



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

October 15, 2015

S. 2012 **Energy Policy Modernization Act of 2015**

*As reported by the Senate Committee on Energy and Natural Resources
on September 9, 2015*

SUMMARY

S. 2012 would amend current law and authorize appropriations for a variety of activities and programs administered primarily by the Department of Energy (DOE). The legislation also would:

- Expand and extend federal agencies' authority to use certain types of long-term contracts to invest in energy conservation measures and related services;
- Specify various energy-related goals and requirements for federal agencies;
- Modify DOE's authority to guarantee loans under Title 17 of the Energy Policy Act of 2005; and
- Establish a pilot program to streamline the review and approval of applications for permits to drill for oil and gas on federal lands.

Assuming appropriation of amounts specifically authorized and estimated to be necessary under S. 2012—roughly \$40 billion over the 2016-2020 period (and an additional \$3 billion in later years)—CBO estimates that implementing this legislation would result in outlays totaling \$32 billion over the 2016-2020 period from those appropriations, with additional spending of about \$11 billion occurring after 2020.

CBO also estimates that the bill would result in additional direct spending. The estimated amount of direct spending depends on the budgetary treatment of federal commitments through certain types of long-term energy-related contracts, which CBO expects would increase under the bill. In CBO's view, commitments under such contracts are a form of direct spending because agencies enter into such contracts without appropriations in advance to cover their full costs. On the basis of that view, CBO estimates that enacting S. 2012 would increase direct spending by \$659 million over the 2016-2025 period.

However, for purposes of determining budget-related points of order for legislation considered by the Senate, section 3207 of the Concurrent Resolution on the Budget for Fiscal Year 2016 specifies a scoring rule for provisions related to such contracts (referred to in this document as the scoring rule for energy contracts). Specifically, that rule requires CBO to calculate, on a net present value basis, the lifetime net cost or savings attributable to projects financed by such contracts and to record that amount as an upfront change in spending subject to appropriation. Under that rule, CBO estimates that S. 2012 would increase direct spending by \$29 million over the 2016-2025 period.

Enacting S. 2012 could affect revenues, but CBO estimates any such effects would be insignificant in any year. Because the bill would affect direct spending and revenues, pay-as-you-go procedures apply.

CBO estimates that enacting S. 2012 would not increase net direct spending or on-budget deficits by more than \$5 billion in any of the four consecutive 10-year periods beginning in 2026.

S. 2012 would impose an intergovernmental and private-sector mandate, as defined in the Unfunded Mandates Reform Act (UMRA), on public and private entities regulated by FERC, such as electric utilities, by requiring them to pay fees in some circumstances. The bill would impose two additional mandates on public entities. One would require state and tribal governments to certify to DOE whether or not they have updated residential and commercial building codes to meet the latest standards developed by building efficiency organizations. The other would preempt state and local environmental and liability laws if they conflict with emergency orders issued by the Federal Energy Regulatory Commission (FERC). The bill also would impose private-sector mandates on electric transmission organizations and traders of oil contracts and on individuals seeking compensation for damages caused by utilities operating under certain emergency orders. Based on information from DOE and analyses of similar requirements, CBO estimates that the aggregate cost of complying with mandates in the bill would fall below the annual thresholds established in UMRA for intergovernmental and private-sector mandates (\$77 million and \$154 million in 2015, respectively, adjusted annually for inflation).

CBO has not reviewed some provisions of section 2001 and section 4303 for intergovernmental or private-sector mandates. Those provisions would provide the Secretary of Energy with emergency authority to protect the electric transmission grid from cybersecurity threats and would protect entities subject to that authority from liability. Section 4 of the Unfunded Mandates Reform Act excludes from the application of that act any legislative provisions that are necessary for national security. CBO has determined that those provisions fall within that exclusion.

ESTIMATED COST TO THE FEDERAL GOVERNMENT

For this estimate, CBO assumes that S. 2012 will be enacted near the start of fiscal year 2016. The estimated budgetary effects of this legislation are shown in the following table. Although some provisions would affect energy-related spending by agencies throughout the federal government, the costs of this legislation primarily fall within budget functions 250 (science), 270 (energy), and 300 (natural resources and environment).

TABLE 1. ESTIMATED BUDGETARY EFFECTS OF S. 2012, FISCAL YEARS 2016-2020

	By Fiscal Year, in Millions of Dollars					2016- 2020
	2016	2017	2018	2019	2020	
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Estimated Authorization Level	7,039	8,134	8,397	8,293	8,560	40,422
Estimated Outlays	3,305	5,669	7,306	7,813	8,216	32,308
CHANGES IN DIRECT SPENDING^a						
Estimated Budget Authority	-399	71	72	72	71	-113
Estimated Outlays	21	48	71	74	77	291

Memorandum: Estimated Budgetary Effects of S. 2012 Under Section 3207 of the Concurrent Resolution on the Budget for Fiscal Year 2016

CHANGES IN SPENDING SUBJECT TO APPROPRIATION^b						
Estimated Budget Authority	7,038	8,136	8,404	8,305	8,577	40,459
Estimated Outlays	3,304	5,671	7,313	7,825	8,233	32,345
CHANGES IN DIRECT SPENDING^b						
Estimated Budget Authority	-469	1	2	2	1	-463
Estimated Outlays	0	-1	1	4	7	11

- a. Under its usual treatment of long-term energy-related contracts, CBO estimates that enacting this legislation would increase direct spending by \$659 million over the 2016-2025 period.
- b. CBO estimates that, pursuant to the scoring rule for energy contracts specified in section 3207 of the Concurrent Resolution on the Budget for Fiscal Year 2016, the legislation would increase direct spending by \$29 million over the 2016-2025 period.

CBO estimates that spending subject to appropriation authorized by S. 2012 would total \$32 billion over the 2016-2020 period and \$11 billion in later years, assuming appropriation of amounts specifically authorized and estimated to be necessary. We also estimate that enacting S. 2012 would increase direct spending by \$291 million over the 2016-2020 period and by \$659 million over the 2016-2025 period.

Under the scoring rule for energy contracts specified in the budget resolution, estimates of both direct spending and spending subject to appropriation would be different. Under that rule, CBO estimates that the increase in direct spending under S. 2012 would be smaller—totaling \$11 million over the 2016-2020 period and \$29 million over the 2016-2025 period. The rule would have a modest impact on CBO’s estimate of total spending subject to appropriation, increasing our estimate of discretionary outlays by \$37 million over the 2016-2020 period.

BASIS OF ESTIMATE

Spending Subject to Appropriation

The legislation would specifically authorize appropriations totaling \$40.4 billion over the 2016-2020 period (and \$3 billion in later years) for a variety of energy-related activities. In addition, CBO estimates that implementing other provisions would require additional net appropriations totaling \$48 million over the next five years. Assuming appropriation of the authorized and estimated amounts, CBO estimates that resulting outlays would total \$32.4 billion over the 2016-2020 period, with about \$11 billion of additional spending occurring in later years.

