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Energy Policy: Comprehensive Energy Legislation (H.R. 6) in the 109th Congress

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Energy Policy: Comprehensive Energy Legislation (H.R. 6) in the 109th Congress

SUMMARY

Conferees on H.R. 6, the Energy Policy Act of 2005, agreed on a final bill July 26, 2005 (H.Rept. 109-190). On July 28, the House approved the conference report (275-156). Senate approval (74-26) of the conference report followed the next day, July 29.

Ethanol and MTBE. The House bill included a “safe harbor” provision to protect methyl tertiary-butyl ether (MTBE) refiners from product liability suits, while the Senate bill did not. A proposal was made to establish a trust fund to assist with cleanup in return for immunity from lawsuits, but the proposal drew criticism. No “safe harbor” provision appears in the conference bill. The conference bill would repeal the Clean Air Act requirement for oxygenated gasoline that led to increased use of MTBE, and would require refiners to use renewable fuels (presumably mostly ethanol). The House bill had set a goal of 5 billion gallons per year by 2012 and the Senate bill would have required 8 billion gallons. The conference bill gradually builds the requirement to 7.5 billion gallons by 2012.

ANWR. On April 28, 2005, the House and Senate approved a final budget resolution implicitly calling for the Arctic National Wildlife Refuge (ANWR) to be opened to provide oil and gas leasing revenue. The House bill had included ANWR language, but none appears in the conference bill.

Electricity Restructuring. The conference committee came to an agreement on a large part of the electricity title on July 21, 2005. The title includes provisions on PUHCA repeal, repeal of the mandatory purchase requirement under PURPA, merger review authority for FERC, electric reliability, and siting of transmission lines.

Renewable Energy. The Senate bill included a “renewable portfolio standard” (RPS) requiring utilities to generate at least 10% of their electricity from renewable energy sources by 2020. An RPS is not included in the conference bill.

Climate Change. The Senate bill would have established a credit-based deployment program for technologies to reduce greenhouse gas intensity and establish programs to deploy technologies in developing countries. The House bill had no climate change provisions. The conference bill creates a committee to develop a national climate change strategy.

Tax Provisions. The Administration’s FY2006 budget request called for a limit of \$6.7 billion in energy tax credits. The tax incentive provisions of the House-passed H.R. 6 had an estimated cost of \$8.1 billion. The Senate tax provisions in H.R. 6 were valued at \$14.1 billion over 11 years, and included more incentives for conservation and renewables than the House bill. The conferees agreed to a package that includes \$11.5 billion in net energy tax incentives over 11 years.

Outer Continental Shelf. The Senate bill would have required an inventory of oil and natural gas resources on the Outer Continental Shelf (OCS). The House bill did not call for a resource study. The conference bill contains the Senate-mandated inventory.

Siting of LNG Terminals. Provisions to permit the Federal Energy Regulatory Commission (FERC) to decide on the siting of liquefied natural gas terminals have been opposed by some as an override of states’ rights. An effort to eliminate this language from the conference bill was unsuccessful.

MOST RECENT DEVELOPMENTS

Conferees on H.R. 6, the Energy Policy Act of 2005, began meeting July 14, 2005, and reached agreement on a final bill July 26, 2005 (H.Rept. 109-190). On July 28, the House approved the conference report (275-156). Senate approval (74-26) of the conference report followed the next day, July 29. (For a side-by-side comparison of the House and Senate versions of H.R. 6, see CRS Report RL33006, *Omnibus Energy Legislation, 109th Congress: Side-by-Side Assessment of House and Senate Versions of H.R. 6*, coordinated by Mark Holt and Carol Glover.)

The most controversial difference between the House and Senate energy bills in the 108th Congress was the inclusion in the House bill of a “safe harbor” provision, which would protect methyl tertiary-butyl ether (MTBE) refiners from product liability suits. Conference Chairman Barton, after proposing a compromise July 22 that found little support, agreed to accept a conference bill without the safe harbor provision.

BACKGROUND AND ANALYSIS

(Note: The House and Senate designated the Energy Policy Act of 2005 in the 109th Congress as H.R. 6, the same number as the energy bill considered in the 108th Congress. References to H.R. 6 in the 108th Congress are designated by [108] following the bill number.)

Since the time of the Arab oil embargo in 1973-1974, the United States and other major energy consumers have achieved greater efficiencies in energy use in all sectors of the economy.¹ However, national and world energy demand continues to grow, and domestic oil production in the United States continues to decline as the more accessible resources of crude from U.S. fields in Alaska and elsewhere have been tapped. As a consequence, the gap between U.S. production and consumption has had to be covered by increased oil imports. These imports, roughly 6 million barrels per day (mbd) daily after the Arab oil embargo, now exceed 10 million mbd to satisfy U.S. oil consumption of nearly 21 mbd.²

As with any commodity, the price of crude oil and petroleum-based products can be volatile. In the last few years, a number of factors have contributed to sharp increases in the price of oil. Demand for petroleum by developing nations and the Far East had put pressure on current world production and refining capacity. Attacks upon Iraqi pipelines supplying oil to world markets, and a general uncertainty about stability in the Middle East, have also contributed to nervousness in world oil markets. In late June 2005, crude oil prices exceeded \$60/barrel for the first time.

¹ For a more thorough review of energy policy since the mid-1970s and a broader framework for the current debate, see CRS Report RL31720, *Energy Policy: Historical Overview, Conceptual Framework, and Continuing Issues*.

² U.S. Department of Energy, Energy Information Administration, at [http://www.eia.doe.gov/pub/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/current/pdf/tableh1.pdf].

