CRS Issue Brief for Congress

Received through the CRS Web

Energy Policy: Legislative Proposals in the 109th Congress

Updated April 1, 2005

Robert L. Bamberger Resources, Science, and Industry Division

Carl E. Behrens Resources, Science, and Industry Division

CONTENTS

SUMMARY

MOST RECENT DEVELOPMENTS

BACKGROUND AND ANALYSIS

Ethanol and MTBE

Arctic National Wildlife Refuge (ANWR)

Electricity Restructuring

Fuel Economy

Renewable Energy and Fuels

Energy Efficiency and Conservation

Energy Tax Policy

The President's Hydrogen Fuel Initiative

Nuclear Energy

LEGISLATION

Energy Policy: Legislative Proposals in the 109th Congress

SUMMARY

The House Energy and Commerce Committee is scheduled to begin a full committee markup of comprehensive energy legislation the week of April 4, 2005. The committee has indicated that provisions in draft sections that have been released would increase domestic oil and gas production, impose mandatory electricity-transmission reliability standards, and provide funding for alternative sources of energy. Previously, on February 10, 2005, the House Science Committee reported H.R. 610, which includes less controversial research and development provisions that were part of the comprehensive legislation (H.R. 6) debated in the 108th Congress.

Yet to be determined is how costly the energy tax provisions of any comprehensive bill should be. 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 calls for only \$6.7 billion in energy tax credits.

The Administration's FY2006 budget request supports opening the Arctic National Wildlife Refuge (ANWR) to exploration and development. The budget projects 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 the next five years from leases in the Arctic National Wildlife Refuge (ANWR). On March 17, the Senate passed the budget

resolution (S.Con.Res. 18) after voting 49-51 the previous day to reject an amendment by Senator Cantwell to remove the ANWR provision. The House also passed its version of the budget resolution (H.Con.Res. 95) on March 17, without the ANWR provisions.

The most contentious provision of H.R. 6 in the 108th Congress was a "safe harbor" provision to protect methyl tertiary-butyl ether (MTBE) refiners from product liability suits, for which there was strong support in the House, but opposition in the Senate. Efforts to achieve some compromise have been unsuccessful.

Proposals to separate less controversial provisions from the comprehensive legislation were resisted by the House and Senate leadership during the 108th Congress. They argued that the conference version of H.R. 6 had been crafted as a careful balance of competing visions; breakup would leave more controversial provisions without leverage for compromise.

High crude oil and petroleum product prices are often the lever that spurs policy-makers to seek legislative initiatives to increase the supply of conventional fuels. However, the debate touches upon many other issues, including finding ways to promote the development and use of alternative and renewable fuels, to achieve improvements in efficiency of energy consumption, to assure greater reliability in the electric utility sector, and to review existing and possible new incentives in the tax system to promote change in how the nation uses energy. These and other issues will likely be addressed in any comprehensive legislation considered by the 109th Congress.

MOST RECENT DEVELOPMENTS

The House Energy and Commerce Committee is scheduled to begin a full committee markup of comprehensive energy legislation the week of April 4, 2005. The committee has indicated that provisions in draft sections that have been released would increase domestic oil and gas production, impose mandatory electricity-transmission reliability standards, and provide funding for alternative sources of energy. 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. Among the issues yet to be settled is how costly the energy tax provisions of any comprehensive bill should be. 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 calls for only \$6.7 billion in energy tax credits.

The FY2006 budget transmitted to Congress by the Administration supports opening the Arctic National Wildlife Refuge (ANWR) to exploration and development. The budget projects 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 from leases in the Arctic National Wildlife Refuge (ANWR); it would allocate \$2.0 billion in mandatory spending to comprehensive energy legislation and \$4.5 billion for energy tax incentives. On March 17, the Senate passed the budget resolution (S.Con.Res. 18) after voting 49-51 the previous day to reject an amendment by Senator Cantwell to remove the ANWR provision. The House passed its version of the budget resolution (H.Con.Res. 95) on March 17, without the ANWR provisions.

The House Committee on Resources is reported to have draft legislation that would establish a 16-member commission, the Commission on North America Energy Freedom. The commission would be charged with making recommendations that would enable the United States, Canada, and Mexico to be free of imported oil. The committee draft would also expand royalty relief to oil and gas producers drilling in federal waters.¹

BACKGROUND AND ANALYSIS

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. 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.

