CONGRESSIONAL BUDGET OFFICE
COST ESTIMATE

April 19, 2005

H.R. 1640
Energy Policy Act of 2005

As ordered reported by the House Committee on Energy and Commerce on April 13, 2005

SUMMARY

H.R. 1640 would authorize funding for several programs aimed at energy production, conservation, and research and development. It would authorize the use of energy savings performance contracts (ESPCs), make several changes to the regulatory framework governing the nation's electricity system, reauthorize the Low-Income Home Energy Assistance Program (LIHEAP), and establish a program for hydrogen and other alternative fuel-powered cars.

Most of the bill's estimated costs would stem from changes in spending subject to appropriation. We estimate that implementing H.R. 1640 would cost $5.4 billion in 2006, and $33.5 billion over the 2006-2010 period, assuming appropriation of the necessary amounts.

CBO estimates that enacting H.R. 1640 also would increase direct spending by $159 million in 2006, by $1.2 billion over the 2006-2010 period, and by $1.7 billion over the 2006-2015 period. CBO estimates that enacting the bill would increase revenues by $38 million in 2006, by $190 million over the 2006-2010 period, and by $380 million over the 2006-2015 period.

H.R. 1640 contains numerous mandates as defined in the Unfunded Mandates Reform Act (UMRA) that would affect both intergovernmental and private-sector entities. Based on its review of the bill, CBO expects that the mandates (new requirements, limits on existing rights, and preemptions) contained in the bill's titles on motor fuels (title XV), nuclear energy (title VI), electricity (title XII), and energy efficiency (title I) would have the greatest impact on state and local governments and private-sector entities.

CBO estimates that the cost of complying with intergovernmental mandates, in aggregate, could be significant and likely would exceed the threshold established in UMRA ($62 million

in 2005, adjusted annually for inflation) at some point over the next five years because we expect that future damage awards for state and local governments under the bill's safe harbor provision would likely be reduced. That provision would shield manufacturers of motor fuels and other persons from liability for claims based on defective product relating to motor fuels containing methyl tertiary butyl ether or renewable fuel.

CBO cannot determine whether the aggregate cost of the private-sector mandates in the bill would exceed the threshold established in UMRA primarily for two reasons. First, some of the requirements established by the bill would hinge on future regulatory action, about which information is not available. Second, UMRA does not specify whether CBO should measure the cost of extending a mandate relative to the mandate's current costs or assume that the mandate will expire and measure the costs of the mandate's extension as if the requirement were new. The bill would extend the existing mandate that requires licensees to pay fees to offset roughly 90 percent of the Nuclear Regulatory Commission's (NRC's) annual appropriation. Measured against the costs that would be incurred if current law remains in place, the cost to the private sector of extending this mandate would exceed the annual threshold established in UMRA ($123 million in 2005, adjusted annually for inflation).

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of H.R. 1640 is shown in Table 1. The costs of this legislation fall within budget functions 270 (energy), 300 (natural resources and environment), 350 (agriculture), and 800 (general government).

TABLE 1. ESTIMATED BUDGETARY IMPACT OF H.R. 1640

	By Fiscal Year, in Millions of Dollars				
	2006	2007	2008	2009	2010
CHANGES IN SPENDING SUBJECT TO APPROPRIATION					
Estimated Authorization Level	11,256	11,723	6,759	6,224	5,756
Estimated Outlays	5,359	8,551	6,956	6,466	6,130
CHANGES IN DIRECT SPENDING					
Estimated Budget Authority	214	450	300	150	100
Estimated Outlays	159	378	343	160	120
CHANGES IN REVENUES					
Estimated Revenues	38	38	38	38	38

BASIS OF ESTIMATE

For this estimate, CBO assumes that H.R. 1640 will be enacted near the end of fiscal year 2005. Additionally, CBO assumes that the full estimated amounts will be appropriated for each year and that spending will follow historical rates for ongoing activities. Table 2 details the components of estimated spending subject to appropriation under H.R. 1640. (Table 3, provided later, details the bill's direct spending effects.)

TABLE 2. ESTIMATED EFFECTS OF H.R. 1640 ON SPENDING SUBJECT TO APPROPRIATION

	By Fiscal Year, in Millions of Dollars					
	2005	2006	2007	2008	2009	2010
SPENDING SUBJECT TO APPROPRIATION						
Discretionary Spending Under Current Law						
Authorization Level[a]	4,604	0	0	0	0	0
Estimated Outlays	4,104	1,736	434	91	29	29
Proposed Changes:						
Specified Authorization Level	0	10,890	11,302	6,311	5,893	5,367
Estimated Outlays	0	5,140	8,228	6,629	6,107	5,729
Estimated Authorizations:						
Energy Conservation Measures (Title I)						
Estimated Authorization Level	0	74	95	88	72	72
Estimated Outlays	0	61	95	88	73	72
Renewable Energy Production Incentive (Title II)						
Estimated Authorization Level	0	100	23	13	8	27
Estimated Outlays	0	70	46	16	10	21
Loan Guarantees for Coal Projects (Title IV)						
Estimated Authorization Level	0	1	125	125	75	75
Estimated Outlays	0	1	10	30	64	105
Energy Development on Indian Land (Title V)						
Estimated Authorization Level	0	83	98	93	83	73
Estimated Outlays	0	31	63	90	94	86
Nuclear Energy Provisions (Title VI)						
Estimated Authorization Level	0	45	71	71	86	86
Estimated Outlays	0	42	72	71	86	86
Loan Guarantees for Ethanol Production (Title XV)						
Estimated Authorization Level	0	50	0	50	0	50
Estimated Outlays	0	5	25	25	25	25

Continued

TABLE 2. CONTINUED

	By Fiscal Year, in Millions of Dollars					
	2005	2006	2007	2008	2009	2010
SPENDING SUBJECT TO APPROPRIATION Continued						
Other Provisions						
Estimated Authorization Level	0	13	9	8	8	7
Estimated Outlays	0	10	12	8	8	7
Subtotal, Estimated Authorizations						
Estimated Authorization Level	0	366	421	448	331	389
Estimated Outlays	0	219	323	327	359	402
Total Proposed Changes						
Estimated Authorization Level	0	11,256	11,723	6,759	6,224	5,756
Estimated Outlays	0	5,359	8,551	6,956	6,466	6,130
Discretionary Spending Under H.R. 1640						
Estimated Authorization Level	4,604	11,256	11,723	6,759	6,224	5,756
Estimated Outlays	4,104	7,095	8,985	7,047	6,495	6,159

a. The 2005 amount is the sum appropriated for that year for energy research and development programs and for LIHEAP.