High crude oil and gasoline prices have been frequently referenced in the debate. While energy policy touches on many problems other than fossil fuel supply and demand, the price of oil — gasoline and home heating oil in particular — is often the lever that spurs policymakers to discuss national energy policy and to seek legislative initiatives to increase the supply of conventional fuels, promote the development and use of alternative and renewable fuels, push for improvements in efficiency of energy consumption, assure greater reliability in the electric utility sector, and review existing and possible new incentives in the tax system to promote change in how the nation uses energy.

Comprehensive energy legislation was reported from conference in the 108th Congress in November 2003 and approved by the House shortly thereafter, but was not approved by the Senate.

Major concerns in the Senate were the cost of H.R. 6 [108] — estimated at around \$31 billion over 10 years — and a provision insisted upon by the House that would have protected producers of methyl tertiary-butyl ether (MTBE) and renewable fuels from liability for personal injury, property damage, and cleanup. Early in the second session of the 108th Congress, a comprehensive bill (S. 2095) with a cost of roughly \$14 billion was introduced in the Senate, but did not reach the floor. Another controversial issue has been establishment of a renewable portfolio standard (RPS) that would require utilities to use more renewable fuel sources to generate electricity. Language to open up the Arctic National Wildlife Refuge (ANWR) to oil and gas development was not included in H.R. 6 [108].

Little in the conference version of H.R. 6 [108] would have addressed price and supply issues in the near term — largely because there are very few policy options to address price volatility. Many policymakers characterized the Energy Policy Act of 2005 passed by the House on April 21, 2005, similarly. In public remarks during the latter part of April 2005, the President acknowledged that the bill would not affect energy prices in the near-term.

109th Congress. On April 13, 2005, several House committees finished markup of their respective portions of comprehensive energy legislation — the House Committee on Energy and Commerce, the Committee on Resources, and the Committee on Ways and Means. For the most part, attempts by the minority to significantly amend the language of the committee bills were unsuccessful. Debate on the Energy Policy Act of 2005 (H.R. 6) began April 20, 2005, and the legislation was passed (249-183) the following day. Some of the major features of H.R. 6 are discussed below. Overall, the Energy Policy Act of 2005 as passed by the House and the comprehensive legislation reported from conference in the 108th Congress, but not enacted, are very similar. Important differences are the ANWR language, fewer energy tax incentives, and inclusion of a refinery revitalization program that was passed by the House (H.R. 4517) during the 108th Congress, but not by the Senate.

One of the major issues has been the cost of legislation providing energy tax credits. The bill that went to conference in the 108th Congress (but was not enacted) included more than \$30 billion in tax credits. Some energy tax incentives were subsequently extended or adopted in the Working Families Tax Relief Act of 2004 (P.L. 108-311) and the American Jobs Creation Act of 2004 (P.L. 108-357). The Administration's FY2006 budget request called for a limit of \$6.7 billion in energy tax credits. The estimated cost of the provisions in H.R. 6 was \$8.1 billion over 11 years. The Senate Finance Committee tax provisions

added to the Senate version of H.R. 6 included more incentives for conservation and renewables than the House bill, and were estimated to cost \$14.1 billion over 11 years.

The House legislation would have opened the Arctic National Wildlife Refuge (ANWR) to exploration and development. An amendment on the floor of the House to delete ANWR from H.R. 6 was defeated (200-231). The House legislation included a “safe harbor” provision to protect methyl tertiary-butyl ether (MTBE) refiners from product liability suits, which was narrowly retained after a close vote on an amendment that reached the floor to drop the language (213-219). In the 108th Congress, this provision was included in the bill that was reported from conference. However, there was opposition to this provision in the Senate and it played a significant role in the defeat of the conference bill at the end of the first session of the 108th Congress.

On February 10, 2005, the House Science Committee reported H.R. 610, which includes less controversial research and development provisions that were part of comprehensive legislation debated in the 108th Congress. That legislation, approved by voice vote, would authorize roughly \$44.1 billion over five years for research of deep sea drilling, clean coal technology, nuclear energy, fusion technology, and high-performance computers. The bill also would authorize funding to improve energy efficiency of vehicles and buildings. These provisions are also a part of the House version of H.R. 6.

The Senate Committee on Energy and Natural Resources ordered reported comprehensive energy legislation on May 26, 2005, and the bill was introduced as S. 10 (S.Rept. 109-78) on June 9. Floor debate began June 14, and the text of S. 10 was substituted for H.R. 6. Cloture was approved (92-4) on June 23. Work was largely completed on the bill on June 24, with final passage (85-12) on June 28.

The comprehensive energy bills passed by the House and Senate were similar, but with important differences. A general summary follows of issues that have gained attention in the energy policy debate, including a summary of some of the major provisions in the House and Senate versions of H.R. 6, as well as the bill reported from conference on July 26, 2005. The House approved the conference report (H.Rept. 109-190) on July 28; Senate approval (74-26) of the conference report followed the next day, July 29. Background about the debate in the 108th Congress is included where helpful.

Ethanol and MTBE. Of the many issues left unresolved in attempts to pass a comprehensive energy bill in the 108th Congress, a primary stumbling block was the effort to promote ethanol as an automobile fuel, and the related problem involving the gasoline fuel additive MTBE. The provision, referred to as the “safe harbor” provision, would have provided protection from product liability lawsuits for producers of MTBE and renewable fuels.

