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Energy Policy: The Continuing Debate and Omnibus Energy Legislation (H.R. 6)

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LEGISLATION

Energy Policy: The Continuing Debate and Omnibus Energy Legislation (H.R. 6)

SUMMARY

On November 18, the House approved the conference report (246-180) on H.R. 6, the omnibus energy bill. On November 21, 2003, a cloture motion to limit debate in the Senate on H.R. 6 failed (57-40). Prior to the vote. Senate Majority Leader Frist indicated to the Senate that the legislation would not be remanded for further negotiation, nor would the majority bring individual sections of the bill to the floor for separate consideration. After the vote, he indicated that another vote on cloture would be scheduled in the days before Thanksgiving. However, on November 24, leadership staff indicated that negotiations to craft a compromise had been unsuccessful, and that the bill would receive no further attention during the First Session.

The Congressional Budget Office (CBO) issued a preliminary estimate November 18 that the conference report would increase direct spending by \$5.4 billion and decrease revenues by \$25.7 billion through 2013. CBO's estimate of discretionary spending (appropriations) that might result from the bill had not yet been completed. (See [http://energy.senate.gov/legislation/energyb ill2003/cbo_report.pdf]).

Debate in the Senate began on November 19 amidst controversy over several provisions. Substantial controversy has focused on the treatment of MTBE, an oxygenate certified for use under the Clean Air Act, but which has proven damaging to the environment. The conference bill provides a "safe harbor" provision to spare MTBE refiners from product liability suits, and would provide \$2 billion for assistance to MTBE producers. It would also provide \$3 billion over FY2004-2008 in remediation funds to states and cities. Opponents of the "safe harbor" provision argue that the costs will be considerably higher and will be borne by consumers. The bill would also ban the use of MTBE by the end of 2014, but gives the President the authority to void the ban.

The bill initially included \$16 billion in tax incentives over a ten-year period, but some argue that it will exceed \$23 billion when a final calculation is provided. The bill would also establish a tax credit of 1.8 cents per kilowatt-hour for electricity from new nuclear power plants placed in service before the end of 2020.

The electricity section would repeal the Public Utility Holding Company Act (PUHCA) and establish mandatory standards for interstate transmission. Standard market design (SMD) would be remanded to the Federal Energy Regulatory Commission (FERC); no rule would be allowed before the end of FY2006. The bill would grant eminent domain authority to the federal government to construct interstate power lines on these transmission corridors if the states did not act.

The conference bill does not authorize oil exploration, development, and production in ANWR. The bill does provide \$18 billion in loan guarantees for construction of an Alaskan natural gas pipeline. However, inclusion of a price floor was rejected and some believe this makes the likelihood of construction remote. The conference bill also authorizes annual appropriations to the National Highway Traffic Safety Administration (NHTSA) for rulemakings on corporate average fuel economy (CAFE). The bill does not include the renewable portfolio standard (RPS), which would have required that 10% of electric generation come from renewables by 2010.



MOST RECENT DEVELOPMENTS

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(The conference bill, like previous drafts, is posted on the Senate Committee on Energy and Natural Resources website and the House Committee on Energy and Commerce website.) (For a side-by-side of the Senate and House versions of H.R. 6, CRS Report RL32033, Omnibus Energy Legislation: Summary of H.R. 6 Non-tax Provisions. For a sideby-side of the tax provisions in the Senate and House versions of H.R. 6, see CRS Report RL32042, Energy Tax Incentives in the 108th Congress: A Comparison of the House and Senate Versions of H.R. 6 and the Senate Finance Committee Amendments. For a comparison with major provisions of S. 14, see CRS Report RL32078, Omnibus Energy Legislation: Comparison of Major Provisions in House- and Senate-Passed Versions of H.R. 6, Plus S. 14. EIA analysis of selected provisions of the energy legislation is available at [http://www.eia.doe.gov/oiaf/servicerpt/eleg/pdf/sroiaf(2003)04.pdf].)

BACKGROUND AND ANALYSIS

On November 17, 2003, House and Senate conferees approved an omnibus energy bill (H.R. 6). On November 18, the House approved the conference report (246-180). On November 21, 2003, a cloture motion to limit debate in the Senate on omnibus energy legislation (H.R. 6) failed (57-40) to pass. Another vote is expected during the week of November 24. Major issues addressed by the conference include:

! ANWR. The bill does not include language that would open up the Arctic National Wildlife Refuge (ANWR) to oil and gas development. The Housepassed bill included such language while the Senate bill did not. While the Administration and many members wanted to include ANWR, it became apparent to the bill managers that a bill with ANWR language would not pass the Senate.

