270

Energy

Budget function 270 includes funding for the nondefense programs of the Department of Energy as well as for the Tennessee Valley Authority, rural electrification loans, and the Nuclear Regulatory Commission. The programs supported by this function are intended to increase the supply of energy, encourage energy conservation, provide an emergency supply of energy, and regulate energy production. CBO estimates that discretionary outlays for function 270 will be $3.1 billion in 2001. That amount continues a recent trend of lower funding levels for federal energy programs. Negative balances in mandatory spending for the function result from repayment of loans, receipts from the sale of electricity produced by federal entities, and charges for the disposal of nuclear waste.

Federal Spending, Fiscal Years 1990-2001 (In billions of dollars)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Estimate 2001
Budget Authority (Discretionary)	5.6	5.4	5.8	5.8	6.4	6.2	4.9	4.2	3.1	2.9	2.7	3.1
Outlays												
Discretionary	4.8	4.4	5.4	5.6	6.4	6.8	6.0	4.9	3.7	3.1	3.0	3.1
Mandatory	-1.4	-2.0	-0.9	-1.2	-1.2	-1.8	-3.1	-3.4	-2.4	-2.2	-4.0	-3.2
Total	3.3	2.4	4.5	4.3	5.2	4.9	2.8	1.5	1.3	0.9	-1.1	-0.1
Memorandum:												
Annual Percentage Change in Discretionary Outlays		-7.4	22.4	3.0	15.1	5.7	-11.9	-17.7	-24.4	-15.7	-5.4	4.7

270-01 Eliminate the Department of Energy's Applied Research for Fossil Fuels

	Savings (Millions of dollars) Budget Authority	Outlays
Relative to Current Appropriations		
2002	452	143
2003	541	366
2004	541	484
2005	541	522
2006	541	536
2002-2006	2,616	2,051
2002-2011	5,321	4,756
Relative to Inflated Appropriations		
2002	463	147
2003	567	380
2004	580	509
2005	592	559
2006	605	586
2002-2006	2,807	2,182
2002-2011	6,033	5,337

SPENDING CATEGORY:

Discretionary

RELATED OPTIONS:

270-02, 270-03, 270-04, 350-01, 350-04, REV-38, and REV-55

The Department of Energy (DOE) currently receives over $500 million in appropriations annually to improve the applied technologies for finding and using fossil fuels (petroleum, coal, and natural gas), including a $95 million grant program in 2001 for demonstration projects. Those programs were put into place when the prices of fossil fuels were controlled and, as a result, incentives for technology development were muted. In a world of partial deregulation and increasingly free energy markets, the value of federal spending for such research and development (R&D) programs is questionable. Eliminating both the research and the demonstration projects would save, over the 2002-2011 period, $4.8 billion relative to the 2001 funding level and $5.3 billion relative to that level adjusted for inflation.

Critics of the programs contend that deregulating prices in energy markets provides suppliers with sufficient incentives to develop better technologies and bring them to market. They argue that private entities are more attuned to which new technologies have commercial promise than are federal officials. Federal programs have had a long history of funding fossil-fuel technologies that, although interesting technically, had little chance of commercial feasibility, even after years of federal investment. As a result, much of the federal spending has been irrelevant to solving the nation's energy problems.

Critics of the programs also argue that DOE should concentrate on basic energy research and reduce the department's involvement in applied technology development. They contend that the federal government has a comparative advantage in developing the basic science for a new energy source but a comparative disadvantage in developing and demonstrating costly technologies.

Defenders of the applied research programs point to the continued development of fuel cell technology in these programs. Fuel cells, which have come down in cost, are just a few years away from displacing more conventional energy sources in a wide variety of markets: from cell phone batteries to household electrical use.

Defenders also argue that the programs help offset several existing failures in energy markets and therefore represent a sound investment for the nation. They say, for example, that current energy prices do not reflect the environmental damage done by the production and use of fossil fuels. Research that allows oil and gas to be extracted with less damage to the environment decreases the cost to society. In addition, current energy prices do not reflect the military and economic risks posed by reliance on oil from the Middle East. Those research programs could increase the efficiency of energy use and thereby reduce dependence on foreign oil. Although DOE’s R&D programs cannot correct market failures in the short term, they may moderate the consequences of such failures over the long term.

