

May 2006

Challenges Choices Changes



An External Study

of the
Energy
Information
Administration



**Challenges, Choices, and Changes:
An External Study
of the Energy Information Administration**

May 15, 2006

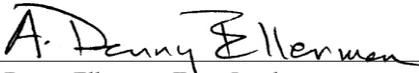
The Honorable Guy Caruso
Administrator
Energy Information Administration
U. S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Dear Guy,

We have been pleased to serve as an External Study Team to review the activities of the Energy Information Administration as requested in the Team Charter dated April 14, 2005. Accordingly, we are submitting herewith our report.

This report would not have been possible without the excellent support provided to us by the management and staff of the Energy Information Administration. We are very grateful for this help and we hope that all of you will find the conclusions and recommendations contained within this report insightful and helpful as you continue to meet the Nation's energy information needs.

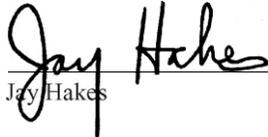
Sincerely yours,



A. Denny Ellerman, Team Leader



Kathleen Cooper



Jay Hakes



Paul L. Jaskow



Philip Sharp

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Executive Summary

In early 2005, an independent External Study Team (hereafter referred to as the “Team”) was assembled at the initiative of the Administrator of the Energy Information Administration (EIA) for the purpose of providing an independent evaluation of EIA.¹ The Team was charged with evaluating EIA’s activities and performance, and specifically to consider whether EIA is doing the “right things” and to identify challenges that EIA will face over the next five years. In doing so, the team took five contextual factors into account: Continuing Public Concern about Energy, International Dimension of Energy, Liberalization of Energy Markets, Emergence of the Internet, and Federal Budget Stringency. The Team also considered carefully that EIA is different from most other Federal statistical agencies in being called upon to provide policy analysis in addition to the more usual statistical functions.

The Team’s findings and recommendations by chapter heading follow.

EIA Yesterday: History and Results

1. EIA has done an excellent job in becoming a trusted source of energy information and analysis by all participants in the energy policy process at the Federal, state and international levels, by participants in energy markets, and by the public at large. In particular, management has responded well to the inevitable budget pressures, the new developments in information technology, and the handling market-sensitive data.

EIA Today: Is EIA Doing the Right Things?

1. EIA’s involvement in policy analysis and forecasting is appropriate, even though unusual among federal statistical agencies. The public interest in this function remains as valid today as it was in the 1970s when it was included in EIA’s original charter.
2. The data, analysis, and forecasting products that EIA is undertaking at its own discretion under the general authority and mission given to it are appropriate. This is not to say that products should not be added or eliminated in the future as circumstances warrant.
3. Three EIA products that have been specifically mandated by Congress—the Financial Reporting System, the Voluntary Reporting of Greenhouse Gases Survey, and the Alternative Fueled Vehicles Survey—should be either discontinued or transferred out of EIA. They are inappropriate activities for EIA and they divert resources from higher priority activities.

¹ EIA recruited Denny Ellerman, then-Executive Director of the MIT Center for Energy and Environmental Policy Research, to serve as Team Leader. He independently identified and selected the other team members.

EIA Tomorrow: What Should EIA Prepare For?

1. Greater efforts should be made, and the necessary resources should be made available, to restore EIA's ability to perform discretionary analysis in order to keep data collection and forecasting activities accurate, reliable, and relevant. Greater interaction with the broader energy research community is also recommended.
2. EIA's information technology infrastructure should remain separate from that of the Department of Energy so that EIA will be able to continue to meet the special demands placed upon it as a statistical agency, including the increasing market sensitivity of EIA's data releases. Also, some of EIA's market-sensitive data should be accorded "principal economic indicator" status.
3. The increasing amounts of data being provided by deregulated markets have not been as fully integrated into EIA's data, analysis, and forecasting activities as they should be. We recommend that EIA management and staff undertake efforts to make greater use of external market information in its data, analysis and forecasting products.

Introduction

I. The EIA External Study Team

In the spring of 2005, the Energy Information Administration (EIA) Administrator, Guy Caruso, requested that Denny Ellerman, Senior Lecturer at the Massachusetts Institute of Technology's (MIT) Sloan School of Management and the then-Executive Director of MIT's Center for Energy and Environmental Policy Research, appoint and lead an External Study Team (hereafter referred to as the "Team") to conduct an independent evaluation of the EIA's activities and performance and to submit a report to the Administrator in early 2006 containing the Team's findings and recommendations. This independent external evaluation responds in part to a requirement in the Office of Management and Budget's Program Assessment Rating Tool (PART). In addition, the Administrator asked the Team to consider whether EIA is doing the "right things" and to identify the challenges to which management attention should be directed over the next five years. The Team's charter can be found in Appendix A.

The other members of the Team are:

Kathleen Cooper, currently Dean of the Business School at the University of North Texas; formerly Under Secretary of Commerce for Economic Affairs, and Chief Economist of ExxonMobil;

Jay Hakes, currently Director of the Jimmy Carter Presidential Library and Museum and the predecessor to Guy Caruso as EIA Administrator;

Paul L. Joskow, Elizabeth and James Killian Professor of Economics and Management at the Massachusetts Institute of Technology (MIT) and Director of the MIT Center for Energy and Environmental Policy Research; and

Philip Sharp, currently President of Resources for the Future and formerly Director of the Institute of Politics at Harvard University and a U.S. Congressman from Indiana.

The biographies of the Team leader and members are provided in Appendix B.

The Team met twice in Washington, in July and November 2005. The one-day meeting in July provided the occasion for a briefing of the Team by EIA's senior managers, the identification of additional information required of EIA by the Team, and the tasking of Team members with particular topics for further study. An internal EIA Support Team headed by Nancy Kirkendall, Director of the Statistics and Methods Group, gathered the additional information requested by the Team and forwarded it to the Team members. The two-day meeting in November was devoted to discussion of the reports on the tasks assigned to EIA and to Team members in July and to the final oral deliberations of the Team. Following the November meeting, the report was drafted, circulated among Team members for additional comment, and further revised before being finally signed by all

Team members. The result of this process is our--the Team's--report to the EIA Administrator. We unanimously agreed upon all findings and recommendations contained in this report.

The remainder of this introduction states EIA's mission as contained in its founding legislation and as formulated in its current Strategic Plan and provides our assessment of the environment in which EIA operates. The second chapter provides our general evaluation of EIA's performance of its mission. The third chapter addresses specifically whether EIA is "doing the right things." It includes recommendations for discontinuing certain activities in order to free up resources for higher priority activities. The fourth and final chapter contains our discussion of the challenges to which EIA should be directing management attention in the coming years.

II. EIA's Mission

The EIA was created in response to the needs for additional federal initiatives to collect and disseminate energy-related information, and to evaluate and analyze this information. These needs were revealed as the United States (U.S.) sought to respond to the energy crises of the 1970s. The first law to address these needs was the **Federal Energy Administration (FEA) Act of 1974**, Public Law 93-275, as amended, which created the first U.S. agency with a primary focus on energy and mandated the establishment of a National Energy Information System to ". . .contain such energy information as is necessary to carry out the. . .[FEA's] statistical and forecasting activities. . . ." (Section 52). It also provided data collection enforcement authority with respect to energy producing and major consuming firms.

The EIA in its present form was created by the **Department of Energy (DOE) Organization Act of 1977**, Public Law 95-91, which also created the Department of Energy. Section 205(a) of this law charges the new organization with carrying out a

". . . central, comprehensive, and unified energy data and information program which will collect, evaluate, assemble, analyze, and disseminate data and information which is relevant to energy resource reserves, energy production, demand, and technology, and related economic and statistical information, or which is relevant to the adequacy of energy resources to meet demands in the near and longer term future for the Nation's economic and social needs."

Section 205(d) of this legislation provides that EIA is to be independent from review by Executive Branch officials in carrying out its duties. Although EIA is the only statistical agency to have independence from review written into law, all statistical agencies strive for independence from review to assure their missions to provide unbiased and relevant information. For example, in practice the Census Bureau and the Bureau of Labor Statistics, two large statistical agencies headed by Presidential appointees, enjoy similar levels of independence from review as does EIA. Section 205(d) states that

“The Administrator shall not be required to obtain the approval of any other officer or employee of the Department in connection with the collection or analysis of any information; nor shall the Administrator be required, prior to publication, to obtain the approval of any other officer or employee of the United States with respect to the substance of any statistical or forecasting technical reports which he has prepared in accordance with law.”

In its most recent Strategic Plan (for 2004-2008), EIA has stated its mission more succinctly as follows:

“To provide high quality, policy-independent energy information to meet the requirements of Government, industry, and the public in a manner that promotes sound policymaking, efficient markets, and public understanding.”

In citing these excerpts from EIA’s founding and current documents, we draw the reader’s attention to two distinctions that have informed the Team’s deliberations. First, the mission extends beyond data collection, assembly and dissemination. Evaluation and analysis are frequently mentioned, as is the need to look into the future. Both the FEA and DOE Acts make reference to forecasting activities and the DOE Act specifically charges EIA to carryout a program that is “. . .relevant to the adequacy of energy resources to meet demands in the near and longer term future for the Nation’s economic and social needs.” Second, “efficient markets” are explicitly noted in EIA’s current mission statement. While perhaps implicit in EIA’s mission as specified in its original legislation, this explicit inclusion in the current mission statement is an appropriate adaptation to the changes that have occurred since EIA’s creation in the 1970s and one that is rightly on a par with sound policymaking and public understanding as basic missions of EIA.

III. Evolution of the Environment in Which EIA Operates

EIA’s performance must be evaluated in the light of the circumstances in which it has operated in the nearly thirty years since it was created. These circumstances are organized below into five contextual factors, which are discussed in more detail in the remainder of this final section of the introduction and are echoed in later chapters when appropriate:

- The Continuing Public Concern about Energy supply, demand, prices, and energy-related emissions;
- The International Dimension of Energy supply, demand, prices, and energy-related emissions;
- The Increasing Importance of Energy Markets;
- The Emergence of the Internet; and
- The Federal Budget Stringency.

Continuing Public Concern about Energy

EIA's inception during in the 1970s was a time of perceived energy crisis. Although the years since the 1970s have seen periods when energy concerns ebbed, events creating some sort of crisis have had a tendency to recur and to bring energy back to the forefront of public concern. The year in which this Team was formed, 2005, provides a good illustration: record high natural gas prices, petroleum prices at inflation-adjusted levels not experienced since the early 1980s, the energy supply impacts of Hurricanes Katrina and Rita, and the Energy Policy Act (EPACT) of 2005. Although the year was almost certainly exceptional, it is illustrative of the reasons for heightened public concern about energy prices and the adequacy of energy resources.

More generally, the U.S. continues to depend heavily upon petroleum imports from a world market that draws a significant share of its supply from a region that is politically unstable and indeed volatile, as evidenced by the two Gulf Wars since 1990. More recently, a period of relative abundance of domestic natural gas supplies appears to have come to a close, as evidenced by the unprecedented high natural gas prices experienced in this current winter and for most of the past three years. And, as if these sources of concern were not enough, the interaction of complex energy infrastructures with public policy mistakes, human failure, or natural disasters have periodically gripped the public's attention and required policy-makers to address energy issues. Recent examples are the Californian electricity problems in 2000-01, the Midwest/Northeast electricity blackout in August 2003, or the hurricane-inflicted damage to offshore platforms and onshore refineries in 2005. Finally, the environmental aspects of energy use have become an increasing public concern since the 1970s. In particular, global warming and the potential impact of climate policy measures on energy demand and supply have introduced a new source of concern for policymakers, the business community, and the public at large.