¹ Congressional Quarterly. House GOP Leaders Want to Create Panel to Reach Energy Self-Sufficiency by 2025. February 14, 2005.

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. Inventories of crude and some petroleum product inventories were already below year-earlier levels, and were continuing to decline or hold steady, raising the specter of home heating oil shortages if winter 2004-2005 proved to be a cold one. A major factor contributing to high prices was Hurricane Ivan, which rampaged through the Gulf Coast in mid-September, and temporarily shut down more than 70% of U.S. offshore crude production, affecting crude oil deliveries to refineries. Inventory levels of crude oil and petroleum products declined. By mid-March 2005, crude prices exceeded \$50/barrel.

The peak of these price increases in the fall, roughly \$55/barrel, did not meet or exceed in real terms historic highs for oil prices. 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. Not surprisingly, national energy policy received significant attention during the 108th Congress.

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. Discussion of breaking out less controversial provisions was resisted by the House and Senate leadership. They argued that the bill that had been crafted was a careful balance of competing visions; breakup would leave more controversial provisions without leverage for compromise. The main exception was that some energy tax incentives were 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).

Major concerns in the Senate were the cost of H.R. 6 — 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. While language to open up the Arctic National Wildlife

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].

Refuge (ANWR) to oil and gas development was not included in H.R. 6, the Republican leadership indicated that ANWR would be included in the budget resolution that is to come before the 109th Congress. At confirmation hearings on January 19, 2005, before the Senate Committee on Energy and Natural Resources, Samuel Bodman, the nominee for Secretary of Energy, indicated that he would press for passage of an energy bill that would include provisions to open ANWR to leasing and development.

The FY2006 budget transmitted to Congress by the Administration supports opening ANWR to exploration and development. The budget projects 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 also passed its version of the budget resolution (H.Con.Res. 95) on March 17, without the ANWR provisions.

In the meantime, the decline in domestic production has been partially offset by growing production from "deep water" fields in the Gulf of Mexico that now exceeds 900,000 barrels daily, or roughly 60% of all production from the Gulf. Deep water production is projected to reach 2.25 million barrels daily by 2010. The Minerals Management Service of the Department of the Interior has estimated potential deep water reserves of 56 billion barrels.³

Little in the conference version of H.R. 6 would have addressed price and supply issues in the near term — largely because there are very few policy options to address price volatility. To the extent that production and refining capacity exists, high prices can encourage additional supply. The Low Income Home Energy Assistance Program (LIHEAP) can provide financial support to households overwhelmed by high prices. In the event of a price increase caused by a shortfall in physical supply of crude or home heating oil, the Strategic Petroleum Reserve (SPR) and the Northeast Heating Oil Reserve (NHOR) might be tapped.

It is difficult to achieve widespread consensus on national energy policy. Constructing a balanced energy policy that will not undermine other competing and equally legitimate policy goals is a complex undertaking. There is controversy about the impacts of energy development on the environment, and policymakers have different positions about the extent to which tradeoffs should be risked. Because of the regional diversity of the United States, some policy options are not perceived to serve all regions of the nation advantageously. These considerations help to explain why the time-consuming crafting of a comprehensive bill in the 108th Congress was perceived to represent a fragile balance between competing interests.

The fashioning of comprehensive energy legislation is also made more difficult by the very price volatility that renews interest in national energy policy. A review of the course of energy prices since the time of the Arab oil embargo and first oil price shock in 1973

³ [http://www.gomr.mms.gov/homepg/offshore/deepwtr.html].

reveals that it is a more proximate characterization to see this 30-year period as one of general price and supply stability that is periodically broken by shorter episodes of supply disruption and price volatility. It is not so much that energy policy has failed to be responsive to crises; rather, during lengthy periods of stability and declining prices for conventional fuels, it has proven difficult to sustain certain policy courses that might help shield the nation from the occasional episodes of instability.