Spending Subject to Appropriation - Overview

H.R. 1640 contains several provisions that specify amounts authorized to be appropriated for the Low-Income Home Energy Assistance Program (LIHEAP), energy research and development programs, and energy conservation. Additionally, the bill would authorize unspecified amounts to be appropriated for incentives to use renewable energy, loan guarantees for certain types of energy facilities, and several other energy programs, studies, and reports. Assuming appropriation of the necessary amounts, CBO estimates that implementing these provisions would cost $5.4 billion in 2006 and $33.5 billion over the 2006-2010 period. The following two sections detail the costs of specified and estimated authorizations. (A discussion of direct spending and revenue effects follows the next two sections.)

Spending Subject to Appropriation: Specified Authorizations

CBO estimates that implementing the bill's programs with specified authorizations would cost about $32 billion over the 2006-2010 period. That estimate assumes that all amounts

authorized to be appropriated for these programs—about $40 billion over the next five years—will be provided each year.

Low-Income Home Energy Assistance Program (LIHEAP). LIHEAP is the largest program that would be authorized by the legislation. The bill would authorize funding of $5.1 billion for each of the next two years. Assuming appropriation of the authorized amounts, CBO estimates that implementing this provision would cost about $7.9 billion over the 2006-2010 period.

Under current law, a total of $2.2 billion was appropriated for fiscal year 2005. These funds include $1.9 billion for the basic formula grant for states to provide energy assistance for low-income households, and $300 million for additional energy assistance for emergency needs. Implementing H.R. 1640 would increase the authorization for the basic formula grant for states to $5.1 billion in fiscal year 2006 and extend this authorized level through fiscal year 2007. The extension of the basic formula grant would automatically extend the authorization of emergency funding through fiscal year 2007 at $600 million per year. The emergency funds are made available only after a formal request by the President that includes a designation of the amount requested as an emergency requirement as defined in the Balanced Budget and Emergency Deficit Control Act.

Other Specified Program Authorizations. The bill also would specifically authorize funds to be appropriated for several other energy-related programs. CBO estimates that over the 2006-2010 period implementing H.R. 1640 would cost:

- Nearly $2 billion for the Department of Energy's (DOE's) energy conservation programs (title I);
- $1.5 billion for renewable energy grants and research projects (title II);
- $1.4 billion to research and demonstrate new technologies that use coal (title IV);
- $390 million for research on nuclear energy technologies, including a new program to research, develop, design, construct, and operate an Advanced Reactor Hydrogen Cogeneration Project (title VI);
- $1.4 billion for research and demonstration of vehicles that use alternative transportation fuels (title VII);
- $3.4 billion for research, development, and demonstration of hydrogen-based fuel technologies and infrastructure for hydrogen fuels (title VIII);

- $9.5 billion to research energy efficiency technologies, renewable energy sources, fossil energy development, and other energy sources and new technologies (title IX);

- $400 million for research and regulation to enhance the reliability of the nation's electricity system as well as incentive payments for advanced power technologies (title XII);

- $300 million for research, construction, and support of electricity generation units using oxygen-fuel technology (title XIV); and

- $3.8 billion for grants to fund clean up of the motor fuel additive methyl tertiary butyl ether (MTBE), to assist producers in eliminating the use of the additive, and to research other fuel additives (title XV).

Spending Subject to Appropriation: Estimated Authorizations

Based on information from DOE, the Environmental Protection Agency (EPA), other affected agencies, and industry sources, CBO estimates that H.R. 1640 would authorize the appropriation of an additional $366 million in 2006 and $2 billion over the 2006-2010 period. Key components of this estimate are described below.

Energy Conservation at Federal Agencies. H.R. 1640 would amend several energy conservation goals and requirements that apply to the federal government. CBO estimates that implementing those provisions would cost $389 million over the 2006-2010 period, subject to appropriation of the necessary amounts. Most of those goals, such as reducing energy use by 2 percent per year relative to 2003 consumption and purchasing energy-efficient products when economical, are being pursued under current executive orders. Where practical, the bill would require that hourly electricity meters be installed at all federal buildings by 2012. Such meters would provide data at least once daily and measure hourly consumption of electricity. The data would be available to facility energy managers.

Based on information from the Department of Energy, we assume that it would only be economical to meter 20 percent of the government's inventory of 500,000 buildings and that installing meters would cost, on average, $4,000 per building. We assume that meters would be installed in 20,000 buildings per year until 2012, when the project would be complete. We estimate that implementing the metering provisions of H.R. 1640 would cost $57 million in 2006 and $323 million over the 2006-2010 period. CBO estimates that other requirements in this title, such as monitoring the equipment installed using energy savings performance contracts, and establishing new programs and rules for making products more energy-efficient, would cost $66 million over the next five years.

Based on experience in the private sector, metering the hourly electricity use of buildings can lead to reduced energy consumption and reduce costs enough to recoup the cost of installing meters within two to four years. It is possible that this requirement could lead to a future reduction in appropriations for federal building energy use, but any such savings would depend on how metering information is used by federal agencies. Additionally, metering can reveal where energy use is high, but capital investment and other changes in how federal buildings consume energy would likely be needed to achieve savings. In any case, any savings are not likely to be significant over the next five years because most of the new metering and required capital investment would not be completed until the end of that period or after 2010.

Renewable Energy Production Incentive (REPI). The REPI program currently provides cash payments to public utilities and electric cooperatives that generate energy using renewable sources. The payment is based on the annual kilowatt-hours of electricity generated using qualified renewable energy sources. Section 202 of the bill would reauthorize the REPI program for an additional 20 years, and make Indian tribes eligible for the program. Annual funding appropriated for the program has not kept pace with applications for payment from eligible utilities. Specifically, eligible utilities have generated electricity from renewable resources since 1994 in an amount that qualifies for about $76 million in REPI payments that have not been appropriated. Based on information from DOE, CBO estimates that fully funding this program, including the backlog of applications, would cost $70 million in 2006 and $163 million over the 2006-2010 period.

Loan Guarantees for Coal Projects. Title IV would authorize DOE to guarantee loans for coal gasification power plants. Assuming appropriation of the necessary amounts, CBO estimates that implementing this provision would cost about $210 million over the 2006-2010 period.

Under credit reform procedures, funds must be appropriated in advance to cover the subsidy cost of such loan guarantees, measured on a present-value basis. The costs of such subsidies could vary widely depending on the terms of the contracts and the financial and technical risk associated with the different types of projects. According to Standard and Poors, the cumulative default risk for projects rated as speculative investments can range from about 20 percent to almost 60 percent, depending on a project's cash flows and contractual terms. Subsidy costs also are affected by amounts recovered by the government in the event of default, which in turn depend on the value of the security backing the guarantee as well as contractual protections.