In view of the above, we see no sign of change in the underlying circumstances that created a significant public interest in the availability of good information about energy supply, demand, prices, and there is also no change in the objective analysis of the effects of alternative public policies. There may be periods of reduced public attention to energy, as there have been in the past, but the record of the past three decades shows that such times are temporary. The public policy concerns about the energy sector that led to the creation of EIA remain as valid today as they were in the 1970s.

International Dimension of Energy

Prior to the 1970s the U.S. depended little on energy produced in other countries. However, the energy problems of the 1970s made clear for all to see that the U.S. had become heavily dependent on imported supplies of petroleum and that the terms under which these energy supplies were available depended on developments outside the U.S. and on decisions made by foreign governments.

Despite a stated national goal in the 1970s of energy independence, the dependence of the U.S. on imported oil supplies is significantly greater today than it was then and U.S. dependence on imported petroleum is expected to continue for the foreseeable future. In addition, it has now, in the first decade of the 21st century, become evident that the U.S. will depend upon imported supplies of liquefied natural gas (LNG) to meet domestic demand, much as had been the case with petroleum supplies in the late 1960s and early 1970s. The emergence of the U.S. as a major importer of LNG is transforming the arrangements by which LNG is traded, much as the similar emergence of the U.S. as an oil importer transformed earlier arrangements for the supply of crude oil. For both petroleum and natural gas, the U.S., Europe, and Japan will depend increasingly on imports from a relatively small number of countries in unstable areas of the world.

A new international dimension has been introduced by the emergence of China as a major economic power and importer of oil and LNG. Heretofore, periods of rising prices and the concomitant heightened concern with energy have originated on the supply side with highly visible interruptions such as those following the Arab-Israeli War of 1973, the Iranian Revolution in 1979/80, and the Iraqi invasion of Kuwait in 1990. Now, energy markets are increasingly affected by what appears to be accelerating economic growth in developing economies, which are expected to account for most of the additional world demand for energy in the coming years. As a result, greater attention must now be given to demand arising from the growing economies of the developing world.

Climate policy introduces yet another international dimension that will require close monitoring in understanding global trends in energy markets. A current example concerns the extent to which carbon dioxide (CO₂) constraints in Europe will affect the price and availability of imported LNG supplies for the U.S.

Given the general increase in global integration, the EIA's mission can only be implemented well by devoting considerable resources to understanding energy developments outside of the U.S. This need for information on and analysis of, the attributes of the global energy sector has been around since the beginning of EIA, but it is now more important than ever.

Increasing Importance of Energy Markets

While continuing public concern and the international dimension of energy markets are relative constants in the environment within which EIA operates, the next two contextual factors—the increasing importance of energy markets and the emergence of the internet—represent significant transformations of certain aspects of that environment.

It is hard for anyone not present in the 1970s to appreciate the extent to which domestic energy supplies and prices were then subject to pervasive government regulation. Natural gas had been regulated from the wellhead to the burner tip for over two decades, and a reluctance to adjust wellhead price controls to reflect growing demand and the increasing costs of extraction created a supply problem of purely domestic dimensions. Then, the imposition of wage and price controls on crude oil and petroleum products by President

Nixon in the early 1970s led to the creation of an elaborate entitlement system to allocate price-controlled domestic oil production when imported oil prices doubled in 1973 in response to a war in the Middle East and the Arab Oil Embargo. Finally, the electricity sector consisted mostly of a set of vertically integrated monopolies serving specific geographic franchise areas that were subject to price and entry regulation primarily by state public utility commissions.

The last 25 years have seen a significant amount of regulatory reform, deregulation, and industry restructuring in all of the energy sectors. Petroleum prices have been deregulated, as have the field prices of natural gas. Natural gas supplies and pipeline transportation have been unbundled, open access to interstate pipeline services has been made available to natural gas shippers, and the Federal Energy Regulatory Commission (FERC) has applied "light handed" regulation to pipeline charges, relying primarily on negotiations between pipelines and shippers. Finally, many states have moved to restructure their electric utility sectors and promote retail competition, while FERC has moved to create competitive wholesale power markets. This is not to say that the energy industry is not subject to regulation. There is still significant regulation of the electricity sector and of the distribution of natural gas. However, the rest of the energy sector is subject to the types of regulation that apply to all industries. These include the anti-trust laws, securities laws, environmental regulations, health and safety regulations, and reporting requirements for various public purposes. Another way to characterize this change is that the scope of markets in determining energy supply, demand, and prices is far greater today, and the role of government regulation far less, than it was at EIA's birth.

The increased role of markets has definite implications for how EIA fulfills its mission. For one thing, some data will become "market-sensitive" in that their release can "move" markets and have important financial implications for market participants throughout the energy system. The resulting burden upon EIA as concerns the quality of the information released, the procedures of its release, and the security measures required to prevent compromising that data prior to its release, is very different from what existed when EIA was created. Another implication of the greater role of markets is that markets themselves become a source of information about energy demand and supply that can and should be integrated into EIA's data collection, analysis, and forecasting² activities. For example, the forward prices for petroleum and natural gas provide good information about the short-term availability of petroleum and natural gas.

More generally, credible, unbiased, and reliable information leads to more efficient markets upon which the Nation now largely depends to allocate available energy supplies to meet the Nation's economic and social needs and to provide appropriate signals for the longer term supply and demand adjustments, whether in periods of high or low public concern about energy. Because some of this information will not naturally be collected or freely disseminated by market participants, EIA plays an important role by providing an unbiased source of certain types of information. As recognized in EIA's current

² As used subsequently in this report, the word "forecasting" refers to future-oriented analysis usually based on models that typically makes reference to base case and alternative scenarios.

mission statement, support for well-informed, efficient markets plays a more important role in meeting the Nation's energy needs than it did when EIA was created.

Emergence of the Internet

Data management had become computer-intensive before EIA was created, but the emergence of the internet since then has transformed the way that EIA does its business. The development of the internet as a resource broadly available to all, and the associated wide availability and augmentation of computing power, have fundamentally changed EIA's ability to disseminate data to interested parties and their capability to receive and to use that data. The data can be provided more quickly than before, customers can interact more frequently with EIA, and the customer base has been broadened. In addition, the development of secure means of data transmission has provided the means for quicker and less burdensome data collection.

The nether side of this transformation is that it is also easier for ill-intentioned persons to attempt to access EIA's information systems as a prank, as a means to gain market advantage, or worse. This threat to EIA's fundamental mission of providing reliable and unbiased energy information requires that EIA keep abreast of fast-changing technological developments affecting data security and be able to ensure the integrity of its data systems.

Federal Budget Stringency

Like death and taxes, budget constraints are an unavoidable fact of life. As a study team, we do not lament the existence of this constraint and we do not seek to be yet another voice affirming that EIA is a worthy recipient of greater Federal funding. Yet, a problem is developing that is essentially one of inadequate budgetary resources to fulfill EIA's mission. This problem has been handled adequately to date, but the expedients used cannot be relied upon indefinitely without damage to EIA's basic mission.

The developing problem to which we refer is in some ways the result of EIA's success in fulfilling its mission, but its root cause lies in the consequences of budget stringency in other parts of the DOE. The problem is that the capability to conduct energy policy analysis in DOE's policy office, and to a lesser extent elsewhere in the Executive and Legislative branches, has been significantly reduced while the need to conduct that analysis has not. The increased reliance upon EIA for this analysis is an appropriate response to overall Federal budget stringency. That various parts of the Government would want policy decisions to be based on the best data and analysis available is to be welcomed. However, the resources to meet this demand must be provided. Otherwise, when increasing demands by policymakers for policy analysis collide with declining real budgets, resources are diverted from other activities that support EIA's ability to perform its mission of collecting and disseminating information about the energy sector. While informing policy makers is a very important part of EIA's mission, equally important parts are informing the public and markets. In fact, better public understanding and more efficient markets both support good policy and reduce the need for policy intervention.

In the present circumstances, federal budget stringency is placing EIA in an increasingly unsustainable position whereby it is being forced to use up capital that has been developed over the previous decades. In later chapters, we make specific recommendations concerning activities that currently absorb budget resources that we believe could be put to better use in addressing this problem. We also direct EIA management's attention to this issue as one of the challenges that will have to be confronted and surmounted in coming years.

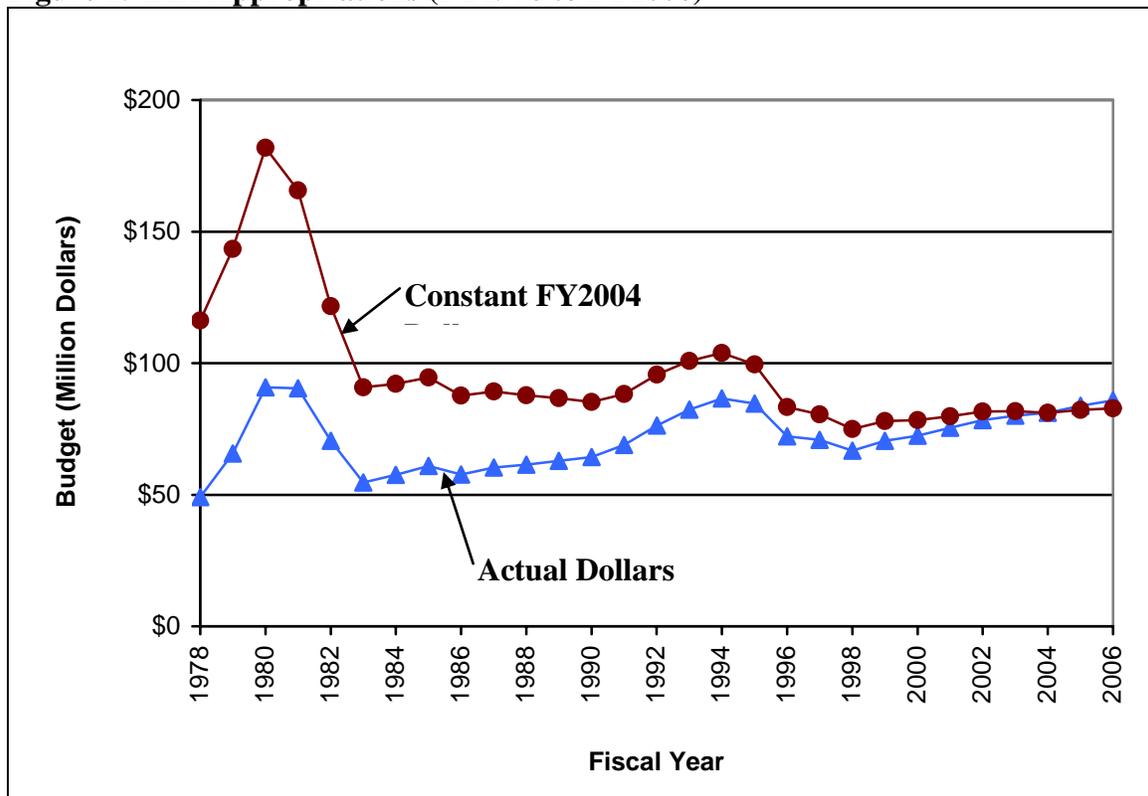
EIA Yesterday: History and Results

This part of the report responds to the request for an independent evaluation of EIA's performance of its mission. To make this assessment, the Team has reviewed the evolution and use of the resources available to EIA, compared its activities to those of other comparable statistical agencies in the Federal government, and considered various indicators of customer use and satisfaction.