Draft comprehensive energy legislation (see [http://energycommerce.house.gov/108/energy_pdfs.htm]) was posted to the House Committee on Energy and Natural Resources website in mid-February, and H.R. 6 has been reserved by Representative Hastert to be the bill number when one is filed. It is unclear when this may be, or what the course of comprehensive energy legislation will be. The Senate Energy and Natural Resources Committee held hearings in early February 2005; Committee Chairman Pete Domenici indicated his intention that the committee complete a bill by April 2005. Senator Domenici also expressed openness to considering individual bills. The House Energy and Commerce Committee is scheduled to begin a full committee markup of comprehensive energy legislation the week of April 4, 2005. The committee has indicated that provisions in draft sections that have been released would increase domestic oil and gas production, impose mandatory electricity-transmission reliability standards, and provide funding for alternative sources of energy.

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.

Among the issues yet to be settled is how costly the energy tax provisions of any comprehensive bill should be. 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 calls for only \$6.7 billion in energy tax credits.

The House Committee on Resources is reported to have draft legislation that would establish a 16-member commission, the Commission on North American Energy Freedom. The commission would be charged with making recommendations that would enable the United States, Canada, and Mexico to be free of imported oil. The committee draft would also expand royalty relief to oil and gas producers drilling in federal waters.⁴

What follows is a summary of issues that have gained attention in the energy policy debate, with a summary of the debate in the 108th Congress and major provisions that were included in the omnibus energy legislation (H.R. 6) reported from conference. There were limited differences between H.R. 6 and S. 2095; these are noted where relevant.

⁴ Congressional Quarterly. House GOP Leaders Want to Create Panel to Reach Energy Self-Sufficiency by 2025. February 14, 2005.

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 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.

The omnibus energy bills 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, presumably ethanol. Consumption of ethanol in gasoline in 2002 was 2.1 billion gallons. Under the renewable fuel standard in H.R. 6, the amount required to be consumed would be 3.1 billion gallons in 2005 and 5.0 billion gallons by 2012. This would still be 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.

The most controversial measure in the bills was a so-called "safe harbor" provision from product liability lawsuits for producers of MTBE and renewable fuels. The measure was in the original House version of H.R. 6, and remained in the conference bill, where it was a major factor in the failure of the Senate cloture motion. It was dropped from S. 2095 in an attempt to get the bill through the Senate, but on the House side supporters of MTBE producers declared opposition to any bill that did not contain a safe harbor provision.

Arctic National Wildlife Refuge (ANWR). 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, and the debate over whether to open ANWR for leasing will likely be one of the major energy policy issues in the 109th Congress. The energy legislation passed by the House during the 108th Congress would have opened up ANWR, but the Senate bill would 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 supports opening ANWR to exploration and development. The budget projects 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 also passed its version of the budget resolution (H.Con.Res. 95) on March 17, without the ANWR provisions.

(For additional information, see CRS Issue Brief IB10136, *The Arctic National Wildlife Refuge: Controversies for the 109th Congress*, by Lynne Corn.)

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 Utilities 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 would have repealed PUHCA, and all contained some reliability measures. But issues of consumer protection, of market design and the role of FERC, and numerous other questions remained unresolved. (For additional information, see CRS Report RL32728, *Electric Utility Regulatory Reform: Issues for the 109th Congress*, by Amy Abel.)

Fuel Economy. Energy problems can be addressed by policies that affect the supply or demand for energy, or both; at issue since the Arab oil embargo in the mid-1970s is what sort of policy balance should be struck. One of the first initiatives designed to have a

significant effect on 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 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 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.

The provisions that were included in the omnibus energy bill reported from conference in the 108th Congress reflected a majority view that Congress should not set specific CAFE targets, and that the present structure of the fuel economy program might benefit from review and study. As reported from conference, the omnibus bill would have required such a study, would have prescribed several considerations that must be weighed by NHTSA in its determination of maximum feasible fuel economy, would have authorized \$2 million annually during FY2004-FY2008, and would have extended the fuel economy credit for the manufacture of alternative-fueled vehicles. The credit was extended in the Working Families Tax Relief Act of 2004 (P.L. 108-311).