- Ethanol. Treatment of ethanol was especially contentious. The conference text includes a mandate to increase ethanol production to 3.1 million gallons annually by 2005 and 5 million gallons by 2012. However, regions can opt out if the mandate will have economic repercussions, but loss of revenue to the highway trust fund is an excluded condition.
- MTBE. Another divisive issue has been the treatment of methyl tertiary butyl ether (MTBE), an oxygenate certified for use under the Clean Air Act, but which has proven damaging to the environment. The conference bill provides a "safe harbor" provision to spare MTBE refiners from product liability suits, and would provide \$2 billion for assistance to MTBE producers. It would also provide \$3 billion over FY2004-2008 in remediation funds to states and cities. Opponents of the "safe harbor" provision argue that the costs will be considerably higher and will be borne by consumers. The conference bill would also ban the use of MTBE by the end of 2014, but gives the President the authority to void the ban.
- 1 Tax Provisions. The bill initially included \$16 billion in tax incentives over a ten-year period, but some argue that it will exceed \$23 billion when a final calculation is provided. Incentives are targeted to encourage energy production, increased efficiency of residential and commercial buildings, increased use of renewables, and generation of electricity from biodiesel fuel. The bill would also establish a tax credit of 1.8 cents per kilowatt-hour for electricity from new nuclear power plants placed in service before the end of 2020.
- Electricity. In part, the electricity section would repeal the Public Utility Holding Company Act (PUHCA) and establish mandatory standards for interstate transmission. Standard market design (SMD) would be remanded to the Federal Energy Regulatory Commission (FERC); no rule would be allowed before the end of FY2006. The Department of Energy (DOE) would identify "transmission corridors" that require new construction or upgrading. The bill would grant eminent domain authority to the federal government for construction of interstate power lines on these transmission corridors if the states do not act.
- Hydrogen. The bill would authorize \$2.1 billion for research and development of hydrogen fuel and fuel cells over the course of FY2004-FY2008.
- ! *Natural Gas Pipelines.* The bill would provide \$18 billion in loan guarantees for construction of a natural gas pipeline from Alaska to Alberta, where it will connect to the existing Midwestern pipeline system.
- ! *CAFE*. The bill does not specify Corporate Average Fuel Economy (CAFE) levels, but would authorize \$2 million annually during FY2004-FY2008 to the National Highway Traffic Safety Administration (NHTSA) to conduct rulemaking as provided in current law.

- Renewable Portfolio Standard (RPS). The bill does not include an RPS. The Senate-passed bill included a 10% RPS target for power production. The Administration opposed it, citing concern about impact on power costs; however, a DOE report found that the impact would be negligible, largely offset by lower costs for natural-gas-fired electricity. A recent "dear colleague" letter of support for RPS was signed by 53 Senators. There is speculation that RPS could come up as a filibuster issue.
- Renewable Energy Production Tax Credit. The bill would extend the existing credit, which would otherwise expire on December 31, 2003, for three more years. It has been lauded as critical to cost-competitiveness for power production from certain renewable energy resources.
- ! *Energy Efficiency Standards.* The energy efficiency section legislates new efficiency standards for several consumer and commercial products and appliances. For certain other products and appliances, DOE would be empowered to set new standards.

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Since the Arab oil embargo in 1973-74, policymakers periodically have focused on energy policy. Most of the periods when energy policy has been the object of major legislative initiatives have been when uncertainty about the security of future energy supply has triggered a sharp increase in the price of energy. The current focus on energy policy was triggered by a rise in oil prices that began in the late spring of 1999. Rising prices during the winter of 2002-2003 had many underlying causes, including anticipation of the war with Iraq, and a general strike in Venezuela that began in late 2002 and curtailed as much as 1.5-1.6 million barrels per day of crude and product imports to the United States. Crude oil inventory in the United States fell sharply to make up for the shortfall from Venezuela. Refined product inventories also fell as a consequence of cold winter weather that has placed particular pressure on heating oil inventories.

Prices softened to roughly \$28 barrel (bbl) amid optimism about the course of the war with Iraq, the resumption of some production from Venezuela in February 2003, and a boost in oil production by Saudi Arabia to make up for tight supply in world markets. With the end of military options in Iraq with minimum damage to Iraqi oil fields, prices fell back to the mid-\$20 range and OPEC — in anticipation of the resumption of oil exports from Iraq — tightened quotas to forestall a glut in oil supply later in 2003. By the end of October, crude oil stocks — 27% below year-ago levels in August 2003 — were roughly on a par with year-earlier levels. Gasoline stocks were 1.3% lower than one year earlier, but distillate stocks were nearly 10% higher and appear well-poised for the winter heating season. Crude contract prices were around \$27/bbl going into November 2003.

(For an expanded background discussion about energy policy, see CRS Report RL31720, Energy Policy: Historical Overview, Conceptual Framework, and Continuing

Issues. For a review of short-term energy policy options to address a supply disruption and high energy prices, see CRS Report RL31676, *Middle East Oil Disruption: Potential Severity and Policy Options.*)

Several energy bills were reported from House committees on April 2, 2003. The House Energy and Commerce Committee reported energy legislation (H.R. 1644) by a vote of 36-17. The House Science Committee marked up legislation (H.R. 238) that would provide \$30 billion for DOE research and development (R&D) programs during fiscal years 2004-2007. The House Committee on Resources reported a bill, H.R. 39 (32-14), that would authorize exploration, development and production of oil in ANWR. On April 3, 2003, the House Ways and Means Committee passed (24-12) H.R. 1531, the Energy Policy Tax Act of 2003. The House bills were merged into H.R. 6, introduced on April 7, 2003, and the House passed H.R. 6, as amended, on April 11, 2003.

The House bill included several provisions that were part of comprehensive, but not enacted, energy legislation (H.R. 4) debated during the 107th Congress. These provisions touched upon energy efficiency and conservation, and clean coal technology. A separate bill in the 107th Congress would have reauthorized the Price-Anderson Act nuclear liability system; language to do so has been incorporated into H.R. 6. The bill passed by the House would have provided roughly \$15.5 billion in net energy tax incentives. The House bill also addressed a number of controversial issues left unresolved by the 107th Congress. It included an electricity title that would, in part, repeal the Public Utility Holding Company Act, would prospectively repeal the mandatory purchase requirement under the Public Utility Regulatory Policies Act, and would create an electric reliability organization. H.R. 6 would also have established a renewable fuels standard of 2.7 billion gallons by 2005 and 5 billion gallons by 2015.