I. A Brief Overview of the Evolution and Use of EIA's Resources

EIA's appropriations history since 1978 is shown in Figure 1. At the beginning of EIA in 1978 there was an initial large build-up in the budget, peaking at \$181.9 million (FY2004 dollars) in 1980. This was followed by a steep decline through 1983, from which time appropriations have remained relatively constant in real terms. However, constant budgets in real terms do not necessarily imply constant real output. If salaries and benefit costs increase at a rate faster than inflation, as they have, output can be maintained only if there are corresponding improvements in productivity.

Figure 1. EIA Appropriations (FY1978 to FY2006)



The increase in budget in the early 1990s followed by the decline after 1994 was a significant period in EIA's history. In the early 1990s, EIA received increased funds to collect new data mandated by the 1992 EPACT and to design and implement the National

Energy Modeling System (NEMS). The subsequent decline in budget authority after 1994 challenged EIA’s ability to continue its activities at the same level of quality.

As summarized in Table 1, the *increases* from 1990 to 1995 were 17% in total budget (constant 2004 dollars), 4% in full-time equivalent (FTE) employees, and 28% in contract budget (constant 2004 dollars). The *decreases* from 1995 to 2005 were 17% in total budget (constant 2004 dollars), 23% in FTE’s, and 45% in contract budget (constant 2004 dollars). In relation to 1990, that is, before NEMS and the 1992 EPACT, the budget level is approximately the same in constant dollars while the number of full-time employees and constant-dollar contract expenditure is considerably less.

Table 1. EIA Total Budget, FTEs, and Contract Budget for Selected Years

Year	Total Budget (\$M) Nominal Dollars	Total Budget (\$M) FY2004 Dollars	Number of FTEs	Contract Budget (\$M) Nominal Dollars	Contract Budget (\$M) FY2004 Dollars
1990	64.3	85.3	462	32.7	43.4
1995	84.6	99.5	479	47.3	55.6
2000	72.4	78.4	374	39.3	42.5
2005	83.8	82.2	369	31.2	30.6

Table 2 shows the distribution of resources among EIA’s eight offices. The bulk of EIA’s resources are allocated to the four offices having mission responsibilities; they account for approximately two-thirds of the overall budget, three-quarters of personnel, and 80% of contract resources. The remaining offices provide support functions in information technology, data quality assurance, information dissemination and administration.

Table 2. Allocation of Resources Among EIA's Eight Offices (FY 2005)

Office	Office Budget (\$M)	Percent of EIA Budget	Office Employees (FTEs)	Office Contracts (\$M)
Oil and Gas	23.1	27.5	91	12.4
Coal, Nuclear, Electric, and Alternate Fuels	12.4	14.8	69	4.4
Energy Markets and End Use	11.5	13.7	62	4.4
Integrated Analysis and Forecasting	9.9	11.8	59	3.0
Information Technology	8.2	9.8	28	5.0
National Energy Information Center	2.5	3.0	16	0.6
Statistics and Methods	2.7	3.2	19	0.4
Resource Management*	13.5	16.2	25	0.4
<i>Total EIA</i>	83.8	100.0	369	30.6

*The Resource Management allocation covers the Office of Resource Management, the Administrator's Office and about \$10M for EIA overhead expenses (rent, telephones, payroll processing, etc.).

Table 3 shows the distribution by product type or function for the four offices having mission responsibilities. Data functions absorb nearly all resources in all the offices except the one charged with maintaining and running the models. When considered as a whole, about three-quarters of EIA's resources are allocated to data collection and the remaining quarter is devoted to analysis and forecasting.

Table 3. Distribution of Funds Among EIA's Three Product Types

Offices	Number of Surveys	Percent of Funds for Data	Percent of Funds for Analysis	Percent of Funds for Forecasting
Oil and Gas	Oil: 26 Gas: 9 Reserves: 2	91%	9%	0%
Coal, Nuclear, Electric, and Alternative Fuels	Coal: 5 Electric: 9 Uranium: 3 Renewables: 4	95%	0%	5%
Energy Markets and End Use	Financial Reporting: 1 Consumption: 3	85%	7.5%	7.5%
Integrated Analysis and Forecasting	Greenhouse Gases: 1	11%	9%	80%
Total EIA*	65	76%	7%	17%

Based on EIA FY2006 Budget Submission.

*Total EIA funds distribution was estimated by allocating EIA Support Office funding in the same proportion as Program Office funding. Total EIA funding for education products is less than 1%.

II. Adaptation to Change

In the quarter century since EIA was created, it has had to adapt to three major changes in its environment. In this section, we summarize and evaluate how EIA has coped with these changes.

Federal Budget Stringency

Without a doubt, the most unrelenting pressure on EIA has been the effort to limit Federal expenditures and to wring greater productivity out of those that are made. In EIA's case, the only respite was in the early 1990s, when the decision was made to create the National Energy Modeling System (NEMS) and the 1992 EPACT placed new data collection requirements on EIA. While some of that budget increase may have reflected one-time, start-up costs, most of it did not.

The initiative to develop NEMS was announced in October 1991, and a re-organization in 1992 created the Office of Integrated Analysis and Forecasting to implement it. The development of NEMS was a natural out-growth of EIA's data and analysis functions and of the need to unify the various separate models that had previously been developed at EIA. However, it was also a response to the decline in modeling (and therefore of analysis and forecasting) capability in the policy office of the Department of Energy that

was also a response to declining budgets. EIA subsequently provided nearly all of the Government policy analyses and alternative case scenarios regarding the energy industry. The budget increase of these years came along with greater demand for analysis and forecasting products, but the demand did not disappear when budgets were subsequently reduced.

The 1992 EPACT mandated three new annual data collections:

- Voluntary Reporting of Greenhouse Gases (EIA-1605),
- Annual Survey of Alternative Fueled Vehicle Suppliers and Users (EIA-886), and
- Additional data items for Uranium Marketing Annual Survey (EIA-858).

Also in the 1990s, EIA began collecting data via three other new surveys that were not related to EPACT:

- Weekly Motor Gasoline Price Survey (EIA-878),
- Weekly On-Highway Diesel Fuel Price Survey (EIA-888), and
- Annual Geothermal Heat Pump Manufacturers Survey (EIA-902).

1995 marked the first decline in its real budget in five years, the first decline in nominal budget dollars since 1986, and the end of an agreement between EIA and the FERC by which EIA received money from FERC to process data they collect for regulatory purposes. In the following three years, the number of full time employees was reduced by about 100 (nearly one-quarter of the 1995 level) through attrition and buy-outs, as part of President Clinton's initiative to reduce the size of the Government.

In addition to the personnel cuts, EIA also found savings by eliminating a few surveys and reducing the frequency of others. These actions included:

- Eliminating the Residential Transportation Energy Consumption Survey;
- Discontinuing some publications, such as *Financial Statistics of Major U.S. Investor-Owned Electric Utilities*, which were based on FERC data;
- Reducing the frequency of the remaining consumption surveys (Residential, Commercial Buildings, and Manufacturing Energy Consumption Surveys) from triennial to quadrennial; and
- Reducing the frequency of the Petroleum Product Sales Identification Survey (EIA-863) from triennial to quadrennial.

EIA's budget has remained fairly stable in real terms since 2000. During that time, however, EIA has added numerous survey activities which filled data gaps and responded to changing market conditions:

- Monthly Natural Gas Marketer Survey (EIA-910),
- Monthly Cost and Quality of Fuel for Electric Plants (EIA-423),
- Weekly Underground Natural Gas Storage Report (WNGSR) (EIA-912),
- Monthly Natural Gas Production Report (EIA-914),

- Monthly Terminal Blenders Report (EIA-815), and
- Weekly Terminal Blenders Report (EIA-805).

Aside from suspending the Annual Electric Industry Financial Report (EIA-412) in 2005 and two petroleum surveys in 2006, EIA has otherwise not significantly reduced data collection in the past five years.

EIA's management has responded well to budget pressure and increasing demands for analysis mostly by improving productivity and paring products, but in doing so it has also been forced to adopt expedients that cannot be continued indefinitely. In an effort to protect the most basic of EIA's activities, data collection, management has virtually eliminated EIA-initiated analysis, deferred NEMS maintenance, and decreased quality control and quality assurance projects. To date, we do not believe that this response has had a serious effect on the performance of EIA's mission, but it cannot go on indefinitely. We will return to this issue in the final chapter of the report.

Emergence of the Internet

Over the past ten years, the most significant change in the way EIA collects and disseminates data, information, and analysis has been its adaptation to and exploitation of the new capabilities presented by the emergence of the internet. EIA launched its internet website in 1995 and has since decreased the number of paper publications from more than 80 in 2000 to just 5 in 2005. The majority of EIA's surveys, data, and other products are now readily available on-line. While this move away from paper reduced printing costs, there are large but difficult-to-quantify costs associated with preparing materials for publication on the internet and it is not clear whether the change resulted in net savings. One clear result, however, is a greatly expanded ability to reach a significantly larger audience, providing the accurate, complete, and unbiased data and analysis that support sound policymaking, efficient markets, and public understanding.

A major effort has also been made to expand the use of the internet in collecting data. Of the almost 37,000 electricity forms collected each year, almost 90 percent now use the Internet Data Collection (IDC) system. The IDC system saves EIA resources by enabling respondents to enter their data directly onto the EIA computer. The system is designed to compare the current data to prior data (known as edits) and evaluate calculated data (e.g., heat rates) to determine the accuracy and reliability of the data being submitted. These tests improve the quality of the data before it is accepted and save EIA from making large numbers of telephone calls to verify and correct data. These improvements in data collection have allowed EIA to release the *Electric Power Monthly* two months earlier, the *Electric Power Annual* two months earlier, and to provide early releases of national level electricity data, called *Monthly Flash Estimates of the Electric Power Data*, 30 days before the *Electric Power Monthly* is released. Most of the coal surveys are also now using the IDC to collect data, with the uranium and alternate fuels surveys to follow soon.

Another benefit of internet communications being exploited by EIA is the ability to "redirect" clients to other reputable sources of energy data. A good example is provided

by one of the most popular categories on EIA's website, the Country Analysis Briefs, which summarize energy information about other countries and provide links to more complete data. The redirection capability increases value to clients and reduces the need for EIA to collect and disseminate data that are readily available from other public sources. This capability could also be used more extensively for domestic sources, such as the Environmental Protection Agency for emissions data, the Department of Transportation for vehicle characteristics, and Regional Transmission Organizations that are now increasingly providing good information on electricity supply, demand and prices in particular regions of the country. In redirecting clients, EIA will need to be assured that these linked data sources possess the required reliability and integrity, but doing so will be easier and cheaper than mounting new collection efforts.

The alacrity with which EIA's management has responded to the capabilities presented by the development of the internet is exemplary. These initiatives have reduced the costs of collecting data, improved the quality, and made the data available sooner. As a result, EIA is doing a better job in fulfilling its basic mission despite budget stringency.

Increasing Importance of Energy Markets

As energy markets have become liberalized and the capability to provide information to all and sundry has increased, some EIA data releases have become an integral component of the energy markets. For example, the *Weekly Petroleum Status Report (WPSR)* is closely watched by the oil market and, on Wednesday morning when it is released, it is often the main news item affecting spot and futures prices. For instance, on March 3, 2004, the front-month crude oil futures contract fell \$1.40 per barrel between 10:30 AM (when the WPSR was released) and 11 AM. Oil industry analysts attributed this drop to an "unexpected build in commercial crude oil inventories" reported in the *WPSR*.