H.R. 1640 would authorize DOE to guarantee loans for gasification projects that use coal and petroleum coke as feedstocks. Section 412 would allow DOE to provide a loan guarantee for a 400 megawatt project that uses integrated gasification combined-cycle technology and

sells power in deregulated energy markets at competitive rates without subsidies from ratepayers. Section 414 would authorize the department to guarantee loans for five or more projects that use petroleum coke gasification technology. Neither provision sets any limits on the amount or terms of the loan guarantees.

Gasification projects would require large capital investments, ranging from over $500 million for a 400 megawatt gasification plant to $800 million or more for a plant that would produce power and possibly other fuels using petroleum coke. Such gasification technologies are not new—they have been tested and deployed to some extent in other countries—but they have not been economically competitive in the United States. Profitability would depend on numerous factors, including future electricity and fuel prices; the price, quality, and availability of feedstocks; and various regulatory approvals.

For this estimate, CBO assumes that DOE would guarantee investments totaling about $2 billion over the next five years, which would allow for the planning and construction of the coal gasification plant and at least two petroleum coke facilities. Given the current outlook for energy prices, CBO expects that the credit risk of gasification loans would likely fall within the middle of the range for speculative investments, but the risk of default could be higher or lower depending on the contract terms. CBO estimates that loan guarantees under this section would involve a 20 percent subsidy (on average), assuming only modest recoveries in the absence of any statutory requirements for collateral. Thus, we estimate that implementing this provision would cost $210 million over the 2006-2010 period, assuming appropriation of the necessary amounts. Additional outlays of $190 million would occur after 2010 as construction progressed on such projects.

Indian Energy Programs. Title V would authorize the Department of the Interior (DOI) to provide grants and loans to Indian tribes for energy resource development projects. That title also would authorize DOE to provide competitive grants for energy development projects on Indian land and to establish an Office of Indian Energy Policy and Programs. In total, CBO estimates that these programs would cost $31 million in 2006, and $364 million over the 2006-2010 period.

DOI Grants and Loans. The bill would authorize DOI to provide loans and grants to Indian tribes for energy resource development and to provide grants to Indian tribes and tribal consortia for the development of tribal energy resources, feasibility studies, and the enforcement of tribal laws to protect the environment. Based on information from DOI, CBO estimates that such grants and loans would cost about $20 million in 2006 and $170 million over the 2006-2010 period.

DOE Loan Guarantees. Title V would authorize the Secretary of Energy to guarantee up to $2 billion in loans for energy projects on Indian lands. Based on information from the

Council of Energy Resource Tribes, CBO expects that DOE would provide loan guarantees for a variety of projects on Indian lands, including electricity transmission lines, fossil fuel electricity generation, and renewable fuels. CBO expects that the subsidy cost of loans guaranteed under this program could range from 2 or 3 percent for routine conventional projects to 50 percent or more for unproven technologies.

For this estimate, CBO assumes that about half of the program would provide loan guarantees for electricity transmission lines, which should pose relatively little credit risk under standard contract terms. We assume that the remaining half would be divided between fossil fuel electricity generation and renewable fuels. Under these assumptions, we estimate that the average subsidy cost for loans guaranteed under the program would be 10 percent. CBO expects that loans would be disbursed over the next 10 years, and we estimate that the loan guarantee program would cost $3 million in 2006 and $136 million over the 2006-2010 period, assuming appropriation of the necessary amounts for the estimated subsidy costs.

DOE Grants. This title would authorize DOE to distribute grants to Indian tribes under two new programs. One would help tribes with regulatory aspects of their energy resources while the other would help tribes to develop tribal energy resource agreements through leases, business agreements, and rights-of-way. CBO estimates that the cost for grants and administration of the programs would average about $9 million annually.

Office of Indian Energy Policy and Programs. The bill also would authorize DOE to establish a new office that would be responsible for various grant and loan programs authorized under title V. Based on information from DOE, CBO estimates that the salaries, expenses, benefits, space, and travel costs of the DOE employees that would administer such programs would be about $3 million annually.

Nuclear Energy Provisions. Section 638 would allow the Department of Energy to create a national stockpile of low-enriched uranium. Title VI would amend the Nuclear Regulatory Commission's authority to collect fees, and modify its security and licensing programs. CBO estimates that implementing those provisions would cost $357 million over the 2006-2010 period, subject to appropriation of the necessary amounts.

Uranium Stockpile. The stockpile would constitute a reserve supply of low-enriched uranium that could be used by commercial nuclear power plants, but could only be sold or transferred under certain restrictions and conditions. The bill would allow DOE to obtain material for the stockpile from highly enriched uranium recovered from dismantled nuclear warheads from Russia and naturally mined or enriched uranium from U.S. companies.

For this estimate, CBO assumes that DOE would purchase about 1.5 tons of highly enriched uranium from Russia each year over the 2006-2010 period for delivery to and storage by

DOE at one or more national stockpile sites. The highly enriched uranium would be converted to low-enriched uranium by Russia prior to purchase by DOE. The conversion process involves diluting the highly enriched uranium with natural uranium. After conversion, DOE would receive about 50 tons of low-enriched uranium a year that would be held as a long-term reserve. Obtaining that amount is similar to what DOE proposed to the Congress in 2003.

Assuming that negotiations between the United States and Russia to purchase the low-enriched uranium might take up to a year, CBO estimates that DOE would only purchase 25 tons of low-enriched uranium in 2006 but would make additional purchases of 50 tons a year over the 2007-2010 period. CBO estimates that the cost for the roughly 50 tons of low-enriched uranium would total about $60 million a year over the 2007-2010 period. This amount includes the costs for the dilution services (about $30 million), the costs for the natural uranium (about $30 million), and shipping costs (less than $1 million). The unit of measurement for the dilution services is commonly referred to as a separative work unit or SWU. Based on information provided by industry, CBO estimates that it would take about 275,000 SWUs to convert 1.5 tons of highly enriched uranium to 50 tons of low-enriched uranium. Assuming a market price of about $110 per SWU, CBO estimates that the cost for diluting the highly enriched uranium would total about $30 million a year.

Based on conversion factors provided by industry, roughly one million pounds of natural uranium would be used in the dilution process to produce 50 tons of low-enriched uranium. Assuming a market price of roughly $30,000 per pound, CBO estimates that the cost of the natural uranium would total another $30 million a year over the 2006-2010 period.