The roots of the controversy lie in the Clean Air Act Amendments of 1990, which mandated that “reformulated” gasoline required in some localities to improve air quality contain 2% oxygen. This requirement could be met by adding ethanol to gasoline, but it could also be achieved by adding a substance called methyl tertiary butyl ether (MTBE), which had been produced in small quantities for many years as an octane enhancer. Because MTBE was cheaper than ethanol and was easier to mix and transport, many refiners began using it to meet the new standards.

However, as its use spread, it became apparent that MTBE tended to escape easily from its fuel carriers and storage tanks, and contaminate water supplies, imparting a taste and odor that was unpalatable even in small quantities. This development led to moves to restrict and prohibit the use of MTBE. It also led a number of communities to sue refiners for the cost of decontaminating their water supplies. At the same time, evidence began to accumulate that oxygenating gasoline was not necessary to achieve the air quality benefits of reformulated gasoline. (For additional information, see CRS Report RS21676, *The Safe-Harbor Provision for Methyl Tertiary Butyl Ether (MTBE)*, by Aaron Flynn, and CRS Report RL32865, *Renewable Fuels and MTBE: A Comparison of Selected Provisions in H.R. 6*, by Brent D. Yacobucci, Mary E. Tiemann, and James E. McCarthy.)

The omnibus energy bills in the 108th Congress addressed this changing situation by repealing the oxygenation requirement in the Clean Air Act, but adding a new mandate that gasoline have an increasing amount of renewable fuel, most of it probably ethanol. Consumption of ethanol in gasoline in 2004 was 3.4 billion gallons. Under the renewable fuel standard in the House version of H.R. 6, the amount required to be consumed would have been 3.1 billion gallons in 2005 and 5.0 billion gallons by 2012. This would still have been a small proportion of the total amount of gasoline consumed, which was close to 150 billion gallons in 2004, but was expected to stimulate the ethanol industry and the agricultural sector that supplies it. It was opposed by oil industry interests, who complained of the mandated increase in consumption of ethanol, which receives a substantial tax credit. Some suggested that it would raise prices locally, despite the subsidy.

In the 109th Congress, H.R. 6, as reported by the House Committee on Energy and Commerce on April 13, 2005, retained the safe harbor provision, and also the ethanol mandate; an amendment to remove the safe harbor provision was defeated in committee. When H.R. 6 reached the floor of the House, opponents raised a point of order on the safe harbor provision. The motion was defeated by a six-vote margin. The Senate version of H.R. 6 did not contain the safe harbor provision. The Senate bill also would have increased the renewable fuels/ethanol mandate from 5 billion gallons by 2012, in the House bill, to 8 billion gallons by 2012.

On July 22, Conference Chairman Barton introduced a compromise plan that would retain the safe-harbor provision, but would set up a fund for cleanup to which federal and state governments and MTBE producers would contribute. However, the plan did not gain support among opponents to the safe-harbor provision, and he abandoned the attempt to include the measure in the conference bill. The conferees set the renewable fuels mandate at 7.5 billion gallons by 2012.

Climate Change. Unlike the Senate-passed bill, the House legislation did not contain provisions addressing climate change. The Senate bill would have, among other provisions, established a credit-based deployment program for technologies to reduce greenhouse gas intensity; support would have included direct loans, loan guarantees, lines of credit, and production incentive payments. It would also have established grant and loan programs to deploy in developing countries technologies that have been developed or demonstrated in the United States. The Senate bill also included language expressing that Congress should enact a program to control and reduce greenhouse gas emissions prior to the end of the first session of the 109th Congress. The Senate rejected a proposal to establish mandatory caps on carbon

dioxide emissions, as well as an amendment that the United States should reduce risks posed by climate change by participating in a negotiated binding international agreement.

Title XVI of the conference bill contains a modification of the Senate version with respect to establishing a new governmental structure to develop a national response strategy to promote technologies and practices to reduce greenhouse gas intensity, coordinate federal climate change activities, and identify barriers to technologies that improve carbon intensity. However, the Senate bill's extensive credit-based deployment program for less carbon-intensive technologies was replaced in the conference report by a demonstration program based on the Research and Development cost-sharing provisions contained in Title IX. The Senate's Climate Change Technology Deployment in Developing Countries provisions were adopted by conference basically unchanged. The Sense of the Senate resolution on climate change was deleted.

(For additional information, see CRS Report RL32953, *Climate Change: Comparison and Analysis of S. 1151 and the Draft "Climate and Economy Insurance Act of 2005,"* by Brent Yacobucci and Larry Parker, and CRS Report RL32955, *Climate Change Legislation in the 109th Congress*, by Brent Yacobucci.)

Arctic National Wildlife Refuge (ANWR) and Outer Continental Shelf (OCS). Domestic oil production continues to fall. Some argue that the nation should be seizing the opportunity to develop the oil and natural gas resources that remain untapped. The potential Alaskan resources are high on this list, with estimates of technically recoverable resources there ranging from a 95% probability of 4.3 billion barrels to a 5% probability of 11.8 billion barrels. However, some argue that drilling for oil in ANWR will have unacceptable environmental consequences on wildlife and vegetation, and that the land should be left undisturbed.

The legislation passed by the House during the 108th Congress would have opened up ANWR, but the Senate bill did not. Once it became apparent that there were insufficient votes in the Senate to pass an energy bill with ANWR provisions, the managers decided to leave ANWR out of the final conference bill.