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.⁵

Given the agreement achieved between the House and Senate on CAFE in the 108th Congress, it would seem unlikely that a more aggressive tack would be taken in any comprehensive bill, pending some review of the entire structure of the CAFE program. However, a few CAFE bills have been introduced. One issue over the years has been the test procedures that measure vehicle fuel economy. Consumers have noted that in-use fuel economy rarely meets rated fuel economy. One bill introduced in the 109th Congress, the Fuel Efficiency Truth in Advertising Act of 2005 (H.R. 1103), would direct the Environmental Protection Agency (EPA) to revise its test procedures, taking into account a number of changes in vehicle characteristics and use since the procedures were last changed. A test procedure that would bring rated fuel economy more into line with in-use fuel economy could make it more difficult for manufacturers to achieve compliance.

⁵ 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].

Interest has continued in studying whether the CAFE standards and program should be restructured. Among the issues have been the definitions and regulations for passenger cars and light duty trucks. Critics argue that the current system encourages manufacturers to nudge larger passenger vehicles into the light truck category and penalizes manufacturers who serve the market for the heavier vehicles in the light truck category. One bill introduced in the House (H.R. 705) would require that standards gradually apply to vehicles up to 10,000 pounds gross vehicle weight (GVW). Basing CAFE on vehicle attributes was offered as another policy option. NHTSA has the latitude to make changes in the CAFE program, and one report at the end of March 2005 indicated that NHTSA was close to issuing a rulemaking making changes to the structure of the CAFE program. (For additional information, see CRS Issue Brief IB90122, *Automobile and Light Truck Fuel Economy: The Cafe Standards*, by Robert Bamberger.)

Renewable Energy and Fuels. 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.

Another major issue was a renewable portfolio standard (RPS) to require electric utilities to increase the use of renewable fuels in electric power generation. The Bush Administration stated its opposition to the RPS provision in the Senate version of H.R. 6, noting concern that an RPS could raise consumer costs, especially in areas of the country where renewable resources are more difficult to provide. However, proponents of RPS cited an Energy Information Administration (EIA) report that found that the RPS provision in the Senate version of H.R. 6 would have a negligible impact on consumer electricity prices. Efforts to retain an RPS provision in the conference bill failed. (For additional information, see CRS Issue Brief IB10041, *Renewable Energy: Tax Credit, Budget and Electricity Production Issues*, by Fred Sissine.)

When it appeared that passage of an energy bill was unlikely, a number of renewable energy tax credits were added to other legislation and enacted as part of the Working Families Tax Relief Act of 2004 (P.L. 108-311) and the American Jobs Creation Act of 2004 (P.L. 108-357). For details, see the "Energy Tax Policy" section, below.

Energy Efficiency and Conservation. Energy efficiency and conservation issues were part of the debate over comprehensive energy legislation in the 108th Congress. The version of H.R. 6 reported out of conference included a number of tax incentives to promote conservation and efficiency. The bill would have legislated new energy efficiency standards for several consumer and commercial products and appliances. For other products and appliances, DOE would have been empowered to set new standards. Also, the bill would have provided increased funding authorizations for the DOE weatherization program and established a voluntary program to promote industrial energy efficiency. Critics of the bill argued that, overall, the incentives in the bill favored production incentives over conservation and efficiency initiatives.

Since the late 1970s, there have been some tax incentives to promote fuel switching and alternative fuels as a way to conserve gasoline and reduce oil import dependence. In contrast, tax incentives for energy efficiency and for electricity conservation have been rare, and generally short-lived. The House- and Senate-passed versions of H.R. 6 proposed some modest new tax incentives for energy efficiency. (For additional information, see CRS Issue

Brief IB10020, Budget, Oil Conservation, and Electricity Conservation Issues, by Fred Sissine).

Energy Tax Policy. Since the 106th Congress, proposals to significantly expand energy tax subsidies and incentives have been incorporated into comprehensive energy reform legislation, although none of the bills were enacted. With the expiration of some existing energy tax incentives, the 108th Congress enacted retroactive extension of several provisions as part of the Working Families Tax Relief Act of 2004 (P.L. 108-311). Congress included an expansion or liberalization of some of the more popular energy tax provisions in the American Jobs Creation Act of 2004 (P.L. 108-357). It also created some new energy tax incentives, discussed below. The Administration's FY2006 budget request calls for only \$6.7 billion in energy tax credits, and the cost of any tax package has been identified as a major issue for any comprehensive energy legislation considered in the 109th Congress.

