the work of the Department, in conjunction with the private sector, through regional carbon sequestration partnerships[.]*; and*

(5) to expedite and carry out large-scale testing of carbon sequestration systems in a range of geological formations that will provide information on the cost and feasibility of deployment of sequestration technologies.

[(c) AUTHORIZATION OF APPROPRIATIONS.—From amounts authorized under section 961(b), the following sums are authorized for activities described in subsection (a)(2):

[(1) $25,000,000 for fiscal year 2006;

[(2) $30,000,000 for fiscal year 2007; and

[(3) $35,000,000 for fiscal year 2008.]

(c) PROGRAMMATIC ACTIVITIES.—

(1) ENERGY RESEARCH AND DEVELOPMENT UNDERLYING CARBON CAPTURE AND STORAGE TECHNOLOGIES AND CARBON USE ACTIVITIES.—

(A) IN GENERAL.—The Secretary shall carry out fundamental science and engineering research (including labora-

tory-scale experiments, numeric modeling, and simulations) to develop and document the performance of new approaches to capture and store, recycle, or reuse carbon dioxide.

(B) PROGRAM INTEGRATION.—The Secretary shall ensure that fundamental research carried out under this paragraph is appropriately applied to energy technology development activities, the field testing of carbon sequestration, and carbon use activities, including—

(i) development of new or improved technologies for the capture of carbon dioxide;

(ii) development of new or improved technologies that reduce the cost and increase the efficacy of the compression of carbon dioxide required for the storage of carbon dioxide;

(iii) modeling and simulation of geological sequestration field demonstrations;

(iv) quantitative assessment of risks relating to specific field sites for testing of sequestration technologies; and

(v) research and development of new and improved technologies for carbon use, including recycling and reuse of carbon dioxide.

(2) CARBON CAPTURE DEMONSTRATION PROJECT.—

(A) IN GENERAL.—The Secretary shall carry out a demonstration of large-scale carbon dioxide capture from an appropriate gasification facility selected by the Secretary.

(B) LINK TO STORAGE ACTIVITIES.—The Secretary may require the use of carbon dioxide from the project carried out under subparagraph (A) in a field testing validation activity under this section.

(3) FIELD VALIDATION TESTING ACTIVITIES.—

(A) IN GENERAL.—The Secretary shall promote, to the maximum extent practicable, regional carbon sequestration partnerships to conduct geologic sequestration tests involving carbon dioxide injection and monitoring, mitigation, and verification operations in a variety of candidate geological settings, including—

(i) operating oil and gas fields;

(ii) depleted oil and gas fields;

(iii) unmineable coal seams;

(iv) deep saline formations;

(v) deep geological systems that may be used as engineered reservoirs to extract economical quantities of heat from geothermal resources of low permeability or porosity; and

(vi) deep geologic systems containing basalt formations.

(B) OBJECTIVES.—The objectives of tests conducted under this paragraph shall be—

(i) to develop and validate geophysical tools, analysis, and modeling to monitor, predict, and verify carbon dioxide containment;

(ii) to validate modeling of geological formations;

(iii) to refine storage capacity estimated for particular geological formations;

(iv) to determine the fate of carbon dioxide concurrent with and following injection into geological formations;

(v) to develop and implement best practices for operations relating to, and monitoring of, injection and storage of carbon dioxide in geologic formations;

(vi) to assess and ensure the safety of operations related to geological storage of carbon dioxide; and

(vii) to allow the Secretary to promulgate policies, procedures, requirements, and guidance to ensure that the objectives of this subparagraph are met in large-scale testing and deployment activities for carbon capture and storage that are funded by the Department of Energy.

(4) LARGE-SCALE TESTING AND DEPLOYMENT.—

(A) IN GENERAL.—The Secretary shall conduct not less than 7 initial large-volume sequestration tests for geological containment of carbon dioxide (at least 1 of which shall be international in scope) to validate information on the cost and feasibility of commercial deployment of technologies for geological containment of carbon dioxide.