270-02 Eliminate the Department of Energy's Applied Research for Energy Conservation

	Savings (Millions of dollars)	
	Budget Authority	Outlays
Relative to Current Appropriations		
2002	501	125
2003	626	432
2004	626	576
2005	626	620
2006	626	626
2002-2006	3,005	2,379
2002-2011	6,135	5,509
Relative to Inflated Appropriations		
2002	513	128
2003	654	446
2004	668	604
2005	681	661
2006	695	681
2002-2006	3,212	2,520
2002-2011	6,906	6,143

SPENDING CATEGORY:

Discretionary

RELATED OPTIONS:

270-01, 270-03, 270-04, 270-08, 300-15, 350-04, and REV-55

RELATED CBO PUBLICATIONS:

Should the Federal Government Sell Electricity? (Study), November 1997.

Electric Utilities: Deregulation and Stranded Costs (Paper), October 1998.

In 2001, the Department of Energy (DOE) received appropriations of $626 million for programs to develop energy conservation technologies. Those efforts include the Partnership for a New Generation of Vehicles (discussed in option 270-08) for automobile research as well as industrial and residential energy-efficiency research. Federal agencies' involvement in the selection and development of near-commercial technologies raises questions about the appropriateness of the current division of labor between the public and private sectors. Eliminating these programs would save, over the 2002-2011 period, $5.5 billion relative to the 2001 funding level and $6.1 billion relative to that level adjusted for inflation.

Opponents of federal spending for energy conservation research and development (R&D) make several arguments. Generally, they argue that the federal government should stay out of the development of applied energy technology and concentrate on basic research in the underlying science. Specifically, they note that many projects funded through this research effort are small and discrete enough—and, in many cases, have a clear enough market—to warrant private investment. In such instances, DOE may be crowding out or preempting private-sector firms. In other instances, such programs conduct R&D that the intended recipients are likely to ignore—often because it is too expensive or esoteric to implement.

Critics of the programs also note that other federal policies encourage the introduction of some of the technologies. Utilities, for instance, are encouraged to subsidize consumers' purchases of conservation technologies by underwriting the purchase of efficient home appliances. In addition, the tax code favors investments in conservation technologies. Thus, federal R&D programs may duplicate other support.

Defenders of the programs argue that federal R&D in energy conservation helps offset several existing failures in energy markets. Current energy prices, they argue, do not reflect the damage to the environment from excessively relying on fossil fuels, including the potential for global warming. In addition, current energy prices do not reflect the military and economic risks posed by relying on oil from the Middle East. Energy conservation will decrease the social costs of producing and using energy and the dependence on foreign oil.

Furthermore, private R&D spending on energy conservation is small, most notably on energy efficiency for buildings, opening up a role for federal investment. Defenders of DOE's programs encourage cost sharing in some industrial grants, which raises the rate of private R&D in the field.

(Because energy conservation R&D and the Partnership for a New Generation of Vehicles overlap, the savings from eliminating both programs would be less than the sum of the figures for the two options. In addition to its own energy conservation programs, DOE separately provides grants to state and local agencies for energy conservation. Those grants are discussed in option 270-04.)

270-03 Eliminate the Department of Energy's Applied Research for Solar and Renewable Energy Sources

	Savings (Millions of dollars) Budget Authority	Outlays
Relative to Current Appropriations		
2002	298	75
2003	373	257
2004	373	343
2005	373	369
2006	373	373
2002-2006	1,790	1,417
2002-2011	3,655	3,282
Relative to Inflated Appropriations		
2002	306	76
2003	390	266
2004	398	360
2005	406	394
2006	414	406
2002-2006	1,914	1,502
2002-2011	4,103	3,647

SPENDING CATEGORY:

Discretionary

RELATED OPTIONS:

270-01, 270-02, 270-04, 270-08, 350-01, 350-04, REV-38, and REV-55

In 2001, the Department of Energy (DOE) received appropriations of $373 million to spend on research and development (R&D) for solar and other renewable energy sources. The largest technology development efforts by far are those for developing alternative liquid fuels from biomass and electricity from photovoltaic cells. Smaller efforts involve electric energy storage and wind energy systems. Eliminating this research would save, over the 2002-2011 period, $3.3 billion relative to the 2001 funding level and $3.6 billion relative to that level adjusted for inflation.

