



The Heritage Foundation

Backgroundunder

Executive Summary

No. 1191

June 16, 1998

RESULTS ACT HANDS CONGRESS FIVE REASONS TO PULL THE PLUG ON THE DEPARTMENT OF ENERGY

ANGELA ANTONELLI

The 103rd Congress passed the Government Performance and Results Act in 1993 to make federal agencies more responsive and accountable to the American people. The Results Act requires agencies to submit strategic plans to Congress that clearly specify their missions and goals. House Majority Leader Richard Armey, who leads the congressional effort to evaluate and grade these strategic plans, believes the Results Act enables Congress to ask “What’s working, what’s wasted, what makes any difference, [and] what’s duplicative” before appropriating more money for an agency.

The Department of Energy (DOE) is a textbook example of an agency whose own agency plan highlights the depth of its problems. The department’s final strategic plan, submitted in September 1997, was the culmination of four years of planning, drafts, and revisions. It received an anemic grade of 43.5 out of 100 possible points and a ranking of 12th out of 24 agency plans submitted. DOE’s fiscal year (FY) 1999 annual performance plan, linking specific performance measures to elements of its budget request, was submitted in February. It fared even worse, scoring 30 out of 100 and ranking 20th out of 24. (See Chart 1.)

Given this poor performance record, Congress increased DOE’s budget by only \$13 million (from

\$16,547,147 to \$16,560,608) between FY 1997 and FY 1998, and held its total budget to about \$16.5 billion. For FY 1999, however, the Department of Energy is asking Congress to reward its dismal Results Act report card with a budget hike that would be *100 times larger* than the one it received in FY 1998, to give it more than \$18 billion in tax dollars. (See Chart 1.)

Yet, as Victor Rezendes of the U.S. General Accounting Office (GAO) testified before Congress, “DOE’s mission and priorities have changed dramatically over time so that the Department is now very different from what it was in 1977. While energy research, conservation and policy-making dominated early DOE priorities, weapons production and now environmental cleanup overshadow its budget.” Today, 75 percent of DOE’s budget is spent on activities other than energy resources.

Fortunately, some Members of Congress are asking why an agency with no clear mission should

Produced by
The Thomas A. Roe Institute
for Economic Policy Studies

Published by
The Heritage Foundation
214 Massachusetts Ave., N.E.
Washington, D.C.
20002-4999
(202) 546-4400
<http://www.heritage.org>



continue to be funded, let alone receive increased funding as requested in the President's budget. Representative John Kasich, chairman of the House Budget Committee, proposed that the Department of Energy be eliminated in FY 1999. The government's own evaluations, from report cards issued by the congressional staff team tasked with grading agency plans to reports prepared by the GAO and agency inspectors general, highlight at least five reasons why Congress should consider closing down the Department of Energy.

REASON #1: An ever-changing mission.

REASON #2: Wasteful spending on unnecessary or duplicative programs.

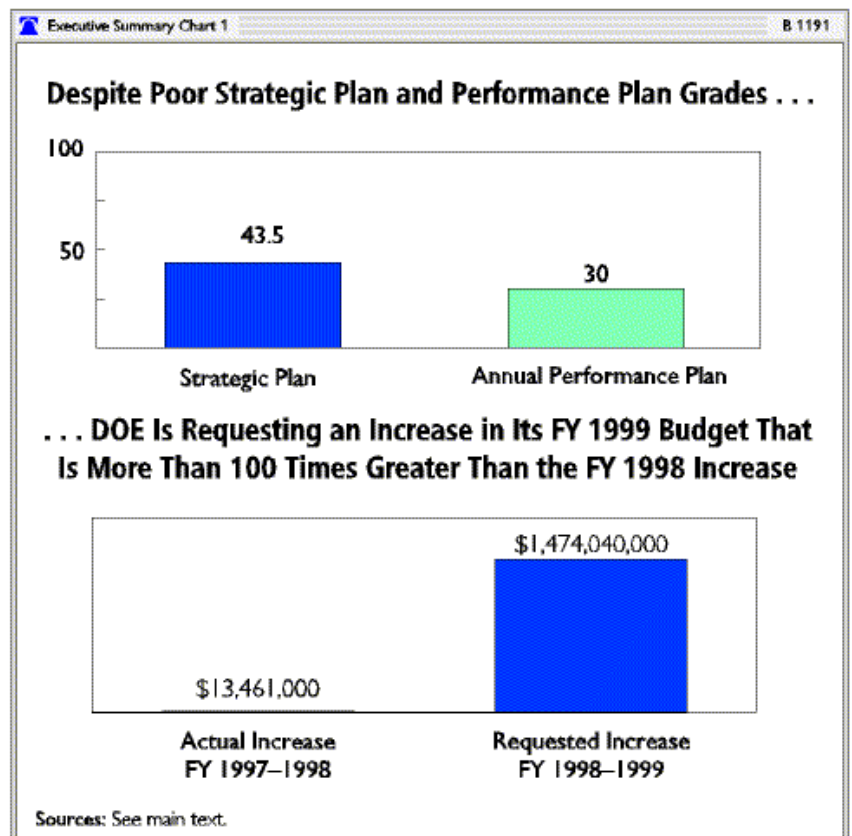
REASON #3: Costly management deficiencies.

REASON #4: An inability to measure program performance.

REASON #5: Too many programs that should be privatized.

Major programs within the Department of Energy that should be privatized include the Strategic Petroleum Reserve, the Power Marketing Administrations, the Federal Energy Regulatory Commission, and the Energy Information Administration.

A Cabinet department that reports directly to the President should have a clearly defined mission. No case has been made that DOE's functions must be performed in the public sector or that its programs are more valuable than the budgetary resources they consume. The truth is that if the



Department of Energy were closed down tomorrow, most Americans would not even notice. In the case of DOE, the Administration is using unfounded fears about global warming to increase the budgets of energy research and development programs substantially. Many of these programs already have a long history of failure.

The Results Act was intended to trigger congressional decisions to reshape the size and scope of the federal government. DOE's substandard report card should provoke Congress to move in this direction by eliminating this unnecessary, wasteful, and expensive agency.

—Angela Antonelli is Director of The Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation.



The Heritage Foundation
Backgrounder

214 Massachusetts Avenue, N.E. Washington, D.C. 20002-4999 • (202) 546-4400 • <http://www.heritage.org>

No. 1191

June 16, 1998

RESULTS ACT HANDS CONGRESS FIVE REASONS TO PULL THE PLUG ON THE DEPARTMENT OF ENERGY

ANGELA ANTONELLI¹

The Results Act process provides a forum for the Congress to examine DOE's current missions to ensure that the Department's priorities are in line with those of Congress and that DOE's functions are complementary, appropriate in scope, and not unnecessarily duplicative.

—U.S. General Accounting Office, 1997²

The 103rd Congress passed the Government Performance and Results Act in 1993 to make federal agencies more responsive and accountable to the American people. The Results Act requires federal agencies to submit to Congress strategic plans that clearly specify their missions and goals. House Majority Leader Richard Armey (R-TX), who leads the congressional effort to evaluate and grade these

agency plans,³ believes the Results Act enables Congress to ask “What's working, what's wasted, what makes any difference, [and] what's duplicative”⁴ before appropriating more money for an agency.