The FY2006 budget transmitted to Congress by the Administration supported opening ANWR to exploration and development. The budget projected bonus bid revenues at \$2.4 billion, half of which would accrue to the federal government and the balance to Alaska. On March 9, 2005, the Senate Budget Committee issued a budget resolution that assumes \$2.5 billion of revenue over five years from leases in ANWR, and would allocate \$2.0 billion in mandatory spending to comprehensive energy legislation and \$4.5 billion for energy tax incentives. On March 16 the Senate rejected an amendment by Senator Cantwell to strike the ANWR provisions, by a vote of 49-51. The next day the Senate passed the budget resolution (S.Con.Res. 18).

The House version of the budget resolution (H.Con.Res. 95) passed on March 17 did not include the ANWR provisions; however, the final version of the resolution passed by both houses on April 28, 2005, instructs the Senate Committee on Energy and Natural Resources and the House Committee on Resources to find \$2.4 billion in savings through FY2010. Reconciliation legislation is not subject to Senate filibuster. Consequently, the comprehensive energy bill reported from the Senate Committee on Energy and Natural

Resources did not include language authorizing exploration and development of ANWR as does the Energy Policy Act of 2005 (H.R. 6) passed by the House on April 21, 2005. There was no effort to add ANWR language to the Senate version of H.R. 6. An amendment to strip the language from the House bill during the House debate was defeated (200-231). (For additional information, see CRS Issue Brief IB10136, *The Arctic National Wildlife Refuge: Controversies for the 109th Congress*, by Lynne Corn.)

The Senate version of H.R. 6 required an inventory of oil and natural gas resources on the Outer Continental Shelf (OCS). An amendment to strike this language from the bill was defeated on June 21 (44-52). The House-passed H.R. 6 also made no changes to existing OCS leasing moratoria, but did not call for a resource study. The OCS inventory remained in the conference bill.

Electricity Restructuring. Since the early 1990s, the electric utility industry has experienced a major transformation. Formerly the nationwide electricity system consisted of vertically integrated utilities with defined service areas, which they were responsible for supplying with power to meet demand. The rates they charged were set for the most part by state utility commissions, as were some other activities. Most power generating capacity was owned by the utilities themselves, as were transmission lines and power distribution systems. Utility commissions determined rates based not only on the cost of power but also on the need to fund additional plants to meet future power demand.

Starting in the 1980s, a number of unregulated entities began producing power for sale to utilities at wholesale, and in 1992 the Energy Policy Act (EPACT, P.L. 102-486) removed some of the regulatory barriers to such unregulated electricity generation. At present many regulated utilities have sold their generating capacity and become essentially transmission and distribution entities, and an increasing share of generating capacity across the nation is owned and operated by companies not regulated as utilities. Many states have joined in Regional Transmission Organizations (RTOs) to distribute independently produced power to local utilities, but the details of these systems vary widely. The principle behind the restructuring has been that power produced by a competitive market of independent generators should be cheaper than that produced by a regulated monopoly.

Most state restructuring plans have not immediately met initial expectations, and many have faced serious problems. In California in particular, a combination of several factors, including demonstrated manipulation of the market by some independent power producers, resulted temporarily in power shortages and extremely high prices to some consumers. The California experience slowed down the process of restructuring in many other states, and also raised barriers to an effort in the Congress to produce a uniform national restructuring system. A massive power failure in much of the Northeast in 2003 added demands for improving the reliability of power transmission systems between regions. As a result of these various developments, the electricity provisions of major energy policy bills have been a source of major controversy. The main issue is not whether utility restructuring should take place; it is the federal role in guiding a restructuring process that is already taking place.

The major legislative issues in electricity restructuring are:

- enforceable standards for transmission system operation and reliability;

- repeal of Public Utility Holding Company Act (PUHCA), which utilities say they need in order to operate in the new competitive market, but which critics fear will threaten consumer interests;
- the role of the Federal Energy Regulatory Commission (FERC) in setting rules for marketing independent power production; and
- access to utility-owned transmission lines by independent producers.

Measures to improve the reliability of the transmission grid have gathered wide support, and all the major energy legislation contained reliability provisions. However, as the broad energy legislation foundered in the 108th Congress, a split developed between those who wanted to push a stand-alone reliability bill and those who insisted on keeping it in the comprehensive bill.

PUHCA was enacted in the 1930s to keep speculation in utility stocks and finances from affecting the utility's ability to provide power to its service area. Utilities are under regulation from the Securities and Exchange Commission (SEC) and can invest in non-utility activities only if SEC finds that it will improve efficiency and service to utility customers. Advocates of PUHCA repeal argue that the statute is outdated and burdensome to utilities in the new competitive environment, and point to the abuses that led to the bankruptcy of Enron. The company had declared itself exempt from PUHCA regulation, and its self-declaration was not challenged until after the abuses were discovered, when an SEC administrative judge denied it. (For details, see [http://www.sec.gov/spotlight/enron.htm#enron_exempt].) Because these events occurred with PUHCA still on the books, repeal advocates contend that the statute is ineffective. But PUHCA repeal still has many opponents, who point out that utilities are still responsible for distributing power to customers, and their ability to do so could be adversely affected by unregulated and unsupervised activities and investments.

Until the restructuring and rise of unregulated power generators, FERC had the rather minor role in the power industry of regulating wholesale interstate transfers of power. Restructuring has thrust FERC into a much more important role of regulating the distribution of power from generators, some of them out of state, to utilities. FERC's activities during and following the California crisis have been highly controversial. In addition, FERC has proposed a rulemaking on "standard market design" (SMD) to create wholesale power markets that would allow sellers to transact easily across transmission grid boundaries (FERC Notice of Proposed Rulemaking, Docket No. RM01-12-000, 18 C.F.R. Part 35, July 31, 2002). This proposal has also raised concerns in some states that have resisted or delayed restructuring.