Thus, CBO estimates that the costs to obtain the low-enriched uranium would total $30 million in 2006 and $270 million over the 2006-2010 period. CBO estimates that there would be no significant costs to store the low-enriched uranium because there is sufficient storage capacity at existing DOE sites, such as the Savannah River Site in South Carolina and the Paducah Plant in Kentucky.

Nuclear Regulatory Commission Fees, and Security and Licensing Programs. H.R. 1640 would require the Nuclear Regulatory Commission update its security programs for the facilities it regulates, establish that it would be the licensing and regulatory authority for the Advanced Reactor Hydrogen Co-generation Project established under the bill, and change the fee collection system currently used by the agency. Based on information from NRC, CBO estimates that these provisions would cost $12 million in 2006 and $87 million over the 2006-2010 period.

Security Programs. The bill would require that NRC update and initiate several studies, rulemakings, and programs related to security at the nation's nuclear power plants.

It would require NRC to study the potential threats to nuclear facilities posed by terrorists and update security rules based on those findings; update the "design basis threat"—the attack scenario nuclear facilities must be capable of defeating; require federal security coordinators in each of the NRC's four regions; establish a training program for federal agencies, the National Guard, and state and local law enforcement and emergency personnel; establish a system to ensure the secure transfer of nuclear materials; and issue rulemakings related to fingerprinting employees of nuclear facilities, safeguarding classified information, and weapons in nuclear facilities. Overall, CBO estimates that these requirements would cost $8 million in 2006 and $37 million over the 2006-2010 period.

Advanced Reactor Hydrogen Co-generation Project Licensing. H.R. 1640 also would require that the NRC license and regulate the Advanced Reactor Hydrogen Co-generation project established in section 654 of the bill. Based on information from the NRC, CBO assumes the agency would need significant additional resources to review site permits, reactor design, and the licence applications needed to get such a project approved. Assuming the full authorized appropriations are provided to DOE to implement this program on the timeline outlined in the bill, CBO estimates that NRC's licensing and regulatory activities related to the project would cost $2 million in 2006 and $40 million over the 2006-2010 period.

NRC Fee Collection. Under current law, the NRC collects fees from its private licensees that offset its annual appropriation. Such fee collection includes the cost of issuing licenses to some government agencies. In 2005, the NRC was authorized to collect 90 percent of most of its appropriation (CBO estimates such fee collections will total $537 million for the fiscal year). Under current law, fee collections are authorized at 33 percent of the agency's budget for each year after 2005. H.R. 1640 would set fee collection at 90 percent of most of the agency's budget after 2005, establish that licensees not be charged fees for homeland security activities, and require that government agencies pay their licensing and regulatory activity fees, rather than the private sector. The authority to increase future fee assessments would result in lower net appropriations for the NRC. Currently, NRC charges private licensees about $2 million per year for licenses issued to government agencies. Because under H.R. 1640 those fees would come from appropriated funds rather than the private sector, the government would incur a net cost relative to current law to pay them. We estimate that such additional costs would be $2 million in 2006 and $10 million over the 2006-2010 period.

Loan Guarantees for Ethanol Production. Section 1511 would authorize loan guarantees for the construction of facilities to produce ethanol or other commercial byproducts from agricultural residue or municipal solid waste, subject to certain terms and conditions. The bill would not limit the volume or portion of the loans that could be guaranteed, but it would

set criteria for project approval, require certain levels of collateral, impose a fee for administrative costs, and terminate the program after 10 years.

CBO expects that projects would be debt-financed and sponsors would recover costs through the sale of ethanol and other recyclable materials. The technology used to process ethanol from such sources is new and not well proven. In addition, prices for the plants' output—ethanol and recycled glass, metal, and paper—have a history of fluctuating widely. Moreover, the profitability of these projects also would depend on the cost of purchased feedstock and, for solid waste facilities, on revenues from "tipping fees" (i.e., those fees charged by the plant to accept municipal solid-waste feedstock). According to DOE, a plant's reliance on feedstock from these sources would increase the credit risk because prices for feedstock can become competitive if demand for such products increases. Likewise, revenues from tipping fees may also fluctuate.

Based on information from DOE, CBO expects that the department would guarantee loans for three projects over the next five years, each with a total construction cost of about $250 million. The types of credit risks associated with producing and marketing ethanol-related products differ from those for gasification facilities, but CBO expects that the net subsidy rates for both programs would be about the same. Thus, CBO estimates that loans guaranteed under section 1511 would have about a 20 percent subsidy, requiring about $150 million in appropriated funds in the subsidy costs, with outlays of about $105 million over the 2006-2010 period, assuming appropriation of the necessary amounts.

Electricity Regulations. Title XII would require the Federal Energy Regulatory Commission (FERC) to establish several new rules for managing the nation's electricity system and governing the business practices of the electricity industry. Such rules would affect transmission services, construction and siting permits for building new transmission lines, and the reliability of the nation's electricity transmission infrastructure. The bill also would repeal the Public Utility Holding Company Act of 1935, require FERC to take over certain regulatory procedures currently undertaken by the Securities and Exchange Commission, and amend the Public Utilities Regulatory Policies Act.

Based on information from FERC, CBO estimates that implementing these provisions would cost $11 million in 2006 and $47 million over the 2006-2010 period. Such costs would cover additional data processing and storage, additional staff, and travel related to the agency's new duties. Because FERC recovers 100 percent of its costs through user fees, such additional costs would be offset by an equal change in fees that the commission charges. Hence, these provisions would have no net budgetary impact.

Other Provisions. H.R. 1640 includes several provisions that would authorize various new studies, reports, and activities related to energy consumption and production. These provisions would require federal agencies to:

- Coordinate permitting of new refineries in the United States;
- Study and report to the Congress on air emissions, aviation fuels, and credits for alternative-fueled vehicles;
- Report to the Congress on the degree of energy dependence by the United States;
- Participate in an ozone demonstration project;
- Issue regulations on certain unfair trade and consumer privacy issues;
- Conduct annual surveys on the market share of renewable fuels; and
- Prepare several other reports on energy resources and efficiency.

Based on information from the agencies that would be responsible for implementing these provisions, CBO estimates that these activities would cost $10 million in 2006 and $45 million over the 2006-2010 period, subject to the availability of appropriated funds.