The agency plans submitted to date, however, only reinforce the concerns of Congress and many Americans—concerns which led to passage of the Results Act—that federal agencies are plagued with serious prob-

Produced by the
Thomas A. Roe Institute
for Economic Policy Studies

Published by
The Heritage Foundation
214 Massachusetts Ave., N.E.
Washington, D.C.
20002-4999
(202) 546-4400
<http://www.heritage.org>



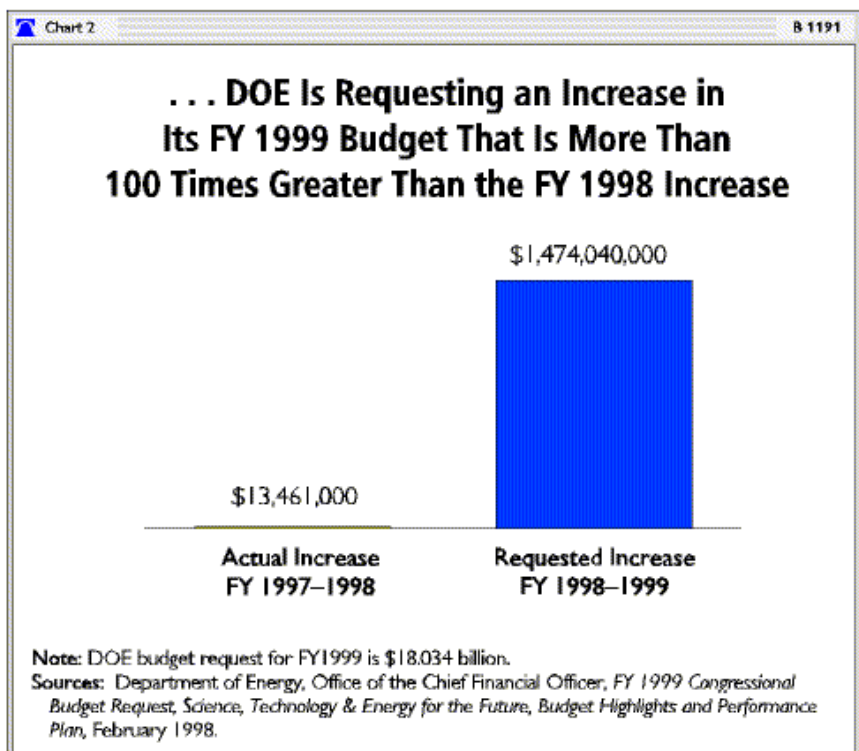
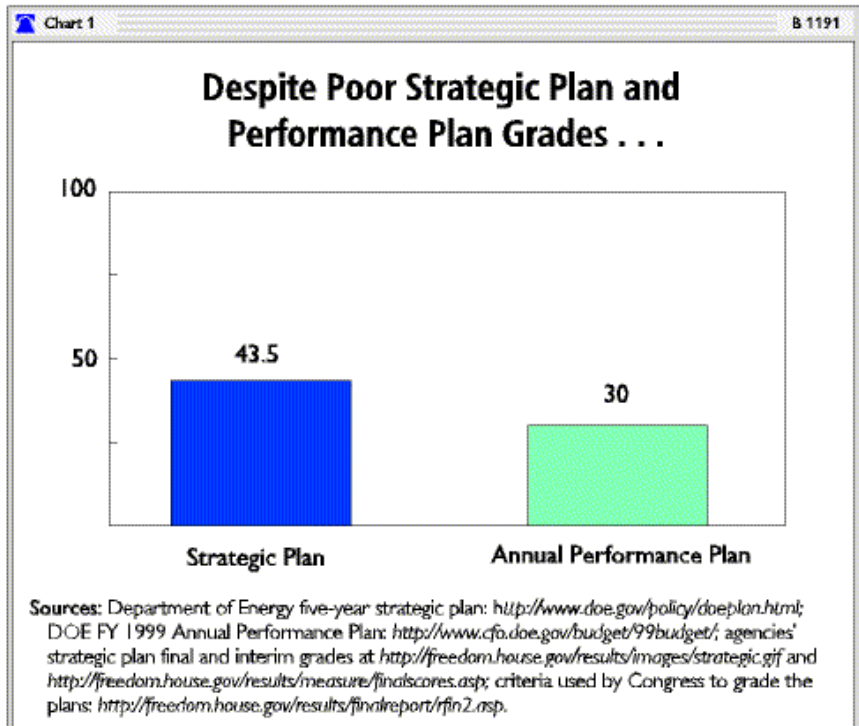
1. The author would like to acknowledge the significant research contributions of Heritage analysts Scott Hodge and John Barry to the preparation of this paper. Portions of this paper are drawn from three previous publications: Scott Hodge, ed., *Balancing America's Budget: Ending the Era of Big Government* (Washington, D.C.: The Heritage Foundation, 1997); John Barry, “How to Close Down the Department of Energy,” Heritage Foundation *Backgrounder* No. 1061, November 9, 1995; and Geoffrey Freeman, “Memo to the President #4: Candidates for a Line-Item Veto in the Energy and Water Development Appropriations Bill,” Heritage Foundation *FYI*. No. 155, October 1, 1997.
2. U.S. General Accounting Office, *Results Act: Observations on the Department of Energy's Draft Strategic Plan*, GAO/RCED-97-199R, July 11, 1997, p. 6.
3. The agency draft and final plans were graded by congressional staff teams representing the House committees of jurisdiction, as well as the Appropriations and Budget committees. Minority staff and Senate committee staff were invited and participated in many grading sessions. See <http://freedom.house.gov/results/finalreport/rfin2.asp>.
4. Stephen Barr, “Congress Pushes Agencies on Results Act Deadline,” *The Washington Post*, June 5, 1997, p. A19.



lems. The plans' debut was marked by a torrent of questionable missions, goals, and objectives; faulty tools with which to measure agency performance; and clear evidence of waste and duplication. Ironically, these agencies are submitting plans that highlight the very internal problems that government watchdogs—such as the U.S. General Accounting Office (GAO) and agency inspectors general (IGs)—have been documenting for years.

The U.S. Department of Energy (DOE) is a textbook example of such an agency. Its final strategic plan (the result of four years of planning, drafts, and revisions) was submitted to Congress on September 30, 1997.⁵ It received an anemic ranking of 43.5 out of 100 possible points. DOE's fiscal year (FY) 1999 annual performance plan linking specific performance measures to elements of its budget request⁶ was submitted in February 1998. This plan fared even worse: a miserable 30 out of 100.⁷ (See Chart 1.)

Fortunately, some Members of Congress are asking why an agency that submits poor plans and lacks a clear mission should continue to exist, let alone receive a funding increase as requested in the President's budget. For example, Representative John Kasich (R-OH), chairman of the House Budget Committee, has proposed that the Department of Energy be eliminated in FY 1999. His assessment is sub-



5. The Department of Energy's five-year strategic plan is available at <http://www.doe.gov/policy/doeplan.html>.
 6. DOE's FY 1999 Annual Performance Plan is available at <http://www.cfo.doe.gov/budget/99budget/index.htm>.
 7. See agencies' strategic plan final and interim grades at <http://freedom.house.gov/results/images/strategic.gif> and <http://freedom.house.gov/results/measure/finalscores.asp>. The criteria used by Congress to grade the plans can be found at <http://freedom.house.gov/results/finalreport/rfin2.asp>.



stantiated by the federal government's own evaluations, from the report card issued by the congressional staff team tasked with grading DOE's agency plans to recent GAO and agency IG reports.