(B) DIVERSITY OF FORMATIONS TO BE STUDIED.—In selecting formations for study under this paragraph, the Secretary shall consider a variety of geological formations across the United States, and require characterization and modeling of candidate formations, as determined by the Secretary.

(5) PREFERENCE IN PROJECT SELECTION FROM MERITORIOUS PROPOSALS.—In making competitive awards under this subsection, subject to the requirements of section 989, the Secretary shall give preference to proposals from partnerships among industrial, academic, and government entities.

(6) COST SHARING.—Activities under this subsection shall be considered research and development activities that are subject to the cost-sharing requirements of section 988(b).

(7) PROGRAM REVIEW AND REPORT.—During fiscal year 2011, the Secretary shall—

(A) conduct a review of programmatic activities carried out under this subsection; and

(B) make recommendations with respect to continuation of the activities.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section—

(1) $150,000,000 for fiscal year 2008;

(2) $200,000,000 for fiscal year 2009;

(3) $200,000,000 for fiscal year 2010;

(4) $180,000,000 for fiscal year 2011; and

(5) $165,000,000 for fiscal year 2012.

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Subtitle G—Science

SEC. 977. SYSTEMS BIOLOGY PROGRAM.

(a) PROGRAM.—

(1) ESTABLISHMENT.—The Secretary shall establish a research, development, and demonstration program in microbial and plant systems biology, protein science, and computational biology to support the energy, national security, and environmental missions of the Department, *including the establishment of at least 11 bioresearch centers of varying sizes, as appropriate, that focus on biofuels, of which at least 2 centers shall be located in each of the 4 Petroleum Administration for Defense Districts with no subdistricts and 1 center shall be located in each of the subdistricts of the Petroleum Administration for Defense District with subdistricts.*

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TITLE XI—PERSONNEL AND TRAINING

SEC. 1101. WORKFORCE TRENDS AND TRAINEESHIP GRANTS.

(a) DEFINITIONS.—In this section:

(1) ENERGY TECHNOLOGY INDUSTRY.—The term "energy technology industry" includes—

(A) a renewable energy industry;

(B) a company that develops or commercializes a device to increase energy efficiency;

(C) the oil and gas industry;

(D) the nuclear power industry;

(E) the coal industry;

(F) the electric utility industry; and

(G) any other industrial sector, as the Secretary determines to be appropriate.

(2) SKILLED TECHNICAL PERSONNEL.—The term "skilled technical personnel" means—

(A) journey- and apprentice-level workers who are enrolled in, or have completed, a federally-recognized or State-recognized apprenticeship program; and

(B) other skilled workers in energy technology industries, as determined by the Secretary.

(b) WORKFORCE TRENDS.—

(1) MONITORING.—The Secretary, in consultation with, and using data collected by, the Secretary of Labor, shall monitor trends in the workforce of—

(A) skilled technical personnel that support energy technology industries; and

(B) electric power and transmission engineers.

(2) REPORT ON TRENDS.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a report on current trends under paragraph (1), with recommendations (as appropriate) to meet the future labor requirements for the energy technology industries.

(3) REPORT ON SHORTAGE.—As soon as practicable after the date on which the Secretary identifies or predicts a significant national shortage of skilled technical personnel in one or more

energy technology industries, the Secretary shall submit to Congress a report describing the shortage.

(c) TRAINEESHIP GRANTS FOR SKILLED TECHNICAL PERSONNEL.—The Secretary, in consultation with the Secretary of Labor, may establish programs in the appropriate offices of the Department under which the Secretary provides grants to enhance training (including distance learning) for any workforce category for which a shortage is identified or predicted under subsection (b)(2).

(d) WORKFORCE TRAINING.—

(1) IN GENERAL.—The Secretary, in cooperation with the Secretary of Labor, shall promulgate regulations to implement a program to provide workforce training to meet the high demand for workers skilled in the energy efficiency and renewable energy industries.