Opponents of federal support for such research argue that the federal government should stay out of the development of applied energy technology and concentrate on basic research in the underlying science. Federally sponsored researchers lack the complex market feedback that helps researchers in private companies realize when their technologies become too esoteric or expensive for the market.

Another criticism shared by DOE's conservation R&D programs (discussed in option 270-02) is that many of the research projects funded by the renewable energy program are sufficiently small and discrete and have a clear enough market to attract private funding. (Of course, many of the alternative energies developed were simply not economical during the period when oil prices were low.)

Several renewable energy technologies—most notably wind power and photovoltaic cells—are now at the heart of commercial markets. Wind energy, for instance, currently constitutes a $4 billion market and is growing by 25 percent per year. Similarly, the photovoltaic market is growing at between 15 percent and 20 percent per year, and U.S. firms are maintaining their technological leadership. In such cases, it may be time for an orderly withdrawal of federal support. Given the large U.S. venture capital market, continued federal support may be displacing private funding.

Finally, critics explain that for liquid fuels derived from renewable resources, especially biomass, the federal tax code already provides incentives for developing the technology. Ethanol fuels receive special treatment under the federal highway tax (see option REV-38). Furthermore, federal regulations authorized by many different statutes favor alcohol fuels, which now usually mean those that are corn-based.

Advocates believe DOE’s programs have been a technical success and represent a hedge against increases in energy prices. One recent analysis showed that many of the technologies had indeed met their goals to lower costs, although they were not used because costs for conventional energy sources had fallen by even more. Should energy prices rise further, however, these new energy sources could gradually come into wider use.

Defenders of the programs also argue that the energy prices consumers pay fail to incorporate both the environmental and national security risks posed by the nation's dependence on fossil fuels. Furthermore, the United States plays the role of international R&D laboratory for less developed countries, which often have much higher energy costs.

270-04 Eliminate Energy Conservation Grant Programs

	Savings (Millions of dollars)	
	Budget Authority	Outlays
Relative to Current Appropriations		
2002	153	38
2003	191	132
2004	191	176
2005	191	189
2006	191	191
2002-2006	917	726
2002-2011	1,872	1,681
Relative to Inflated Appropriations		
2002	156	39
2003	200	136
2004	204	184
2005	208	202
2006	212	208
2002-2006	980	769
2002-2011	2,101	1,868

SPENDING CATEGORY:

Discretionary

RELATED OPTIONS:

270-01, 270-02, 270-03, and 300-15

RELATED CBO PUBLICATIONS:

Should the Federal Government Sell Electricity? (Study), November 1997.

Electric Utilities: Deregulation and Stranded Costs (Paper), October 1998.

Weatherization assistance grants supported by the Department of Energy's (DOE's) Office of State and Community Programs help low-income households reduce their energy bills by funding such activities as installing weather stripping, storm windows, and insulation. Institutional conservation grants supported by the office help reduce the use of energy in educational and health care facilities by adding federal funds to private and local public spending to encourage local investment in improvements to buildings. The Office of State and Community Programs also supports the energy conservation programs of states and municipal governments that, for example, establish energy-efficiency standards for buildings and promote public transportation and carpooling.

This option would halt new appropriations for DOE's grant programs that support energy conservation activities by the states. Implementing this option would save, over the 2002-2011 period, $1.7 billion relative to current appropriations and $1.9 billion relative to current appropriations adjusted for inflation.

Critics of those programs question whether they actually work and whether the conservation actions they call for are not already promoted by other programs or laws, such as the Clean Air Act Amendments of 1990. The DOE programs are independent of a similar block-grant activity, the Low Income Home Energy Assistance Program, administered by the Department of Health and Human Services. Moreover, federal support for reducing the use of gas and coal through conservation grants for security or environmental needs conflicts with other federal policies that promote the production and use of those fuels.