FIVE GOOD REASONS TO CLOSE DOWN DOE

Given the Department of Energy's poor performance record, Congress increased its budget by only \$13 million (from \$16,547,147 to \$16,560,608) between FY 1997 and FY 1998, holding its total budget to about \$16.5 billion.⁸ On September 30, 1997, DOE submitted a five-year strategic plan that ranked 12th out of the 24 graded; in February 1998, it submitted an FY 1999 performance plan that ranked 20th out of 24. Even worse, for FY 1999, the Department is asking Congress to reward its dismal Results Act report card with a budget hike that would be *100 times* larger than the one it received in FY 1998—a \$1.5 billion (or 9 percent) overall increase to a funding level of more than \$18 billion.⁹ (See Chart 2.)

The available evidence—including DOE's unacceptable and poorly graded strategic and performance plans, as well as the relevant GAO and IG reports—clearly indicates that Congress has been on the right track in holding down DOE's budget. Recent reports suggest that DOE has done little to improve its problems and that Congress would only be wasting more tax dollars by continuing to fund the agency. These Results Act reports underscore, more clearly than ever before, that there are

at least five persuasive reasons to close down the Department of Energy.

REASON #1: Ever-Changing Missions and Bureaucratic Growth.¹⁰

During the past 20 years, the Energy Department has grown in the number of tax dollars spent as well as functions performed. As Victor Rezendes of the GAO has testified, "DOE's mission and priorities have changed dramatically over time so that the Department is now very different from what it was in 1977. While energy research, conservation and policy-making dominated early DOE priorities, weapons production and now environmental cleanup overshadow its budget."¹¹ Today, 75 percent of DOE's budget is spent on activities other than energy resources: Nearly \$12 billion is budgeted for environmental quality and nuclear waste disposal, and about \$4 billion for fundamental science research, each year.

Since its creation in 1977, the Department of Energy has changed its mission numerous times. Its original mission—oversight of energy resources and administration of a complex set of regulations, price controls, and allocation laws established in response to the oil embargo of 1973 and 1974—was too broad for its programs to be effective. The result: higher energy costs and increased dependence on foreign oil.¹² During his 1980 presidential campaign, Ronald Reagan promised that he would eliminate the Department of Energy. Instead, he changed its mission from energy conservation, imposed through a centralized structure of regulations, to energy promotion by means of market mechanisms. DOE also was given respon-

8. Department of Energy, Office of the Chief Financial Officer, *FY 1999 Congressional Budget Request, Science, Technology & Energy for the Future, Budget Highlights and Performance Plan*, February 1998, p. 13.

9. *Ibid.*

10. For a more in-depth review of changes in DOE's mission, see Barry, "How to Close Down the Department of Energy," *op. cit.*

11. Victor S. Rezendes, "Department of Energy: Need to Reevaluate Its Role and Missions," statement before Subcommittee on Energy and Water, Committee on Appropriations, U.S. House of Representatives, 104th Cong., 1st Sess., January 18, 1995.

12. For more information on DOE's failed efforts during the late 1970s, see Milton R. Copulos, "The Department of Energy," in Charles Heatherly, ed., *Mandate for Leadership* (Washington, D.C.: The Heritage Foundation, 1981).

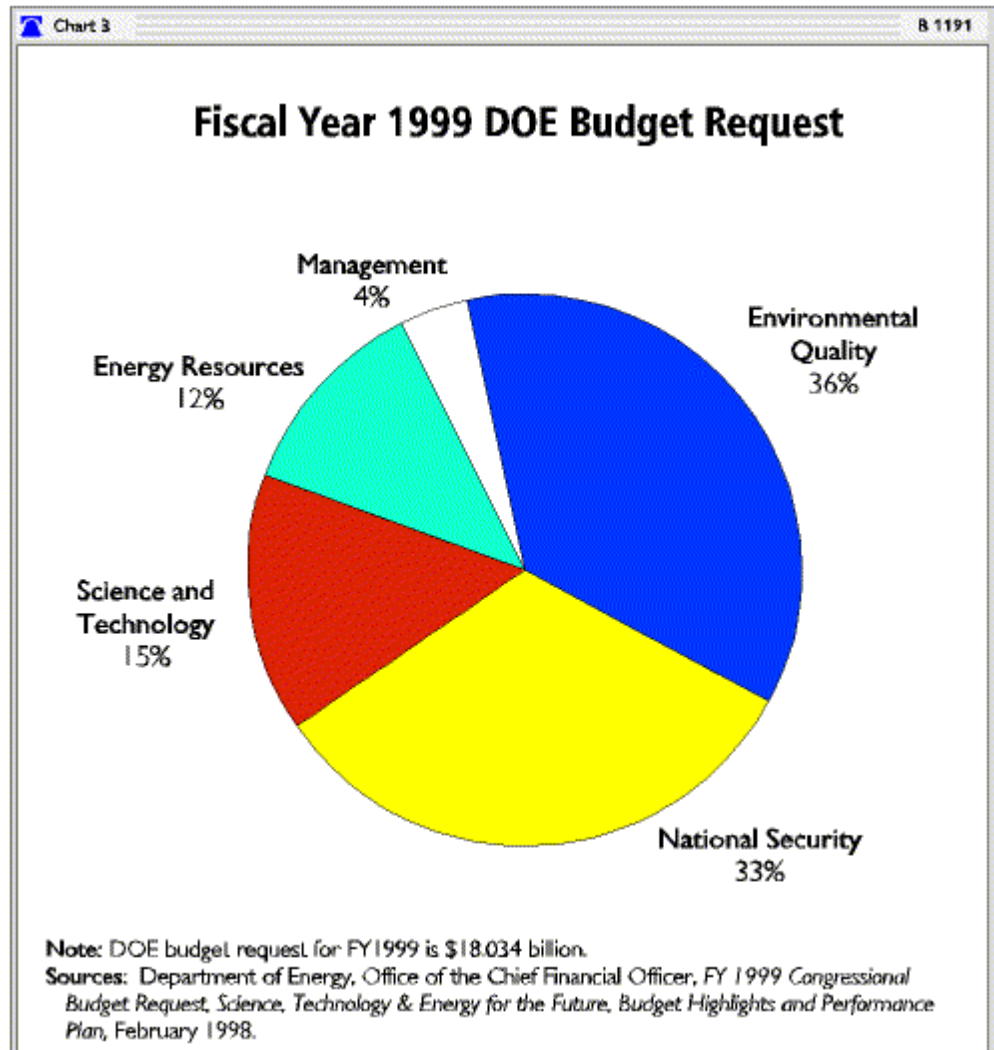


sibility for the production of nuclear weapons during the 1980s because of a misguided belief that production and stockpile management should be controlled by a civilian agency, not the military.

With the end of the Cold War, DOE's central mission changed yet again. The high level of weapons production was no longer necessary, and world energy supplies remained constant. DOE began to concentrate on environmental remediation of past actions, including cleaning up its own contaminated weapons facilities. In addition, a large portion of the department's budget is now dedicated to research and development of alternative energy supplies, including solar, wind, geothermal, and nuclear power generation.

Despite this massive effort to find alternative sources of energy, however, petroleum and coal remain the dominant sources of power in America today. Chart 3 shows just how much of DOE's proposed FY 1999 budget would be dedicated to each of these efforts.