Direct Spending and Revenues

H.R. 1640 has five provisions that would have a measurable impact on direct spending and revenues. The estimated effects of these provisions are shown in Table 3. The bill would provide permanent authorization for the use of energy savings performance contracts and cap their use at $500 million; establish an Electric Reliability Organization (ERO) to manage the reliability of the nation's electricity system; establish a research and development program to drill for ultra-deep water natural gas and unconventional petroleum resources; allow the Western Area and Southwestern Power Administrations to accept up to $100 million in financing from private sources for electricity transmission projects; and direct the Department of Energy to reimburse private contractors for certain employee benefits. The bill also would establish a specified minimum level of renewable fuel content for motor fuels sold by refiners, blenders, or importers, but CBO estimates this provision would have a negligible effect on direct spending.

CBO estimates that enacting H.R. 1640 would increase direct spending by $159 million in 2006 and $1.7 billion over the 2006-2015 period. We estimate that enacting the bill would increase net revenues by $38 million in 2006 and by $380 million over the 2006-2015 period. In addition, we estimate that new civil penalties imposed by the bill would result in an increase in revenues of less than $500,000 annually.

TABLE 3. ESTIMATED DIRECT SPENDING AND REVENUE EFFECTS OF H.R. 1640

	By Fiscal Year, in Millions of Dollars									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
CHANGES IN DIRECT SPENDING										
Energy Savings Performance Contracts										
Estimated Budget Authority	0	300	200	0	0	0	0	0	0	0
Estimated Outlays	0	255	215	30	0	0	0	0	0	0
Electric Reliability Organization (ERO)										
Estimated Budget Authority	50	50	50	50	50	50	50	50	50	50
Estimated Outlays	50	50	50	50	50	50	50	50	50	50
Ultra-deep Water Natural Gas and Unconventional Petroleum Resources										
Estimated Budget Authority	100	50	50	50	50	50	50	50	50	0
Estimated Outlays	45	63	58	50	50	50	50	50	50	28
Financing of Federal Electricity Transmission Projects										
Estimated Budget Authority	0	50	0	50	0	0	0	0	0	0
Estimated Outlays	0	10	20	30	20	20	0	0	0	0
DOE Payment for Employee Benefits										
Estimated Budget Authority	64	0	0	0	0	0	0	0	0	0
Estimated Outlays	64	0	0	0	0	0	0	0	0	0
Total Changes in Direct Spending Under H.R. 1640										
Estimated Budget Authority	214	450	300	150	100	100	100	100	100	50
Estimated Outlays	159	378	343	160	120	120	100	100	100	78
CHANGES IN REVENUES										
Fees Charged by ERO on Electricity Consumers										
Estimated Revenues [a]	38	38	38	38	38	38	38	38	38	38

a. Net of income and payroll tax offsets.

Energy Savings Performance Contracts (ESPCs). Section 105 would permanently extend the authority to enter into ESPCs but would cap total payments under such contracts at $500 million and specify that only DOE, the Department of Defense, and the Department of Veterans Affairs would be eligible to use such contracts, beginning on October 1, 2006. CBO estimates that such agencies would quickly use this authority up to the authorized amount, and thus, the provision would increase direct spending by $500 million over the 2007-2009 period.

ESPCs enable federal agencies to enter into long-term contracts with an energy savings company (ESCO), for the acquisition of energy-efficient equipment, such as new windows, lighting, and heating, ventilation, and air conditioning systems. Using such equipment can

reduce the energy costs for a facility, and the savings from reduced utility payments can be used to pay the contractor for the equipment over time. Because the government does not pay for the equipment at the time it is acquired, the ESCO borrows money from a nonfederal lender to finance the acquisition and installation of the equipment. When it signs the ESPC, the government commits to paying for the full cost of the equipment, as well as the interest costs on the ESCO's borrowing for the project. Since the ESCO faces higher borrowing costs than the U.S. Treasury, total interest payments for the equipment acquisition will be higher than if the government financed the acquisition of the equipment directly with appropriated funds.

The obligation to make payments for the equipment and the financing costs is incurred when the government signs the ESPC. Under the current authority, agencies can use ESPCs to acquire new equipment, paying over a period of up to 25 years, without an appropriation for the full amount of the purchase price. Thus, consistent with governmentwide accounting principles, CBO believes that the budget should reflect that commitment as new obligations at the time that an ESPC is signed, and the authority to enter into these contracts without budget authority for the full amount of the purchase price constitutes direct spending.

CBO's estimate of direct spending reflects an amount equal to the cost of the energy conservation measures as installed, plus the portion of borrowing costs attributable to contract interest rates that exceed U.S. Treasury interest rates. (Borrowing costs equivalent to the amount of Treasury interest that would be paid if the equipment were financed with appropriated funds are not counted against this authority, consistent with the budget scorekeeping of regular interest costs associated with federal spending. That is, Treasury interest effects are not counted as a direct cost or savings to any particular legislative provision.)

Electric Reliability Organization. H.R. 1640 would authorize the Federal Energy Regulatory Commission to exercise authority over the reliability of the nation's electricity transmission system through the establishment of an Electric Reliability Organization (ERO). Under the bill, FERC would select an organization to become the ERO based on several criteria, including the ability of the organization to charge fees to end users of the electricity system to cover its costs. CBO believes the ERO's collections and spending should be included in the federal budget because this new entity would conduct inherently governmental activities that could not be undertaken by a purely private organization.

H.R. 1640 would cap the amount of dues, fees, and other charges collected by the ERO at $50 million per year, until 2015. Thus, we estimate that spending by the ERO would total $50 million in 2006 and $500 million over the next 10 years.

Because the ERO and the regional organizations created by it would be governmental in nature, CBO believes that the collection of these fees should be recorded as revenues in the budget. The increased revenue from the assessments would be offset by 25 percent to reflect reduced receipts of income and payroll taxes. The assessments would add to the costs of the industry, which would be expected to pass them forward to consumers in higher prices. As consumers spend less in other sectors of the economy, wages and profits—and resulting income and payroll taxes—would shrink accordingly. CBO estimates that net revenues collected by an ERO and its regional organizations would total $38 million in 2006, $190 million over the 2006-2010 period, and $380 million over the 2006-2015 period.

Currently, the federal power marketing administrations, including the Tennessee Valley Authority and the Bonneville Power Administration, pay dues to the regional affiliates of the North American Electric Reliability Council (NERC). We would expect that those payments would continue and would increase under the new regulatory scheme established by the ERO. Any increase in those fees would be offset by changes in the rates charged to customers of the federal agencies.