An equally interesting case, and one revealing even more plainly the role that EIA is now being called upon to play, is the *Weekly Natural Gas Storage Report (WGNSR)*. The American Gas Association (AGA) had issued a similar report prior to 2002 but decided to drop the report when liability concerns arose because of a reporting problem that caused significant market volatility. At that time, the Secretary of Energy asked EIA to take over the report. This was an appropriate request given the importance of the data, EIA's independence and impartiality, and ultimately its ability to compel participation in a critical data survey. It is also a development that can be expected to recur as energy data take on more market significance and become more of a public good.

As is the case with the *WPSR*, the weekly release of the *WGNSR* often causes prices to make dramatic changes and trading volume to surge as contract holders reposition in light of the new information. In fact, in 2004, a new derivative product was created to allow traders to take financial positions on their predictions of the forthcoming natural gas storage report.

The increased market sensitivity of these reports has posed challenges to EIA in having the data infrastructure to ensure accessibility at release time and to protect the integrity of the data collection and dissemination efforts. In response, EIA has installed internet access management software to protect data and to handle the increase in demand for access to EIA's website at the moment of release. On non-release days, that is, Mondays,

Tuesdays, and Fridays, EIA averages 200-600 connections from 10:25am to 10:35am. On release days for the WPSR and WNGSR (Wednesdays and Thursdays), this number increases to an average of 1600 connections. Additionally, the amount of data being transmitted or accessed on non-release days averages 3 million bits per second; on Wednesdays and Thursdays, it averages 20 million bits per second. Internet access management software has been installed to protect against attempts to obtain data prior to its official release time.

A final example of how EIA has responded to the emergence of the internet and the increasing importance of energy markets is provided by its response to energy crises. In past crises, such as the oil supply interruptions occasioned by the run-up to the First Gulf War in 1991, EIA's resources were mobilized to inform policymakers and market participants but the means were archaic by today's standards-- briefings and press releases of data and analysis as it was available--and the audience more limited. Now, EIA is mounting major efforts to provide up-to-date information—by relying on the strong relationships and regular contacts established with respondents in normal data collection efforts—to enable policymakers and markets to assess developments. For example, when Hurricanes Katrina and Rita severely damaged offshore platforms and on-shore refineries in late August and September of last year, EIA maintained a report on EIA's website that reported the status of damaged infrastructure and related market information on prices and other supply and demand developments. This report was updated daily from August 29 through November 1, twice weekly from November 3 through December 2, and then weekly from December 6 through December 27. The daily hurricane report received up to 6,000 "hits" per day and provided links to EIA's weekly data releases and other relevant DOE and Federal websites addressing hurricane issues.

This event also reveals the transformation in EIA's relations to its clients. The greater availability to market participants and to the interested public is obvious, but for policymakers, who can count on privileged access, the quickest and easiest way to stay informed is now to go to the EIA website. This is again a good example of how EIA management has been able to continue and even to improve on meeting its basic mission despite constrained budgets.

III. Customer Response

No external evaluation of EIA can be complete without consideration of what customers have to say. EIA has a wide variety of customers and a long history of collecting feedback in order to better understand the needs of the public and to improve the quality of its products.

EIA's major customer groups can be classified as follows:

- Government, including the Congress, the White House and the Department of Energy;

- Business and industry, including participants in financial markets;
- The research community extending from academia to consulting groups; and
- The general public including, importantly, the news media.

Two groups can be singled out for particular attention. The Congress has always been an important customer and many comments about the value, quality, and neutrality of EIA data and products have been received from lawmakers over the years. The feedback provided to EIA from Congress has been mostly positive and supportive (See Appendix C for examples of some recent feedback).

The news media are also intensive users of EIA data and are given special treatment because of the strong multiplier effect that is obtained by well informed journalists who then communicate the information to thousands of individuals in the general public. A sampling of the sources and nature of these requests is given at Appendix D.

Overall, EIA receives about 30,000 requests for energy information each year via telephone and email. The web clientele is large and constantly growing. Recently, web usage has averaged around 2 million unique users each month and it reached 3 million customers in September 2005 when gasoline prices spiked. These numbers are very high for a small government organization and demonstrate that many people know of and use EIA information. Recent customer surveys indicate that a surprisingly large percentage of EIA customers (approximately 40%) are located outside the U.S. This is a statistic to be welcomed, not only as a tribute to the accessibility and usefulness of EIA data, but also for the contribution to a more informed global public and to the more efficient functioning of the world energy markets from which the U.S. draws an increasing amount of its energy supplies. As in many other areas, improved global communications have led to global standards; and, to the extent EIA becomes the standard for energy information collection, analysis, and dissemination, the long-term benefits for the U.S. will be great.

EIA has conducted a customer satisfaction survey every year since the early 1990s and has consistently received high scores. EIA's most recent customer survey (2005), the American Customer Satisfaction Index (ACSI) Survey, showed that 90 percent of respondents were satisfied or very satisfied with the quality and content of EIA's information. Users indicate that there is a strong likelihood that they will return to the EIA website and that they would recommend it to others. The web search and navigation features received lower ratings; however, the new website launched in November 2005 should eliminate many navigational problems identified by customers. Many of the changes to the website were based on extensive customer usability testing with a variety of users.

In 2004 and 2005, EIA also conducted product-specific surveys for the *Annual Energy Outlook* (AEO), *International Energy Outlook* (IEO), and *Short-Term Energy Outlook* (STEO). Surveys of a random sample of users who subscribe to these forecasting products revealed that over 80% of the respondents agree or strongly agree with the statements, "The information in the AEO/IEO/STEO is of high quality." and "The AEO/IEO/STEO is relevant." This suggests that there is widespread belief among high-

level users that EIA's analytical and future-oriented products are relevant to their needs and that the information provided in these products is of high quality.

The diversity of EIA's customer base makes prioritization and evaluation of these comments difficult. People want many different things and there is not always a clear message about what customers are saying. Generally speaking, areas of positive feedback include the coverage, depth, neutrality and accessibility of EIA's information, while negative feedback concerns website usability and the timeliness of data releases. Despite the difficulties of interpretation, it is clear that EIA listens to and serves its customers well. There is also an established track record of responding to customer suggestions and comments to improve everything from EIA surveys to the EIA website. Most importantly, despite the significant budget constraints, EIA continues to provide numerous products and services to its customers and to maintain a high level of customer satisfaction.

IV. Findings and Recommendations

EIA has done an excellent job in becoming a source of energy information and analysis trusted by all participants in the energy policy process at the Federal, state and international levels; by participants in energy markets; and by the public at large. In particular, management has responded well to the inevitable budget pressures, new developments in information technology, and handling market-sensitive data.

EIA Today: Is EIA Doing the Right Things?

This chapter is devoted to an assessment of EIA's current activities. In particular, the Team has sought to respond to the Administrator's question of whether EIA is doing the "right things" with the resources that it has available in light of its mission and the specific obligations placed upon it. The Team has sought to answer this question from two perspectives: firstly, by looking more generally at the functions EIA performs and, secondly, by conducting a more specific review of identifiable products and programs.

I. Consideration of EIA's Functions

EIA's primary mission is to provide data, analysis, and forecasting regarding energy supply, demand, prices and the public policies that affect them. The Team believes that, while the public interest justification and precedent for government responsibility in data collection and dissemination is beyond question, the public interest in energy analysis and forecasting is not as obvious, nor the precedent as compelling. Accordingly, the Team has focused its attention on these two latter functions. EIA also lists education and documentation as functions; however, these activities have not been specifically evaluated because the level of activity seems appropriate and few resources are devoted to them.

Data, analysis, and forecasting are closely related functions that constitute a continuum. The data function is easy to visualize and to define: collecting, processing, and disseminating relevant data. Some analysis is involved in performing the data function, but it is of the type that concerns the quality and integrity of the data and is typically not published other than as a methodological aside. Analysis, as used in this report, means something more. At the very least, it embraces descriptive analysis, a matter-of-fact explanation of what is being reported and what is especially noteworthy, but it often involves more complex analyses of what is going on in some segment of society or the economy. Forecasting is a form of analysis that seeks to look into the future and, if not to predict, at least to evaluate possible alternative scenarios. While the orientation to the future is the distinguishing feature of forecasting, it cannot be undertaken without an analysis of present and past developments.

EIA's allocation of resources to analysis and forecasting differentiates EIA from other Federal statistical agencies. All ten major Federal statistical agencies collect and disseminate data; most engage in some form of analytical activity; but none are as extensively involved in forecasting as is EIA.

Table 4 displays the results of an informal survey that the EIA Support Team conducted in response to a request from the Team to determine the extent to which the other major Federal statistical agencies were involved in analysis and forecasting and how they allocated their budgets between data, analysis, and forecasting.

Table 4. Resource Allocation by Function in Federal Statistical Agencies

Agency	Data	Analysis	Forecasting
Census Bureau	100%		
Bureau of Economic Analysis (BEA)	90%		
Bureau of Transportation Statistics	90%	6%	
National Center for Education Statistics	86%	10%	1%
Bureau of Justice Statistics	78%	14%	
Energy Information Administration	76%	7%	17%
National Center for Health Statistics	75%	20%	
Bureau of Labor Statistics* (BLS)	70%	20%	
National Agricultural Statistical Service	97%		
Economic Research Service (ERS)	20%	60%	10%
Agriculture Combined**	69%	22%	4%

NB: Sums do not always equal 100%.

* BLS reported 50% for data collection and 40% for data processing and analysis.

** National Agricultural Statistical Service and ERS weighted by budget shown in Table 6 below.

Even allowing for the informality of this survey and the likelihood that there are differences between agencies in their interpretations of what constitutes data, analysis, and forecasting, two regularities are revealed.

- Data collection and dissemination absorb most resources in all statistical agencies.
- EIA stands out for the relatively large fraction of resources devoted to forecasting.

As reported, the Economic Research Service looks distinctly different from the others. It looks much more like an agency providing policy analysis, but that is because the data functions are performed primarily by another agency within the Department of Agriculture, the National Agricultural Statistical Service (NASS). When the two agencies within Agriculture are combined, as shown above, the share of resources allocated to analysis activities is comparable.

When asked to make the distinction between descriptive and more complex analyses, BLS, BEA, ERS, EIA, and the National Centers for Educational Statistics and for Health Statistics viewed themselves as producing more complex analyses, while the other agencies claimed to perform only descriptive analysis. Amongst these agencies, only EIA and ERS responded that they employ analytical and empirical models for policy analysis. In contrast, Census, BEA and NASS do everything in their power to avoid even being mistaken for conducting policy analysis. Within the Department of Commerce any modeling for policy analysis is conducted outside of the Census Bureau and BEA.

A tendency among the other Federal statistical agencies to concentrate on data collection and dissemination and to leave analysis and forecasting to others is evident in Table 4, but it should not be inferred that data collection is an appropriate government activity and analysis and forecasting are not. While government is often an important supplier of data, private, commercial suppliers of data to meet all sorts of needs can be readily found. Moreover, although private concerns often undertake and sell analysis and forecasting

products, the Government remains as interested in deciphering the future as any party, if for no other reason than to understand better the consequences of laws, regulations, and other actions that may be taken in the name of the people. To take only one example, forecasts of economic activity and the associated expected flows of revenue and expenditure are a staple of budget discussions. The main difference with EIA is that these forecasts are not undertaken by the statistical agencies that produce the national income statistics. Instead, they are undertaken competently and objectively by the Treasury Department and the Executive Office of the President, chiefly the Office of Management and Budget and the Council of Economic Advisors.