The House version of H.R. 6 went to conference in September with the Senate version, passed on July 31 (84-14). The Senate debate had begun in May, and the Senate was working to pass a bill prior to the August recess. However, when the debate on S. 14 became mired and passage appeared unlikely, Senate Minority Leader Daschle suggested that the body pass the comprehensive energy legislation that the Senate had sent to conference in the 107th Congress. After several hours of discussion off the floor, both parties agreed to this proposal, and the text of the Senate version of last year's H.R. 4 was inserted into H.R. 6. (A summary of the debate on the unpassed S. 14 appears at the end of this issue brief.)

There were identical or similar provisions in both S. 14 and the substitute measure that the Senate passed as H.R. 6, but there were also significant differences. Both the House and Senate energy bills would have provided for an extension of the Price-Anderson nuclear liability program, and the bills either encouraged or required the National Highway Traffic Safety Administration (NHTSA) to initiate a rulemaking to establish new corporate average fuel economy (CAFE) standards. Both versions of H.R. 6 authorized construction of an Alaskan natural gas pipeline. However, the Senate bill required electric utilities to provide a minimum percentage of power from renewable sources; the House bill has no such provision. The Senate bill authorized R&D on global climate change; the House bill had no climate change provisions, nor did the draft conference language that was initially released. For a more complete description of the treatment of these and other issues in the two different bills, see CRS Report RL32078, *Omnibus Energy Legislation: Comparison of Major Provisions in House- and Senate-Passed Versions of H.R. 6, Plus S. 14*.

In the wake of the blackout on August 14, 2003, President Bush called upon Congress to pass an energy bill quickly. Some expressed the belief that the blackout has increased pressure to complete an energy bill this year.

Conferees on the House and Senate energy bills (H.R. 6) met on September 4, 2003. Senator Domenici indicated that he and Representative Tauzin would draft the bill and release sections for comment as they are developed. Senator Domenici expressed his belief that it was the periodic meeting of the conferees to discuss individual provisions that scuttled passage of an energy bill in the last Congress — and that the process he outlined would make expeditious passage of a bill more likely. His expressed objective was to complete the conference by October 1. In a letter to Senator Domenici on September 11, Senator Bingaman took vigorous exception to the process, arguing that excluding Democrats from the drafting process is not an effective way to build consensus.

On September 9, the Administration sent its own comments, urging inclusion of drilling in the Arctic National Wildlife Refuge (ANWR) and stating that it would like to see the conferees retain language that would provide for streamlined oil and gas permitting on public lands. Secretary of Energy Abraham indicated that the Administration would support a loan guarantee, rather than tax credits, to encourage construction of a natural gas pipeline from Alaska. The Administration would support a renewable fuel standard calling for a tripling in ethanol use. However, the Administration believes that both the House and Senate bills would set unrealistic targets for development of hydrogen-powered vehicles. The Secretary of Energy was explicit in calling for the conferees to reduce "excessive" spending on energy projects and research and development.

Domenici and Tauzin released draft sections as they were developed, and revisions of these sections — including some provisions suggested by Democrats — were released on September 29, 2003. On October 1, Domenici released a letter announcing that conference action on H.R. 6 would be delayed until the third week in October. This was attributed to the need for time to work on tax provisions. The Senator said that agreement was near on controversial sections; some believed consensus was proving more elusive.

In the intervening weeks, agreement between the House and Senate managers had been reported on a number of issues, but resolution of differences over the tax treatment of ethanol proved almost insurmountable until the White House proposed a compromise. Agreement was announced on November 5, 2003, to repeal the current 5.2 cents per gallon exemption for ethanol, and institute a tax credit in its place. The bill reported from conference on November 17 did not include the exemption, but adds new tax credits. Incentives for the construction of an Alaskan natural gas pipeline was provided. Inclusion of language extending deadlines for certain metropolitan areas to meet clean air deadlines has been cited as potentially injurious to passage of a final bill.

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a compromise had been unsuccessful, and that the bill would receive no further attention during the First Session. (The conference bill, like previous drafts, is posted on the Senate Committee on Energy and Natural Resources website and the House Committee on Energy and Commerce website.)

Some of the major energy issues that have been receiving attention during the debate in the 108th Congress are discussed briefly below.

The 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 or not to open ANWR for leasing continues after more than a decade. While the House bill would have opened up ANWR, the Senate bill did not. In a letter to Senator Domenici on September 11, 2003, Secretary of Energy Abraham indicated that the Administration would strongly like to see ANWR included in the conference bill. However, 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. (For additional information, see CRS Issue Brief IB10111, *The Arctic National Wildlife Refuge: Controversies for the 108th Congress.*)

Other Non-Tax Energy Production Initiatives. The Department of the Interior has estimated that roughly a quarter of oil resources and less than one-fifth of gas resources on Indian lands have been developed. H.R. 6, as passed by the House, included a controversial provision that would allow Indian tribes to enter into business agreements with energy developers without obtaining prior approval from the Department of the Interior, but only if DOI has already approved the tribe's regulations governing such energy agreements. The provision also absolved the United States from any liabilities for tribal losses stemming from such a business agreement, which tribes objected to. The Senate had a similar provision, as did S. 14, and the bill reported from conference includes many aspects of these bills' provisions. The bill retains the federal government's general Indian trust responsibility and a specific trust responsibility to protect tribal rights in cases of violations of tribal regulations or business agreements, but it absolves the federal government from liability for losses resulting specifically from the terms of a tribal energy business agreement.