(2) CONSULTATION.—In carrying out this subsection, the Secretary shall consult with representatives of the energy efficiency and renewable energy industries concerning skills that are needed in those industries.

[(d)**]** *(e)* AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $20,000,000 for each of fiscal years 2006 through 2008.

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TITLE XVII—INCENTIVES FOR INNOVATIVE TECHNOLOGIES

SEC. 1701. DEFINITIONS.

In this title:

(1) COMMERCIAL TECHNOLOGY.—

(A) IN GENERAL.—The term "commercial technology" means a technology in general use in the commercial marketplace.

[(B) INCLUSIONS.—The term "commercial technology" does not include a technology solely by use of the technology in a demonstration project funded by the Department.**]**

(B) EXCLUSION.—The term 'commercial technology' does not include a technology if the sole use of the technology is in connection with—

(i) a demonstration plant; or

(ii) a project for which the Secretary approved a loan guarantee.

(2) COST.—The term "cost" has the meaning given the term "cost of a loan guarantee" within the meaning of section 502(5)(C) of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a(5)(C)).

(3) ELIGIBLE PROJECT.—The term "eligible project" means a project described in section 1703.

(4) GUARANTEE.—

(A) IN GENERAL.—The term "guarantee" has the meaning given the term "loan guarantee" in section 502 of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a).

(B) INCLUSION.—The term "guarantee" includes a loan guarantee commitment (as defined in section 502 of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a)).

(5) OBLIGATION.—The term "obligation" means the loan or other debt obligation that is guaranteed under this section.

SEC. 1702. TERMS AND CONDITIONS.

(a) IN GENERAL.—Except for division C of Public Law 108–324, the Secretary shall make guarantees under this or any other Act for projects on such terms and conditions as the Secretary determines, after consultation with the Secretary of the Treasury, only in accordance with this section.

[(b) SPECIFIC APPROPRIATION OR CONTRIBUTION.—No guarantee shall be made unless—

(1) an appropriation for the cost has been made; or

(2) the Secretary has received from the borrower a payment in full for the cost of the obligation and deposited the payment into the Treasury.]

(b) SPECIFIC APPROPRIATION OR CONTTRIBUTION.—

(1) IN GENERAL.—No guarantee shall be made unless—

(A) an appropriation for the cost has been made; or

(B) the Secretary has received from the borrower a payment in full for the cost of the obligation and deposited the payment into the Treasury.

(2) LIMITATION.—The source of payments received from a borrower under paragraph (1)(B) shall not be a loan or other debt obligation that is made or guaranteed by the Federal Government.

(3) RELATION TO OTHER LAWS.—Section 504(b) of the Federal Credit Reform Act of 1990 (2 U.S.C. 661c(b)) shall not apply to a loan or loan guarantee made in accordance with paragraph (1)(B).

[(c) AMOUNT.—Unless otherwise provided by law, a guarantee by the Secretary shall not exceed an amount equal to 80 percent of the project cost of the facility that is the subject of the guarantee, as estimated at the time at which the guarantee is issued.]

(c) AMOUNT.—

(1) IN GENERAL.—Subject to paragraph (2), the Secretary shall guarantee up to 100 percent of the principal and interest due on 1 or more loans for a facility that are the subject of the guarantee.

(2) LIMITATION.—The total amount of loans guaranteed for a facility by the Secretary shall not exceed 80 percent of the total cost of the facility, as estimated at the time at which the guarantee is issued.

(d) REPAYMENT.—

(1) IN GENERAL.—No guarantee shall be made unless the Secretary determines that there is reasonable prospect of repayment of the principal and interest on the obligation by the borrower.

(2) AMOUNT.—No guarantee shall be made unless the Secretary determines that the amount of the obligation (when combined with amounts available to the borrower from other sources) will be sufficient to carry out the project.

(3) SUBORDINATION.—The obligation shall be subject to the condition that the obligation is not subordinate to other financing.

(e) INTEREST RATE.—An obligation shall bear interest at a rate that does not exceed a level that the Secretary determines appropriate, taking into account the prevailing rate of interest in the private sector for similar loans and risks.