Provisions with Specified Authorizations. S. 2012 would authorize specific appropriations totaling nearly \$7 billion in 2016 and \$33.4 billion over the following four years for a wide range of activities as described below.

TABLE 2. CHANGES IN SPENDING SUBJECT TO APPROPRIATION UNDER S. 2012^a

	By Fiscal Year, in Millions of Dollars					2016- 2020
	2016	2017	2018	2019	2020	
Specified Authorizations						
Title I - Efficiency						
Authorization Level	994	786	789	803	817	4,189
Estimated Outlays	199	455	642	743	789	2,828
Title II - Infrastructure						
Authorization Level	272	690	710	350	350	2,372
Estimated Outlays	150	364	565	453	382	1,914
Title III - Supply						
Authorization Level	70	850	860	865	865	3,510
Estimated Outlays	14	161	402	611	731	1,919
Title IV - Accountability						
Authorization Level	5,637	5,809	6,039	6,279	6,539	30,303
Estimated Outlays	2,912	4,667	5,694	6,013	6,325	25,611
Provisions Related to ESPCs, UESCs, and Federal Energy-Related Goals^b						
Estimated Authorization Level	-2	-5	-10	-15	-20	-52
Estimated Outlays	-2	-5	-10	-15	-20	-52
Other Estimated Authorizations						
Inventory of Federal Lands						
Estimated Authorization Level	60	0	0	0	0	60
Estimated Outlays	24	24	12	0	0	60
Loans for Facilities to Manufacture Energy-Efficient Vessels						
Estimated Authorization Level	1	1	11	11	11	35
Estimated Outlays	1	1	3	8	11	24
Energy Information Administration						
Estimated Authorization Level	3	1	1	1	1	7
Estimated Outlays	3	1	1	1	1	7
Housing and Urban Development Demonstration Program						
Estimated Authorization Level	1	1	-2	*	*	*
Estimated Outlays	1	1	-2	*	*	*

Continued

TABLE 2. Continued

	By Fiscal Year, in Millions of Dollars					2016- 2020
	2016	2017	2018	2019	2020	
Repeal of Fossil Fuel Reduction Standard						
Estimated Authorization Level	0	-1	-3	-3	-5	-12
Estimated Outlays	0	-1	-3	-3	-5	-12
Administrative Fees for DOE Loans						
Estimated Authorization Level	*	*	*	*	*	*
Estimated Outlays	*	*	*	*	*	*
Other Estimated Authorizations						
Estimated Authorization Level	3	2	2	2	2	10
Estimated Outlays	3	2	2	2	2	10
Total Proposed Changes						
Estimated Authorization Level	7,039	8,134	8,397	8,293	8,560	40,422
Estimated Outlays	3,305	5,669	7,306	7,813	8,216	32,308

Memorandum: Estimated Changes in Spending Subject to Appropriation Under S. 2012 Pursuant to Section 3207 of the Concurrent Resolution on the Budget for Fiscal Year 2016

Provisions Related to ESPCs						
Estimated Authorization Level	-3	-3	-3	-3	-3	-15
Estimated Outlays	-3	-3	-3	-3	-3	-15
All Other Provisions						
Estimated Authorization Level	7,041	8,139	8,407	8,308	8,580	40,474
Estimated Outlays	3,307	5,674	7,316	7,828	8,236	32,360
Total Proposed Changes						
Estimated Authorization Level	7,038	8,136	8,404	8,305	8,577	40,459
Estimated Outlays	3,304	5,671	7,313	7,825	8,233	32,345

Notes: ESPCs = energy savings performance contracts; UESCs = utility energy service contracts; DOE = Department of Energy; * = between -\$500,000 and \$500,000.

- CBO estimates that \$8 billion in additional outlays stemming from authorized funding over the 2016-2020 period would occur after 2020. In addition, S. 2012 would authorize appropriations totaling \$3 billion over the 2021-2025 period.
- Estimated effects of these provisions are subject to the Senate scoring rule specified in section 3207 of the Concurrent Resolution on the Budget for Fiscal Year 2016. Using that rule, CBO estimates these provisions would reduce spending subject to appropriation by \$15 million over the 2016-2020 period. See Table 4 and the memorandum in Table 2.

Title I – Efficiency. Title I would specifically authorize appropriations totaling almost \$1 billion in 2016 and \$4.2 billion over the 2016-2020 for activities aimed at improving the energy-efficiency of buildings, appliances, and vehicles. (By comparison, CBO estimates that appropriations for such activities in 2015 totaled about \$900 million.) That five-year total includes:

- \$1.8 billion for the Weatherization Assistance Program, which provides grants to enable local governments to improve the energy efficiency of the homes of low-income families;
- \$1.7 billion to support basic and applied research, development, and engineering of vehicle technologies that would boost energy efficiency and reduce petroleum use;
- \$450 million for the State Energy Program, through which DOE provides financial and technical assistance to help state and tribal energy offices achieve energy-related goals;
- \$270 million for other activities aimed at improving the energy efficiency of public and private residential and commercial buildings; and,
- \$20 million for energy-efficiency programs related to certain appliances.

Based on historical spending patterns for existing and similar activities, CBO estimates that fully funding activities with specified authorizations under title I would cost \$2.8 billion over the 2016-2020 period and \$1.4 billion in later years.

Title II – Infrastructure. Title II would specifically authorize appropriations totaling \$272 million in 2016 and about \$2.4 billion over the 2016-2020 period (plus \$2 billion in later years) for a variety of activities related to systems and infrastructure used to transmit, distribute, and store energy. (By comparison, CBO estimates that funding for related ongoing activities in 2015 totaled about \$211 million.) That five-year total includes:

- \$972 million for DOE to carry out research to develop high-performance exascale computing architecture (capable of performing computations at the speed of a human brain) to support DOE’s mission;
- \$800 million for a variety of efforts to improve the design and performance of the nation’s electricity grids and distribution systems;
- \$400 million for programs to assess and mitigate threats to the bulk power system and to develop technologies to enhance cybersecurity and build capacity for responding to cyber threats; and,

- \$200 million to develop methods to store electricity on a large scale within the power grid.

Assuming appropriation of the specified amounts, CBO estimates that fully funding activities with specified authorizations under title II would cost about \$1.9 billion over the 2016-2020 period and nearly \$2.5 billion in later years. That estimate is based on historical spending patterns for existing activities related to grid security and exascale computing.