The fourth change in mission came with the creation of Cooperative Research and Development Agreements (CRADAs)—contracts allowing individual companies to use federal laboratories, and even conduct research and development (R&D), at taxpayer expense. CRADAs are meant to increase the competitiveness of American companies and support quality jobs at a time when much



of the defense-related work that used to be completed at DOE's laboratories is seen as no longer necessary. Proponents of CRADAs argue that they provide private companies with free research capabilities and prevent the closing of federal facilities.

DOE's September 30, 1997, Results Act five-year strategic plan suggests that the agency still cannot answer the basic question: "What are we supposed to be accomplishing?" One of the more revealing and inappropriate performance measures buried in the agency's strategic plan is to "Map capabilities, core strengths, and leadership roles across the DOE research enterprise in FY 1998."¹³ It is hard to imagine how the department could

13. U.S. Department of Energy, *September 1997 Department of Energy Strategic Plan*, p. 34, at <http://www.doe.gov/policy/doestpl.pdf>.



have accomplished anything before this without understanding what role, if any, it plays in energy research. Another revealing statement from the Results Act plan: “complete a comprehensive national energy strategy that integrates major federal government energy related activities.”¹⁴ Clearly, DOE continues to look for ways to justify its existence.

REASON #2: Wasteful Spending.

Not only has the Department of Energy strayed from its original mission of energy resources oversight, but it also has failed to conduct efficiently the services it now provides. Moreover, much of the government-funded research does not meet its intended objectives. Regarding nuclear fission research, for example, the Congressional Budget Office (CBO) observed that the department “has little in the way of commercial applications to show for its investment.”¹⁵

Energy Research and Development. DOE spends nearly \$3.2 billion per year on a variety of applied and basic research projects. In FY 1998, Congress approved \$1 billion for applied research on solar and renewable energy sources and research on nuclear energy and fusion, and \$2.2 billion for research on basic science topics in human genetics, fusion power generation, materials and metals, and computers. Federal agencies such as the National Science Foundation (NSF) and the National Oceanic and Atmospheric Administration (NOAA) fund complementary or parallel research programs on such technologies as photovoltaic, solar, and geothermal energy. Terminating DOE’s

research would not necessarily affect these programs.¹⁶

Remarkably, despite evidence that many DOE energy R&D programs have failed to produce appreciable results,¹⁷ the Administration wants Congress to appropriate even more money for such efforts, especially its Climate Change Technology Initiative (CCTI). In response to a request from Representative Kasich, the GAO issued an April 1998 report on how DOE plans to “alter its climate change spending from fiscal year 1998 to fiscal year 1999” and provide “observations about funding for research and development, based on our previous work in the area.”¹⁸ According to this report, DOE is seeking to increase its energy R&D budget from \$729 million in FY 1998 to \$1.06 billion in FY 1999. The \$331 million increase (see Chart 4) would go to climate change-related programs, in addition to the \$729 million from FY 1998 that is being “recoded as CCTI”¹⁹ and that would “support and expand existing R&D programs in energy efficiency and renewable energy as well as other programs related to climate change.”²⁰

For FY 1999, DOE requested a more than 30 percent increase in funding for solar and renewable energy programs as part of the Climate Change Technology Initiative. Currently, the department spends approximately \$356 million—nearly \$90 million more than FY 1997—in this area despite House language that lawmakers remain “concerned about the Department’s administration of the programs.”²¹ Examples of

14. *Ibid.*, p. 17.

15. Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options*, August 1994, pp. 112–113.

16. Carl E. Behrens and Richard Rowenberg, “Department of Energy Programs: History, Status, Options,” Congressional Research Service, 95–508ENR, April 20, 1995.

17. For evidence of DOE’s failure to produce results from its R&D programs, see Robert Bradley, Jr., “Renewable Energy Not Cheap, Not Green,” Cato Institute *Policy Analysis*, Executive Summary, August 27, 1997; see also Linda R. Cohen and Roger G. Noll, *The Technology Pork Barrel* (Washington, D.C.: The Brookings Institution, 1991).

18. U.S. General Accounting Office, *Department of Energy: Proposed Budget in Support of the President’s Climate Change Technology Initiative*, GAO/RCED–98–147, April 1998, p. 1.

19. *Ibid.*, p. 12.

20. *Ibid.*, p. 1.



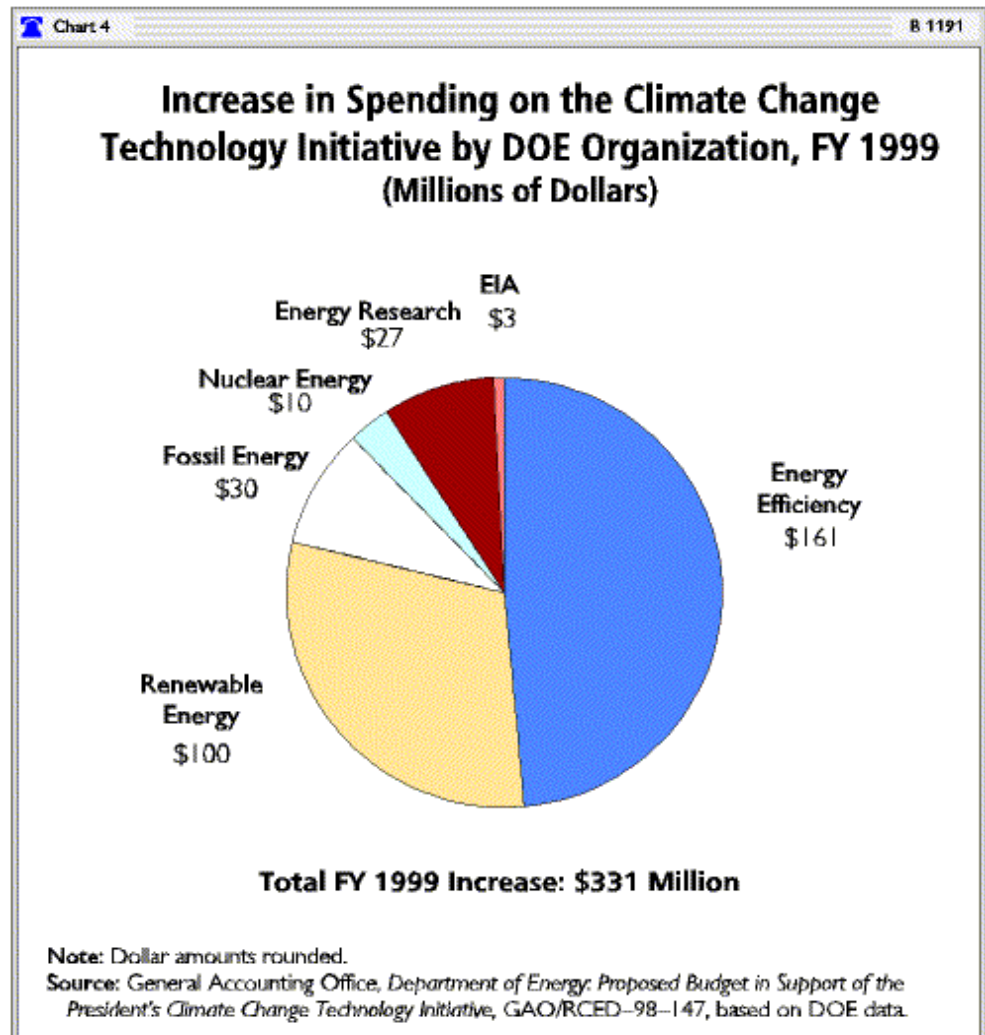
requested funding increases for FY 1999 include:

- A 20 percent increase for photovoltaic energy systems (from \$65.5 million to \$78.8 million);
- A 52.6 percent increase for biomass/biofuels energy systems (from \$58.8 million to \$89.7 million);
- A 33.7 percent increase for wind energy systems (from \$32.5 million to \$43.5 million); and
- A 540 percent increase for international solar energy research (from \$1.4 million to \$8.8 million).