Other statistical agencies also make forecasts. The Census Bureau provides projections of the characteristics of the population for as much as twenty-five to fifty years out. The Bureau of Labor Statistics makes predictions of employment and labor force characteristics for up to ten years into the future. The agricultural agencies provide forecasts of crop yields three to five months out, as well as more general forecasts concerning the economics of the farm sector for as much as ten years out.

In EIA's case, three forecast products are regularly published. The *Short-Term Energy Outlook (STEO)* looks at U.S. energy markets out over 8 quarters and is published monthly; the *Annual Energy Outlook (AEO)* provides a midterm (about 20 years) forecast of U.S. energy supply and demand and is published annually; and the *International Energy Outlook (IEO)* provides a midterm forecast for world energy markets and is also published annually. All of these products use the term "Outlook" in their title to avoid the implication of an official prediction and all engage in some form of "what-if" scenarios that are built around a reference or base case to suggest alternative futures.

Each of these products is backed up by a separate modeling capability. By far, the most extensive modeling effort goes into the AEO in the form of the National Energy Modeling System (NEMS), which is comprehensive and closed (i.e., all energy variables must "add up"). The System for the Analysis of Global Energy Markets (SAGE), the linear programming modeling system that supports the IEO, is also comprehensive and closed, but the IEO still depends on NEMS for the U.S. contribution. The STEO provides monthly forecasts of important fuel supply-related variables using the Short-Term Integrated Forecasting System (STIFS) model, which is not comprehensive across all energy sources.

While the *a priori* public interest in forecasting and the associated analysis may not be obvious, nor the precedents compelling, EIA's founding legislation leaves no doubt that forecasting activities were to be included among EIA's responsibilities. The FEA Act specifically mentions forecasting and the DOE Organization Act includes "the adequacy of energy resources. . .[for] the near and longer term future. . . ." among the activities in EIA's data and information program. In addition, the section of the DOE Organization Act dealing with EIA's independence cites "forecasting technical reports" as among the items not subject to Executive Branch review. This language constitutes a definitive statement of the public interest during the energy turmoil of the 1970s and the only

question is whether circumstances have changed sufficiently to alter what must be assumed to be a strong presumption of continuing public interest.

After some deliberation on this issue, the Team's conclusion is that the presumption of a strong public interest in EIA performing these forecasting activities continues to be valid today. Interest in issues related to energy supply, demand, security, and prices remains high on the public agenda. Non-governmental interest groups that are participants in the policy process often provide pertinent analyses and forecasts, but a justifiable reluctance on the part of the Congress to trust the adversarial process to provide reliable analysis can be observed in the increased number of service reports requested of EIA by the Congress and the Executive Branch. While EIA's analyses and forecasts may be no more accurate than others, policymakers have at least the confidence that the analytic results are not driven by undisclosed ideological considerations or private interests.

A final consideration in the Team's evaluation of the appropriateness of EIA's forecasting and associated analysis activities is the need for this capability within the Executive Branch. It is simply inconceivable that this capability not exist somewhere within the Executive Branch. The current arrangement is the outcome of Federal budget stringency, and the placement of this function in EIA is appropriate given EIA's expertise and budget considerations. Serving as the Executive Branch's source of analysis could put some stress on the Administrator's independence, but the strain is not different from that encountered in meeting demands from the Congress and other participants in the policy process. As will be discussed in greater detail in the next chapter, the Team's greater concern is that the requirements of this function be recognized and that the necessary resources be provided so that the data collection effort, which is fundamental to any analysis, not be weakened by the diversion of resources to the more immediate requests for policy-driven analysis and forecasting.

II. Product and Program Review

Table 5 shows the budget resources devoted to EIA's programs and associated products. Oil- and gas-related programs account for about 41% of the total, and the Office of Oil and Gas is the largest single office in EIA. The color coding classifies each program as data (yellow), analysis (magenta), forecasting (violet), and education (blue).

Table 5. EIA Programs in Order of Resource Size (Showing Product Categories)

Rank	EIA Program	Percent of EIA Program Resources (Product Category)	Cumulative Percent of EIA Program Resources
1	Electric Power Monthly and Annual Data	12.3% (D)	12.3%
2	Commercial Buildings (CBECS), Residential (RECS), and Manufacturing (MECS)	11.2% (D)	23.5%
3	<i>Annual Energy Outlook (AEO) and National Energy Modeling System (NEMS)</i>	9.6% (F)	33.2%
4	Petroleum Marketing Monthly and Annual Data	9.1% (D)	42.3%
5	Petroleum Supply Monthly and Annual Data	7.5% (D)	49.8%
6	Natural Gas Monthly and Annual Data	6.9% (D)	56.7%
7	Oil and Gas Reserves/Production Annual and Monthly Data	6.4% (D)	63.1%
8	Petroleum Weekly Data	5.5% (D)	68.6%
9	Financial Reporting System (FRS) Data	3.7% (D)	72.3%
10	Renewable and Alternative Transportation Fuels Data	3.4% (D)	75.7%
11	Coal Weekly, Quarterly and Annual Data	2.9% (D)	78.6%
12	<i>International Energy Outlook (IEO) and System for Analysis of Global Energy Markets (SAGE)</i>	2.3% (F)	80.9%
13	Monthly Energy Review (MER) and Annual Energy Review (AER)	2.2% (D)	83.1%
14	Greenhouse Gases and Emissions (CO ₂ Only) Data	1.9% (D)	84.9%
15	Petroleum Analysis	1.7% (A)	86.7%
16	Short-Term Energy Outlook (STEO)	1.7% (F)	88.4%
17	Natural Gas Analysis	1.7% (A)	90.0%
18	Natural Gas Storage Weekly Data	1.7% (D)	91.7%
19	International Energy Data	1.6% (D)	93.3%
20	Service Reports	1.6% (A)	94.9%
21	Contingency Analysis	1.4% (A)	96.3%
22	Nuclear Forecasts	0.8% (F)	97.1%
23	Integrated State Energy Data: State Energy Data System (SEDS) and <i>State Energy Price Report (SEPR)</i>	0.8% (D)	97.9%
24	Education*	0.6% (E)	98.5%
25	Uranium Data	0.6% (D)	99.0%
26	Oil and Gas Reserves/Production Analysis	0.4% (A)	99.5%
27	Financial Analysis (Financial Reporting System Data)	0.3% (A)	99.7%
28	Coal Forecasts	0.3% (F)	100.0%

Based on EIA FY2006 Budget Submission.

* Education activities in this program include the EIA Kid's Page, two Energy Industry Study Programs for EIA employees, special-purpose education materials, and EIA and DOE education coordination.

These programs can also be classified according to the basis of the authority with which they are carried out. Most fall within a category defined by the general mandate given to EIA by the Congress and for which EIA has discretion in deciding whether to initiate or discontinue them. The other category includes those specifically mandated by the Congress and about which EIA has much less discretion.

The Congressionally mandated programs are the following, identified by the mandating legislation and EIA form:

- Petroleum Marketing Surveys - Section 507 of Part A of Title V of the Energy Policy and Conservation Act of 1975 broadly directs EIA to collect information on the pricing, supply, and distribution of petroleum products by product category at the wholesale and retail levels, on a State-by-State basis.
- Financial Reporting System (EIA-28) - Section 205(h) of the DOE Organization Act of 1977.
- Energy Consumption Surveys:
 - Manufacturing Energy Consumption Survey (EIA-846A-C)- Section 205(i) of the DOE Organization Act of 1977.
 - Residential Energy Consumption Survey (EIA-457A-G) - Section 205(k) of the DOE Organization Act of 1977.
 - Commercial Buildings Energy Consumption Survey (EIA-871A-F)- Section 205(k) of the DOE Organization Act of 1977.
- Greenhouse Gas Emissions Inventory and the Voluntary Reporting of Greenhouse Gases (EIA-1605 & EIA-1605EZ) - Sections 1605(a) and (b), respectively, of the Energy Policy Act of 1992.
- Annual Survey of Alternative Fueled Vehicle (AFV) Suppliers and Users (EIA-886) - Section 503(b) of the Energy Policy Act of 1992.
- Uranium Marketing Annual Survey (EIA-858) - Section 1015 of the Energy Policy Act of 1992.

For some of these specifically mandated surveys, the resource requirements are considerable. For example, the energy consumption surveys consume 11.2% of EIA resources and the petroleum marketing surveys, considered to be core EIA surveys, consume 9.1%. Others, such as the Financial Reporting System and related analysis (4.0%) and the Greenhouse Gas Emissions program (1.9%), require fewer resources, but they still place a noticeable strain on EIA's abilities. Moreover, budget requirements are not the only criterion by which a program should be judged. The data should not be duplicative of those collected elsewhere in the government, as well as being appropriate to the agency and capable of being collected.

In its review of EIA's programs and products, the Team did not make a distinction between those with and without a specific Congressional mandate. All of EIA's activities can be considered to be mandated by the Congress. The only distinction is whether the mandate is direct or indirect, that is, not being specifically mandated and falling under the Congress' general mandate to EIA to establish an accurate, complete, and unified energy information system. Accordingly, the Team has not excluded the directly mandated programs from its review. In doing so, we recognize that the Administrator would not be

able to act on any recommendation concerning these programs without consultation with the Congress, as has been done in the past.

The distinction between specifically mandated programs and those over which EIA has full discretion under the Congress' general mandate is a useful one for presenting our findings concerning whether EIA is doing the right things. In general, the Team found that the core group of programs were well justified and that EIA has appropriately exercised its discretion in initiating and discontinuing programs and products as circumstances warranted. Numerous examples were cited in the preceding chapter evaluating EIA's performance over the past years. The Team did not come to the same conclusion concerning several of the specifically mandated products. In particular, the Team concluded that three programs should be discontinued or transferred and that better use should be made of a fourth. Our recommendation is also strongly motivated by our belief that additional resources must be devoted to higher priority activities in EIA, which we will discuss more fully in the next chapter.

Financial Reporting System (FRS)

The Financial Reporting System (FRS) was established in 1977 under the Department of Energy Organization Act. The relevant section requires EIA to "identify and designate major energy-producing companies," and to develop and implement a data reporting program for energy financial and operating information from these companies. EIA is also required to submit an annual data and analysis report on the FRS information. The FRS is an annual survey, with results not published until more than a year after the end of the report year.

The data collected by the FRS survey are mostly duplicative of data collected by the Securities and Exchange Commission (SEC) on a quarterly (Form 10Q) and annual (Form 10K) basis and made available to investors shortly thereafter. More data on specific business lines are included in the FRS survey, but the value and use of this data is questionable. The financial status of the energy industry is not mentioned among the purposes of the EIA in either the FEA or DOE Acts, and the responsibility for protecting investors and ensuring competitive behavior rests squarely with the SEC, Federal Trade Commission (FTC), and the Department of Justice. Although FRS data have been used on occasion by the FTC, the latter has full authority to compel the production of data as required to fulfill its mission.

Finally, the purpose for collecting this data has long since passed. In 1977, the FRS reporting requirement may have helped in the administration and enforcement of the entitlement and allocation regulations that were then in effect, but these regulations were discontinued in the early 1980s. If these data serve any remaining public interest, the responsibility for collecting them should be transferred to the SEC or FTC. In our view, the Financial Reporting System has outlived its usefulness and it should be discontinued in order to free up resources for activities that are more in line with EIA's mission and less duplicative of those of other Federal agencies.

Voluntary Reporting of Greenhouse Gases Survey

The Voluntary Reporting of Greenhouse Gas Emissions survey is mandated by Section 1605(b) of the 1992 EPACT. The purpose of this program is to provide a means whereby entities can register greenhouse gas emission reductions in the hope of receiving “early action” credit in any future regulatory program limiting these emissions.