Title III – Supply. Title III would specifically authorize appropriations totaling \$70 million in 2016 and \$3.5 billion over the 2016-2020 period (and \$1 billion in later years) for activities related to developing the energy-related potential of a wide range of resources. Most of the authorized amounts would support ongoing research and development programs, primarily administered by DOE, to develop advanced technologies to produce energy from both conventional and renewable resources. (By comparison, CBO estimates that funding for related ongoing activities in 2015 totaled roughly \$1.3 billion.) In particular, over the 2016-2020 period title III would authorize:

- \$2.4 billion for research, development and financial support for projects to demonstrate advanced technologies for improving the efficiency and environmental performance of coal as an energy source;
- \$290 million to support research and development of technologies to promote large-scale generation of energy from geothermal resources;
- \$230 million for activities aimed at commercializing technologies to generate power from marine and hydrokinetic renewable energy resources;
- \$220 million for a variety of activities related to the analysis and use of critical minerals—resources that are essential to the economy and whose supply may be disrupted;
- \$140 million for grants and other assistance to nonfederal entities to perform basic and applied research on the commercial viability and other aspects of methane hydrate as an energy source;
- \$80 million for grants to public or nonprofit entities that provide energy-related job-training and education services;
- \$50 million for payments to certain producers of hydroelectric energy;

- \$50 million for the Department of Agriculture for the subsidy cost of low-interest loans to construct systems that generate heat and power from biomass resources; and,
- \$10 million to study and develop a pilot project to demonstrate the feasibility of recycling carbon fiber.

Based on historical spending patterns for ongoing and similar programs, CBO estimates that outlays stemming from specified authorizations under title III would total \$1.9 billion over the 2016-2020 period and about \$2.6 billion in later years.

Title IV – Accountability. Title IV would specifically authorize appropriations totaling \$5.6 billion in 2016 and \$30.3 billion over the 2016-2020 period, primarily for basic science and research carried out by DOE’s Office of Science and the Advanced Research Projects Agency-Energy (ARPA-E). (By comparison, CBO estimates that those offices received appropriations totaling \$5.4 billion in 2015.) That five-year total includes:

- \$28.6 billion for basic research programs conducted by DOE’s Office of Science;
- \$1.6 billion for activities of ARPA-E;
- \$80 million to provide technical assistance to Indian tribes on energy-related issues;
- \$50 million for DOE to establish microlab facilities near existing national laboratories;
- \$15 million for efforts to improve interagency coordination related to energy and water use and conservation; and,
- \$10 million for a competitive pilot program to demonstrate opportunities to improve energy efficiency, conservation, and technology innovation in areas with high energy costs.

Assuming appropriation of the specified amounts, CBO estimates that fully funding title IV would cost \$25.6 billion over the 2016-2020 period and \$4.7 billion in later years. That estimate is based on historical spending patterns, particularly for the Office of Science and ARPA-E.

Provisions Related to Energy Savings Performance Contracts (ESPCs), Utility Service Energy Contracts (UESCs), and Federal Energy-Related Goals. Under current law, a variety of statutory provisions and executive orders direct federal agencies to meet certain goals to reduce the amount of energy used, increase the consumption of electricity

that is generated from renewable sources, reduce emissions of greenhouse gases, and ensure that federal facilities meet certain standards related to sustainable resource use. To support investments in energy-efficiency and renewable technologies necessary to achieve those goals, federal agencies sometimes use ESPCs or UESCs—specific types of long-term contracts that enable nonfederal vendors to finance energy-related investments on behalf of the government. S. 2012 would specify a variety of energy-related goals and requirements for federal agencies and modify agencies’ authority to use ESPCs and UESCs—specific types of long-term contracts that enable nonfederal vendors to finance energy-related investments on behalf of the government.

As discussed more thoroughly in the section on Changes in Direct Spending, CBO generally considers that implementing ESPCs and UESCs affects both direct spending and spending subject to appropriation. Briefly, in CBO’s view, the authority to enter into long-term contractually binding agreements to make payments in future years is a form of direct spending. Under such contracts, agencies agree to pay vendors for energy conservation measures and related financing costs over time on the basis of anticipated and realized reductions in energy costs, which are generally paid from discretionary annual appropriations.

Under S. 2012, CBO expects that agencies would use ESPCs and UESCs to finance new energy-related projects that otherwise would not be undertaken under current law. Following CBO’s usual methods for estimating the budgetary effects related to the use of such contracts, CBO estimates those provisions would increase direct spending and subsequently reduce agencies’ discretionary spending for energy and related costs. However, such effects would be subject to the scoring rule for energy contracts, as discussed below.

This section of CBO’s cost estimate addresses the discretionary savings that would result from increased use of ESPCs and UESCs. The effects on direct spending are discussed later.

Estimated Effects Attributable to Energy Contracts Following CBO’s Usual Methods. CBO estimates that reductions in energy and related costs attributable to ESPCs and UESCs entered into under S. 2012 would occur gradually over the period of time covered by such contracts—up to 25 years. As a result, most anticipated savings attributable to projects financed by such contracts would occur beyond the period covered by this estimate. During the 2016-2020 period, CBO estimates that such savings would total \$62 million.

Those estimated savings would be partially offset by increased spending for certain services related to ESPCs and UESCs entered into under the bill. Typically, when using such a contract, an agency agrees to make payments for services related to the operation and maintenance of newly installed equipment. Such agreements include measurement and

verification activities to confirm that projects reduce energy consumption as guaranteed by the contract. Because the government can opt out of those services at any time, such contract-related costs are considered discretionary. For this estimate, CBO projects that the cost of such services would total about 2.5 percent of the value of energy conservation measures acquired through ESPCs and UESCs. Assuming appropriation of the necessary amounts, CBO estimates that discretionary spending for optional contract-related services would total \$10 million over the 2016-2020 period and gradually increase as new contracts are entered into each year and payments on older contracts continue. Netting those costs against the projected savings in energy and related costs, CBO estimates discretionary savings of \$52 million over the 2016-2020 period.

Estimated Effects Attributable to Energy Contracts Under the Scoring Rule. As previously mentioned, a scoring rule in effect in the Senate specifies a methodology for CBO to follow in estimating the budgetary effects of legislation related to ESPCs and UESCs. Specifically, the Senate scoring rule requires CBO to calculate, on a net present value basis, the lifetime net cost or savings attributable to projects financed by ESPCs or UESCs and to record that amount as an upfront change in spending subject to appropriation in the year when commitments are expected to be made.