These issues were dealt with differently in the various bills considered in the 108th Congress. All the major bills contained some reliability measures, but issues of consumer protection, of market design and the role of FERC, and numerous other questions remained unresolved. All the major bills in the last Congress repealed PUHCA, as did the version of H.R. 6 in the 109th Congress passed by the House. The Senate bill also included PUHCA repeal language, but in markup a provision to give FERC additional merger review authority was added. The House-passed merger review provision gave FERC jurisdiction over transmission transactions. FERC merger review authority would also apply to natural gas utilities and generation-only transactions. In addition, the bill passed by the Senate required FERC to determine that cross-subsidization would not result from a merger.

Most other electricity provisions in the House- and Senate-passed bills were essentially those contained in the electricity title as approved by the conference committee on H.R. 6 in the 108th Congress. Amendments to make major changes in this title of the bill were rejected during markup by the House Energy and Commerce Committee. One feature of that title, Sec. 1242, providing for “participant funding” of transmission projects, raised opposition from a number of interested parties as being inflexible and potentially inequitable, and was dropped in markup.

The conference committee came to an agreement on a large part of the electricity title on July 21, 2005. In the conference bill, PUHCA would be repealed, and FERC’s merger review authority is strengthened. In addition, language is included that is intended to prevent cross-subsidization. The mandatory purchase requirement under the Public Utility Regulatory Policies Act (PURPA) would be repealed. An Electric Reliability Organization would be able to promulgate mandatory, enforceable reliability standards for the electric industry that include cybersecurity protection. Included in the conference report, but not in either the House- or Senate-passed versions of H.R. 6, is a Sense of Congress that FERC should carefully consider the states’ objections to the locational installed capacity (LICAP) mechanism for New England.

(For additional information, see CRS Report RL32925, *Electric Utility Provisions in House-Passed H.R. 6, 109th Congress*, by Amy Abel, and CRS Report RL32728, *Electric Utility Regulatory Reform: Issues for the 109th Congress*, by Amy Abel.)

Fuel Economy. Gasoline and diesel fuel consumption account for roughly 50% of U.S. total petroleum consumption. Many argue that higher requirements for new vehicle fuel economy could go far in reducing automobile fuel consumption or holding consumption levels steady in future years. One of the first initiatives designed to have a significant effect on vehicle fuel demand was passage of corporate average fuel economy standards (CAFE) in the Energy Policy and Conservation Act of 1975 (EPCA, P.L. 94-163). Under the standards, the average fuel economy of all vehicles of a given class that a manufacturer sells in a model year must be equal to, or greater than the standard. In the years since enactment, there have been periodic calls for stiffening or broadening the applicability of CAFE standards — especially as consumer demand has turned more to light-duty trucks and sport utility vehicles (SUVs), for which CAFE standards are set at a lower level than for passenger automobiles. The standard for passenger automobiles is 27.5 miles per gallon (mpg).

The 107th Congress lifted a prohibition on expenditure of appropriated funds by the National Highway Traffic Safety Administration (NHTSA) to undertake CAFE rulemakings. The lifting of the prohibition on NHTSA was a significant development, restoring the ability of NHTSA to perform analysis and rulemaking as it had until the rider was first imposed for FY1996. On April 1, 2003, NHTSA issued a final rule to boost the CAFE of light-duty trucks by 1.5 mpg by 2007. The rule sets the interim standards at 21.0 mpg for model year (MY) 2005, 21.6 mpg for MY2006, and 22.2 for MY2007, and is the first increase in CAFE since MY1996.

A study by the National Commission on Energy Policy released in early December 2004 recommended that Congress instruct NHTSA to raise the standards to take advantage of

current technologies that have been used to enable vehicles to have more size and power without reductions to baseline fuel economy.³

The Energy Policy Act of 2005 passed by the House on April 21, 2005, included provisions strongly similar to language that appeared in the omnibus energy legislation reported from conference during the 108th Congress. The legislation would have authorized \$2 million annually during FY2006-FY2010 for the National Highway Traffic Safety Administration (NHTSA) to carry out fuel economy rulemakings. It also expanded the criteria that the agency would take into account in setting maximum feasible fuel economy for cars and light trucks. The new criteria required NHTSA to consider occupant safety and automotive industry employment in its determination of the maximum feasible fuel economy. The Senate bill added more factors that NHTSA would need to consider in setting maximum feasible fuel economy standards. These included the extent to which meeting higher CAFE standards might divert resources from developing advanced technologies.

All but one of the CAFE amendments offered during the House debate on H.R. 6 were defeated. The latter included an amendment to raise the CAFE standard for passenger automobiles to 33 miles over ten years (177-254). Another concern about the CAFE program has been that consumers have noted that in-use fuel economy rarely meets rated fuel economy, despite an adjustment that is made to the fuel economy ratings that appear on stickers posted to new cars. An amendment directing the Environmental Protection Agency (EPA) to weigh additional factors in this adjustment was approved (346-85).

The Senate bill would have provided NHTSA with \$5 million annually to conduct CAFE activities for each fiscal year, FY2006-FY2010. The bill required NHTSA to promulgate new car and light truck standards within a few years. An amendment to raise the CAFE standards to 40 mpg for passenger cars by MY2016, and 27.5 for light-duty trucks, was rejected (28-67).