In addition, DOE is requesting a 43.7 percent increase (from \$74.4 million to \$106.9 million) for nuclear energy research and development.

The type of eco-energy planning envisioned by the Administration in its budget request requires large taxpayer and ratepayer subsidies as well as government mandates for renewable energy generation. The Energy Department, for example, has spent approximately \$5.1 billion (in 1996 dollars) on solar energy since FY 1978 but has little to show for it.²² According to a recent Cato Institute study, renewable energy plants produce electricity that is, on average, *twice* as expensive as electricity

from the most economical fossil-fuel alternatives and *three times* as expensive as surplus electricity. Not only are renewable energy sources not economically efficient, but every major renewable energy source has drawn criticism from environmental groups: hydroelectric power for river habitat destruction; wind generators for avian mortality; solar power for desert overdevelopment; biomass electricity for air emissions; and geothermal for depletion and toxic discharges.²³ Yet between 1978 and 1996, the federal government provided more than \$10 billion (in 1996 dollars)



21. H.R. 2203, *Energy and Water Development Appropriations Bill, 1998*, House Report 105-190, p. 91.

22. Bradley, "Renewable Energy Not Cheap, Not Green," p. 29.

23. *Ibid.*, p. 8.



for solar, wind, hydroelectric, geothermal, and other renewable energies.²⁴

In light of these criticisms, federal funding for renewable and non-renewable energy research and development efforts should be halted immediately. Congress had begun to cut back these programs, but funding levels are again increasing. (See Table 1.) And the huge investment the Administration wants all Americans to underwrite will produce few distinguishable effects on climate temperature, compared with what would have occurred if current trends were simply allowed to continue. (See Table 2.)

In its report on the Administration's FY 1999 Climate Change Technology Initiative, the GAO notes that the "concept is to accelerate technology 'more faster.'"²⁵ But past attempts by the federal government to outguess the energy market have produced expensive, well-known failures, such as the Synthetic Fuels Corporation and the Clinch River Breeder Reactor.²⁶ In the case of wind power, as Robert Bradley points out in a recent Cato Institute report on renewable energy research and development, "the federal government's crash course in wind-related research and development has been a bust to date, and further commitment may be doomed as well."²⁷ Bradley points out that "the United States lavished nearly a half a billion dollars on the aerospace industry from 1974 to 1992 [for wind power R&D]. . . . By the mid-1990s there were no major U.S. manufacturers selling commercially

proven wind turbines. . . ."²⁸ (He recounts similar stories for other renewable resources.)

Although the current costs of generating power through alternative energy sources are high, it fre-

Table 1 B 1191

Federal Funding for Energy Research (Millions of Dollars)

Fiscal Year	Solar and Renewable	Nuclear Energy	Basic Energy Sciences
1994	\$347.4	\$341.4	\$802.0
1995	\$388.1	\$293.2	\$747.3
1996	\$275.2	\$231.0	\$791.7
1997	\$270.0	\$222.7	\$649.7
1998	\$341.0	\$277.8	\$667.3
1999*	\$437.2	\$325.7	\$836.1

Note: * Requested.
Source: Congressional Research Service, *Energy and Water Appropriations Reports*, FY 1996 through FY 1999.

Table 2 B 1191

Proposed Effective CO₂ Increase and Resulting Temperature Savings

	No controls (ppm)	Kyoto Protocol (ppm)	Difference (ppm)	Temperature Savings (°C)
1990	440	440	0	0.000
2000	472	472	0	0.000
2005	489	487	2	0.007
2010	506	501	5	0.017
2020	542	528	14	0.049
2030	582	555	27	0.094
2040	624	582	42	0.146
2047	655	602	53	0.185

Note: Based on NCAR model results and the IPCC "best guess" emission scenario with no emission controls.
Source: Patrick J. Michaels, "The Consequences of Kyoto," Cato Institute Policy Analysis No. 307, May 7, 1998.

24. During this time period, the federal government spent \$60 billion (in 1996 dollars) not only for these energy sources, but also for nuclear, coal, oil, and gas, as well as energy conservation. *Ibid.*, Table A.1, p. 63.

25. *Ibid.*, p. 12.

26. Cohen and Noll, *The Technology Pork Barrel*, *op. cit.*

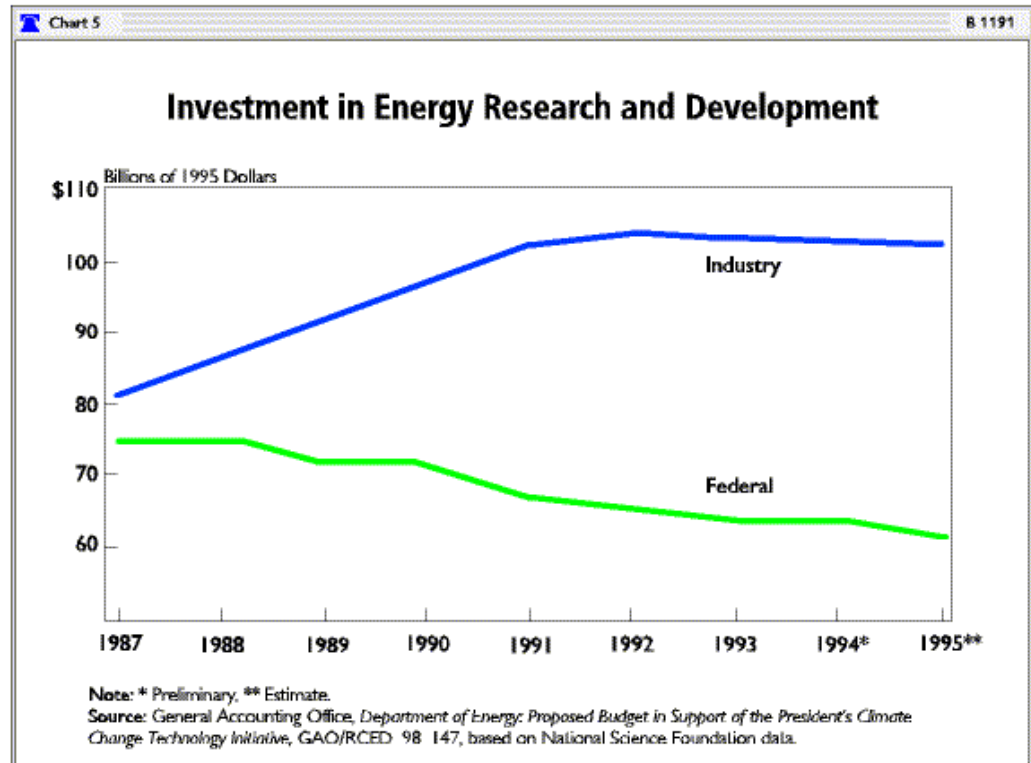
27. Bradley, "Renewable Energy Not Cheap, Not Green," p. 15.

quently is argued that current subsidies eventually will bring prices to a level that is competitive with conventional sources. This is unlikely, however, because market competition is far stronger than protectionism as a motivating factor in technological advance and price reduction. As the GAO points out, competitive energy resources consistently provide lower prices than do protected sources.²⁹

Energy Conservation and Research.