Following that methodology, CBO estimates that one year's worth of projects pursued through ESPCs or UESCs under S. 2012 would involve payments to contractors totaling, on a nominal basis, \$111 million over nearly 20 years. Such payments include \$50 million for repayments of principal amounts borrowed by the contractors to finance projects, \$34 million in interest costs, and \$27 million in payments for optional contract-related services. We also estimate that nominal energy savings attributable to one year's worth of projects would total \$126 million over the anticipated useful life of equipment. Adjusting the discount rate for market risk associated with the various cash flows, CBO estimates that one year's worth of projects would generate net savings, on a net present value basis, of \$3 million—or \$15 million for five years' worth of projects over the 2016-2020 period covered by this estimate.

Other Provisions with Estimated Authorizations. Several other provisions of S. 2012 would affect spending subject to appropriation, as described below. In addition, a few provisions—particularly those related to grid security and other aspects of the nation's energy infrastructure—would specify a variety of new procedural and analytical requirements for FERC, which regulates the interstate transmission of electricity, natural gas, and oil and plays a role in approving and licensing certain energy projects. Such provisions could affect FERC's workload; however, because FERC recovers 100 percent of its costs through user fees, any change in that agency's costs (which are controlled through annual appropriation acts) would be offset by an equal change in fees that the commission charges, resulting in no net change in federal spending.

Inventory of Federal Lands. Section 4401 would authorize the Secretary of the Interior (DOI) to develop and maintain a multipurpose inventory of federal lands under the agency’s jurisdiction. CBO expects that the inventory would be composed of existing inventories and available data. The bill also would require the secretary to create a website that would combine spatial and quantitative data that can be used to generate customized maps and datasets. Based on information provided by DOI, CBO estimates that developing the website would cost \$60 million over the 2016-2018 period, assuming appropriation of the necessary amounts.

Loans for Facilities to Manufacture Energy-Efficient Vessels. Section 4004 would authorize DOE to provide direct loans to reequip, expand, or establish domestic facilities to manufacture, retrofit, or repower certified U.S. vessels that meet energy-efficiency-related standards specified by the Secretary of Energy. Consistent with the Federal Credit Reform Act, DOE’s authority to provide such loans would be contingent on subsequent appropriations of amounts necessary to cover the government’s anticipated subsidy costs.¹ (Under the legislation, in lieu of using appropriated funds, DOE could disburse loans to borrowers who elect to pay a fee to cover subsidy costs; however, CBO anticipates that the demand for such borrower-financed loans—which would be subject to limits on loan volume specified in appropriation acts—would be negligible.)

For purposes of this estimate, CBO assumes that direct loans issued through the proposed new program would finance projects similar to those supported by the existing Federal Ship Financing Program. Through that program, the U.S. Maritime Administration (MARAD) guarantees loans for projects to build or recondition U.S. vessels or to modernize U.S. shipyards. According to MARAD, the agency currently has 38 contracts to guarantee loans with an outstanding value of approximately \$1.6 billion; CBO estimates that those guarantees support projects with an average cost of about \$100 million.

CBO estimates that fully funding this provision over the 2016-2020 period would require appropriations totaling \$5 million for administrative costs and \$30 million for anticipated subsidy costs. We further estimate that the total volume of loans supported from such funding would total between \$300 million and \$500 million and that the loans would largely finance projects to produce vessels powered by alternative fuels, such as liquefied natural gas. For this estimate we assume that subsidy rates for proposed loans would be in line with historical subsidy rates for both MARAD loan guarantees and DOE direct loans to manufacturers of advanced technology vehicles. We also anticipate that DOE would need two years to specify energy-related eligibility criteria and solicit applications and would make new loan commitments starting in 2018. Assuming appropriation of the

1. The subsidy cost is the estimated long-term cost to the federal government of a direct loan or loan guarantee. That cost is calculated on a net present value basis, using the interest rate on Treasury securities as the discount rate, and excludes federal administrative costs. For direct loans, the subsidy cost is the net present value of loan disbursements minus repayments of interest and principal, adjusted for estimated defaults (net of recoveries), prepayment fees, and penalties.

estimated amounts, CBO estimates that this provision would cost \$24 million over the 2016-2020 period.

Energy Information Administration. A few provisions in S. 2012 would increase administrative costs for the Energy Information Administration (EIA), an analytical agency within DOE. In particular, subtitle F of title IV would require DOE to survey the energy industry on the extent of critical energy supplies and storage capacity for oil and natural gas and establish a working group to investigate energy commodity markets and their regulatory framework. In addition, section 2203 would require EIA to collaborate with Canadian and Mexican officials on ways to enhance the quality and transparency of data related to the trade of energy within North America and other issues. Based on information from EIA, CBO estimates that fully funding those activities would cost \$7 million over the next five years, assuming appropriation of the necessary amounts.

Housing and Urban Development (HUD) Demonstration Program. Section 1002 would require HUD to implement a demonstration program to reduce energy consumption in properties that receive housing subsidies. Property owners that participate in the program would receive incentive payments for lowering their utility costs, but the housing subsidies that those owners receive would be lower under the bill because they are based, in part, on utility costs. CBO estimates that HUD would incur administrative costs to implement the program of \$1 million per year in 2016 and 2017 and about \$500,000 annually thereafter. Beginning in 2018, we estimate that those upfront costs would be offset by subsequent reductions in housing subsidies paid to participating property owners, and that any amounts that remained would be paid to property owners in the form of incentive payments. As a result, CBO estimates that section 1002 would have no net effect on spending subject to appropriation over the 2016-2020 period.

Repeal of Requirement to Reduce Fossil Fuel Use. Section 1015 would repeal section 433 of the Energy Independence and Security Act of 2007 (EISA), which requires federal agencies to gradually phase out, and eliminate by 2030, the use of energy generated from fossil fuel in newly constructed federal buildings and buildings underdoing major renovations. Under current law, that provision is one of several energy-related requirements with which federal agencies must comply; for example, other statutory provisions and executive orders direct agencies to reduce overall consumption of energy and water, reduce greenhouse gas emissions, increase use of energy generated from renewable sources, and meet certain sustainability-related standards. According to DOE, agencies are expected, under current law, to make significant investments in energy-related technologies, many of which will help agencies simultaneously achieve multiple requirements.

For that reason, CBO estimates that repealing any single energy-related requirement would not necessarily change the overall amount of federal investments in energy-related technologies. In particular, during the 2016-2020 period covered by this estimate, agencies

must also ensure that newly constructed buildings and major renovations are designed to achieve certain energy-efficiency standards; according to DOE, many investments that agencies pursue to comply with such standards are likely to simultaneously fulfill the requirement under section 433 of EISA. After 2020, CBO expects that incremental spending attributable to federal agencies' efforts to comply with the standard would increase as it becomes more stringent.

Nevertheless, CBO expects that repealing section 433 of EISA would, on the margin, reduce agencies' near-term costs. Although DOE has not yet finalized a rule to implement that provision, the department expects that, as an alternative to reducing the use of energy generated by fossil fuels, agencies will be allowed to achieve compliance by purchasing renewable energy certificates from firms that generate electricity from renewable resources. (Under current law, federal agencies purchase such certificates to comply with certain other energy-related requirements.)