The Senate bill included language to require the Administration to develop a plan to reduce U.S. oil consumption by 1 million barrels daily by 2015 from projected consumption levels. The amendment would not have created any new authorities. Rather, it gave the Administration the latitude to use currently existing authorities, including CAFE. A similar provision was rejected as an amendment to the committee print marked up by the House Energy and Commerce Committee in mid-April 2005, and was not in the bill passed by the House. During debate on the Senate bill, an amendment that would have further required a 40% reduction in oil imports (7.6 mbd) by 2025 was rejected (47-53).

The conference bill authorizes \$3.5 million annually during FY2006-FY2010 for the National Highway Traffic Safety Administration (NHTSA) to carry out fuel economy rulemakings. It also requires a study to explore the feasibility and effects of a significant reduction in fuel consumption by 2014, and requires NHTSA to adjust its test procedure for measuring fuel economy to take into account differences in vehicles and driving habits since

³ National Commission on Energy Policy, *Ending the Energy Stalemate: A Bipartisan Strategy to Meet America's Energy Challenges*, December 2004. See [<http://www.energycommission.org/ewebeditpro/items/O82F4682.pdf>].

the test was designed. Some of these factors include higher speed limits, faster acceleration, differences in the ratio between city and highway driving, and use of air conditioning.

(For additional information, see CRS Issue Brief IB90122, *Automobile and Light Truck Fuel Economy: The CAFE Standards*, by Robert Bamberger.)

Renewable Energy and Fuels. Policymakers have debated for a number of years the role that renewable fuels might play in displacing U.S. oil consumption. Skeptics have argued that the production of some renewable fuels will consume more energy than will be produced. However, others argue that the nation needs to develop alternative fuels and that the economics and energy intensity of producing these fuels will become competitive once a market for renewables can be established.

As noted above (see “Ethanol and MTBE”), a major feature of the energy bills of the 108th Congress was a requirement that an increasing amount of gasoline contain renewable fuels such as ethanol. An amendment to H.R. 6 agreed to on the floor of the House authorized \$300 million annually during MY2006-MY2015 to encourage production of advanced diesel and hybrid vehicles and to provide consumer incentives for their purchase. The program would be subject to appropriated funds. Another amendment that was approved (239-190) expanded the types of renewable fuels under other provisions in H.R. 6 that would qualify for grants for the construction of production facilities. For a discussion of previously enacted tax cuts relating to renewables and alternative fuel, see the section on energy tax policy, below.

For retail electricity suppliers, a Renewable Portfolio Standard (RPS) sets a minimum requirement (often a percentage) for electricity production from renewable energy resources or for the purchase of tradable credits that represent an equivalent amount of production. In the 109th Congress, two bills (H.R. 983 and S. 427) would establish an RPS. The Senate Committee on Energy and Natural Resources held a hearing on RPS on March 8, 2005. Regional differences in the availability of renewable resources, particularly resource availability in the southeastern United States, were a key issue at the hearing. In its markup of the energy legislation on April 12, 2005, the House Committee on Energy and Commerce rejected an amendment to add an RPS (1% in 2008, increasing by 1% annually through 2027)(17-30).

The Senate bill would have mandated a federal RPS, which would require investor-owned utilities to generate at least 10% of their electricity from renewable energy sources, such as wind, solar, geothermal, or new hydroelectric facilities, by 2020. Proponents of an RPS note a growing number of states with an RPS and argued that an RPS could reduce electricity bills. Opponents raise concerns about the exclusion of existing hydropower facilities and resource limits for the southeastern United States.

The conference bill does not include the Senate RPS measure.

(For information on renewable energy and fuels proposals in the 109th Congress, see CRS Report RL32860, *Energy Efficiency and Renewable Energy Legislation in the 109th Congress*, and CRS Issue Brief IB10041, *Renewable Energy: Tax Credit, Budget and Electricity Production Issues*, by Fred Sissine.)

Energy Efficiency and Conservation. Over the years that energy policy has been debated, some have argued that improvements in the efficiency of energy use could reduce demand sufficiently to eliminate the pressure to discover new reserves of conventional fuels and to build more electric generation and transmission facilities. Energy efficiency is increased when an energy conversion device, such as a household appliance, automobile engine, or steam turbine, undergoes a technical change that enables it to provide the same service (lighting, heating, motor drive) while using less energy. The energy-saving result of the efficiency improvement is often called “energy conservation.” The energy efficiency of buildings can be improved through the use of certain materials such as attic insulation, components such as insulated windows, and design aspects such as solar orientation and shade tree landscaping. Further, the energy efficiency of communities and cities can be improved through architectural design, transportation system design, and land use planning. Thus, energy efficiency involves all aspects of energy production, distribution, and end-use.

Energy efficiency and conservation issues have continued to be part of the debate over comprehensive energy legislation in the 109th Congress. H.R. 6, as passed by the House on April 21, 2005, reauthorized many programs, set a new goal for reducing federal facilities’ energy use, extended Energy Savings Performance Contracts (ESPC), established several standards for products and equipment, and could have terminated cogeneration purchase requirements. Overall, many of the non-tax energy efficiency provisions in H.R. 6 were similar to the comprehensive bill considered in the 108th Congress. H.R. 6 also included language that would provide a total of \$8.1 billion in energy tax incentives, including \$397 million in tax credits for energy efficiency. The bill also provided an \$18 million residential solar tax credit. However, critics of the bill argued that, to achieve the goal of reducing the cost of the measure, provisions favoring conventional fossil fuel production were retained while many incentives to promote conservation and efficiency were dropped.

The Senate version of H.R. 6 included stronger standards for products and equipment, and a major oil savings provision requiring development of a plan to reduce U.S. oil consumption by 1 million barrels daily by 2015 from projected consumption levels. Also, the tax package in the Senate bill had about \$5.4 billion in tax incentives for energy efficiency, including \$3.7 billion for equipment and \$1.7 billion for vehicles.