Some critics of the proposal also argued that tribal energy business agreements without DOI approval could enable tribes to initiate projects without going through the environmental review required by the National Environmental Policy Act (NEPA). The Senate defeated an amendment to strengthen an environmental review process for development of energy projects on Indian lands (52-47). The bill reported from conference retains House language requiring that the tribal energy regulations include an environmental review process. The Senate version of H.R. 6 would establish a broader program than the House version, including the establishment of an Office of Indian Energy Policy and Programs. Among other provisions, the Senate bill would require the Secretary of Energy to report on "barriers to the development of renewable energy" resources on tribal lands. The bill reported from conference retains many Senate provisions but not the report on barriers to renewable energy development. The largest national Indian organization, the National Congress of American Indians (NCAI), opposes the bill because of the reduction in federal trust responsibility for tribal energy business agreements.

Alaska currently holds 30 trillion cubic feet of undeveloped proven natural gas reserves, about 18% of total U.S. reserves. Because these reserves are located on Alaska's North Slope, they have not been developed due to the very high cost of building and operating the transportation infrastructure to reach distant markets. There also was debate during the 107th Congress over whether construction of a natural gas pipeline to carry gas to the lower 48 states would require loan guarantees and other incentives and over the most desirable route for the pipeline. The energy legislation, H.R. 6, passed by the House on April 11, 2003, would have authorized construction of a natural gas pipeline from the Alaskan North Slope to the lower 48 states, but would have allowed the Federal Energy Regulatory Commission (FERC) — which must issue a certificate of convenience and necessity for construction of the pipeline — to consider only the southern route through Alaska to which conferees on omnibus energy legislation had agreed in the last Congress (H.R. 4). The Senate bill authorized the same pipeline, but also included loan guarantees of up to \$10 billion for The Administration raised potential problems with Canada over loan construction. guarantees for pipeline construction. The conference bill would provide \$18 billion in loan guarantees for pipeline construction. Efforts to include a price floor were defeated. Some argue that the absence of a price floor makes the likelihood of pipeline construction remote.

Energy Tax Policy. Work remaining to be done on the tax section of the energy bill was cited as one of the reasons for delays in scheduling a final conference meeting. As sent to conference, the bill was estimated to include \$18 billion in tax incentives. Some argue that once the calculations are at hand, the incentives will exceed \$23 billion in the bill reported from conference. The Administration had urged that the total cost of the tax provisions in the final bill be held to \$8 billion, significantly lower than either the House or the Senate bills.

The 108th Congress has been considering three bills to provide tax incentives to increase the supply of, and reduce the demand for, fossil fuels and electricity: the House version of H.R. 6, introduced as H.R. 1531 and approved by the House by a vote of 247-175; the Senate version of H.R. 6, which is the same as the energy bill H.R. 4 approved by the Senate in 2002, and a Senate Finance Committee (SFC) amendment to H.R. 6 (S.Amdt. 1424), which is a slightly modified version of S. 1149, the Energy Tax Incentives Act of 2003 approved by the SFC on May 23, 2003.

Each of the three bills would have provided a ten-year tax cut of about \$18 billion, although the mix of energy tax incentives differs. H.R. 6 as passed by the House provided about \$18.2 billion of energy tax incentives and includes just under \$0.1 billion (\$100 million) of non-energy tax increases, or offsets. The apportionment of tax savings in the House-passed H.R. 6 among the three categories — fossil fuels, energy efficiency, and alternative/renewable fuels — was the same as in the House bill in the last Congress (H.R. 4), but the absolute amounts of dollar cuts were much smaller. The Senate version of H.R. 6 included about \$13.2 billion in energy tax incentives over ten years, plus an additional \$5.1 billion in energy tax cuts (or revenue losses) due to mandates that would have further reduced energy tax receipts: the renewable portfolio standard — to require that electric utilities boost their use of renewable energy — and the renewable fuels standard. However, the renewable portfolio standard failed to make the final bill sent to the floors.

S. 1149, which was approved by the Senate Finance Committee on April 2, 2003, but not included in the Senate version of H.R. 6, would have provided about \$19.5 billion in

energy tax cuts, offset by about \$5 billion of non-energy tax increases — additional curbs on corporate tax shelters, limits on corporate and individual expatriates, and an extension of Internal Revenue Service user fees. Thus the net ten-year tax cut under S. 1149 would have been just over \$14.6 billion.

In general, the House version of H.R. 6 would have conferred a larger tax cut, both in absolute and relative terms, for fossil fuels production — particularly the oil and gas industry — and for electricity restructuring (or the production of electricity), and a smaller tax cut for energy efficiency and renewable/alternative fuels development than the other two bills. Also, the downstream tax incentives for oil and gas refining, distribution, and transportation were both absolutely and relatively larger in the House bill than either of the other two bills. In contrast, the Senate bills were absolutely and relatively more generous to renewable and alternative fuels. Also, these versions of the bills included substantial new tax breaks for investment in clean-coal technologies and for the generation of electricity from these technologies; the House version of H.R. 6 includes no incentives for clean coal technologies were additional incentives for that renewable transportation fuel, while the other two bills did.