(f) TERM.—The term of an obligation shall require full repayment over a period not to exceed the lesser of—

(1) 30 years; or

(2) 90 percent of the projected useful life of the physical asset to be financed by the obligation (as determined by the Secretary).

(g) DEFAULTS.—

(1) PAYMENT BY SECRETARY.—

(A) IN GENERAL.—If a borrower defaults on the obligation (as defined in regulations promulgated by the Secretary and specified in the guarantee contract), the holder of the guarantee shall have the right to demand payment of the unpaid amount from the Secretary.

[(B) PAYMENT REQUIRED.—Within such period as may be specified in the guarantee or related agreements, the Secretary shall pay to the holder of the guarantee the unpaid interest on, and unpaid principal of the obligation as to which the borrower has defaulted, unless the Secretary finds that there was no default by the borrower in the payment of interest or principal or that the default has been remedied.]

[(C)] *(B)* FORBEARANCE.—Nothing in this subsection precludes any forbearance by the holder of the obligation for the benefit of the borrower which may be agreed upon by the parties to the obligation and approved by the Secretary.

(2) SUBROGATION.—

(A) IN GENERAL.—If the Secretary makes a payment under paragraph (1), the Secretary shall be subrogated to the rights of the recipient of the payment as specified in the guarantee or related agreements including, where appropriate, the authority (notwithstanding any other provision of law) to—

(i) complete, maintain, operate, lease, or otherwise dispose of any property acquired pursuant to such guarantee or related agreements; or

(ii) permit the borrower, pursuant to an agreement with the Secretary, to continue to pursue the purposes of the project if the Secretary determines this to be in the public interest.

(B) SUPERIORITY OF RIGHTS.—The rights of the Secretary, with respect to any property acquired pursuant to a guarantee or related agreements, shall be superior to the rights of any other person with respect to the property.

(C) TERMS AND CONDITIONS.—A guarantee agreement shall include such detailed terms and conditions as the Secretary determines appropriate to—

(i) protect the interests of the United States in the case of default; and

(ii) have available all the patents and technology necessary for any person selected, including the Secretary, to complete and operate the project.

(3) PAYMENT OF PRINCIPAL AND INTEREST BY SECRETARY.—With respect to any obligation guaranteed under this section, the Secretary may enter into a contract to pay, and pay, hold-

ers of the obligation, for and on behalf of the borrower, from funds appropriated for that purpose, the principal and interest payments which become due and payable on the unpaid balance of the obligation if the Secretary finds that—

(A)(i) the borrower is unable to meet the payments and is not in default;

(ii) it is in the public interest to permit the borrower to continue to pursue the purposes of the project; and

(iii) the probable net benefit to the Federal Government in paying the principal and interest will be greater than that which would result in the event of a default;

(B) the amount of the payment that the Secretary is authorized to pay shall be no greater than the amount of principal and interest that the borrower is obligated to pay under the agreement being guaranteed; and

(C) the borrower agrees to reimburse the Secretary for the payment (including interest) on terms and conditions that are satisfactory to the Secretary.

(4) ACTION BY ATTORNEY GENERAL.—

(A) NOTIFICATION.—If the borrower defaults on an obligation, the Secretary shall notify the Attorney General of the default.

(B) RECOVERY.—On notification, the Attorney General shall take such action as is appropriate to recover the unpaid principal and interest due from—

(i) such assets of the defaulting borrower as are associated with the obligation; or

(ii) any other security pledged to secure the obligation.

(h) FEES.—

(1) IN GENERAL.—The Secretary shall charge and collect fees for guarantees in amounts the Secretary determines are sufficient to cover applicable administrative expenses.

[(2) AVAILABILITY.—Fees collected under this subsection shall—

[(A) be deposited by the Secretary into the Treasury; and

[(B) remain available until expended, subject to such other conditions as are contained in annual appropriations Acts.**]**

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

(A) be deposited by the Secretary into a special fund in the Treasury to be known as the 'Incentives For Innovative Technologies Fund'; and

(B) remain available to the Secretary for expenditure, without further appropriation or fiscal year limitation, for administrative expenses incurred in carrying out this title.