The conference bill does not contain the Senate oil savings provision.

(For more information, see CRS Report RL32860, *Energy Efficiency and Renewable Energy Legislation in the 109th Congress*, and CRS Issue Brief IB10020, *Energy Efficiency: Budget, Oil Conservation, and Electricity Conservation Issues*, by Fred Sissine).

Energy Tax Policy. Some argue that the historical volatility of energy prices has been a disincentive to make investments in new energy-related technologies and infrastructure that might boost production of conventional fuels and encourage homeowners, for example, to invest in systems that would reduce energy consumption for heating, cooling, and water heating. Tax policy has been one option to encourage both supply and demand-reduction efforts.

The energy tax provisions of H.R. 6 (109th Congress) as passed by the House included an \$8.1 billion, 11-year tax reduction of energy taxes, weighed almost entirely toward fossil fuels and electricity. The Senate version of H.R. 6 included a \$14.1 billion, 11-year tax title

aimed less toward fossil fuel production and more toward energy conservation and alternative fuels than the House measure.⁴ (For more information, see CRS Issue Brief IB10054, *Energy Tax Policy*, by Salvatore Lazzari.) Joint Committee on Taxation estimates of the revenue effects of the tax provisions of the Senate bill were released on June 23; see [<http://www.house.gov/jct/x-47-05.pdf>].

The tax package added to the conference bill on July 27, Title XIII, includes \$11.5 billion in net energy tax incentives over 11 years. (The gross tax cut would be \$14.55 billion, minus \$3 billion in tax increases.) It provides about \$1.3 billion for energy efficiency and conservation, including a deduction for energy-efficient commercial property, fuel cells, and micro-turbines, and \$4.5 billion in renewables incentives including a two-year extension of the tax code §45 credit, renewable energy bonds, and business credits for solar.

A \$2.6 billion package of oil and gas incentives includes seven-year depreciation for natural gas gathering lines, a refinery expensing provision, and a small refiner definition for refiner depletion, according to sources. A nearly \$3 billion coal package would provide 84-month amortization for pollution control facilities and treatment of §29 as a general business credit. More than \$3 billion in electricity incentives leans more toward the House version, including provisions providing 15-year depreciation for transmission property, nuclear decommissioning provisions, and a nuclear electricity production tax credit. It also provides for the five-year carry-back of net operating losses of certain electric utility companies.

Details of the tax title show that four revenue offsets were retained in the conference report: reinstatement of the Oil Spill Liability Trust Fund; extension of the Leaking Underground Storage Tank (LUST) trust fund rate, which would also be expanded to all fuels; modification of a §197 amortization, and a small increase in the excise taxes on tires. The offsets total roughly \$3 billion compared to nearly \$5 billion in the Senate-approved H.R. 6.

The President's Hydrogen Fuel Initiative. In January 2003 President Bush announced a new research and development initiative for hydrogen as a transportation fuel. A goal of the Hydrogen Fuel Initiative, and previously established FreedomCAR initiative, is to produce hydrogen-fueled engine systems by 2015 that achieve double to triple the efficiency of today's conventional engines at a cost competitive with conventional engines.

Over five years, the Administration is seeking a total funding increase of \$720 million. These initiatives would fund research on hydrogen fuel and fuel cells for transportation and stationary applications. The 108th Congress for FY2004 appropriated approximately \$50 million for the initiatives (\$20 million less than the Administration request) above the FY2003 level, and for FY2005 an additional \$25 million above the FY2004 level. The Energy Policy Act of 2005 (H.R. 6) would authorize \$3.3 billion during the period FY2006-FY2010. The comprehensive legislation in the 108th Congress would have set goals for the production of hydrogen-fueled passenger vehicles; no goals are included in the House

⁴ U.S. Congress, Joint Committee on Taxation, *Estimated Revenue Effects of the Chairman's Amendment in the Nature of a Substitute to the "Energy Policy Tax Incentives Act of 2005,"* JCX-47-05, June 16, 2005.

version of H.R. 6. The Senate bill also includes a number of programs and provisions to further hydrogen fuel research.

Critics of the Administration initiative suggested that the hydrogen program was intended to forestall attempts to significantly raise vehicle CAFE standards, and that it relieves the automotive industry of assuming more initiative in pursuing technological innovations. In addition, they argue that hydrogen-fueled vehicles may ultimately be infeasible, and that attention and funding should be focused on other research areas. On the other hand, supporters argue that it is appropriate for government to become involved in the development of technologies that are too financially risky to draw private sector investment. At issue for these policymakers will be whether the federal initiative and level of funding is aggressive enough. (For additional information, see CRS Report RS21442, *Hydrogen and Fuel Cell R&D: FreedomCAR and the President's Hydrogen Fuel Initiative*.)

Nuclear Energy. The conference report would provide strong incentives for the construction of new nuclear power plants — including production tax credits, loan guarantees, insurance against regulatory delays, and extension of the Price-Anderson Act nuclear liability system. The Energy Information Administration (EIA) has previously concluded that the 1.8-cents/kilowatt-hour tax credit in the conference bill would stimulate construction of new commercial reactors.⁵ Primarily because of high construction costs, no nuclear plants have been ordered in the United States since 1978, and all orders since 1973 have been cancelled.