Proponents of continuing the grant programs claim that eliminating them could impose hardships on states that wish to continue their energy conservation efforts. Many states still rely heavily on such grants to help low-income households and public institutions. In addition, the voluntary energy savings those programs effect could contribute to reducing greenhouse gas emissions. Such considerations may result in continued federal support for the energy conservation grants.

270-05 Eliminate Electrification and Telephone Credit Subsidies Provided by the Rural Utilities Service

	Savings (Millions of dollars)	
	Budget Authority	Outlays
Relative to Current Appropriations		
2002	52	12
2003	55	22
2004	55	32
2005	55	43
2006	55	49
2002-2006	272	158
2002-2011	547	422
Relative to Inflated Appropriations		
2002	53	13
2003	58	23
2004	60	35
2005	61	46
2006	62	54
2002-2006	295	171
2002-2011	631	483

SPENDING CATEGORY:

Discretionary

RELATED OPTIONS:

270-06, 270-07, 270-11, 450-01, REV-40, REV-45, and REV-46

RELATED CBO PUBLICATIONS:

Should the Federal Government Sell Electricity? (Study), November 1997.

Electric Utilities: Deregulation and Stranded Costs (Paper), October 1998.

The Rural Utilities Service (RUS) is an agency within the Department of Agriculture that, among other activities, offers financial assistance through subsidized loans and grants to electric and telephone companies serving primarily rural areas. Because electric and telephone services are now well-developed in rural areas, questions have arisen as to whether those subsidies should continue to be offered. This option would eliminate the credit subsidies provided through loans for electrification and telephone service that were previously administered by the Rural Electrification Administration, the RUS's predecessor. (Potential savings from cutting other programs of the RUS are described in option 450-01.)

For 2001, the RUS's subsidies to electric and telephone companies total about $41 million. In addition, the agency spends nearly $35 million per year administering those programs. Eliminating the credit subsidies for loans made or guaranteed by the RUS and appropriations used to administer new loans would save, over the 2002-2011 period, $422 million relative to current appropriations and $483 million relative to current appropriations adjusted for inflation.

Those savings would result from discontinuing lending and requiring the RUS's borrowers to use private sources of capital for their loans. Alternatively, the RUS could continue a federal loan program but eliminate subsidies. A loan program with no subsidy costs would require raising the interest rates on loans to rural electric and telephone companies to the level of the Treasury's cost of borrowing; it would also mean charging small loan origination fees to cover the costs of defaults for certain classes of loans.

Critics of the RUS's loan program argue that it has outgrown its original mission and that eliminating it would have little effect on utility rates. Most of the communities that the RUS subsidizes today have more than 1,500 inhabitants, which was the original limit for receiving assistance. Furthermore, more than 95 percent of the rural United States has electric service today. Rates would be largely unaffected because the cost of interest constitutes only a small percentage of the typical customer's bill.

Proponents of the RUS claim that many borrowers still depend on federal loans to maintain and expand utilities. Increasing the interest rates or charging origination fees on some loans would raise the rates that such borrowers charge their customers. Borrowers argue that they need some level of subsidization to keep their service and utility rates comparable with those in urban areas.

270-06 Restructure the Power Marketing Administrations to Charge Higher Rates

	Savings (Millions of dollars)	
	Budget Authority	Outlays
2002	0	0
2003	140	140
2004	140	140
2005	140	140
2006	140	140
2002-2006	560	560
2002-2011	1,260	1,260

SPENDING CATEGORY:

Mandatory

RELATED OPTIONS:

270-05, 270-07, 270-11, 920-06, REV-40, REV-45, and REV-46

RELATED CBO PUBLICATION:

Should the Federal Government Sell Electricity? (Study), November 1997.

The three smallest power marketing administrations (PMAs) of the Department of Energy—the Western Area Power Administration, the Southwestern Power Administration, and the Southeastern Power Administration—sell about 1 percent of the nation's electricity. Those PMAs sell power at below-market rates.