While the motivation for a voluntary reporting program is understandable, it is not a proper activity for a statistical agency that prides itself on using the very best sampling and data acquisition methods. Data provision by emissions sources is voluntary; the determination of the baseline against which the reported reductions are measured is arbitrary; and there is no assurance that the complete universe is being covered, or even appropriately sampled. Moreover, while most of the emission reductions reported result from energy activities, not all greenhouse gases originate from the combustion of energy and greenhouse gas emissions are not the only energy-related air emissions of public concern.

Finally, the program has the potential for compromising EIA’s independence by involving it directly in what will be a highly political issue of what “credit” is to be given for “early action” in the event legislation that restricts greenhouse gas emissions is enacted. While EIA’s data and expertise may be useful in determining baselines for early action credits, it is not EIA’s responsibility to decide what the baselines should be, much less to pre-empt decisions that can more appropriately be made when clear public policies have been formulated by certifying reductions now. If the purpose is merely to record claims for credit against possible future environmental liabilities, EIA is not the place to do it. In brief, this is an inappropriate activity for the EIA.

The 1992 EPACT also mandates EIA to establish and publish a greenhouse gas emissions inventory under section 1605(a). This activity is appropriate to EIA’s expertise, at least as concerns energy-related greenhouse gas emissions. There is some duplication with a similar activity and associated annual publication carried on at the Environmental Protection Agency (EPA). EIA’s product is called *Emissions of Greenhouse Gases in the United States*, while the EPA publication is titled *Inventory of U.S. Greenhouse Gas Emissions and Sinks*. The Team notes this duplication in publication; it did not consider whether this activity should be conducted at EIA, EPA, or both. It is obvious that EIA will be very much involved in any effort to account for greenhouse gases given the importance of energy-related carbon emissions. The Team also recognizes that EPA is tasked with providing U.S. greenhouse gas inventories under the U.N. Framework Convention on Climate Change and that it possesses the expertise in non-energy related greenhouse gases and sinks.

Annual Survey of Alternative Fueled Vehicle (AFV) Suppliers and Users

This collection, also mandated by 1992 EPACT, concerns the supply of vehicles that can use alternative fuels, and the amount of fuel those vehicles use. This would be an extremely expensive data collection effort since vehicles can be readily altered to use

alternative fuels and the amount of fuel actually used by modified vehicles can vary greatly. As a result, the frames (lists of entities to be surveyed) are hopelessly incomplete and the data reported are of questionable value.

The assignment of this survey to EIA appears to be inappropriate and duplicative. EIA is not charged with collecting and reporting data on the characteristics of the vehicle fleet even though these characteristics have a significant effect on energy use. Alternative fueled vehicles produced by vehicle manufacturers receive credit under the Corporate Average Fuel Economy program administered within the Department of Transportation. Furthermore, that Department's Bureau of Transportation Statistics would seem to be more capable of determining the extent to which existing vehicles are being modified to use alternative fuels.

The Team's concern with the survey of alternatively fueled vehicles does not extend to the data collection efforts related to the production of renewable fuels, such as ethanol and biodiesel. These data collection efforts are more likely to produce an accurate picture of alternative fuel use, they are more akin to the activities that EIA has always conducted, and they are not being collected elsewhere. Accordingly, our recommendation is that the Alternative Fueled Vehicles Survey be eliminated or transferred elsewhere.

Energy Consumption Surveys

The Team spent a great deal of time investigating and discussing the Energy Consumption Surveys that were mandated by the DOE Organization Act of 1977. They consume a large part of EIA's resources (11.2% of the FY06 Budget Request) and the detail required is similar to data collected by the Census Bureau. In fact, the Manufacturing Energy Consumption Survey (MECS) is collected by the Census Bureau for EIA. Also, EIA has already worked with the Congress and gained assent for discontinuing one of the original surveys mandated by the DOE Organization Act, the Residential Transportation Energy Consumption Survey, and for reducing the frequency of the remaining surveys from a triennial to a quadrennial basis.

Unlike the three Congressionally-mandated products whose termination or transfer is recommended, the Energy Consumption Surveys are clearly an appropriate activity for EIA. They provide invaluable information concerning the demand for energy, and the Team's main concern is whether the wealth of information being generated is being appropriately used. Accordingly, the Team concluded that these surveys should be retained, that EIA has taken appropriate action to reduce their cost, and that EIA's efforts should be directed to ensuring greater use and access to the data.

In particular, the confidential micro-data collected by these surveys are very useful in understanding the demand for energy, and every effort should be made to encourage researchers to use these data through means such as the Census Research Data Centers. Research Data Centers make data available to researchers with appropriate safeguards of the confidentiality of individually identifiable data.

III. Findings and Recommendations

1. EIA's involvement in policy analysis and forecasting is appropriate, even though unusual among federal statistical agencies. The public interest in this function remains as valid today as it was in the 1970s when it was included in EIA's original charter.
2. The data, analysis, and forecasting products that EIA is undertaking at its own discretion under the general authority and mission given to it are appropriate. This is not to say that products should not be added or eliminated in the future as circumstances warrant.
3. Three EIA products that have been specifically mandated by the Congress—the Financial Reporting System, the Voluntary Greenhouse Gas Survey, and the Alternative Fueled Vehicles Survey—should be either discontinued or transferred out of EIA. They are inappropriate activities for EIA and they divert resources from higher priority activities.

EIA Tomorrow: What Should EIA Prepare For?

In this chapter, we address the most important challenges that EIA will face in the coming years and those to which more attention should be given. The trends identified in the introduction to this report provide a convenient framework for a discussion of the challenges facing EIA. The agency has adapted well to three of the trends and the recommendation is to remain alert and to respond as EIA has done in the past. More attention needs to be given to the challenges arising or likely to arise out of the other two trends and we single them out for more extended discussion.

I. Challenges That EIA is Meeting Adequately

EIA has done well in dealing with the challenges arising from continuing public concern about energy supply, demand, and prices; increased globalization; and the emergence of the internet. Specific issues deserving attention can be identified in each but they are recognized by EIA management, who has demonstrated a capability to do what is called for and who is dealing competently with them now.

EIA hardly needs to be told that there will be future periods of heightened concern about energy during which the call upon resources and the need for special products will be greater than during the intervals between these periods. As witnessed in 2005, the circumstances creating public concern are no longer limited to political and other developments in foreign lands but also include natural events close to home.

An international dimension has been a part of EIA's mandate from its origin and the increasing pace of globalization of energy markets and the U.S. economy is an almost trite observation today. EIA's management is aware of the developments concerning increasing U.S. imports of LNG and the growth of China and other developing economies that make the international dimension of its activity even more important. Within the limits of budget constraints, appropriate steps are being taken to adapt EIA's programs to collect data and conduct analysis to keep abreast of these developments.

We have already commented on EIA's exemplary adaptation to the emergence of the internet in moving away from print publications to electronic dissemination and in exploiting internet technology to collect energy data more efficiently. Management is aware of the dangers as well as the potential represented by the internet and is taking appropriate measures to deal with each aspect.

In meeting past and present challenges in these three areas, EIA has done well and our only comment is to carry on dealing with them as successfully as the agency has to date.

II. Challenges That Require More Attention

The challenges that will require more attention from EIA's management in the next five years are those arising from federal budget stringency and from the increasing importance of energy markets. In both cases, EIA has done well to date, but more remains to be done.

Federal Budget Stringency

The budget constraints of the past decade or so have had an effect on EIA's analytic capabilities that will have serious long-term consequences if not adequately addressed in the near future. In brief, as total budgets have been kept flat in the face of increasing requests for forecast-based analysis, investment in the form of organizational capital that is discretionary analysis has virtually ceased. This is an understandable response to budget stringency (and an appropriate one if the choice must be made), but it is not one that can persist without detracting from the quality of EIA's data, analysis, and forecasting products.

Discretionary analysis has important effects on the quality of data and forecasting and it is what justifies the separate identification of analysis in the three-part functional description of data, analysis, and forecasting that has been used throughout this report. The lines between data and analysis and between analysis and forecasting are not clear ones and the interaction works both ways. Data feeds analytic efforts, but the latter are required to keep data collection efforts relevant by noticing market trends and identifying new data needs. Similarly, forecasting is a form of analysis, but analysis separate from the forecasting is needed to keep the structural features of models aligned with the markets and economic activity being simulated.

EIA's response to budget stringency and to increasing external demands has been to reduce the amount of discretionary analysis virtually to the point of elimination and to reassign some analytic staff to data quality assurance work. The disappearance of discretionary analysis is readily evident in a comparison of past and current publications. EIA used to include feature articles on topical energy issues in the *Monthly Energy Review (MER)* multiple times per year. The number of feature articles varied between one and six through the late 1980s and early 1990s. However, the *MER* has not included any feature articles since 1997. Similarly, data reports such as the *Quarterly Coal Report* used to include a "Summary" section in the beginning which provided an overview of the key topics addressed in that report, as well as some analysis. This "Summary" section was discontinued in 1998. Also, the *Petroleum Supply Monthly*, *Petroleum Marketing Monthly* and *Natural Gas Monthly* each, at one time, contained analytical articles virtually every month, but now these have been mostly eliminated.

As another example, EIA created an Analysis Review Board (ARB) in 1996 to set EIA's yearly Analysis Agenda and to provide recommendations to the Administrator about discretionary analysis projects proposed by its component offices each year. During its six-year life, the ARB typically reviewed 30-35 proposals a year, most of which resulted in published reports and articles. As part of setting the annual Analysis Agenda, the

Board held yearly “Analysis Roundtables,” chaired by the Administrator and attended by prominent government and non-government customers. Attendees were asked to identify emerging energy issues and to provide suggestions about analysis projects EIA should undertake. The ARB also sponsored monthly Analysis Briefings, at which EIA analysts discussed analytical work in progress. This activity was phased out in 2001 as resources for discretionary analytical work were diverted to address issues of data quality in EIA’s surveys.

Now, most EIA analysis is performed in response to requests from energy policy decision-makers in the Congress and DOE, or it is performed to support forecasting model updates. The requests help to keep EIA informed of current policy issues; however, the quality of the analysis provided in response, as well as the quality of the data collection efforts, which constitute EIA’s most fundamental responsibility, will eventually suffer if EIA is unable to undertake the discretionary analysis needed to keep data and models relevant.

Fundamentally, this is a resource problem. Although the Team believes that an increase in budget to address this problem is justified, we are not in a position to make specific budget recommendations. Instead our intent is to draw the attention of EIA’s management and of those who decide EIA’s budgets to the existence and seriousness of this problem. In doing so, we are unanimous in our strong belief that the current situation cannot endure without undermining EIA’s ability to fulfill its mission.

When compared to other Federal statistical agencies, EIA’s current budget is not excessive. As shown in Table 6 below, EIA lies on the lower end of the range of the Federal statistical agencies when judged by budget or personnel.