The Department of Energy also is proposing a 32 percent increase (from \$611 million to \$808.5 million in FY 1999) for energy conservation and research targeted toward improving energy efficiency in various sectors of the economy, such as transportation, industry, private and public buildings, and utilities.

This program funds research and grants that should be financed by the private sector and state or local governments. For FY 1998, for example, Congress approved over \$380 million for research targeted toward private industry, including building systems, heating and cooling technology, alternative fuels utilization, vehicle systems materials, and international market development. Congress also earmarked \$125 million for state-based weatherization programs and \$30 million for state conservation programs. However important these conservation measures may be, they are not properly a function of the federal government. Con-



gress should not be in the business of funding and micromanaging purely private research and purely local responsibilities.

In its report, the GAO suggests that Congress consider five questions in assessing whether to fund particular energy research and development programs:

1. Would the private sector be inclined to do the research?
2. Will consumers buy the product?
3. Do benefits exceed costs?
4. Have efforts been coordinated?
5. Have implementation concerns been addressed?

Chart 5 clearly shows that, as federal funding for energy R&D increases, industry support decreases. Industry will invest in technologies for which it sees a market and a benefit. DOE's track

28. *Ibid.*

29. Tom McClintock, "Draft Paper on Government Subsidy of Renewable Energy Resources," Claremont Institute, August 22, 1996, p. 11.



record demonstrates that it is far less likely than the private sector to invest in winning new technologies. Furthermore, the federal government, after decades of failure, is clearly less capable of picking technology winners than industry has been. If Congress asked these basic question about DOE's energy R&D programs, it most likely would conclude that many are unnecessary and wasteful, and that they duplicate other programs.

Environmental Cleanup. The Department of Energy was responsible for the production of nuclear weapons during the Cold War, and the pressure of competing with the Soviet Union kept environmental protection from being a top priority at weapons production facilities. Today, although production has ceased, environmental remediation at DOE's facilities remains. The vast majority of contamination problems at the department's nuclear weapons plants involve some level of radioactivity. Since 1989, the department has managed, stored, and cleaned up hazardous wastes produced at these plants under its Environmental Management (EM) program.

The proposed FY 1999 budget for this program is \$6.123 billion. The GAO has estimated that the total cost of remediation at federal nuclear waste disposal sites will run as high as \$200 billion.³⁰ However, given DOE's poorly graded performance in estimating costs in the past, this could be only a fraction of the total cost. DOE should reevaluate its original goals and strategies to deal with this problem. Contamination of these sites is not insignificant, and the amount of radioactive and hazardous waste at its nuclear weapons complex is so great that more effective action is essential.

The Environmental Management program was supposed to clean up all sites within 30 years. Agreements signed by DOE, the Environmental Protection Agency (EPA), and state regulatory agencies specify requirements and set milestones for achieving those requirements. But cleanup

costs have escalated rapidly, breakthroughs in technology have not occurred at the pace originally estimated, and the nature and scope of the contamination problem simply are not known. "As a result," notes the GAO, these cleanup "agreements taken together do not reflect a national strategy of targeting resources based on the highest risks to human health and the environment."³¹ It is now clear that DOE will not be able to clean up the sites either within the 30-year period or any time soon thereafter.

Beginning with FY 1999, DOE's new structure for managing the EM program will be in place in an attempt to accelerate its cleanup strategy. The FY 1999 request consists of five appropriations: Defense Facilities Closure Projects, Defense Environmental Restoration and Waste Management, Defense Environmental Management, Non-Defense Environmental Management, and Uranium Enrichment Decontamination and Decommissioning Fund. It would seem that DOE deserves credit for trying to initiate a very modest privatization of cleanups (focused largely on its Hanford, Washington, site), yet a review of the program's strategic plan suggests that policymakers would be naïve to expect that things will get better. For example, the plan indicates that DOE wants to "prioritize and fund high risk projects, such that risk to workers, the public and the environment decreases over time."³² The only problem is that the plan gives no indication of how it will accomplish this fundamental task; and because no effort is made to tie the work to any measurable health benefits, it will never be clear whether DOE addressed the most serious health risks first. Furthermore, DOE has not developed "comprehensive land use plans for DOE sites that provide information on alternative uses, ownership, environmental requirements, and implementation schedules"³³ at the Hanford (Washington), Savannah River (South Carolina), Rocky Flats (Colorado), and all other DOE sites, and has set no clear goals for cleaning

30. U.S. General Accounting Office, *Energy Issues*, Transition Series, GAO/OCG-93-13TR, December 1992.

31. U.S. General Accounting Office, *Addressing the Deficit: Budgetary Implications of Selected GAO Work for Fiscal Year 1996*, GAO/OCG-95-2, March 1995, p. 80.

32. *September 1997 Department of Energy Strategic Plan*, p. 25.



up the sites. How the land would be used would have a significant impact on the costs associated with the cleanup.

REASON #3: Costly Management Deficiencies.

In 1995, GAO official Victor Rezendes warned that “DOE suffers from significant management problems, ranging from poor environmental management of the nuclear weapons complex to major internal inefficiencies rooted in poor oversight of contractors, inadequate information systems, and work force weaknesses.”³⁴ These management problems and the inefficiencies that flow from them are primarily a result of DOE’s continual efforts to realign itself and justify its own existence. Although the department has reorganized many times over the years to correct these deficiencies, its efforts have failed. DOE’s Results Act strategic and annual performance plans have not demonstrated any improvements that would allay these fundamental concerns.

In May 1995, DOE unveiled its Strategic Alignment and Downsizing Initiative Plan, largely as a response to plans by Members of the 104th Congress to terminate the agency. It was estimated that this Strategic Initiative would save about \$1.7 billion over five years—a mere 2.5 percent of the \$67.5 billion projected to be spent on DOE programs during the same period.

Also in May 1995, DOE published *Success Stories: The Energy Mission in the Market Place*, a report highlighting over 60 technologies supposedly developed or supported by DOE’s applied research and development programs. *Success Stories* represented an attempt by DOE to justify its existence in the face of attacks from Members of Congress;

instead, congressional criticism was given new impetus by a GAO analysis of 15 randomly selected “success stories.” The GAO found “problems with the analysis DOE used to support the benefits cited in 11 out of the 15 cases” it had reviewed. “These problems include basic math errors, problems in the supporting economic analysis, and unsupported links between the benefits cited and DOE’s role or the technology. These problems make DOE’s estimates of the benefits for these cases questionable.”³⁵

Despite attempts at reform, DOE’s Office of Inspector General (OIG) continues to uncover widespread financial management and accountability problems throughout the agency. In its *Semiannual Report to Congress* for the period from April 1, 1997, to September 30, 1997, the OIG found, for example, that:

- “[T]he Department’s Los Alamos National Laboratory did not generate the information needed to assess whether specific sites were remediated cost effectively. . . . Los Alamos paid up to \$540,000 more than necessary to validate results.”³⁶
- “[T]he Department’s Headquarters and field sites had also paid an estimated \$1.8 million to develop and implement a Departmentwide database, while at the same time, the contractors were maintaining their own duplicative database. Neither of the systems tracked the [leased] property accurately.”³⁷
- “On two requisitions the Department could have saved almost \$850,000 out of \$1.6 million if the prime contractors had used normal procurement channels. . . .”³⁸

33. *Ibid.*, p. 29.