The power generated by the PMAs comes largely from hydropower facilities that the Army Corps of Engineers and the Bureau of Reclamation have built and continue to operate. Current law requires that those sales be made at cost—a pricing structure intended to ultimately reimburse taxpayers for all of the costs of current operations and a share of the costs of construction and interest on the portion of total costs that has not been repaid. Interest charges are generally below the government's cost of borrowing. Those lower charges, along with the low cost of generating electricity from hydropower, result in power rates for customers that are significantly below the rates that other utilities charge. Current law also requires that PMAs first offer their power to rural electric cooperatives, municipal utilities, and other publicly owned utilities.

Restructuring would require that those three PMAs sell electricity at market rates to any wholesale buyer. Those higher rates would bring in about $140 million in 2003 and increase total receipts by about $1.3 billion through 2011.

Opponents maintain that the rationale for federal power subsidies is weak. The market power of private utilities is checked by federal and state regulation of the power supply; by federal antitrust laws; and, increasingly, by competition from independent producers. In many cases, neighboring communities—some receiving federal power and some not—have similar characteristics. For households in the regions that the three PMAs serve, federal sales of power meet only a small share of their total power needs; therefore, the impact of increased federal rates on households' electricity costs would be small. In addition, bolstering the case for increasing power rates now is the prospect of significant future costs for the PMAs to perform long-deferred maintenance and upgrades. Finally, selling power at below-market rates encourages inefficient use of energy.

Supporters of the federal power program believe that restructuring could greatly increase electricity rates for the many small and rural communities served by PMAs. Supporters also argue that continuing low-cost federal power is necessary to counter the uncompetitive practices of investor-owned utilities and to bolster the economies of certain regions of the country.

270-07 Sell the Southeastern Power Administration and Related Power-Generation Equipment

	Savings (Millions of dollars)	
	Budget Authority	Outlays
2002	0	0
2003	0	0
2004	1,800	1,800
2005	-128	-128
2006	-130	-130
2002-2006	1,542	1,542
2002-2011	853	853

SPENDING CATEGORY:

Mandatory (excludes discretionary savings for operations)

RELATED OPTIONS:

270-05, 270-06, 270-11, 920-06, REV-40, REV-45, and REV-46

RELATED CBO PUBLICATIONS:

Should the Federal Government Sell Electricity? (Study), November 1997.

Electric Utilities: Deregulation and Stranded Costs (Paper), October 1998.

The Southeastern Power Administration (SEPA) of the Department of Energy sells electricity that comes from hydropower facilities that the Army Corps of Engineers has constructed and operates. SEPA pays private transmission companies to deliver that power to over 300 wholesale customers: rural cooperatives, municipal utilities, and other publicly owned utilities. Selling federal power assets would be consistent with the policy goal of increasing efficiency in energy markets.

SEPA's power rates are designed to recover for taxpayers all of the costs of current operations, a share of the costs of construction, and a nominal interest charge on the portion of the total costs that has not yet been recovered. The average revenues from SEPA power (for sales other than to the Tennessee Valley Authority) are about 3.5 cents per kilowatt-hour (kWh), compared with average revenues in the region of 4.0 cents per kWh.

Selling assets that directly support SEPA's supply of electricity would save about $1.5 billion over the 2002-2006 period. That estimate reflects sale proceeds of about $1.8 billion minus a loss of receipts for that period of about $130 million annually. Over the 2002-2011 period, savings would total $853 million. Those figures do not include discretionary budgetary savings of about $75 million annually from ending appropriations to SEPA and the Corps for operations. The estimate of sale proceeds is based on recent sales of hydroelectric assets in the United States. The Corps's assets that would be transferred include equipment, such as turbines and generators, but not the dams, reservoirs, or waterside properties. The sale would also include rights of access to that equipment and to the water flows necessary for power generation, subject to the constraints of competing uses of the water.

The original reasons for establishing SEPA—marketing low-cost power to promote competition and fostering economic development—are no longer compelling to many people because of the small amount of power that SEPA sells and because of competitive and regulatory constraints on power rates. Also, selling federal facilities does not mean transferring all functions in managing and protecting the water as a resource. The Corps could retain direct responsibility for managing water flows for all uses, including the upkeep of basic physical structures and surrounding properties. Or, as with other nonfederal dams, the terms of the federal licenses to operate the facilities (issued by the Federal Energy Regulatory Commission) could determine the management of water flows for competing purposes.