Treatment of ethanol proved particularly controversial. A compromise was announced on November 5, 2003, after Vice President Cheney and the White House became involved in crafting a compromise. Departing from the compromise, the bill reported from conference did not repeal the current 5.2 cents per gallon exemption, and added new tax credits. (For more information, see CRS Report RL32042, *Energy Tax Incentives in the 108th Congress: A Comparison of the House and Senate Versions of H.R. 6 and the Senate Finance Committee Amendment.*)

Electricity Restructuring. Electricity was one of the most controversial issues yet to be resolved by negotiators on the energy bill. Historically, electric utilities have been regarded as natural monopolies requiring regulation at the state and federal levels. The Energy Policy Act of 1992 (EPACT, P.L. 102-486) removed a number of regulatory barriers to electricity generation in an effort to increase supply and introduce competition, but further legislation has been introduced and debated to resolve remaining issues affecting transmission, reliability, and other restructuring concerns. In part, the electricity section in the bill reported from conference would repeal the Public Utility Holding Company Act (PUHCA) and establish mandatory standards for interstate transmission. Standard market design (SMD) would be remanded to the Federal Energy Regulatory Commission (FERC); no rule would be allowed before the end of FY2006. The Department of Energy (DOE) would identify "transmission corridors" that require new construction or upgrading. The bill would grant eminent domain authority to the federal government for construction of interstate power lines if the states do not act.

The electricity section of the bill reported from conference would repeal the Public Utility Holding Company Act (PUHCA) and establish mandatory standards for interstate transmission. Standard market design (SMD) would be remanded to the Federal Energy Regulatory Commission (FERC); no rule would be allowed before the end of FY2006. The Department of Energy (DOE) would identify "transmission corridors" that require new construction or upgrading. The bill would grant eminent domain authority to the federal

government for construction of interstate power lines on these transmission corridors if the states do not act.

Title VI of H.R. 6, the House-passed version of omnibus energy legislation, provided for incentive-based transmission rates, allowed transmission owners in certain instances to exercise the right of eminent domain to site new transmission lines, allowed transmission owners that do not belong to a regional transmission organization to preferentially serve native load customers, created an electric reliability organization, and would have given new, but limited authority to the Federal Energy Regulatory Commission (FERC) over municipal and cooperative transmission systems. The House bill also repealed the Public Utility Holding Company Act (PUHCA) and gave FERC and state public utility commissions access to books and records, prospectively repealed the mandatory purchase requirement of the Public Utility Regulatory Policies Act of 1978 (PURPA), and required utilities to provide real-time rates and time-of-use metering. The House bill would also have established market transparency rules, explicitly prohibit round-trip trading, and significantly increase criminal penalties under the Federal Power Act.

In general, the Senate-passed version of the energy bill repealed PUHCA and gave FERC and the state utility commissions access to utility books and records. It also repealed the PURPA mandatory purchase requirement where FERC finds that a competitive electric market exists. In addition, the Senate-passed H.R. 6 gave FERC more review authority over certain electric utility mergers and increase the value of asset transfers that would trigger FERC review. It required FERC to apply cost-of-service rates when market-based rates are unjust, unreasonable, unduly discriminatory, or preferential; required an electric reliability organization to develop and enforce mandatory reliability standards; provided access to the transmission system for certain intermittent generators; created an Office of Consumer Advocacy within the Department of Justice; and gave states the authority to prescribe and enforce laws regarding the application of the Consumer Protection Subtitle.

On July 23, 2003, Senator Domenici announced that "bipartisan" agreement had been reached on a comprehensive electricity amendment that he would offer as an amendment to S. 14. This amendment was on the Senate floor when agreement was reached to send last year's energy bill to conference with H.R. 6. Its electricity section would have given FERC additional review authority over certain electric utility mergers; required FERC to apply cost-of-service rates when market-based rates are unjust, unreasonable, unduly discriminatory or preferential; required an electric reliability organization to develop and enforce mandatory reliability standards; provided access to the transmission system for certain intermittent generators; and given states the authority to prescribe and enforce laws regarding the application of the Consumer Protection Subtitle.

After the blackout on August 14, 2003, President Bush called upon Congress to enact an energy bill that includes electric reliability provisions. At the initial meeting of the conferees, Representative Dingell argued that the conference bill should include reliability provisions while other, more controversial provisions should be treated in separate legislation. (For additional information, see CRS Issue Brief IB10006, *Electricity: The Road to Restructuring*, or see the CRS Electronic Briefing Book: Electric Utility Restructuring, at [http://www.congress.gov/brbk/html/ebele1.shtml].) **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 are 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. The House version of H.R. 6 would reauthorize the Price-Anderson Act through August 1, 2017. The Senate version of H.R. 6 would extend it until 2012 for new reactors and indefinitely for DOE contractors. The conference committee on H.R. 6 would provide a twenty-year extension to the end of 2023. The nuclear industry contends that the system has worked well and should be continued, but opponents charge that Price-Anderson's liability limits provide an unwarranted subsidy to nuclear power. The conference report would also require the Nuclear Regulatory Commission (NRC) to issue new regulations on nuclear power plant security and to conduct force-on-force security exercises.

The energy bill first debated by the Senate, S. 14, would have authorized federal loan guarantees and power purchase agreements to aid construction of six or seven reactors that would add up to 8,400 megawatts to the current nuclear generation capacity of 98,000 megawatts. On June 10, 2003, an amendment to strike the federal nuclear assistance from the bill narrowly failed (48-50). The version of H.R. 6 ultimately passed by the Senate makes no provision for construction of commercial nuclear power plants. However, the conference agreement provides a tax credit of 1.8 cents per kilowatt-hour for electrical generation from up to 6,000 megawatts of new nuclear power capacity that is placed in service by 2020.

Another provision that was included in S. 14, but is not part of the Senate-passed version of H.R. 6, is an 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. There is no provision for this in the House version of H.R. 6. The conference language would provide \$635 million for the project during FY2004-2008, and "such sums as necessary" after 2008, plus \$500 million for construction.

Fuel Economy. Energy problems can be addressed on both the supply and demand side; at issue since the Arab oil embargo in the mid-1970s is what balance should be struck between policies affecting supply and demand. 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). In the years since, 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).