34. Rezendes, “Department of Energy: Need to Reevaluate Its Role and Missions,” *op. cit.*

35. U.S. General Accounting Office, *DOE’s Success Stories Report*, GAO/RCED-96-120R, April 15, 1996, pp. 1-2.

36. U.S. Department of Energy, Office of Inspector General, *Semiannual Report to Congress*, April 1, 1997, to September 30, 1997, p. 4.

37. *Ibid.*, p. 19.

38. *Ibid.*, p. 20.



- “[A]bout \$500,000 out of the \$895,000 spent on the [groundwater quality control] program in Calendar Year 1995 was unnecessary.”³⁹
- “[T]he Department may incur \$4 million to \$8.5 million more than necessary each year to continue...operations at the Mound Plant.”⁴⁰
- “Basin [Electric Power Cooperative] overcharged WAPA [Western Area Power Administration] approximately \$23.8 million.”⁴¹

REASON #4: An Inability to Measure Performance.

In attempting to explain to Congress how it plans to determine how well its programs are achieving their goals, the Energy Department seemed incapable of suggesting suitable performance measures. The congressional evaluation of DOE’s FY 1999 performance plans gave the department a score of 10 out of a possible 30 points. As noted earlier, one of the more revealing performance measures buried in the agency’s strategic plan was to “Map capabilities, core strengths, and leadership roles across the DOE research enterprise in FY 1998.”⁴² Clearly, the agency already should have understood what role, if any, it plays in energy research. Other examples of its recommended performance measures that received poor Results Act grades include:

1. Climate Change Related Measures

- Support the President’s initiative to reduce greenhouse gas emissions so that the

nation will have installed 7,000 solar roofs in FY 1999 and 1 million by 2010.⁴³

- In FY 2000, for the seven most energy-intensive industries, complete development and pursue implementation of R&D “roadmaps,” whereby the federal government and industry develop a strategic vision of the industry-desired future and the technology road map to achieve it.⁴⁴
- In FY 1998, continue to help 18 developing countries and countries with economies in transition to develop national action plans for reducing greenhouse gas emissions and adapting to climate change, and initiate assistance to an additional two to three countries.⁴⁵

2. Duplicative Tasks

- In FY 1999, initiate a program to develop more accurate monitoring capabilities and identify cost-effective mitigation strategies for fine particulate matter.⁴⁶ The EPA also proposes to undertake such steps.⁴⁷
- By FY 1999, develop improved technologies and systems for early detection, identification, and response to weapons of mass destruction proliferation and illicit materials trafficking.⁴⁸ These programs duplicate Department of Defense programs.⁴⁹

39. *Ibid.*

40. *Ibid.*, p. 24.

41. *Ibid.*

42. *September 1997 Department of Energy Strategic Plan*, p. 34.

43. *Ibid.*, p. 14.

44. *Ibid.*, p. 16.

45. *Ibid.*

46. *Ibid.*, p. 14.

47. See Environmental Protection Agency Strategic Plan at <http://www.epa.gov/docs/strategic.plan/full/>.

48. *Ibid.*, p. 23.

49. See Department of Defense 1997 Quadrennial Defense Review report at <http://www.defenselink.mil/pubs/qdr/>.



3. Throwing Money Away

- Increase the already extensive amount of committed research to competitive solicitations through FY 2000.⁵⁰
- Increase the number and extent of collaborations with others on complex problems, such as climate change and fuel-efficient vehicles, that require interdisciplinary research capabilities.⁵¹
- In FY 2000, validate new DOE technologies that deliver benefits faster, better, and more cheaply than existing technologies.⁵²
- Increase the total dollars leveraged through FY 2000.⁵³
- In FY 2000, implement innovative funding options for R&D activities.⁵⁴

REASON #5: Programs That Should Be Privatized.

Major programs within the Department of Energy should be privatized, including the Strategic Petroleum Reserve (SPR), the Power Marketing Administrations (PMAs), the Federal Energy Regulatory Commission (FERC), and the Energy Information Administration (EIA).

Strategic Petroleum Reserve.⁵⁵ Created by the Energy Policy and Conservation Act of 1975, the Strategic Petroleum Reserve is a government-owned stockpile of 563 million barrels of crude oil to be made available in the event of market disruptions, such as the Arab oil embargo of 1973 and 1974 or the Persian Gulf crisis of 1990 and 1991. DOE operates six underground salt dome storage

sites on the Gulf Coast of Louisiana and Texas. One, at Weeks Island, is scheduled to be decommissioned by July 1999 because of serious structural problems.

The SPR has become an expensive monument to the heavily regulated oil markets that existed before the advent of deregulation in 1981 under President Reagan. Over the past 20 years, according to the CBO, the United States has spent about \$4 billion to construct SPR storage facilities and another \$17 billion to fill its reserves.⁵⁶

Since deregulation, the oil market has become increasingly diversified, and the futures market (which hedges against price fluctuations) has become highly sophisticated. As a result, recent interruptions in the world oil supply, such as those that occurred during the Persian Gulf crisis, have not had the same impact on the economy they once would have had. The Congressional Research Service (CRS) concluded that when SPR oil was sold during the Gulf War (the only time emergency sales were authorized since SPR's creation), "the SPR drawdown did not appear to be needed to help settle markets." Indeed "it became clear during the fall of 1990 that, in a decontrolled market, physical shortages are less likely to occur. Instead, shortages are likely to be expressed in the form of higher prices as purchasers are free to bid as high as they wish to secure scarce supply."⁵⁷

Congress and the Administration should consider selling the SPR facilities to a consortium of oil storage companies. The Administration has proposed leasing SPR excess storage capacity to foreign countries, such as the Czech Republic and

50. *Ibid.*, p. 31.

51. *Ibid.*, p. 32.

52. *Ibid.*

53. *Ibid.*

54. *Ibid.*

55. See Scott A. Hodge, "Strategic Petroleum Reserve," in Hodge, ed., *Balancing America's Budget*, pp. 118–119.

56. Congressional Budget Office, *Rethinking Emergency Energy Policy*, December 1994.

57. Robert Bamberger, "The Strategic Petroleum Reserve," CRS *Issue Brief*, Congressional Research Service, June 14, 1996, pp. 4–5.



South Korea. This proposal should be considered as well. But if a potential market for such lease options does exist, private companies—not the Department of Energy—should be engaged in that activity.

Power Marketing Administrations and the Tennessee Valley Authority.⁵⁸ DOE operates five Power Marketing Administrations (Alaska, Bonneville, Southeastern, Southwestern, and Western Area) which sell wholesale electricity generated by approximately 130 power plants (mostly dams) built and maintained by the U.S. Army Corps of Engineers and the Bureau of Reclamation. These entities sold nearly \$3 billion worth of electricity in 1994, according to the Energy Information Administration. Congress so far has authorized only the sale of the Alaska Power Marketing Administration (budgeted for completion by mid-1999), despite the fact that all five PMAs could be sold. The federal government also operates the Tennessee Valley Authority (TVA), which serves much of the Appalachian region.