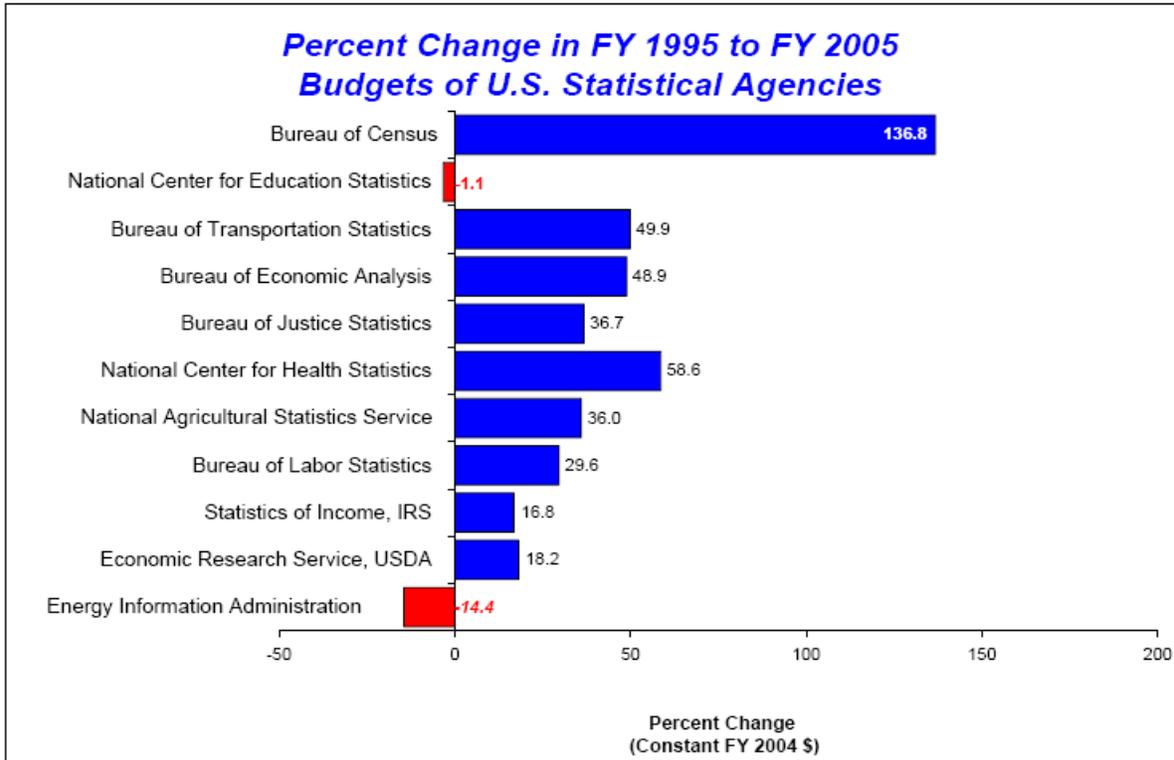
Table 6. Size of Federal Statistical Agencies

Agency	Personnel	FY2006 Budget (\$M)	% Analysis & Forecasting
Census Bureau	14,956	\$897	0%
Bureau of Labor Statistics	2,707	\$543	20%
Agriculture Combined	1,854	\$226	26%*
National Center for Education Statistics	116	\$225	11%
National Agricultural Statistical Service	1,395	\$145	0%
National Center for Health Statistics	530	\$109	20%
Energy Information Administration	369	\$86	24%
Bureau of Economic Analysis	571	\$81	0%
Economic Research Service (Agriculture)	459	\$81	70%
Bureau of Justice Statistics	59	\$53	14%
Bureau of Transportation Statistics	122	\$33	6%

EIA’s size is also small compared both to the Department of Energy (0.4% of the DOE budget) and to the overall energy market (approximately \$1 trillion annually) that EIA’s data serves to make more efficient.

Another insight into the source of the problem facing EIA is presented by Figure 2, which shows the percent change in the budgets of U.S. statistical agencies over the past ten years.

Figure 2. Percent Change in FY1995 to FY2005 Budgets of U.S. Statistical Agencies



Although the Team has made no attempt to evaluate the needs of the other Federal statistical agencies shown in Figure 2, we question whether the EIA’s circumstances are so different as to justify the 14.4% reduction in real budget over the past decade.

Another aspect of maintaining the organizational capital represented by discretionary analysis is frequent interaction with the research community external to EIA and located chiefly in academic institutions. In the case of EIA, this implies establishing relations with outside researchers that are on a par with the good level of interaction that EIA analysts now enjoy with the energy industry. The academic community brings rigor to models, documentation and comparisons that can enhance the performance of EIA’s analysis and forecasting functions. The agency would benefit from the interaction with researchers who are investigating issues of common interest. The Nation would also benefit by the wider use of EIA’s data for analysis that would lead to better public understanding, more informed markets, and sounder policy.

Ideas to promote this interaction include a program of visiting scholars to bring academic people to EIA; increasing the number of seminars, workshops and symposia with academics; and expanding researcher access to micro-data under appropriate safeguards

to protect the confidentiality of the reporting entities. With respect to the latter, EIA has no formal process in place for academic researchers (and others) to access its survey data. It provides restricted access as part of its ASA Fellowship Program, and the Manufacturing Energy Consumption Survey data, which is collected by the Census Bureau, is available to researchers through the Census Bureau's Research Data Centers (RDCs).

Most of the ten major statistical agencies provide researchers some form of restricted access to confidential data. This process requires a researcher to submit a proposal that demonstrates either a general benefit or a direct benefit to the agency. Agencies that operate RDCs and/or data laboratories usually charge fees for allowing access to the data. Other agencies do not charge fees to the researcher, and some agencies even provide grants or study programs which help to support worthy research projects. Four out of the ten agencies (Census, NCES, NASS, and NCHS) have expanded researcher access to restricted data by designing on-line data base query systems that allow researcher access to suitably protected files from personal computers at remote locations.

Increasing Importance of Energy Markets

As we have noted earlier, the trend toward deregulation of the energy sector has increased the importance of energy markets and their role in the economy. There are at least two important implications for EIA. First, EIA's data will become increasingly important for market and financial operations, with consequent implications for how those data are collected, processed, and released. Second, new sources of information about energy demand and supply have become available that should be incorporated into EIA's data and analysis functions.

Providing timely, accurate market-sensitive data is an important (new) role for EIA and one that will become more important in the future as energy markets become more complete and sophisticated. Other Federal statistical agencies have had to change data handling procedures as their data series took on greater economic importance. For example, when first developed, Gross Domestic Product estimates were of interest primarily to academics and national income accountants, but as the relevance of these data became more evident they came to have an impact on markets that required the adoption of special procedures for their collection, processing, and release. Data series that are market-sensitive are designated as Principal Economic Indicators by the Office of Management and Budget and are therefore required to follow procedures specified in OMB Directive 3. The Census Bureau, the Bureau of Labor Statistics, the Bureau of Economic Analysis, and the National Agricultural Statistical Service have data series that are so designated. While EIA does not yet have any series so designated, it follows the procedures set out in Directive 3 for the WNGSR and the WPSR.

The increasing market sensitivity of EIA's data has important implications for the agency's computer systems and their relation to those of the parent department. Statistical agencies have unique demands for ensuring timeliness, accuracy and security that make consolidation of information technology (IT) functions with non-statistical users difficult.

The situation is stated well in the National Academy of Sciences' report, *Principles and Practices for a Statistical Agency*:

“The authority to ensure that information technology systems fulfill the specialized needs of the statistical agency is also an aspect of independence. A statistical agency must be able to vouch for the integrity, confidentiality, and impartiality of the information collected and maintained under its authority so that it retains the trust of its data providers and data users. Such trust is fostered when a statistical agency has control over its information technology resources, and there is no opportunity or perception that policy, program, or regulatory agencies could gain access to records of individual respondents. A statistical agency also needs control over its information technology resources to support timely and accurate release of official statistics, which are often produced under stringent deadlines.”

A number of Federal statistical agencies have IT independence, but those that do not are dealing with data that are not market-sensitive, unlike EIA. As energy markets become more important, and EIA is called upon to provide data to promote the efficiency of these markets, IT independence will be required.

The second implication of the growth of energy markets for EIA concerns the integration of new sources of information about energy supply, demand and prices into the data collection and analysis effort. Markets produce a wealth of price, financial, and transaction data that are informative of market developments and expectations of the future. For example, the markets for forward deliveries of crude oil and natural gas are well developed and the relationship between current and forward prices is an important indicator of the expected future supply and demand balance. Many well-informed observers would consider this relationship at least as reliable as model-based short-term forecasts. At the very least, appropriate market information is a complement to modeling that deserves consideration and integration into the analyses and forecasts that EIA conducts.

The increasing availability of market-based energy information need not imply that EIA collect the data. Instead, it may be sufficient for EIA to provide the “re-direction” facility once EIA has assured itself that adequate statistical procedures are employed to assure that the data are reliable and accurate. The more important challenge for EIA is to integrate the information now being provided by markets into analysis and forecasting products and to educate users about the value and limitations of market-based information in understanding energy developments and trends.

III. Findings and Recommendations

1. Greater efforts should be made, and the necessary resources should be made available, to restore EIA's ability to perform discretionary analysis in order to keep data collection and forecasting activities accurate, reliable, and relevant. Greater interaction with the broader energy research community is also recommended.
2. EIA's information technology infrastructure should remain separate from that of the Department of Energy so that EIA will be able to continue to meet the special demands placed upon it as a statistical agency, including the increasing market sensitivity of EIA's data releases. Also, some of EIA's market-sensitive data should be accorded "principal economic indicator" status.
3. The increasing amounts of data being provided by deregulated markets have not been as fully integrated into EIA's data, analysis, and forecasting activities as they should be. We recommend that EIA management and staff undertake efforts to make greater use of external market information in its data, analysis and forecasting products.

Appendix A. Team Charter

Challenges, Choices, and Changes for EIA Charter of the External Study Team (April 14, 2005)

Background

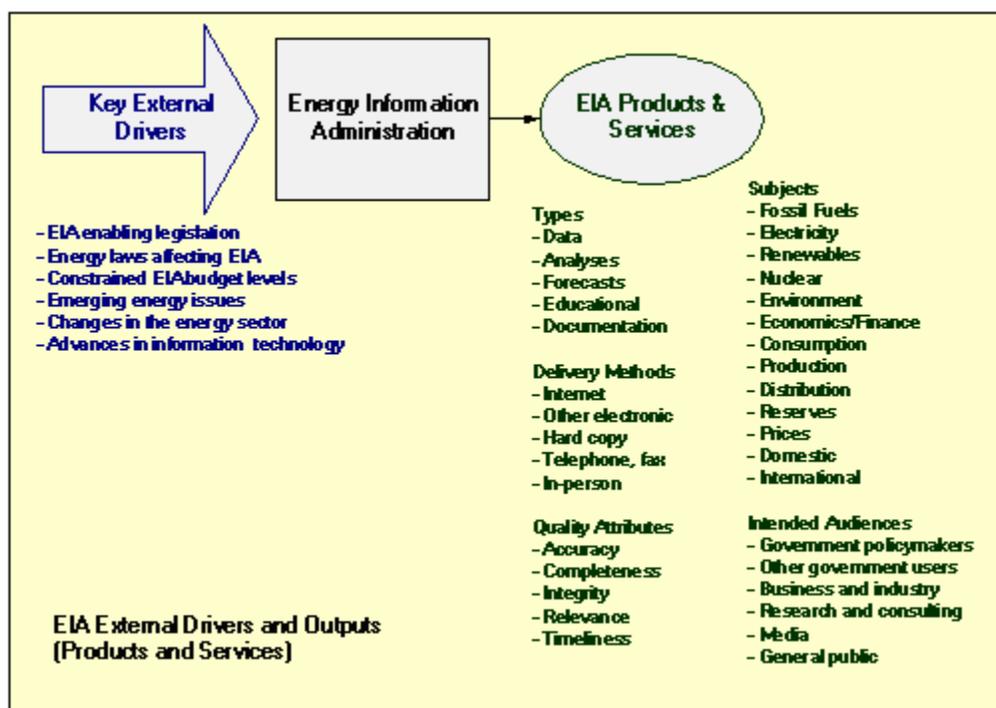
EIA is chartering this external study team to address an Office of Management and Budget requirement for a program-wide independent evaluation of EIA. EIA senior managers will use the results to help determine how EIA should focus its resources in the next five years to provide relevant energy information to policymakers, the marketplace, and to the public. The results of the study will provide input to EIA's strategic planning and budgeting processes.