(i) RECORDS; AUDITS.—

(1) IN GENERAL.—A recipient of a guarantee shall keep such records and other pertinent documents as the Secretary shall prescribe by regulation, including such records as the Secretary may require to facilitate an effective audit.

(2) ACCESS.—The Secretary and the Comptroller General of the United States, or their duly authorized representatives,

shall have access, for the purpose of audit, to the records and other pertinent documents.

(j) FULL FAITH AND CREDIT.—The full faith and credit of the United States is pledged to the payment of all guarantees issued under this section with respect to principal and interest.

SEC. 1703. ELIGIBLE PROJECTS.

(a) IN GENERAL.—The Secretary may make guarantees under this section only for projects that—

(1) avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases; and

(2) employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued.

(b) CATEGORIES.—Projects from the following categories shall be eligible for a guarantee under this section:

(1) Renewable energy systems.

(2) Advanced fossil energy technology (including coal gasification meeting the criteria in subsection (d)).

(3) Hydrogen fuel cell technology for residential, industrial, or transportation applications.

(4) Advanced nuclear energy facilities.

(5) Carbon capture and sequestration practices and technologies, including agricultural and forestry practices that store and sequester carbon.

(6) Efficient electrical generation, transmission, and distribution technologies.

(7) Efficient end-use energy technologies.

(8) Production facilities for fuel efficient vehicles, including hybrid and advanced diesel vehicles.

(9) Pollution control equipment.

(10) Refineries, meaning facilities at which crude oil is refined into gasoline.

(c) GASIFICATION PROJECTS.—The Secretary may make guarantees for the following gasification projects:

(1) INTEGRATED GASIFICATION COMBINED CYCLE PROJECTS.—Integrated gasification combined cycle plants meeting the emission levels under subsection (d), including—

(A) projects for the generation of electricity—

(i) for which, during the term of the guarantee—

(I) coal, biomass, petroleum coke, or a combination of coal, biomass, and petroleum coke will account for at least 65 percent of annual heat input; and

(II) electricity will account for at least 65 percent of net useful annual energy output;

(ii) that have a design that is determined by the Secretary to be capable of accommodating the equipment likely to be necessary to capture the carbon dioxide that would otherwise be emitted in flue gas from the plant;

(iii) that have an assured revenue stream that covers project capital and operating costs (including servicing all debt obligations covered by the guarantee) that is approved by the Secretary and the relevant State public utility commission; and

(iv) on which construction commences not later than the date that is 3 years after the date of the issuance of the guarantee;

(B) a project to produce energy from coal (of not more than 13,000 Btu/lb and mined in the western United States) using appropriate advanced integrated gasification combined cycle technology that minimizes and offers the potential to sequester carbon dioxide emissions and that—

(i) may include repowering of existing facilities;

(ii) may be built in stages;

(iii) shall have a combined output of at least 100 megawatts;

(iv) shall be located in a western State at an altitude greater than 4,000 feet; and

(v) shall demonstrate the ability to use coal with an energy content of not more than 9,000 Btu/lb;

(C) a project located in a taconite-producing region of the United States that is entitled under the law of the State in which the plant is located to enter into a long-term contract approved by a State public utility commission to sell at least 450 megawatts of output to a utility;

(D) facilities that—

(i) generate one or more hydrogen-rich and carbon monoxide-rich product streams from the gasification of coal or coal waste; and

(ii) use those streams to facilitate the production of ultra clean premium fuels through the Fischer-Tropsch process; and

(E) a project to produce energy and clean fuels, using appropriate coal liquefaction technology, from Western bituminous or subbituminous coal, that—

(i) is owned by a State government; and

(ii) may include tribal and private coal resources.