Customers of the PMAs and the TVA enjoy hidden taxpayer subsidies because these government-owned utilities are allowed to borrow from the Treasury at below-market interest rates and take as long as 50 years to pay back their loans. Of the more than \$16 billion lent to the PMAs by the Treasury, only about 25 percent has been repaid. Douglas A. Houston, professor of business economics at the University of Kansas, estimates that the TVA and PMAs together receive roughly \$7 billion to \$10 billion in subsidies each year.⁵⁹ These

subsidies are neither targeted nor means-tested; according to Professor Houston, they “simply transfer wealth to a set of lucky citizens who are no less affluent than their fellow citizen-taxpayers.”⁶⁰

PMAs generally lose money when they resell power. Instead of being sold to the highest bidder, PMA-generated electricity is sold at varying rates to municipal utilities, cooperatives, industrial users, government facilities, and investor-owned utilities. Municipal utilities and rural cooperatives buy electricity at cost, often paying as little as half the rates paid by customers in other parts of the country. Industrial users pay according to a different rate schedule. The rate paid by aluminum companies, for example, “is, by contract, tied to aluminum prices.” Thus, as aluminum prices fell over the past five years, Bonneville was buying power “for as much as 3.5 cents a kilowatt hour, [but] it had to sell it to those utilities for 1.8.”⁶¹

Congress should terminate all federal assistance to the PMAs and the TVA, including direct appropriations and the authority to borrow from the Treasury. The government should sell the remaining PMAs and the TVA to private investors through a variety of privatization plans by the end of 1999, and sell the hydroelectric power plants by the turn of the century. Selling the PMAs is the only way to bring sound business practices to these utilities.

Congress should follow the example of other countries that are privatizing their state-owned utilities. In 1993, Argentina, Germany, and the United Kingdom raised a total of \$4.4 billion by

58. See Adam D. Thierer, “Power Marketing Administrations,” in Hodge, ed., *Balancing America's Budget*, pp. 113–115.

59. Douglas A. Houston, “Federal Power: The Case for Privatizing Electricity,” Reason Foundation *Policy Study* No. 201, March 1996. Other studies have found similar subsidization levels. See *Subsidies and Unfair Competitive Advantages Available to Publicly-Owned and Cooperative Utilities*, prepared by Putnam, Hayes & Bartlett, Inc., for the Edison Electric Institute, September 1994, and U.S. Department of Energy, Energy Information Administration, *Federal Energy Subsidies: Direct and Indirect Interventions in Energy Markets*, November 1992.

60. Houston, “Federal Power: The Case for Privatizing Electricity,” p. 1.

61. Joan Laatz, “BPA: How Does It Rate?,” *The Oregonian*, June 20, 1993.



selling state-owned electric utilities to private investors, including U.S. investors. Almost 25 major utility privatizations have been undertaken around the world since 1988.

There is an overwhelming consensus that privatization will benefit both consumers and the electric industry. Douglas Houston estimates that privatizing the TVA and the PMAs would generate \$15 billion to \$30 billion for the Treasury. The Office of Management and Budget (OMB) estimates that selling the relatively small Southeastern and Southwestern PMAs could generate \$1 billion (\$500 million for each one sold).⁶² The Southeastern PMA, which sells less than 2 percent of the power in the region, could be sold swiftly to regional utilities because it does not own or operate any transmission facilities; it simply pays a fee to various utilities to market power through its transmission lines. The Southwestern PMA, which accounts for 4 percent of the energy sold in the region, also could be sold to regional investor-owned utilities.

The OMB estimates that selling the much larger Western Area PMA, headquartered in Golden, Colorado, could generate some \$2.6 billion. According to DOE, while WAPA markets about 9 percent of the power in the region, its service area covers 1.3 million square miles and its wholesale power customers provide service to 16 million consumers in 15 central and western states. Because of its large distribution area, WAPA should be broken up and sold in manageable pieces to investors.

Selling Bonneville (BPA) will be more complicated, because it is very large and provides about 65 percent of the electric power in the Northwest. One method, used in such countries as Britain, would be to sell BPA through a broad-based stock option plan in order to neutralize opposition from the interests served by BPA and win support from public investors. Stock could be sold at favorable prices to employees, residential customers, envi-

ronmentalists, fishing and agricultural interests, or others who feel that they stand to lose from the privatization of Bonneville. Such a move might generate support from many investor-owned and public utilities in the region which, according to the Portland *Oregonian*, have threatened to build their own power generators to free themselves from BPA's near-monopoly status.

There are many creative and successful privatization options and alternatives on the books that can help ensure a smooth and beneficial transition.⁶³ Under any privatization scenario, however, Congress should set a strict timetable for selling the PMAs and their power-generating assets, such as turbines and powerhouses. The PMAs should be sold by the end of 1999, and their generating assets should be sold by the end of 2000. This is vitally important, not only to ensure that taxpayer dollars are no longer squandered, but also to ensure the success of congressional reform efforts aimed at bringing competition to the industry.

If PMA and TVA privatizations do not occur, electricity consumers will be hurt because the development of competitive opportunities will be discouraged. Public power providers would continue to hold unique and important advantages over private providers who might want to enter new markets to offer competitive services. In other words, if legislators attempt to open electric markets to competition without simultaneously privatizing the TVA and the PMAs, the likely result will be an uneven playing field, with fewer rivals coming forward to offer electricity and consumer service in areas traditionally served by public power entities. Electricity deregulation cannot be considered complete until public power entities are privatized and special preferences eliminated.

Federal Energy Regulatory Commission. The \$146 million-per-year FERC is charged with regulating certain interstate aspects of the natural gas, oil pipeline, hydropower, and electric industries. It

62. *Budget of the United States Government, Fiscal Year 1996* (Washington, D.C.: U.S. Government Printing Office, 1995), p. 148.

63. See also Dr. Michael K. Block and Representative John Shadegg, "Lights out on Federal Power: Privatization for the 21st Century," Progress and Freedom Foundation *Future Insight* No. 37, August 1996.



is basically self-financed through fees paid by regulated industries. It could be an independent agency like the Federal Communications Commission. Congress should begin a serious debate over the extent to which the federal government should continue to regulate the private energy sector.

Energy Information Administration. The EIA is a quasi-independent agency within the Energy Department that collects and disseminates data on petroleum, natural gas, coal, nuclear power, electricity, alternate fuel sources, and energy consumption. EIA's FY 1998 budget is \$66.8 million, and the Administration is requesting a 5.5 percent increase for FY 1999, which would bring the agency's budget to \$70.5 million. All of the activities and functions performed by the EIA are also carried out by private firms, newsletters, trade magazines, and industry associations. The utility-funded Edison Electric Institute, for example, publishes its own statistical yearbook of the electric utility industry; and many of its statistics originate with the EIA. Based on the marketability of the information it provides, the EIA should be privatized and all federal funding eliminated.

CONCLUSION

The 1993 Results Act was intended to trigger congressional decisions to resize and reshape the federal government. The Department of Energy is a textbook example of an agency that has failed. The government's own evaluations, from report cards issued by the congressional staff team tasked with grading agency plans to reports prepared by the GAO and inspector general, highlight at least five good reasons why Congress should consider pulling the plug on the DOE. An ever-changing mission, wasteful spending, costly management deficiencies, poor performance measures, and many programs that the federal government should simply get out of the business of doing all make the DOE a programmatic umbrella that is too costly to maintain.

Rather than allow the Clinton Administration to play upon unfounded fears about global warming rather than to significantly increase the budgets of DOE's long-failed energy research and development, Congress should take a bold, giant step to eliminate this unnecessary, grossly mismanaged, and wasteful agency

—*Angela Antonelli is Director of The Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation.*