Based on information from DOE, CBO estimates that under current law, agencies will use discretionary appropriations to purchase renewable energy certificates worth as much as \$12 million over the next five years in order to comply with section 433 of EISA. Thus, CBO estimates that repealing that provision would generate discretionary savings of that amount, assuming future appropriations for compliance costs are reduced accordingly.

Administrative Fees for DOE Loans. Under current law, DOE provides direct loans to manufacturers of advanced technology vehicles and related components. Borrowers pay a closing fee of up to \$100,000—far less than DOE's costs to administer such loans. Subject to conditions specified in annual appropriation acts, section 4005 of this bill would direct DOE to charge fees sufficient to cover the agency's administrative costs associated with new loans. For purposes of this estimate CBO assumes that higher fees would apply only to new loans. Consistent with current budgetary treatment applied to existing fees, CBO assumes that the collection and spending of such fees would be considered discretionary.

Based on information from DOE on the likely structure of the proposed fees and the potential magnitude of future loans, CBO estimates that increased collections under S. 2012 would total between \$1 million and \$3 million annually. Because we also expect such amounts would be spent soon after they are collected, we estimate that implementing this provision would have no significant net impact on spending in any given year.

Other Provisions with Estimated Authorizations. Several provisions would require DOE or other agencies to complete various studies and reports, operate advisory boards and working groups, and undertake other administrative activities. In total, CBO estimates that meeting such requirements would cost \$10 million over the next five years.

Changes in Direct Spending

The estimated \$659 million increase in direct spending over the 2016-2025 period includes \$630 million for provisions that would increase agencies' use of certain long-term energy-related contracts; such effects would be subject to the scoring rule for energy contracts, as discussed below. CBO estimates that other provisions of S. 2013 would increase direct spending by \$29 million over the 2016-2025 period (see Table 3).

Provisions Related to ESPCs, UESCs, and Federal Energy-Related Goals. CBO generally considers that implementing ESPCs and UESCs will affect both direct spending and spending subject to appropriation. The rationale for CBO's longstanding budgetary treatment of ESPCs and UESCs, and differences between CBO's view and the Administration's, are discussed in depth in a recent CBO report on that topic.² In brief, upon entering into an ESPC or UESC, the government effectively commits to making payments to a vendor in future years before having appropriations to cover all of the resulting costs; in CBO's view, the authority to enter into such contractually binding agreements without appropriations is a form of direct spending. ESPCs and UESCs permit agencies to pay vendors for energy conservation measures and related financing costs over time on the basis of anticipated and realized reductions in energy costs, which are generally paid from discretionary annual appropriations.

S. 2012 would specify a variety of energy-related goals and requirements for federal agencies and modify statutory provisions related to ESPCs and UESCs. Taken as a whole, CBO expects that enacting those changes would result in increased federal commitments under ESPCs and UESCs, which CBO estimates would increase direct spending by \$630 million over the next 10 years. We also estimate that the net reductions in federal energy and related costs stemming from investments financed through such contracts would total \$52 million over the next five years, \$227 million over the 2016-2025 period, and additional amounts in later years; those reductions would affect spending subject to appropriation.

However, under the scoring rule for energy contracts, the estimated increases in direct spending from the provisions related to energy-related contracts would be excluded from direct spending totals for purposes of enforcing budgetary points of order in the Senate. That rule requires CBO to estimate the net present value of all budgetary effects attributable to such contracts and to classify such effects as spending subject to appropriation. On that basis, CBO estimates that ESPC- and UESC-related provisions of S. 2012 would have no impact on direct spending and would generate discretionary savings of \$15 million over the 2016-2020 period. (See Table 4 for a comparison of the estimated effects of increased use of ESPCs and UESCs under CBO's treatment and the scoring rule.)

2. See Congressional Budget Office, *Using ESPCs to Finance Federal Investments in Energy-Efficient Equipment*, (February 2015), <https://www.cbo.gov/publication/49869>.

TABLE 3. ESTIMATED DIRECT SPENDING EFFECTS OF S. 2012

	By Fiscal Year, in Millions of Dollars										2016-	2016-
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2020	2025
ESTIMATED CHANGES IN DIRECT SPENDING UNDER CBO'S USUAL METHODS												
Provisions Related to ESPCs, UESCs, and Federal Energy-Related Goals ^a												
Estimated Budget Authority	70	70	70	70	70	70	70	70	70	70	350	700
Estimated Outlays	21	49	70	70	70	70	70	70	70	70	280	630
Changes to DOE Title 17 Loan Guarantee Program												
Expanded Authority for New Guarantees												
Estimated Budget Authority	0	0	1	1	1	1	0	0	0	0	3	4
Estimated Outlays	0	-1	1	4	8	11	9	5	0	-2	12	35
Rescission of ARRA Funds												
Estimated Budget Authority	-470	0	0	0	0	0	0	0	0	0	-470	-470
Estimated Outlays	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-5	-10
Pilot Program to Expedite Permits to Drill												
Estimated Budget Authority	1	1	1	1	0	0	0	0	0	0	4	4
Estimated Outlays	1	1	1	1	0	0	0	0	0	0	4	4
Total Changes												
Estimated Budget Authority	-399	71	72	72	71	71	70	70	70	70	-113	238
Estimated Outlays	21	48	71	74	77	80	78	74	69	67	291	659

**ESTIMATED CHANGES IN DIRECT SPENDING UNDER SECTION 3207
OF THE CONCURRENT RESOLUTION ON THE BUDGET FOR FISCAL YEAR 2016^b**

Provisions Related to ESPCs, UESCs, and Federal Energy-Related Goals												
Estimated Budget Authority	0	0	0	0	0	0	0	0	0	0	0	0
Estimated Outlays	0	0	0	0	0	0	0	0	0	0	0	0
All Other Provisions												
Estimated Budget Authority	-469	1	2	2	1	1	0	0	0	0	-463	-462
Estimated Outlays	0	-1	1	4	7	10	8	4	-1	-3	11	29
Total Changes												
Estimated Budget Authority	-469	1	2	2	1	1	0	0	0	0	-463	-462
Estimated Outlays	0	-1	1	4	7	10	8	4	-1	-3	11	29

Notes: ESPCs = energy savings performance contracts; UESCs = utility energy service contracts; DOE = Department of Energy; ARRA = American Recovery and Reinvestment Act.

a. Estimated effects of these provisions are subject to the Senate scoring rule specified in section 3207 of the Concurrent Resolution of the Budget for Fiscal Year 2016.

b. Section 3207 of the Concurrent Resolution of the Budget for Fiscal Year 2016 specifies a methodology for CBO to follow in estimating the budgetary effects of legislation related to certain energy contracts. Specifically, that rule requires CBO to calculate, on a net present value basis, the lifetime net cost or savings attributable to projects financed by ESPCs or UESCs and to record that amount as an upfront change in spending subject to appropriation in the year when commitments are expected to be made. The amounts shown here are the direct spending effects of other provisions, as shown above.