(2) INDUSTRIAL GASIFICATION PROJECTS.—Facilities that gasify coal, biomass, or petroleum coke in any combination to produce synthesis gas for use as a fuel or feedstock and for which electricity accounts for less than 65 percent of the useful energy output of the facility.

(3) PETROLEUM COKE GASIFICATION PROJECTS.—The Secretary is encouraged to make loan guarantees under this title available for petroleum coke gasification projects.

(4) LIQUEFACTION PROJECT.—Notwithstanding any other provision of law, funds awarded under the clean coal power initiative under subtitle A of title IV for coal-to-oil liquefaction projects may be used to finance the cost of loan guarantees for projects awarded such funds.

(d) EMISSION LEVELS.—In addition to any other applicable Federal or State emission limitation requirements, a project shall attain at least—

(1) total sulfur dioxide emissions in flue gas from the project that do not exceed 0.05 lb/MMBtu;

(2) a 90-percent removal rate (including any fuel pretreatment) of mercury from the coal-derived gas, and any other fuel, combusted by the project;

(3) total nitrogen oxide emissions in the flue gas from the project that do not exceed 0.08 lb/MMBtu; and

(4) total particulate emissions in the flue gas from the project that do not exceed 0.01 lb/MMBtu.

(e) QUALIFICATION OF FACILITIES RECEIVING TAX CREDITS.—A project that receives tax credits for clean coal technology shall not be disqualified from receiving a guarantee under this title.

(f) RENEWABLE FUEL FACILITIES.—

(1) IN GENERAL.—The Secretary may make guarantees under this title for projects that produce advanced biofuel (as defined in section 102 of the Biofuels for Energy Security and Transportation Act of 2007).

(2) REQUIREMENTS.—A project under this subsection shall employ new or significantly improved technologies for the production of renewable fuels as compared to commercial technologies in service in the United States at the time that the guarantee is issued.

(3) ISSUANCE OF FIRST LOAN GUARANTEES.—The requirement of section 20320(b) of division B of the Continuing Appropriations Resolution, 2007 (Public Law 109–289, Public Law 110–5), relating to the issuance of final regulations, shall not apply to the first 6 guarantees issued under this subsection.

(4) PROJECT DESIGN.—A project for which a guarantee is made under this subsection shall have a project design that has been validated through the operation of a continuous process pilot facility with an annual output of at least 50,000 gallons of ethanol or the energy equivalent volume of other advanced biofuels.

(5) MAXIMUM GUARANTEED PRINCIPAL.—The total principal amount of a loan guaranteed under this subsection may not exceed $250,000,000 for a single facility.

(6) AMOUNT OF GUARANTEE.—The Secretary shall guarantee 100 percent of the principal and interest due on 1 or more loans made for a facility that is the subject of the guarantee under paragraph (3).

(7) DEADLINE.—The Secretary shall approve or disapprove an application for a guarantee under this subsection not later than 90 days after the date of receipt of the application.

(8) REPORT.—Not later than 30 days after approving or disapproving an application under paragraph (7), the Secretary shall submit to Congress a report on the approval or disapproval (including the reasons for the action).

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CRANSTON-GONZALEZ NATIONAL AFFORDABLE HOUSING ACT

Public Law 101–626, as amended

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SEC. 109. ENERGY EFFICIENCY STANDARDS.

(a) ESTABLISHMENT.—

(1) IN GENERAL.—The Secretary of Housing and Urban Development and the Secretary of Agriculture shall, not later

than September 30, 2006, jointly establish, by rule, energy efficiency standards for—

(A) new construction of public and assisted housing and single family and multifamily residential housing (other than manufactured homes) subject to mortgages insured under the National Housing Act;

(B) new construction of single family housing (other than manufactured homes) subject to mortgages insured, guaranteed, or made by the Secretary of Agriculture under title V of the Housing Act of 1949; and

(C) rehabilitation and new construction of public and assisted housing funded by HOPE VI revitalization grants under section 24 of the United States Housing Act of 1937 [, where such standards are determined to be cost effective by the Secretary of Housing and Urban Development].