P.L. 108-311 retroactively extended four energy tax subsidies: the renewable tax credit, suspension of the 100% net income limitation for the oil and gas percentage depletion allowance, the \$4,000 tax credit for electric vehicles, and the deduction for clean fuel vehicles (which ranges from \$2,000 to \$50,000). The tax credit and the suspension of the 100% net income limitation had each expired on January 1, 2004; they were retroactively extended through December 31, 2005. The electric vehicle credit and the clean-vehicle income tax deduction were being phased out gradually beginning on January 1, 2004. P.L. 108-311 arrests the phase-down — provides 100% of the tax breaks — through 2005, but resumes it beginning on January 1, 2006, when only 25% of the tax break will be available. (For more information, see CRS Report RL32265, *Expired and Expiring Energy Tax Incentives*.)

P.L. 108-357 contains several energy-related tax breaks:

- expansion of the renewable electricity credit to open-loop biomass, geothermal, solar, small irrigation power, and municipal solid waste facilities, and creation of a production tax credit for refined coal;
- liberalization of the tax treatment of electric cooperatives under a restructured electricity market;
- treatment of certain Alaska pipeline property as seven-year depreciation property (rather than 15 years under prior law) and extension of the 15% enhanced oil recovery credit to Alaska gas processing facilities;
- reform of the tax subsidies for fuel ethanol basically replacement of the excise tax exemption with an equivalent immediate tax credit and expansion of the credit to include biodiesel (at a higher rate for biodiesel made from virgin oils); liberalization includes allowance of the credits against the alternative minimum tax;
- creation of a new tax credit for oil and gas from marginal (small) wells; this credit is triggered when oil prices are below \$18/barrel (\$2/mcf for natural gas), which means that currently it would provide no benefits;
- repeal of the general fund component (4.3¢/gal.) excise tax on diesel fuel used in trains and barges;
- a \$2.10/barrel tax credit for production of low-sulfur diesel fuel and "expensing" of (basically, faster depreciation deductions for) the capital costs to produce such fuels; both tax subsidies are subject to limits.

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.

In addition, the conference report on H.R. 6 in the 108th Congress would have set a goal of producing hydrogen-fueled passenger vehicles by 2020. The Senate version of H.R. 6 would have required the production of 100,000 hydrogen-fueled cars by 2010 and 2.5 million vehicles by 2020 and annually thereafter.

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. Reauthorization of the Price-Anderson Act nuclear liability system has been one of the top nuclear items on the energy agenda. 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 commercial reactors ran out at the end of 2003, but it continues in place for existing reactors. Congress in the FY2005 Defense Authorization Act (P.L. 108-375) reauthorized the act for DOE contractors through 2006. Most of the energy bills considered in the 108th Congress, including the conference version of H.R. 6, would have extended authorization of Price-Anderson for both commercial plants and DOE contractors for 15 to 20 years.

Several provisions dealing with security at nuclear power plants were included in unpassed energy legislation in the last Congress. One measure would have authorized Nuclear Regulatory Commission licensees, including guards at nuclear plants, to carry weapons, preempting some state restrictions. Another would have provided training for National Guard and law enforcement personnel in responding to nuclear plant security threats.

Several bills would have authorized federal aid to encourage construction of new nuclear power plants. Measures such as federal loan guarantees and power purchase agreements were highly controversial. However, the conference agreement on H.R. 6 would have provided a tax credit of 1.8 cents per kilowatt-hour for electrical generation from up to 6,000 megawatts of new nuclear power capacity placed in service by 2020. Another provision was the proposed authorization of \$1.1 billion for the design and construction of a nuclear-hydrogen cogeneration project at the Idaho National Engineering and Environmental Laboratory. The purpose would be to explore production of hydrogen fuel from nuclear energy. Currently, natural gas is the main source for hydrogen fuel. (For more information, see CRS Issue Brief IB88090, *Nuclear Energy Policy*.)

LEGISLATION

H.R. 6 (Hastert)

This bill number has been designated as a "placeholder" for the text of comprehensive energy legislation to be inserted at a later date. Introduced January 4, 2005.

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. 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.