TABLE 4. COMPARISON OF ESTIMATED BUDGETARY EFFECTS OF PROVISIONS RELATED TO ESPCs, UESCs, AND ENERGY-RELATED GOALS UNDER CBO’S USUAL METHODS AND UNDER THE SCORING RULE FOR ENERGY CONTRACTS

	By Fiscal Year, in Millions of Dollars										2016-	2016-
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2020	2025
CHANGES IN DIRECT SPENDING FOLLOWING CBO’S USUAL METHODS ^a												
Federal Obligations Under ESPCs and UESCs ^b												
Estimated Budget Authority	70	70	70	70	70	70	70	70	70	70	350	700
Estimated Outlays	21	49	70	70	70	70	70	70	70	70	280	630
CHANGES IN SPENDING SUBJECT TO APPROPRIATION FOLLOWING CBO’S USUAL METHODS ^a												
Reductions in Energy and Energy-Related Costs Attributable to ESPCs and UESCs												
Estimated Authorization Level	-2	-6	-12	-18	-24	-30	-36	-42	-48	-54	-62	-272
Estimated Outlays	-2	-6	-12	-18	-24	-30	-36	-42	-48	-54	-62	-272
Appropriations for ESPC and UESC-Related Services												
Estimated Authorization Level	*	1	2	3	4	5	6	7	8	9	10	45
Estimated Outlays	*	1	2	3	4	5	6	7	8	9	10	45
Total Changes												
Estimated Authorization Level	-2	-5	-10	-15	-20	-25	-30	-35	-40	-45	-52	-227
Estimated Outlays	-2	-5	-10	-15	-20	-25	-30	-35	-40	-45	-52	-227
ESTIMATED NET PRESENT VALUE OF ALL BUDGETARY EFFECTS PURSUANT TO THE SCORING RULE FOR ENERGY CONTRACTS ^c												
Estimated Authorization Level	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-15	-30
Estimated Outlays	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-15	-30

Notes: ESPCs = energy savings performance contracts; UESCs = utility energy service contracts; * = less than \$500,000.

- a. The estimates presented here reflect CBO's view of how cash flows related to ESPCs and UESCs should be reflected in the federal budget. Since ESPCs were first implemented in 1998, however, the Administration has not recorded the full extent of federal obligations under ESPCs and UESCs upfront when contracts were signed. Instead, the Administration records ongoing contract payments to vendors on a year-by-year basis as appropriations for such payments are provided. If the Administration was to continue following that practice for executing ESPCs and UESCs under S. 2012, agencies' total energy-related costs would be largely unchanged during the contract period, when savings from reduced energy costs would be used to make contractual payments to vendors. As a result, CBO estimates that there would be no significant reduction in appropriations from implementing S. 2012 in the 10-year period covered by this estimate. If expected reductions in energy use continued beyond the contract period, budgetary savings would accrue to the federal government if annual appropriations for agencies' energy-related spending were reduced accordingly.
- b. Estimated budget authority reflects the value of energy conservation measures as installed plus the net present value of a portion of vendors' borrowing costs attributable to contract interest rates that would exceed U.S. Treasury interest rates. Estimated outlays stemming from such commitments are spread across the period during which the vendor is expected to construct, manufacture, or purchase the asset on behalf of the federal government.
- c. Section 3207 of the Concurrent Resolution of the Budget for Fiscal Year 2016 requires CBO to calculate, on a net present value basis, the lifetime net cost or savings attributable to projects financed by ESPCs or UESCs and to record that amount as an upfront change in spending subject to appropriation in the year when commitments are expected to be made.

Increased Use of ESPCs and UESCs. S. 2012 would specify a variety of energy-related goals and requirements for federal agencies. In particular, the bill would:

- Increase, from 7.5 percent to 15 percent, the proportion of electricity consumed by federal agencies that must be generated from renewable sources (and modify parameters for calculating compliance with that requirement);
- Direct agencies to reduce the energy intensity of buildings (measured in British thermal units per gross square foot) by 2.5 percent annually relative to 2015 levels;
- Specify that new federal buildings and major renovations to existing buildings must meet certain energy-efficiency standards; and,
- Require federal energy managers to report to DOE on the reasons why any energy conservation measures believed to be cost effective on a life-cycle basis have not been implemented.

To help achieve those and other energy-related requirements, S. 2012 would modify federal agencies' authority to use ESPCs and UESCs to finance necessary capital investments. Key changes would:

- Extend, from 10 years to 25 years, the maximum allowable term of a UESC;
- Permit agencies to use, sell, or transfer energy incentives, rebates, or credits (such as renewable energy certificates) as a means of making payments to vendors under ESPCs;³
- Expand the definition of an "energy conservation measure" to include the acquisition of energy-consuming devices and support structures (such as appliances located within federal buildings); and,
- Require federal agencies to include, in estimating the value of energy savings attributable to an ESPC, any anticipated reduction in operation and maintenance expenses related to energy conservation measures financed under the contract.

3. Renewable energy certificates represent the right to the nonpower renewable and environmental attributes of electricity generated from renewable resources. Such certificates, and other similar incentives and rebates, can be sold separately from the underlying units of physical electricity. For purposes of complying with certain energy-related requirements, the purchase of a renewable energy certificate is equal to purchasing the renewable attributes of the underlying electricity without consuming or purchasing the energy itself.

Estimated Budgetary Effects of Increased Use of ESPCs and UESCs. CBO expects that proposed changes to agencies' authority to use ESPCs and UESCs would enable agencies to pursue new projects that are otherwise unlikely to be undertaken under current law. In particular, we expect that authorizing agencies to use incentives such as renewable energy certificates to finance contract payments would enable greater investments in renewable technologies. Under current law, agencies' authority to use such incentives to pay for ESPC costs is uncertain in light of a 2013 decision by a federal contract appeals board.⁴ As a result of that decision and based on information from DOE, CBO expects that, under current law, federal agencies are unlikely to pursue ESPCs that involve renewable energy technologies as a significant component.

Thus, CBO anticipates that allowing agencies to use such incentives would lead them to make larger investments in renewable projects than would otherwise occur, especially in combination with the proposed requirement for agencies to increase the share of their electricity that is generated from renewable sources. (According to DOE, although many of the provisions in S. 2012 that would specify energy-related goals and requirements for federal agencies are largely consistent with existing statutory and administrative policy, the requirement to increase purchases of renewable electricity would necessitate additional investments in renewable technologies.) We similarly expect that extending the term of UESCs would facilitate additional projects that are otherwise unlikely to proceed because of the current 10-year limit on contract length.