The 107th Congress lifted a prohibition on expenditure of appropriated funds by the National Highway Traffic Safety Administration (NHTSA) to undertake CAFE rulemakings. Subsequently, 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 bill reported from conference would require a CAFE study, would prescribe several considerations that must be weighed in determining maximum feasible fuel economy, would authorize \$2 million annually during FY2004-FY2008 for NHTSA rulemakings and CAFE analysis, and would extend the fuel economy credit for the manufacture of alternative-fueled vehicles.

H.R. 6, the omnibus energy bill passed in the House on April 11, 2003, also authorized appropriations to NHTSA to conduct rulemakings, and would have required a study on the feasibility and effects of reducing fuel use by automobiles. During markup in the House Committee on Energy and Commerce, an amendment by Representative Markey to require reductions of 5% in automotive fuel usage by 2010 and an additional 5% by 2015 was defeated (14-38). An amendment offered on the floor of the House to include only the 5% savings by 2010 was defeated (162-268) as well.

The Senate version of H.R. 6 also authorized NHTSA to determine by rule appropriate standards, as provided in current law. However, the Senate version of H.R. 6 retained an amendment that was approved on the Senate floor in 2002. The Senate language — originally passed before the latest NHTSA rulemaking — would have required NHTSA to issue new CAFE standards, except for "pickup trucks." This provision would have rolled back the standard for pickup trucks to 20.7 miles per gallon, the level in effect when the Senate first approved this language in 2002. The CAFE freeze on pickup trucks, which were undefined, could have shifted at least some of the burden for achieving fuel savings to the passenger automobile portion of the fleet. This language was not retained in the conference bill.

Some hailed as an alternative to tightening CAFE an amendment to S. 14 proposed by Senator Landrieu that was agreed to (99-1) by the Senate on June 9. The provision would have required the Administration to develop a plan to reduce U.S. oil consumption by 1 million barrels by 2013 from projected consumption levels. The amendment did not create any new authorities. Rather, it would have given the Administration the latitude to use currently existing authorities, including CAFE. Opponents of an increase in CAFE especially embraced the amendment because it required a significant reduction in petroleum consumption without necessarily using CAFE as one of the levers. Some have expressed disappointment that the Landrieu amendment is not in the bill reported from conference.

Currently, light truck fuel economy standards do not apply to vehicles above 8,500 pounds gross vehicle weight (GVW). Senator Feinstein has introduced legislation (S. 255) that, among other provisions, would expand the applicability of fuel economy standards to vehicles up to 10,000 pounds GVW. In the Senate Energy and Natural Resources Committee, an amendment to require light trucks and sport utility vehicles (SUVs) to achieve a CAFE of 27.5 mpg by MY2011 was defeated (15-7). (For additional information, see CRS Issue Brief IB90122, Automobile and Light Truck Fuel Economy: The Cafe Standards.)

The President's Hydrogen Fuel Initiative. The bill reported from conference would authorize \$2.1 billion for FY2004-2008 for the hydrogen initiative and establish a goal of producing hydrogen vehicles by 2020.

In his State of the Union Address on January 28, 2003, President Bush announced a new \$720 million research and development (R&D) 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 2010 that achieve double to triple the efficiency of today's conventional engines at a cost competitive with conventional engines. The Administration's FY2004 budget request would increase overall funding for research into hydrogen fuel, fuel cells, and vehicle technologies by about 30%. Some of this increase would be offset by funding reductions in other programs, but the majority will be new funding. H.R. 6 as passed by the House included language that would authorize the President's requested level of funding for the program in FY2004; the President's request was for an additional \$720 million over a period of five years from levels authorized for FY2003. An amendment in the House Science Committee to boost the funding level even more was defeated. However, the House Appropriations Committee elected to reduce hydrogen funding in the Energy and Water Appropriations Committee agreed to fully fund the President's hydrogen request for FY2004.

The Senate version of H.R. 6 required the production of 100,000 hydrogen-fueled cars by 2010 and 2.5 million vehicles by 2020 and annually thereafter. However, the Senate version did not authorize the President's requested funding increase for hydrogen. In a communication to Senator Domenici, the Administration expressed that the conferees should relax the timetables for hydrogen vehicles and fuel in the bill reported from conference, that the targets in the current bills were "unrealistic." These goals were dropped.

Critics of the Administration suggest that the hydrogen program is intended to forestall any attempts to significantly raise vehicle CAFE standards, and that it relieves the automotive industry of assuming more initiative in pursuing technological innovations. On the other hand, some will argue that it is appropriate for government to become involved in the development of technologies that are too costly to draw private sector investment. At issue for these policymakers will be whether or not 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*.)

Renewable Energy and Fuels. One of the most controversial provisions of the energy legislation debated during the 107th Congress was the establishment of a renewable fuel standard (RFS) intended to increase the use of ethanol. The bill reported from conference includes a mandate to increase ethanol production to 3.1 million gallons annually by 2005 and 5 million gallons by 2012. However, regions can opt out if the mandate will have economic repercussions, but loss of revenue to the highway trust fund is an excluded condition.

H.R. 6 as passed by the House included a renewable fuel standard (RFS) that would require the blending of 2.7 billion gallons of renewable fuel with gasoline in 2005. Most of this would be met with ethanol, but other renewable fuels, including biodiesel, would qualify. The required volume would rise to 5 billion gallons annually by 2015.