Proponents of maintaining federal ownership believe that nonfederal entities lack the proper incentives to perform all of SEPA's functions. Many Corps facilities serve multiple purposes, managing water resources for navigation, flood control, or recreation as well as for power generation. Proponents also argue that selling SEPA could increase power rates. Although sales by SEPA meet only about 1 percent of the total power needs in the 11 states where it operates, a few communities depend heavily on SEPA.

270-08 Eliminate Federal Funding for the Partnership for a New Generation of Vehicles

	Savings (Millions of dollars)	
	Budget Authority	Outlays
Relative to Current Appropriations		
2002	196	55
2003	239	165
2004	239	218
2005	239	233
2006	239	236
2002-2006	1,152	907
2002-2011	2,347	2,092
Relative to Inflated Appropriations		
2002	200	56
2003	249	170
2004	254	228
2005	259	248
2006	264	256
2002-2006	1,226	958
2002-2011	2,622	2,314

SPENDING CATEGORY:

Discretionary

RELATED OPTIONS:

270-01, 270-02, 270-03, 300-15, REV-38, REV-50, and REV-55

The Partnership for a New Generation of Vehicles (PNGV) is a joint federal/private research effort focusing on energy-efficient vehicles. The partnership draws on the resources of several federal agencies, most notably the Department of Energy (DOE). Over the 2002-2011 period, eliminating the program would save $2.1 billion relative to current appropriations and $2.3 billion relative to those appropriations adjusted for inflation. (Because the PNGV and DOE's energy conservation programs—discussed in option 270-02—are related, the savings from eliminating both of them would be less than the sum of the figures for the two options.)

Critics of the PNGV argue that instead of using general tax revenues to support applied research, the federal government could more effectively increase the efficiency of the nation's automotive fleet by raising gasoline taxes, user fees, or both for vehicles that get low mileage per gallon of fuel. Critics also point out that the program may not reach its goal of creating a production-ready vehicle by 2004. Further, both the prospect of tougher emissions standards in the future as well as recent advances in fuel cell technology call into question the long-term viability of the hybrid (that is, diesel and electric) motor used in PNGV automobiles. Competitive pressures also raise doubts about the PNGV's usefulness. Both Honda and Toyota have begun marketing high-mileage cars in the United States. If those efforts succeed, then domestic automakers should have sufficient commercial incentive to continue their research and hence should no longer need federal support. Finally, critics contend that because the federal contribution to the PNGV has, to date, accounted for only a small fraction of total spending on research and development by participating automakers, those firms could probably finance such efforts privately.

Proponents of the PNGV argue that imperfections in energy markets and environmental considerations make it desirable for government policy to encourage energy-efficient technologies. Although sport utility vehicles, minivans, and pickups have more than doubled their market share since 1983, claiming 46 percent of the U.S. market in 1999 (and demonstrating consumers' relative lack of enthusiasm for high-mileage vehicles), the PNGV program conducts research that could contribute to the production of desirable high-mileage vehicles. Given the uncertainty surrounding future energy prices and environmental conditions, levying taxes or user fees to reduce fuel consumption could impose a burden on consumers that outweighed eventual benefits. From this perspective, funding research through the PNGV program may constitute a better alternative for ultimately reducing fuel consumption.

270-09 Sell Oil from the Strategic Petroleum Reserve

	Savings (Millions of dollars)	
	Budget Authority	Outlays
2002	293	293
2003	357	357
2004	364	364
2005	373	373
2006	383	383
2002-2006	1,771	1,771
2002-2011	1,901	1,901

SPENDING CATEGORY:

Mandatory

RELATED CBO PUBLICATION:

Rethinking Emergency Energy Policy (Study), December 1994.

The Strategic Petroleum Reserve (SPR) is a government-owned stock of crude oil that was first authorized in 1975 to help safeguard the nation against the threat of a severe disruption of oil supplies. The threat of politically motivated disruptions has diminished since then, and the reserve has recently been called upon to help manage prices.