Ultra-deep Water Natural Gas and Unconventional Petroleum Resources. H.R. 1640 would provide $50 million per year over the 2005-2014 period to establish a new program to research and develop drilling technologies in waters greater than 1,500 meters on the Outer Continental Shelf and for unconventional petroleum resources onshore, such as gas shales or natural gas in tight sand. If successful, such research could eventually lead to greater oil and gas production (and royalty collections) from federal lands. The program would be funded from royalties, rents, and bonuses received by the government for oil and gas drilling on federal land. Such funds are currently deposited into the Treasury and are available for appropriation. CBO estimates that the new program would cost $45 million in 2006 and $494 million over the 2006-2015 period.

Financing of Federal Electricity Transmission Projects. Section 1222 of the bill would authorize DOE's Western Area and Southwestern Power Administrations to accept up to $100 million to assist in the design, development, construction, and operation of transmission projects that would contribute to reducing congestion on existing electricity lines. CBO considers such financing to be equivalent to incurring new federal debt, and thus the spending of such borrowed amounts should be recorded in the budget as direct spending. We estimate that such spending would cost $10 million in 2007 and $100 million over the 2007-2015 period.

DOE Payments for Employee Benefits. Section 640 of the bill would require DOE to ensure that employees of its contractors at certain facilities maintain their retirement and health benefits. Currently, DOE is changing contractors for infrastructure and environmental remediation activities at its Portsmouth and Paducah facilities. Employees working under

current contracts are not guaranteed continuity of benefits under the new contracts. This section would require the department to ensure that such employees maintain their benefits. Based on information from DOE and the potential new contractor, up to 500 employees would be eligible for continued benefits under this provision. Based on previous payments to contractors under similar circumstances, we expect that DOE would make an immediate transfer of funds to the new contractor for the estimated future benefits related to pensions, medical, dental, and life insurance benefits for each employee. Based on information from DOE, CBO estimates that this provision would increase direct spending by $64 million in 2006.

Renewable Fuels Mandate. CBO estimates that enacting title XV of H.R. 1640 would not have any significant effect on direct spending or revenues over the 2006-2015 period.

Section 1501 of the bill would require that motor fuels sold by a refiner, blender, or importer contain specified amounts of renewable fuel. The required volume of renewable fuel would start at 3.1 billion gallons in 2005 and escalate to 5 billion gallons for 2012 and increase at the growth in gasoline consumption thereafter. Those amounts are generally less than the amounts of renewable fuels that CBO projects will be used for several years. The bill also would amend the Clean Air Act to eliminate the requirement for gasoline that is sold in certain regions of the country to contain 2 percent oxygen by weight. This provision might lower demand for gasoline oxygenates (including ethanol), because the mandated use of renewable fuels is below CBO's baseline for the use of fuels.

However, the bill also provides for the generation of credits towards meeting the renewable fuel requirement, which can be used to satisfy future years' requirements. Because of the ability of a refiner, blender, or importer to save ethanol-use credits generated in one year to satisfy requirements in a future year, CBO does not expect that the use of renewable fuels would be significantly affected. Accordingly, the costs of federal programs to support farm prices and provide income support would not be significantly affected, with these levels of renewable fuel requirements.

Civil Penalties. H.R. 1640 also could affect governmental receipts and direct spending by establishing and increasing certain civil and criminal penalties. CBO estimates that any resulting increase in receipts and spending would be less than $500,000 annually. Such penalties would be established for violations of regulations relating to:

- Violations of the Price-Anderson Act,
- Nuclear safety at nonprofit institutions,
- Willful destruction of a nuclear facility,

- The reliability of the nation's electricity system,
- Market trading of electricity, and
- The sale of renewable fuels.

INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

H.R. 1640 contains numerous mandates as defined in UMRA that would affect both intergovernmental and private-sector entities.

CBO estimates that the cost of complying with intergovernmental mandates, in aggregate, could be significant and likely would exceed the threshold established in UMRA ($62 million in 2005, adjusted annually for inflation) at some point over the next five years because we expect that future damage awards for state and local governments under the bill's safe harbor provision would likely be reduced. That provision would shield the motor fuels industry from liability under certain conditions.

CBO cannot determine whether the aggregate cost of the private-sector mandates in the bill would exceed the threshold established in UMRA, primarily for two reasons. First, some of the requirements established by the bill would hinge on future regulatory action about which information is not available. Second, UMRA does not specify whether CBO should measure the cost of extending a mandate relative to the mandate's current costs or assume that the mandate will expire and measure the costs of the mandate's extension as if the requirement were new. The bill would extend the existing mandate that requires licensees to pay fees to offset roughly 90 percent of the Nuclear Regulatory Commission's annual appropriation. Measured against the costs that would be incurred if current law remains in place, the cost to the private sector of extending this mandate would exceed the annual threshold established in UMRA ($123 million in 2005, adjusted annually for inflation).

Based on its review of the bill, CBO expects that the mandates (new requirements, limits on existing rights, and preemptions) contained in the bill's titles on motor fuels (title XV), nuclear energy (title VI), electricity (title XII), and energy efficiency (title I) would have the greatest impact on state and local governments and private-sector entities.

Ethanol and Motor Fuels (Title XV)

Safe Harbor. Section 1502 would shield manufacturers of motor fuels and other persons from liability for claims based on defective product relating to motor vehicle fuel containing methyl tertiary butyl ether or renewable fuel. That protection would be in effect as long as the fuel is in compliance with other applicable federal requirements. The provision would impose both an intergovernmental and private-sector mandate as it would limit existing rights to seek compensation under current law. (The provision would not affect other causes of action such as nuisance or negligence.)

Under current law, plaintiffs in existing and future cases may stand to receive significant amounts in damage awards, based, at least in part, on claims of defective product. Because section 1502 would apply to all such claims filed on or after September 5, 2003, it would affect more than 100 existing claims filed by local communities, states, and some private companies against oil companies. Individual judgments and settlements for similar lawsuits over the past several years have ranged from several million dollars to well over $100 million. Based on the size of damages already awarded and on information from industry experts, CBO anticipates that precluding existing and future claims based on defective product would reduce the size of judgments in favor of state and local governments over the next five years. CBO estimates that those reductions would exceed the threshold established in UMRA in at least one of those years. Because significantly fewer such cases are pending for private-sector claimants, CBO does not have a sufficient basis for estimating expected reductions in damage awards for the private sector.

Renewable Fuels Standard. Section 1501would require domestic refiners, blenders, and importers of gasoline to ensure that gasoline sold or dispensed to consumers in the contiguous United States contains a minimum volume of renewable fuels. The required volume of renewable fuel would start at 3.1 billion gallons in 2005 and increase to 5.0 billion gallons by 2012. Section 1501 also would allow refineries, blenders, and importers to accumulate and trade credits for quantities of renewable fuels. Excess credits from one year could be used in the next. CBO expects that the motor fuels industry would be able to meet the renewable fuels requirement in the first five years that the mandate is in effect (2005 through 2009) without significant additional costs to the industry.