Proposals to eliminate methyl tertiary butyl ether (MTBE) were equally contentious. Its elimination is supported by the oil industry, ethanol producers, and environmental groups. However, critics argue that its elimination would boost prices to consumers and create shortages. The House version of H.R. 6 would have eliminated the current 2% oxygenate mandate for reformulated gasoline, but would not ban MTBE outright. As passed by the House, and like the Senate-passed version, H.R. 6 included the controversial "safe harbor" provision that would exempt producers from liability for damages resulting from the use of renewables, such as contamination of water supply. The House version of H.R. 6 would also have extended this protection to MTBE. Those opposed to an outright ban of MTBE argue that marketers should be allowed to choose to use ethanol in markets that are closest to storage and blending facilities, and that the key problem is not MTBE, but underground storage tanks that leak. Essentially, the differences to be resolved are geographical and not aligned by party, which has made agreement difficult to achieve.

The conference bill provides a "safe harbor" provision to spare MTBE refiners from product liability suits, and would provide \$2 billion for assistance to MTBE producers. It would also provide \$3 billion over FY2004-2008 in remediation funds to states and cities. Opponents of the "safe harbor" provision argue that the costs will be considerably higher and will be borne by consumers. The conference bill would also ban the use of MTBE by the end of 2014, but gives the President the authority to void the ban.

It was indicated early the week of September 29, 2003, that the final bill presented to the conference committee would not include a renewable portfolio standard (RPS). Nevertheless, a bipartisan "dear colleague" letter for RPS was signed by 53 Senators. Several Democrats, and some Republicans, have expressed strong objection to its exclusion, but an effort to include it in the bill reported from conference failed. An RPS would impose a requirement on electric utilities to increase the use of renewable fuels in electric power generation. In the 107th Congress, a 10% RPS provision was adopted (58-42) into the Senate version of H.R. 4, the omnibus energy bill. The same provision is in the Senate-passed version of H.R. 6. (While S. 14 did not include an RPS provision, S.Amdt. 1480 would have added one. For more background information on how the RPS works, see a CRS Memorandum on Renewable Energy Portfolio Standard, November 27, 2001.)

The Bush Administration stated its opposition to the RPS provision in the Senate version of H.R. 6, noting concern that it could "... raise consumer costs, especially in areas where [renewable] resources are less abundant and harder to cultivate or distribute." However, proponents of RPS have cited an Energy Information Administration's (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. (The EIA report has been posted on the web. For additional information, see CRS Issue Brief IB10041, *Renewable Energy: Tax Credit, Budget and Electricity Production Issues.*)

Also, the bill would extend the existing renewable energy production tax credit, which would otherwise expire on December 31, 2003, for three more years. It has been lauded as critical to cost-competitiveness for power production from certain renewable energy resources.

Energy Efficiency and Conservation. While the bill reported out of conference includes a number of tax incentives to promote conservation and efficiency, critics of the bill argue that incentives have been weighted toward energy production. The bill would legislate new energy efficiency standards for several consumer and commercial products and appliances. For certain other products and appliances, DOE would be empowered to set new

standards. Also, the bill provides increased funding authorizations for the DOE weatherization program and establishes a voluntary program to promote energy efficiency in industry.

Both the House- and Senate-passed versions of H.R. 6 directed DOE to issue a rule that "determines whether" an energy efficiency standard needs to be set for "standby mode" energy use by battery chargers and external power supplies. Further, DOE was directed to create voluntary programs to reduce standby mode energy use. The House and Senate versions also would have legislated standards for illuminated exit signs, torchieres, distribution transformers, and traffic signal modules, and direct DOE to set standards by rulemaking for suspended ceiling fans, vending machines, commercial refrigerators and freezers, and unit heaters. In these respects, the provisions in S. 14 as it reached the Senate floor, and H.R. 6 as passed by the Senate, were similar. As one point of difference, S. 14 would have also legislated a standard for medium base compact fluorescent lamps (CFLs). This provision was not in the Senate version of H.R. 6. However, in another point of difference, the Senate-passed version of H.R. 6 would have directed DOE to "amend" the energy efficiency standard for central air conditioners and heat pumps.

The House and Senate versions of H.R. 6 set goals for further energy efficiency in federal buildings. Although the baseline years and associated coverage periods have different dates, the provisions in the House and Senate versions of H.R. 6 were nearly identical, setting progressive annual 2% reductions over a 10-year period that end with a 20% reduction from baseline. Both bills also called for DOE to review results by the end of the 10-year period and recommend further goals for building energy savings for an additional decade. S. 14 had closely similar provisions.

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. Most of the provisions are similar in nature, but there are some differences in standards, percentage caps, and dollar caps. They cover new homes, existing homes, and combined heat and power (CHP). Also, both bills had tax incentives for alternative fuel vehicles and equipment. As one point of difference, the House-passed version of H.R. 6 had a provision for fuel cell power plants that is not in the Senate-passed version. As another point of difference, the Senate version of H.R. 6 would have provided a tax credit for manufacturers of certain appliances that exceed federal standards, and would create a tax deduction for efficient commercial buildings. These two provisions did not appear in the House-passed version. (For additional information, see CRS Issue Brief IB10020, *Budget, Oil Conservation and Electricity Conservation Issues.*)

An Overview of the Senate Debate on S. 14. On April 30, 2003, the Senate Energy and Natural Resources Committee ordered reported its own comprehensive energy legislation (13-10) (S. 14). It included a narrowly approved electricity section that would, among other provisions, "remand for reconsideration" a controversial proposal from FERC called standard market design (SMD), which would provide for the standardization of access and management of electricity transmission lines. The committee rejected a proposed amendment to require light trucks and sport utility vehicles (SUVs) to meet the same CAFE standards as passenger automobiles. The Senate bill would also have provided federal

support for the construction of nuclear power plants and provided loan guarantees for construction of an Alaskan natural gas pipeline. Unlike the House bill, the Senate legislation did not include a renewable fuels standard and did not include language to open up the Arctic National Wildlife Refuge to leasing.