Consisting of four underground sites along the Gulf of Mexico, the SPR currently holds about 550 million barrels of oil. The Department of Energy (DOE) can draw from the SPR a maximum of about 4 million barrels per day (20 percent of the nation's current petroleum use) for 90 days. The department has released large quantities of oil only twice—during the Persian Gulf War and in fall 2000 in response to a tight oil market. The government's net investment in the SPR is about $16 billion for oil and about $4 billion for storage and transportation facilities. At a price of $25 per barrel, that oil would be valued at about $14 billion.

This option would require DOE to reduce the size and excess capacity of the SPR by closing the smallest storage site, Bayou Choctaw, and selling the site's 71 million barrels of oil over a five-year period. It would place at least 10 million but no more than 20 million barrels on the market each year to minimize the impact on world oil prices. The Congressional Budget Office estimates that receipts from the oil sales would total $1.9 billion over the 2002-2011 period, and appropriations for operating the reserve could be reduced after the site was decommissioned toward the end of the decade. The option conforms with past Congressional actions: in 1996 and 1997, the Congress directed DOE to sell SPR oil to offset spending on the reserve and other programs. In the past year, DOE boosted the SPR's holdings even though there was no Congressional appropriation for purchases. In one case, royalties owed to the federal government by private companies were taken in oil, rather than cash, and diverted to the reserve. In another case, DOE engaged in physical swaps.

The argument for reducing the SPR is supported by changes in the reserve's benefits and costs since 1975. Structural changes in energy markets and the economy at large have reduced the potential costs of a disruption of oil supplies and consequently the benefits from releasing oil in a crisis. The increasing diversity of world oil supplies and the growing integration of the economies of oil-producing and oil-consuming nations also lessen the risk of such disruptions. Moreover, DOE's experience in its Persian Gulf War sale and other recent sales indicates that the process of deciding to release oil and the sales mechanism can contribute to market uncertainty, diminishing the benefits of a release. The rising costs of maintaining the SPR also strengthen the case for this option: many of the SPR's facilities are aging and have required unanticipated spending for repairs.

Arguments against closing the site and selling the oil stress logistical and pricing concerns. Closing Bayou Choctaw could reduce DOE's flexibility in distributing oil from a drawdown, especially in the Mississippi Valley. Another argument against this option concerns the effect of selling SPR oil on domestic oil producers, which prompted the Congress to repeal legislation in 1998 requiring oil to be sold.

270-10 Eliminate the Analysis Function of the Energy Information Administration

	Savings (Millions of dollars) Budget Authority	Outlays
Relative to Current Appropriations		
2002	7	4
2003	9	8
2004	9	9
2005	9	9
2006	9	9
2002-2006	43	40
2002-2011	88	85
Relative to Inflated Appropriations		
2002	7	4
2003	9	9
2004	10	10
2005	10	10
2006	10	10
2002-2006	46	42
2002-2011	99	95

SPENDING CATEGORY:

Discretionary

RELATED OPTIONS:

350-01 and 350-04

The Energy Information Administration (EIA), created by the Congress in 1977, is an independent statistical agency of the Department of Energy. EIA has two missions. One is to collect and publish data on energy resources and reserves, production, demand, and technologies, as well as related financial and statistical information on the adequacy of energy resources in meeting U.S. demand. The other is to provide analyses of those subjects. Questions about the appropriateness and current need for the analyses underlie this option. Eliminating the analysis function, which includes energy forecasting, would save $4 million in 2002 out of EIA's total budget of $76 million. Over the 2002-2011 period, this option would save $85 million relative to current appropriations and $95 million relative to current appropriations adjusted for inflation.

The Congress created EIA when many people thought that the United States would deplete its reserves of fossil fuels. Because that concern has been alleviated, some argue that eliminating EIA's analysis function is appropriate. Furthermore, some critics of EIA assert that analyses that support policy decisions are already done by academicians, the Department of Energy's Policy Office, the Congressional Research Service, and the General Accounting Office. In addition, some critics note that industry's willingness to fund specific research activities through trade associations, such as the American Petroleum Institute and the Edison Electric Institute, suggests that EIA is providing a service that the private sector would perform on its own.