MTBE Ban. Section 1504 would ban the use of methyl tertiary butyl ether (MTBE) in gasoline effective no later than December 31, 2014. At the same time, the bill would allow any state to authorize MTBE use in motor fuels by notifying the EPA. A nationwide ban with states opting to continue use of MTBE may not be fundamentally different from the current situation in which states impose their own local bans. Therefore, it is possible that MTBE use would not be greatly affected by the ban under the bill. Moreover, CBO

anticipates that the renewable fuels standard established in section 1501 could, on its own, greatly reduce incentives to use MTBE.

CBO cannot determine in which states, if any, the federal MTBE ban would be more constraining than the renewable fuel standard and, therefore, cannot determine the cost of the mandate. In states where the federal ban would be more constraining, the ban could impose costs on refiners and merchant producers. Gasoline refiners would need to replace MTBE with higher-cost blendstocks, and merchant producers would likely convert their operations to the production of less-profitable blendstocks, such as alkylates or iso-octane. The bill would authorize appropriations of $250 million annually for fiscal years 2005 through 2012 for federal transition grants to merchant producers to convert their facilities.

Seasonal Variation in Renewable Fuel Use. Section 1501 would direct the Energy Information Administration (EIA) to determine if there are excessive seasonal variations in the amount of renewable fuel blended into gasoline. Refiners might have an incentive to use more of the annual requirement for renewable fuel (mostly ethanol) in the winter months, when evaporative emissions from gasoline are less of a concern. Sharp seasonal changes in the demand for ethanol could lead to large swings in ethanol and gasoline prices. If EIA determines that there are excessive seasonal fluctuations, EPA would impose regulations requiring that at least 35 percent of the renewable fuel standard be blended into gasoline in summer months and another 35 percent be blended in winter months. At this time EPA does not have any information on excessive seasonal variation in renewable fuel use, but expects that such requirements will not be likely. In the event that a determination by EIA triggers additional EPA regulations, the duty to comply with those regulations would constitute a private-sector mandate.

VOC Region Consolidation. Section 1506 would consolidate the regional regulations that limit the emissions of volatile organic compounds (VOCs) from gasoline, by applying the more stringent standards for gasoline sold in the southern United States to gasoline sold in the northern United States. Applying the more-stringent standards would impose a private-sector mandate. According to industry experts, the difference in the stringency of the two standards is small, and therefore, the mandate is not likely to increase industry costs.

Boutique Fuels. Section 1541 would require EPA to promulgate a list of boutique fuels approved by the federal government. The Clean Air Act allows individual states to implement their own clean fuel programs to address local or regional concerns about air quality. The term "boutique fuels" refers to the various specialized gasoline blends made to meet those air quality standards. Section 1541 would limit the total number of fuels on the approved list and would prohibit the addition of new fuels to the list without the removal of an older fuel. The federal list of fuels would supersede any list currently allowed under state implementation plans. In effect, the section would require any refinery currently producing a boutique fuel that is not on the federal list of boutique fuels to cease production of that fuel. According to various industry contacts, most refineries are capable of producing the fuels that are slated to be on the initial list of boutique fuels. CBO estimates that the costs

associated with any retooling necessary to comply with the provisions of this section would be minimal, if any.

Underground Storage Tank (UST) Compliance for States. Section 1524 would require the EPA to specify training requirements for operators of USTs and would require states to develop and implement a training strategy for UST operators that is consistent with the EPA requirements. The bill also would require each state and tribe to develop an implementation report that lists each publically owned underground storage tank out of compliance with regulations, past actions taken toward listed tanks, and future steps that will be taken to bring those tanks into compliance. CBO estimates that the cost of these requirements could be significant, but that states would be eligible for grants from EPA to implement them.

In states where the EPA oversees regulation of USTs directly, this provision would constitute a private-sector mandate on private owners of USTs. Currently, only USTs in Idaho are regulated directly by the EPA. While CBO has no information on what training the EPA may require, the industry does not expect the requirements to differ greatly from existing industry and state training requirements. CBO anticipates that the cost of the private-sector mandate would not be large.

Additional Groundwater Protection Requirements. Section 1530 would direct the EPA to require states that receive federal funding for UST programs to impose new groundwater protection requirements on manufacturers and installers of USTs. This would constitute a private-sector mandate, since states receiving grants must implement the new requirements and the EPA is expected to impose these requirements regardless of the states' action. CBO has no information at this time on how the requirements would be implemented and, therefore, cannot determine the cost of the mandate.

Nuclear Matters (Title VI)

Increase in the Annual Premium. Under current law, in the event that losses from a nuclear incident exceed the required amount of private insurance, NRC licensees (both public and private) are assessed a charge to cover the shortfall in damage coverage. Section 603 would increase the maximum annual premium from $10 million to $15 million. CBO has determined that raising the maximum annual premium would increase the costs of existing mandates and would thereby impose both intergovernmental and private-sector mandates under UMRA. Because the probability of a nuclear accident resulting in losses exceeding the amount of private insurance coverage is low, CBO estimates that the annual costs for public and private entities of complying with the mandates (in expected value terms) would not be substantial over the next five years.

Security Upgrades and Background Checks. Sections 661 and 666 would direct the NRC to issue new security regulations for the operation of nuclear facilities and the transport of nuclear materials. The duty to comply with the new regulations governing nuclear material transport and facility operations would constitute both private-sector and intergovernmental mandates. Under section 661, the rules governing the operation of nuclear facilities would be based upon future study by the NRC and consultation with other federal, state, and local agencies and the private sector. At this time, the agency could not give any indication as to the scope of the new regulations. Consequently, CBO cannot determine the costs of compliance. However, based on the small number of public nuclear facilities and the security upgrades that have already occurred in response to the events of September 11, 2001, CBO expects that the cost of these requirements would not be large for state and local governments.

In addition, the bill would require fingerprinting of additional individuals connected with nuclear facilities as part of criminal background checks done through the U.S. Attorney General's Office. The increased costs for those background checks would be the responsibility of the licensee. The duty to pay the increased cost would be both a private-sector and intergovernmental mandate under UMRA, but the cost of the mandate would be small.