The tax credit would be available for up to 6,000 megawatts of new nuclear capacity for the first eight years of operation, up to \$125 million annually for each 1,000 megawatts. That capacity limit could accommodate five or six new commercial reactors, or it could be allocated among a greater number of reactors (with the tax credit pro-rated accordingly) by the Secretary of Energy. Nuclear power plants would also be eligible for federal loan guarantees for up to 80% of construction costs. Both the nuclear tax credits and loan guarantees originated in the Senate-passed version of H.R. 6.

Because the nuclear industry has often blamed licensing delays for past nuclear reactor construction cost overruns, the conference report would authorize the Secretary of Energy to pay for up to \$500 million in costs resulting from Nuclear Regulatory Commission (NRC) delays for the first two new reactors and up to \$250 million for the next four. This provision was proposed by the Bush Administration and is similar to language in the Senate-passed bill.

Reauthorization of the Price-Anderson Act nuclear liability system has been one of the top nuclear items on the energy agenda and is widely considered to be a prerequisite for new nuclear plant construction. Under Price-Anderson, commercial reactor accident damages would be paid through a combination of private-sector insurance and a nuclear industry self-insurance system. Liability is capped at the maximum coverage available under the system, currently about \$10.9 billion. Price-Anderson also authorizes the Department of Energy (DOE) to indemnify its nuclear contractors. Authorization of the system for new

⁵ Energy Information Administration, *Analysis of Five Selected Tax Provisions of the Conference Energy Bill of 2003*, February 2004.

commercial reactors ran out at the end of 2003, but it continues in place for existing reactors. Both the House- and Senate-passed versions of H.R. 6 would extend the authorization of Price-Anderson for both commercial plants and DOE contractors through 2025, and the conference report would do the same.

Several provisions dealing with security at nuclear power plants were also included in the conference report. NRC would be required to conduct “force on force” security exercises at each nuclear power plant at least once every three years (as is its current policy), and would be required to revise the “design basis threat” that nuclear security forces must be able to defeat. Another measure would authorize NRC licensees, including guards at nuclear plants, to carry weapons, preempting some state restrictions. The conference bill would require fingerprinting of nuclear plant workers for criminal background checks. The security provisions are based on similar sections in the House-passed bill.

Authorization of \$1.25 billion for the design and construction of a nuclear-hydrogen cogeneration plant at the Idaho National Laboratory would be provided by the conference bill. The purpose would be to explore production of hydrogen fuel from nuclear energy as an alternative to natural gas, which is currently the main source of hydrogen. Similar authorizations were included in both the House- and Senate-passed versions of the bill. (For more information, see CRS Issue Brief IB88090, *Nuclear Energy Policy*.)

LEGISLATION

H.R. 6 (Barton)

Energy Policy Act of 2005. Introduced April 18, 2005. Among other provisions, the House bill would open up the Arctic National Wildlife Refuge (ANWR) to exploration and development, includes a “safe harbor” provision to protect methyl tertiary-butyl ether (MTBE) refiners from product liability suits, would establish a “refinery revitalization” program, and would permit the Federal Energy Regulatory Commission (FERC) to decide on the siting of liquefied natural gas (LNG) terminals. Passed by the House on April 21, 2005 (249-183). The Senate passed its own version of the bill on June 28, 2005 (85-12). Differences were resolved by conference committee July 26. The House passed the conference report (H.Rept. 109-190) July 28. The Senate approved (74-26) the conference report the next day, July 29.

H.R. 610 (Biggert)

A bill to provide for federal energy research, development, demonstration, and commercial application activities, and for other purposes. Would authorize roughly \$44.1 billion over five years for research of deep sea drilling, clean coal technology, nuclear energy, fusion technology, and high-performance computers. Would authorize funding to improve energy efficiency of vehicles and buildings. Introduced February 8, 2005, and referred to several House committees. Reported favorably by voice vote from the Committee on Science, February 10, 2005.

H.R. 705 (Gilchrist)

Automobile Fuel Economy Act of 2005. To amend Title 49, United States Code, to require phased increases in the fuel efficiency standards applicable to light trucks; to require

fuel economy standards for automobiles of up to 10,000 pounds gross vehicle weight; to increase the fuel economy of the federal fleet of vehicles, and for other purposes. Introduced February 9, 2005, and referred to House Subcommittee on Energy and Air Quality.

H.R. 1103 (Johnson)

Fuel Efficiency Truth in Advertising Act of 2005. Would direct EPA to update its test procedures for light-duty vehicles for the purpose of calculating vehicle fuel economy. Introduced March 3, 2005, and referred to House Committee on Energy and Commerce.

H.R. 1541 (Thomas)

Enhanced Energy Infrastructure and Technology Tax Act. To amend the Internal Revenue Code of 1986 to enhance energy infrastructure properties in the United States and to encourage the use of certain energy technologies, and for other purposes. Introduced April 12, 2005. Ordered to be reported (26-11), April 13, 2005.

S. 10 (Domenici)

Energy Policy Act of 2005. Includes provisions on electricity regulation and reliability, energy research and development, alternative fuels, and energy access to public lands. Introduced as an original bill and reported June 9, 2005, by the Committee on Energy and Natural Resources (S.Rept. 109-78). Ordered reported May 26 by a vote of 21-1. Text substituted for H.R. 6 June 14.

H.R. 6 (Tauzin) [108th Congress]

Enhances energy conservation and research and development, provides for security and diversity in the energy supply for the American people, and for other purposes. Introduced April 7, 2003. Passed House (247-175) April 11, 2003. Senate version passed (84-14) July 31, 2003. Reported from conference, November 17, 2003. Passed House (246-180) November 19, 2003. Motion to invoke cloture failed in the Senate (57-40), November 21, 2003.