EIA supporters maintain that an independent party should collect, analyze, and disseminate information. They argue that access to such information is important to a competitive market. Although concerns about energy supplies have been alleviated, the Congress is now addressing such issues as global warming. Without independent analyses, the Congress would have to choose among conflicting studies done by the Administration, environmental groups, and industry sources.

Additional savings could be obtained by eliminating some of EIA's data collection responsibilities or moving them to other agencies, such as the Federal Energy Regulatory Commission. Much of the information collected and distributed by EIA is available through newspapers and trade sources. Natural gas and electricity futures are traded on the New York Mercantile Exchange and other exchanges and are published daily in the *Wall Street Journal*. Although EIA conducts its own statistical surveys, it also develops reports based on information collected by the Federal Energy Regulatory Commission.

270-11 Require the Tennessee Valley Authority to Accelerate the Repayment of Deferred Nuclear Assets and Limit Its Future Borrowing

	Outlay Savings (Millions of dollars)
2002	0
2003	275
2004	275
2005	275
2006	275
2002-2006	1,100
2002-2011	2,475

SPENDING CATEGORY:

Mandatory

RELATED OPTIONS:

270-05, 270-06, 270-07, 920-06, REV-40, REV-45, and REV-46

RELATED CBO PUBLICATION:

Should the Federal Government Sell Electricity? (Study), November 1997.

The Tennessee Valley Authority (TVA), a federal agency, is one of the largest electric utilities in the nation. Under current law, TVA sets rates for the electricity that it sells so that over time, receipts from its sales will be sufficient to pay for routine operations, capital projects, and certain other activities. TVA finances some of those costs by borrowing from the public, subject to a limit of $30 billion in outstanding debt at any given time. Currently, TVA's outstanding debt totals about $26 billion, an amount that the agency and others suggest may be too high in today's increasingly competitive electricity market. Of particular concern is the agency's ability to repay $6.3 billion that it has invested in building nuclear power plants whose completion has been deferred.

This option would amend laws governing TVA's financial operations in two ways. First, it would require the agency to pay off its $6.3 billion investment in deferred nuclear assets within the next 10 years. (Those payments would be in addition to the agency's regular depreciation of its other assets.) Second, the option would lower the limit on TVA's outstanding debt to $25 billion for fiscal year 2002 and periodically reduce that limit further so that the borrowing cap would be $18 billion by the end of 2011. The Congressional Budget Office estimates that those changes would reduce TVA's net outlays by an average of about $275 million a year beginning in 2003. Savings over the 2002-2006 period—which could result from reductions in spending, increases in power revenues, or some combination of the two—would total about $1.1 billion. Savings over the 2002-2011 period would be nearly $2.5 billion.

In addition to those savings, CBO expects TVA to retire substantial amounts of its debt under current law. In 1997, the agency announced a series of actions aimed at cutting its debt in half by 2007. Despite those initiatives, however, TVA has paid off less debt over the past three years than it planned, largely because of additional spending on new power plants and emission controls. CBO projects that under current law, TVA's outstanding debt will decline to about $20.5 billion by the end of 2011. CBO's projection of TVA's debt—and of the effects of this option—may change if TVA revises its debt management policies when it adopts a new financial plan this year.

This option would address several concerns about TVA's operations. Adopting a statutory timetable for repaying TVA's investment in deferred assets would allay concerns that taxpayers—rather than TVA—will be saddled with those costs if the utility has to reduce its prices in the future to stay competitive. Indeed, a key rationale for reducing TVA's debt-related costs is to increase the agency's flexibility in setting rates so that it can remain a viable competitor. Lowering the debt limit would bring the statutory ceiling in line with TVA's long-term plans, giving customers greater assurance that debt-related costs could not climb in the future unless authorized by the Congress.

Advocates for the status quo argue that such restrictions are unnecessary and could impair TVA's ability to manage its 6-billion-dollar-a-year electricity business efficiently. They point to the initiatives that the agency announced in 1997 as evidence that market forces, rather than new government controls, will lead TVA to lower its debt and restrain its spending. They also argue that this option could force TVA to keep prices higher than anticipated, at least in the near term.