NRC User Fees and Annual Charges. Under current law, the NRC is authorized to collect annual fees from its licensees (public and private) to offset 90 percent of a major portion of its general fund appropriation. CBO estimates that those collections would amount about $500 million in fiscal year 2005. Those fee collections include the cost of issuing licenses to some federal agencies. The NRC's authority to collect that level of fees expires at the end of fiscal year 2005. When that authority expires, the NRC will be authorized to collect annual fees up to only 33 percent of its budget. Section 668 would extend the NRC's current authority to charge annual fees to offset 90 percent of its net appropriation indefinitely. The duty to pay such an increase in fees would be a mandate as defined in UMRA.

The total amount of fees collected under this provision would depend on the level of future appropriations. Assuming appropriations in the amount authorized for 2005, CBO estimates that extending the fees could result in additional collections of roughly $300 million in 2006 from industries regulated by the NRC (primarily electric utilities) and similar amounts for fiscal years 2007 through 2010. CBO estimates that most of the annual fees would be paid by private, investor-owned nuclear utilities (less than 5 percent would be paid by nonfederal, publicly owned utilities.)

In the case of a mandate that has not yet expired, UMRA does not specify whether CBO should measure the cost of the extension relative to the mandate's current costs or assume that the mandate will expire and that it must measure the costs of the mandate's extension as if the requirement were new. Measured against the costs that would be incurred if current law remains in place and the annual fee declines, the total cost to the private sector of extending this mandate could be close to $300 million annually, beginning in fiscal year 2006. Measured that way, the cost of the mandate would exceed the annual threshold for the private sector as defined in UMRA. By contrast, measured against the fees paid for fiscal year 2005, the mandate would impose no additional costs on the private sector because the fees under the bill would not differ much from those currently in effect. In any case, CBO estimates that the total costs to state, local, and tribal governments would be small relative to the threshold for intergovernmental mandates.

Electricity (Title XII)

Mandatory Reliability Standards. The bill would require users of the bulk-power system to comply with standards issued by the newly established Electric Reliability Organization as designated by the Federal Energy Regulatory Commission. Those users include intergovernmental entities such as municipally owned utilities as well as private-sector entities, including utilities, nonutility generators, and marketers. Currently, the North American Electric Reliability Council, a voluntary organization, promotes electricity reliability. According to several industry experts, almost all public and private-sector users of the bulk power system voluntarily comply with standards issued by NERC. The mandate would impose no significant additional costs in the short term relative to current practice since the ERO is not expected to significantly change current standards. In the future, market conditions may prompt the ERO to impose stricter standards to maintain reliability. In that case, costs for users of the bulk power system—that could otherwise elect to disregard NERC standards under current law—could increase substantially.

Mandatory Assessments. The bill would direct the ERO to assess fees and dues to cover the costs of implementing and enforcing ERO standards. Although there is some uncertainty as to how those fees would be assessed, the most likely scenario is that the ERO would assess fees on its members, which is the current practice of NERC. As NERC members include both public and private entities, such fees would constitute intergovernmental and private-sector mandates as defined in UMRA.

The bill would cap the amount of fees and other charges collected by the ERO at $50 million per year. Based on information from NERC, the membership fees collected in 2004 amounted to about $50 million. Consequently, CBO estimates that the increment in fee collections for the proposed compliance, monitoring, and enforcement activities under the bill would be negligible, if any. Based on industry data, CBO assumes that roughly 80 percent to 85 percent of the collections would be borne by the private sector and another 10 percent to 14 percent would be borne by state and local government entities. The remainder would be paid by federally owned entities.

Regulatory Fees. The bill would require FERC to assume certain regulatory procedures that are currently under the jurisdiction of the Securities and Exchange Commission. Under current law, FERC has the authority to collect fees from investor-owned utility companies to offset its costs. The duty to pay those fee increases would impose a private-sector mandate on those entities. Based on information from FERC, CBO expects that investor-owned utilities would have to pay $11 million in 2006 and $47 million over the 2006-2010 period.

Requirements for State Review. Sections 1251, 1252, and 1254 would require state regulators to review the use of net metering, time-based metering, demand response systems, and interconnection services before permitting electric utilities to implement these federal standards. The sections contain intergovernmental mandates because they would increase states' responsibilities under the existing mandates in the Public Utilities Regulatory Policies Act. However, CBO estimates that the states' costs to review additional standards would not be significant.

Energy Efficiency (Title I)

Section 133 would direct the Secretary of Energy to prescribe energy conservation standards restricting standby mode energy consumption of household appliances. According to industry sources and DOE, up to 9,000 types of household appliances could be affected by this provision, and further, many such products may require significant modification to meet the standard for energy consumption in standby mode. DOE could not say how they would implement this provision, and CBO cannot determine the products that would be affected. Therefore, we cannot estimate the incremental cost to the industry of meeting such requirements.

If DOE applies standards to the majority of products potentially affected, costs to industry could be substantial. The magnitude of the costs also depend on the stringency of new standards that would affect the appliance manufacturers. For example, the bill would require DOE to apply new energy conservation standards to certain furnaces. Roughly three million oil, gas, and electric furnaces would have to comply with the new standards. According to a DOE report, the incremental costs to manufacturers of improving energy efficiency could range from $5 to $175 per unit depending on the level of the standard that must be met. If the DOE applies relatively high efficiency standards to the appliances covered under the bill,

the incremental costs to the industry could be large, and thus could exceed UMRA's threshold for private-sector mandates.

Preemptions of State and Local Authority

In addition to the mandates discussed above, H.R. 1640 contains several explicit preemptions of state and local authority. Such preemptions are considered intergovernmental mandates under UMRA. CBO estimates that those preemptions would not impose significant additional costs on state, local, or tribal governments as regulators:

- Section 110 would extend an existing intergovernmental mandate by changing when daylight-saving time (DST) begins and ends. Under current law, states are required to follow federal guidelines for DST and may only opt-out by passing legislation.

- Section 133 would create national standards for the energy efficiency of ceiling fans and would supercede existing state standards. Currently two states—California and Maryland—have more strict standards and five other states have legislation pending; those standards would be preempted.

- Section 663 would preempt state laws restricting the use and transport of certain firearms. That provision would expand an existing NRC duty and allow the commission to authorize certain security employees to use and transport several types of firearms, regardless of state or local regulations.

- Section 1211 would preempt the authority of states to take action to ensure the safety, adequacy, and reliability of electric service within that state if those actions are inconsistent with federal reliability standards.

- Section 1221 would authorize FERC to issue construction permits for electric transmission facilities in "interstate congestion areas" when a state has not acted on or has rejected a permit request.

- Section 1502 would preempt state liability laws as they relate to renewable fuels and MTBE.

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