Debate began on the Senate floor during the week of May 5, 2003, and the bill remained on the floor until June 12. Before debate was suspended in June, agreement was reached to limit the number of amendments. Negotiators tried to pare the nearly 400 proposed amendments. Senate staffers suggested that roughly three-fourths of these amendments were "second tier" and that about 70-100 amendments awaited disposition.

During the week of June 2, 2003, the Senate added a renewable fuels standard to S. 14 that would require refiners to blend at least 5 billion gallons annually of ethanol by 2012, a doubling of current U.S. ethanol production. Votes on June 3, 2003, decisively defeated amendments that would have allowed states to opt in to any renewable fuels program (34-62) and permitted the EPA Administrator to waive the ethanol mandate for states that already meet Clean Air Act standards (34-61). An amendment to exempt states on the East and West Coast and the Rocky Mountains from the ethanol mandate was defeated (69-26) on June 5, 2003. Also defeated was an amendment to drop language referred to as the "safe harbor provision" that extends a product liability waiver to ethanol producers (57-38). On June 5, 2003, the Senate also agreed by unanimous consent to an amendment to increase the funding authorization for the Low Income Home Energy Assistance Program (LIHEAP) to \$3.4 billion annually through FY2006.

When debate resumed on June 9, the Senate agreed to an amendment proposed by Senator Landrieu that would require the Administration to develop a plan to reduce U.S. oil consumption by 1 million barrels daily by 2013 from projected consumption levels. The amendment would not have created any new authorities, but gave the Administration the latitude to use any authorities, or combination of authorities, currently at its disposal to achieve the reduction.

On June 10, the Senate narrowly (48-50) defeated an amendment to drop language in S. 14 to authorize federal assistance for the construction of nuclear power plants. An amendment by Senator Dorgan that would require the production of 100,000 hydrogen-fueled cars by 2010 and 2.5 million vehicles by 2020 and annually thereafter was passed on June 10 (67-32). On June 11, the Senate voted to require a report from the Secretary of Energy on supply and demand for natural gas. A motion to table an amendment by Senator Feinstein to institute new controls in energy trading and markets passed (55-44). An amendment to establish an environmental review process for development of energy projects on Indian lands was defeated (52-47).

The Senate bill would also have required an inventory and analysis of oil and natural gas resources that may lie underneath the Outer Continental Shelf (OCS). Opponents of the survey argue that it is a veiled attempt to begin a process of ending the moratorium on development of the Florida and California OCS. An amendment proposed by Senator Graham to drop the language requiring the inventory was defeated (44-54).

S. 14 did not include an RFS. However, on June 5, 2003, the Senate agreed (67-29) to an amendment to establish a renewable fuels standard that would require refiners to blend

at least 5 billion gallons annually of ethanol by 2012, a doubling of current U.S. ethanol production. A number of second-degree amendments were defeated by significant margins. Votes on June 3, 2003, decisively defeated second-degree amendments that would have allowed states to opt in to any renewable fuels program (34-62) and permitted the EPA Administrator to waive the ethanol mandate for states that already meet Clean Air Act standards (34-61). An amendment to exempt states on the East and West Coast and the Rocky Mountains from the ethanol mandate was defeated (69-26) on June 5, 2003. Also defeated was an amendment to drop language referred to as the "safe harbor provision" that extends a product liability waiver to ethanol producers (57-38). The Senate accepted an amendment to broaden the ethanol program to include agricultural residues and waste products as feedstocks for ethanol production.

Debate resumed on S. 14 on July 24, 2003. Amendments pertaining to corporate average fuel economy (CAFE) were among the first order of business. The Senate agreed to an amendment that would have required the National Highway Traffic Safety Administration (NHTSA) to complete a CAFE rulemaking for both cars and light trucks by 2006. The next major piece of business was electricity. On July 23, 2003, Senator Domenici had announced that "bipartisan" agreement had been reached on a comprehensive electricity amendment that he offered as an amendment to S. 14. Several amendments to the electricity substitute were defeated just before the Senate debate stalled. It was at this point that Senator Daschle proposed that the Senate go back to, and pass, the energy bill (H.R. 4) agreed to during 2002. Both parties conferred off the floor, and during the evening of July 31, the Senate agreed (86-14) to substitute last year's H.R. 4 in the text of H.R. 6. The bill went to conference with the House.

A bill reported from the Senate Committee on Finance, S. 597, later designated as S. 1149, would have provided \$15.5 billion in net energy tax incentives. However, the version of H.R. 6 passed by the Senate on July 31 included the tax provisions included in H.R. 4 from 2002.

LEGISLATION

H.R. 6 (Tauzin)

To enhance energy conservation and research and development, to provide for security and diversity in the energy supply for the American people, and for other purposes. Incorporates H.R. 39, H.R. 238, H.R. 1531, and H.R. 1644. Introduced April 7, 2003; referred to several committees. Passed by the House, April 11, 2003. Senate version passed July 31, 2003 (84-14). 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.

S. 14 (Domenici)

A bill to enhance the energy security of the United States, and for other purposes. Introduced April 30, 2003; Chairman's Mark reported May 6, S.Rept. 108-43. For technical reasons, the Senate report read to accompany S. 1005; however, the debate referred only to S. 14. On July 31, 2003, the Senate suspended debate on S. 14, and substituted in H.R. 6 the text of the energy bill the Senate had passed in 2002 (H.R. 4).