Taken as a whole, CBO estimates that, under S. 2012, agencies would use ESPCs and UESCs to adopt additional energy conservation measures with an investment value of about \$50 million annually. That estimate is largely based on historical information from DOE on the potential magnitude of renewable energy projects that are likely to be pursued through ESPCs if agencies were explicitly permitted to use incentives such as renewable energy certificates to fund contracts. The estimate represents a relatively modest incremental increase in anticipated spending for energy-related investments. By comparison, since 2003 overall spending by federal agencies for such investments has averaged nearly \$1.5 billion annually, with roughly one-third of energy conservation measures—or about \$500 million annually—acquired through ESPCs or UESCs.

It is possible that incremental commitments through ESPCs and UESCs would be even greater under S. 2012 to the extent that agencies that currently plan to undertake projects using appropriated funds for the upfront costs shift instead toward using such contracts, given expanded flexibility under the bill. However, based on information from DOE about the multi-billion dollar pipeline of energy-related improvements that agencies intend to pursue under current law over the next several years, CBO does not expect that increased use of contracts to finance projects would reduce the need for future appropriations for

4. Honeywell International Inc., Armed Services Board of Contract Appeals No. 57779 (August 7, 2013).

energy-related investments. Rather, our estimate reflects the expectation that, under the bill, overall levels of investment would increase relative to current law.

Under S. 2012, CBO estimates that increased direct spending for the upfront cost of contractual commitments to acquire additional energy conservation measures through ESPCs and UESCs would total \$70 million annually. CBO's estimate of direct spending reflects an amount equal to the annual cost of energy conservation measures as installed (about \$50 million), plus the net present value of the portion of borrowing costs attributable to contract interest rates that would exceed U.S. Treasury interest rates (about \$20 million). (Borrowing costs equivalent to the amount of Treasury interest that would be paid if projects were financed with appropriated funds are not included in our estimate because, for the enforcement of Congressional budget rules, changes in Treasury interest costs are not counted as a cost or savings related to any particular legislative provision.) CBO's estimate of spending reflects its judgment as to when equipment or services would be provided—typically over a three-year period for equipment.

In addition, CBO also estimates that projects financed through ESPCs and UESCs would, on net, reduce federal agencies' energy costs, which are typically paid for using annual discretionary appropriations. (See the subsequent discussion on changes in spending subject to appropriation for details on such effects, and for CBO's analysis of the net present value of budgetary effects attributable to energy-related contracts pursuant to the scoring rule for energy contracts.)

Other Changes in Direct Spending. CBO estimates that other provisions of S. 2012 would, on net, increase direct spending by \$29 million over the 2016-2025 period. That estimate includes the effects of proposed changes to DOE's Title 17 Loan Guarantee Program and a new pilot program to expedite applications for permits to drill for oil and gas on federal lands. In addition, several provisions of S. 2012 related to grid security and cybersecurity could affect direct spending by federal power agencies, but CBO estimates that such provisions would not have a significant net effect on direct spending over the next 10 years.

Title 17 Loan Guarantee Program. Title IV would modify the scope and sources of funding for DOE's Title 17 loan guarantee program, which is available to finance advanced technology projects that would reduce greenhouse gases. In addition, the bill would rescind the unobligated balances remaining from the amount appropriated for that program in 2009 under the American Recovery and Reinvestment Act (ARRA). On net, CBO estimates that enacting those provisions would increase direct spending by \$25 million over the 2016-2025 period.

The estimated increase in direct spending would result from provisions that would expand DOE's authority to use \$170 million that was appropriated in 2011 for the subsidy cost of loan guarantees for energy efficiency and renewable energy projects. Under current law,

CBO estimates that DOE will spend about \$110 million of that balance over the 2016-2025 period. CBO estimates that, under S. 2012, spending of those previously appropriated funds would increase, primarily because the bill would expand the scope of eligible projects to include those that involve conventional energy technologies, provided that such projects are partially financed by state governments. Based on information about state energy loan programs and the cost of similar activities, CBO estimates that enacting that provision would accelerate spending for the Title 17 program, increasing direct spending by \$35 million over the 2016-2025 period. Outlays would be correspondingly lower after 2025 as a result of this timing shift.

CBO also estimates that provisions requiring borrowers to pay at least 25 percent of the subsidy cost of a loan guarantee would have no significant net effect on outlays over the 2016-2025 period for guarantees issued using previously appropriated funds. CBO estimates that such payments by borrowers probably would be lower than necessary to offset the subsidy cost of the loan guarantee by about \$4 million over the 2016-2025 period. CBO expects that those costs would be offset during this period by a shift in the timing of program costs stemming from the additional time needed to negotiate the borrower's fee and finalize the loan guarantee agreement.⁵

Finally, S. 2012 would rescind unobligated funds that were provided in 2009 under ARRA. Based on information from DOE, CBO estimates that those unobligated balances, which were designated as an emergency requirement when they were appropriated, currently total \$470 million. Under current law, DOE is not authorized to spend those amounts to guarantee loans for new projects, but the Office of Management and Budget has indicated that DOE can use the funds to cover the cost of any modifications to the contractual terms of existing loan guarantees. Based on recent trends, CBO expects that any outlays for such modifications would be small in any given year, and that most of the affected funds would not be spent over the next 10 years. In total, CBO estimates that rescinding unobligated ARRA funds would reduce budget authority by \$470 million and outlays by \$10 million over the 2016-2025 period. Because those savings would stem from an appropriation that was originally designated as an emergency requirement, they are excluded from estimated changes in direct spending for purposes of budget enforcement under the Statutory Pay-As-You-Go Act (see Table 5).

Pilot Program to Expedite Permits to Drill. Section 3401 would establish a temporary pilot program to streamline the review and approval of applications for permits to drill (APD) on oil and gas leases on federal lands. Over the 2016-2019 period, the bill would authorize the Bureau of Land Management (BLM) to spend collections from APD fees to hire up to 10 employees to carry out the program. Under current law, the agency has the authority to

5. For more information on how CBO estimates the cost of borrower-financed loan guarantees, see CBO's cost estimate for S. 1321, the Energy Savings Act, as ordered reported by the Senate Committee on Energy and Natural Resources on May 7, 2007. <https://www.cbo.gov/publication/18735>

spend 85 percent of collections from APDs, and CBO expects that the agency will spend that amount, with the remaining 15 percent of such collections remaining unspent. Thus, we expect that this provision would result in additional direct spending that would not occur under current law. Based on information regarding the compensation of BLM employees, CBO estimates that enacting this provision would increase direct spending by \$1 million a year over the 2016-2019 period.