(2) CONTENTS.—Such standards shall meet or exceed the requirements of [the Council of American Building Officials Model Energy Code, 1992] *2006 International Energy Conservation Code*, (hereafter in this section referred to as "[CABO Model Energy Code, 1992] *the 2006 IECC*") or, in the case of multifamily high rises, the requirements of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers Standard 90.1 [1989] *2004* (hereafter in this section referred to as "ASHRAE Standard 90.1 [1989] *2004*") [, and, with respect to rehabilitation and new construction of public and assisted housing funded by HOPE VI revitalization grants under section 24 of the United States Housing Act of 1937 (42 U.S.C. 1437v), the 2003 International Energy Conservation Code], and shall be cost-effective with respect to construction and operating costs on a life-cycle cost basis. In developing such standards, the Secretaries shall consult with an advisory task force composed of homebuilders, national, State, and local housing agencies (including public housing agencies), energy agencies, building code organizations and agencies, energy efficiency organizations, utility organizations, low-income housing organizations, and other parties designated by the Secretaries.

(b) [MODEL ENERGY CODE.—] *INTERNATIONAL ENERGY CONSERVATION CODE.*—If the Secretaries have not, by September 30, 2006, established energy efficiency standards under subsection (a), all new construction *and rehabilitation* of housing specified in such subsection shall meet the requirements of [CABO Model Energy Code, 1992] *the 2006 IECC*, or, in the case of multifamily high rises, the requirements of ASHRAE Standard 90.1 [1989] *2004*. [, and, with respect to rehabilitation and new construction of public and assisted housing funded by HOPE VI revitalization grants under section 24 of the United States Housing Act of 1937 (42 U.S.C. 1437v), the 2003 International Energy Conservation Code.]

(c) REVISIONS OF [MODEL ENERGY CODE AND] THE INTERNATIONAL ENERGY CONSERVATION CODE.—If the requirements of [CABO Model Energy Code, 1992] *the 2006 IECC*, or, in the case of multifamily high rises, ASHRAE Standard 90.1 [1989] *2004* [, or, with respect to rehabilitation and new construction of public and assisted housing funded by HOPE VI revitalization grants under section 24 of the United States Housing Act of 1937 (42 U.S.C. 1437v), the 2003 International Energy Conservation Code], are revised at any time, the Secretaries shall, not later than 1 year

after such revision, amend the standards established under subsection (a) to meet or exceed the requirements of such revised code or standard unless the Secretaries determine that compliance with such revised code or standard would not result in a significant increase in energy efficiency or would not be technologically feasible or economically justified.

(d) FAILURE TO AMEND THE STANDARDS.—If the Secretaries have not, within 1 year after the requirements of the 2006 IECC or the ASHRAE Standard 90.1–2004 are revised, amended the standards or made a determination under subsection (c) of this section, and if the Secretary of Energy has made a determination under section 304 of the Energy Conservation and Production Act (42 U.S.C. 6833) that the revised code or standard would improve energy efficiency, all new construction and rehabilitation of housing specified in subsection (a) shall meet the requirements of the revised code or standard.

TITLE 10, UNITED STATES CODE

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CHAPTER 173—ENERGY SECURITY

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SUBCHAPTER I—ENERGY SECURITY ACTIVITIES

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SEC. 2913. ENERGY SAVINGS CONTRACTS AND ACTIVITIES.

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[(e) Congressional notification of cancellation ceiling for energy savings performance contracts. When a decision is made to award an energy savings performance contract that contains a clause setting forth a cancellation ceiling in excess of $7,000,000, the Secretary of Defense shall submit to the appropriate committees of Congress written notification of the proposed contract and of the proposed cancellation ceiling for the contract. The notification shall include the justification for the proposed cancellation ceiling. The contract may then be awarded only after the end of the 30-day period beginning on the date the notification is received by such committees or, if earlier, the end of the 15-day period beginning on the date on which a copy of the notification is provided in an electronic medium pursuant to section 480 of this title.**]**

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