Strategic Petroleum Reserve (SPR). Under current law, the proceeds from the sale of oil from the SPR are deposited in the SPR Petroleum Account and are available to be spent without further appropriation to acquire oil and pay related logistical expenses. This legislation would authorize DOE to spend such proceeds for variety of new purposes, including activities that are unrelated to the SPR. Because CBO expects that any proceeds from future SPR sales will be spent within a few years after the sale under current law, we estimate this provision would result in no additional costs.

Revenues

S. 2012 would amend existing law regarding actions taken by electric utilities when DOE determines that the electric power system is experiencing emergency conditions. Under current law, during a designated emergency, DOE can require firms to produce or supply electricity to avoid or resolve blackouts or other risks to the electric power system. If those actions violate other regulatory requirements, such as air pollution limits, the affected firms may be liable for penalties under those laws. S. 2012 would revise this framework by establishing new procedures for ensuring compliance with environmental standards during designated emergencies. The bill also would exempt firms from certain civil and criminal liability if the actions taken to comply with DOE's emergency orders violate environmental or other regulatory standards.

According to DOE, it has issued emergency orders to electric utilities six times since 1978, and none of those transactions resulted in the payment of penalties. Based on that historical experience, CBO estimates that revenues from such penalties would not be significant over the next 10 years under current law; as a result, CBO estimates that reducing firms' liability for such penalties would not result in any significant loss of federal revenues.

PAY-AS-YOU-GO CONSIDERATIONS

The Statutory Pay-As-You-Go Act of 2010 establishes budget-reporting and enforcement procedures for legislation affecting direct spending or revenues. The net changes in outlays that are subject to those pay-as-you-go procedures are shown in the following table. Because section 3207 of the Concurrent Resolution on the Budget for Fiscal Year 2016 does not apply to estimates for the Statutory Pay-As-You-Go Act, the amounts shown here are CBO's estimates following its usual procedures.

Table 5. CBO Estimate of Pay-As-You-Go Effects for S. 2012, as reported by the Senate Committee on Energy and Natural Resources on September 9, 2015

	By Fiscal Year, in Millions of Dollars										2016-	2016-
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2020	2025
NET INCREASE OR DECREASE (-) IN THE DEFICIT												
Total change	21	48	71	74	77	80	78	74	69	67	291	659
Less:												
Amounts Designated as Emergency Requirements ^a	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-5	-10
Statutory Pay-As-You-Go Impact	22	49	72	75	78	81	79	75	70	68	296	669

a. Section 4001(d)(2) of S. 2012 would rescind budget authority for the Title 17 Loan Guarantee Program that was originally designated as an emergency requirement. Pursuant to section 4 (g) of the Statutory Pay-As-You-Go Act of 2010, estimated savings stemming from that proposed rescission are excluded from totals.

INCREASE IN LONG-TERM DEFICIT AND NET DIRECT SPENDING

CBO estimates that enacting the legislation would not increase net on-budget deficits or net direct spending by \$5 billion or more in any of the four consecutive 10-year periods beginning in 2026.

INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

S. 2012 would impose intergovernmental and private-sector mandates as defined in UMRA. Based on information from DOE and analyses of similar requirements, CBO estimates that the aggregate cost of complying with the mandates would fall below the annual thresholds established in UMRA for intergovernmental and private-sector mandates (\$77 million and \$154 million in 2015, respectively, adjusted annually for inflation).

Mandates That Apply to Public and Private Entities

The bill could impose an intergovernmental and private-sector mandate on entities that are required to pay fees to FERC. If FERC increases those fees to offset the costs of implementing the bill, the bill would increase the cost of an existing mandate to pay those fees. The amount of fees collected would depend on the level of future appropriations.

Based on incremental changes in past appropriations following other energy legislation, CBO estimates that any incremental change in fees collected would not be substantial.

Mandates That Apply to Public Entities Only

The bill would impose an additional intergovernmental mandate by requiring state and tribal governments to certify to DOE whether or not they have updated residential and commercial building codes to meet the latest standards developed by building efficiency organizations. Based on information from DOE, CBO estimates that the cost of that mandate would be small. The bill would authorize funding and technical assistance to state, local, and tribal governments to implement the certification requirement. Such funding also could be used for implementing and enforcing new building codes and training officials. In addition, state, local, and tribal governments may benefit from federal grants to establish or expand programs to promote retrofit projects for reducing energy costs, and public institutions of higher education may benefit from federal funding for outreach activities in industrial research and assessment centers. Any costs to public entities associated with receiving such assistance would be incurred voluntarily as conditions of receiving federal assistance.

The bill also would preempt state and local environmental and liability laws. Electric utilities would be exempt from complying with such laws if those laws conflict with an emergency order issued by the Federal Energy Regulatory Commission (FERC) to provide temporary connections of public facilities for electrical transmission. While the preemption would limit the application of state law, CBO estimates that it would impose no duty on state, local, or tribal governments that would result in additional spending.

Mandates That Apply to Private Entities Only

The bill would impose private-sector mandates on electric transmission organizations (such as Regional Transmission Organizations and Independent System Operators) and traders of oil contracts. The bill would require transmission organizations to file with FERC a report that describes and evaluates certain electricity supply resources and grid systems and a report that describes and evaluates electric generating resources. CBO expects that fewer than ten entities would be required to submit each report, and based on analyses of the cost of similar types of reports, CBO estimates that the cost of completing each report could total several million dollars. The bill also would direct EIA to collect information from certain traders of oil contracts. Those traders would be required to report information to EIA about oil storage capacity and the volume of oil under ownership, including oil stored in offshore tankers. Some information about oil inventories and storage capacity is already reported to EIA through other surveys. Based on the estimated cost of responding to those surveys and other EIA surveys, CBO estimates that the incremental cost for each trader to report information required by the bill would be small.

The bill also would impose a private-sector mandate to the extent that it eliminates an existing right to seek compensation for damages under environmental laws from utilities operating in compliance with certain federal emergency orders issued by FERC. The cost of the mandate would be the forgone value of awards and settlements in such claims. Because FERC has issued emergency orders infrequently, CBO expects that claims would be uncommon in the future. Consequently, CBO expects that the cost of the mandates would be small.

ESTIMATE PREPARED BY:

Federal Costs: Marin Burnett, Megan Carroll, Elizabeth Cove Delisle, Kathleen Gramp,
and Jeff LaFave

Impact on State, Local, and Tribal Governments: Jon Sperl

Impact on the Private Sector: Amy Petz

ESTIMATE APPROVED BY:

Theresa Gullo

Assistant Director for Budget Analysis