Team Objectives

1. The primary objective of the team is to provide consensus advice to EIA concerning these overarching questions:
2. Given continuing tight EIA budgets and other external drivers, is EIA doing the "right" things?
3. What are the "right" things EIA should do over the next five years?
4. The final report will contain the team's consensus recommendations, and rationale along with a discussion of important issues. It will be a public document and will be posted on EIA's Website.

Scope

The study will focus on EIA's outputs (i.e., its products and services), potential outputs, its specific program areas and their relationships, and its key external drivers. EIA's internal business processes, management practices and systems are not within the scope of this study. The planning horizon is five years.



Schedule of Activities

Activity	Schedule
Team forms and EIA provides background materials.	By May 15, 2005
Team conducts study; members prepare individual responses to questions.	Summer - Fall 2005
Members deliver individual responses to EIA and participate in development of consensus recommendations and supporting rationale at a “consensus” meeting to be held at EIA.	2 or 3 days in September or October 2005
Team delivers final report to EIA.	January 2006

Team Composition, Member Compensation and Commitment

The team will consist of five members, one of whom will serve as the leader. Team members will be compensated through honoraria to be paid by EIA. Members will work primarily at their own locations, with one meeting at EIA’s Washington office in September or October (date and length of time to accommodate team member schedules and the work to be done). EIA estimates that about 100 hours of work time would be required from each member (not including travel) and that the leader’s work time would be about 125 hours, over a period of about eight months.

Participant Responsibilities

EIA:

- Identify study team leader
- Provide study questions and background materials³
- Provide additional information requested by team members throughout summer
- Provide logistical support for team meeting at EIA in September or October 2005
- Support discussions at fall meeting, providing information and/or briefings requested by team
- Prepare an initial draft report consistent with the team's deliberations and the direction it provides
- Respond to study team recommendations

Study Team Leader:

- Select the other four members of the study team
- Work with EIA to clarify the purpose of the study, meetings needed, the list of questions to be addressed, and background information to be provided.
- Clarify issues with other team members
- Conduct research to answer study questions
- Prepare an individual response to study questions before the fall on-site meeting
- Chair the discussions at the fall on-site meeting
- Direct EIA support staff in preparing text for portions of final report as desired by team
- Provide a set of team consensus recommendations to EIA

Other Study Team Members:

- Conduct research to answer study questions
- Prepare a "position" document responding to study questions before fall on-site meeting
- Participate in discussions at the fall on-site meeting
- Provide input to the final report
- Provide a set of team consensus recommendations to EIA

Resources

EIA will provide background materials prior to the startup of the study. The team will be supported by a group of EIA senior employees who will provide technical and administrative support throughout the study. The EIA support team will also assist in drafting the team's final report based on the discussions at the "consensus" meeting to be held in September or October 2005.

³The background materials will describe EIA's mission, legal framework, budget, organizational structure, data collection, analysis, educational and dissemination programs, products, services and customers. Electronic links to actual documents will also be provided.

Accountability

The team is independent of EIA. It will provide its recommendations to the Administrator of EIA in a final report. Individual team members will present their responses to the study questions at the meeting in September-October. The final report will contain team's consensus recommendations, supporting documentation and rationale.

Additional Guidance

The following questions are subsidiary to the overarching questions. They should also be addressed in the study:

- Is EIA addressing the "right" energy questions?
- What will be the major energy issues facing the United States in the next five years?
- How will EIA's current activities produce useful information related to those issues?
- What better information should EIA provide on upcoming issues?
- What kinds of questions should EIA prepare itself to answer in the next five years?
- To what extent is EIA fulfilling its legislative mandate to maintain a comprehensive energy information system?
- Is EIA providing the "right" products and services?
- Overall, is EIA adequately covering key energy subjects and current issues? What subject areas should be given more or less attention in the future?
- What should be the proper balance between data, analysis, forecasting, education and documentation in the future?
- Are there data series and/or analysis and forecasting efforts that should be changed or discontinued?
- What level and type of analytical work should EIA do to maintain the quality and relevance of its data, and what alternatives could EIA pursue?
- Are EIA's dissemination methods comprehensive and accessible enough for our primary users? What, if any, changes do you recommend?
- To what degree are the quality attributes of our products adequate to meet our customers' needs?

Appendix B. Team Biographies

Denny Ellerman

Dr. Ellerman is a Senior Lecturer with the Sloan School of Management at the Massachusetts Institute of Technology where he was also the Executive Director of Center for Energy and Environmental Policy Research and of the Joint Program on the Science and Policy of Global Change from 1992 to 2005. During the academic year 2005-06, he was a visitor at the University of Cambridge in the United Kingdom and is presently (spring 2006) a visiting Fulbright lecturer at the University of Paris (Sorbonne) in France.

Dr. Ellerman is a co-author with four MIT colleagues (including Paul Joskow) of *Markets for Clean Air: The US Acid Rain Program*. He has published articles on energy and environmental matters in a number of academic journals and other publishing outlets. His current research interests focus on emissions trading, climate change policy, and the economics of fuel choice, especially concerning coal and natural gas.

Before his appointment at MIT, Dr. Ellerman was a vice president with Charles River Associates, the executive vice president of the National Coal Association, a deputy assistant secretary at the U.S. Department of Energy, and a staff member of the Office of Management and Budget and the National Security Council within the U.S. Executive Office of the President.

Dr. Ellerman was President of the International Association for Energy Economics for 1990 and received its Award for Outstanding Contributions to the Profession of Energy Economics in 2001. He also serves on the editorial boards of several journals and on formal advisory boards to the Commonwealth of Massachusetts, the European Environmental Agency, and *Électricité de France*.

Dr. Ellerman received his undergraduate education at Princeton University and his Ph.D. in Political Economy and Government from Harvard University. He served in the U.S. Marine Corps from 1964 to 1967 and received a Bronze Star and Navy Commendation Medal for service in Vietnam.

Kathleen Cooper

Kathleen Cooper was appointed dean of the College of Business at the University of North Texas as of October 1, 2005. The college enrolls more than 5,000 students and offers a diverse set of business degrees at the undergraduate, masters, and doctoral levels.

Prior to her current appointment, she served as Under Secretary for Economic Affairs of the U.S. Commerce Department from May 2001 until August 2005. In that capacity, she served as principal economic adviser to Secretary Don Evans and Carlos Gutierrez and oversaw the activities of the Census Bureau, Bureau of Economic Analysis, and STAT-U.S.A. Accomplishments during her tenure include reengineering the 2010 Census, instituting the first quarterly measure of the U.S. service sector, achieving sustainable funding levels for more accurate and timely economic statistics, and working collaboratively to develop the Administration's comprehensive private pension reform proposal. For her many contributions, she was honored with the Commerce Department's prestigious Redfield award.

Before government service Dr. Cooper served as Chief Economist for the Exxon Mobil Corporation as well as Economics and Energy Division Manager in its Corporate Planning Department. In this capacity, her responsibilities included advising senior management on the global business environment and energy markets and developing appropriate assumptions for planning purposes. In addition, she contributed to the development of company positions on international trade, tax, and environmental policy issues.

Before associating with ExxonMobil in 1990, Dr. Cooper was Executive Vice President and Chief Economist of Security Pacific National Bank. She headed the bank's Economics Department, which conducted international, financial market, industry risk, and regional research. She spent the years 1971 to 1981 as Corporate Economist and then Chief Economist of the United Banks of Colorado, lecturing part time on economics and statistics at the University of Colorado at Denver for one of those years.

Dr. Cooper is a director of the National Bureau of Economic Research and member of the Conference of Business Economists. She has held positions as president of the National Association of Business Economists (NABE), chairman of the American Bankers Association's Economic Advisory Committee, trustee of Scripps College, and past president and senior fellow of the U.S. Association for Energy Economics. She has also served as trustee of the Committee for Economic Development and the American Council for Capital Formation.

Dr. Cooper holds a bachelor's degree in mathematics from the University of Texas at Arlington and a Ph.D. degree in economics from the University of Colorado.

Paul L. Joskow

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Education:

Yale University

Ph.D., Economics, 1972

M. Philosophy, Economics, 1970

Cornell University

B.A. (with distinction), Economics, 1968

Jay Hakes

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Phone: 404/865-7100 (o) or 404/872-1781 (h)
E-Mail: jay.hakes@nara.gov (o) or jayhakes@biltmorecomm.com (h)
Date/Place of Birth: July 13, 1944; Gallipolis, Ohio

Education:

B.A., Wheaton College (Illinois), 1966
M.A., Duke University, 1968
Ph.D., Duke University, 1970

Current Job

Director, Jimmy Carter Presidential Library & Museum (Atlanta Georgia), 2000-

Manage one of eleven presidential libraries under the National Archives and Records Administration. The research component of the library contains the primary papers of the Carter presidency as well as records relating to Carter's life before and after his time in office. These materials are open to historians, other researchers, and the general public. Some materials are available at the Library's website:
www.jimmycarterlibrary.org.

The website also contains a museum with numerous exhibits on Carter's life and presidency. The museum contains a detailed replica of the oval office, some of the most impressive gifts of state, and sections on major issues of the Carter presidency, such as limiting the spread of nuclear weapons, the signing of the Panama Canal Treaty, and the Camp David Accords. Major traveling exhibits on various aspects of American history are also featured.

Continue to speak on modern energy policy and issues related to improving the management of public agencies.

Previous Job

Administrator, Energy Information Administration, Department of Energy, 1993-2000

Presidentially appointed, Senate confirmed manager of independent statistical and analytic agency within the U.S. Department of Energy. Oversaw the collection, dissemination, and archiving of the nation's energy data series. Final review and approval for a wide variety of analytic and forecasting products that form the foundation for almost all major work on energy issues throughout the governmental and private sectors.

Major spokesman on energy issues. Testified frequently before congressional committees on a wide variety of energy issues. Interviewed and quoted by most major

news organizations. Provided regular briefings on energy trends to the Secretary of Energy.

Used strategic planning to provide higher levels of customer service. EIA website highly advanced and rated as one of sixteen best in Federal government by Government Executive. Developed comprehensive system of performance measures, which indicated increasing levels of public recognition and customer usage. In 1998, organization received highest Baldrige quality management ranking of any headquarters organization in the history of DOE.

Other Government Experience

1995-2000 Member, Council on Federal Statistical Policy
1987-93 Florida Director for U.S. Senator Bob Graham (resigned twice for brief periods to run statewide campaigns)
1985-86 Florida Governor's Office (Executive Staff Director, Deputy Chief of Staff and Chief of Staff for Governor Bob Graham)
1981-85 Director, Governor's Energy Office, State of Florida
1980 Special Assistant, Executive Office of the President
1977-79 U.S. Department of Interior, Deputy Executive Secretary and Executive Secretary (Also had titles of Special Assistant and Assistant to the Secretary)
1977 U.S. Agency for International Development, Special Assistant for Personnel
1977 Member (Presidential appointment), Panel for the Western Fifth Circuit, U.S. Circuit Judge Nominating Commission

Academic Experience

University of New Orleans:

1970-73 Assistant Professor, Political Science
1973-77 Associate Professor, Political Science
1972-75 Political Science Graduate Coordinator
1974-77 Graduate Council
1971-77 University Senate (not consecutive terms)

Duke University:

1966-70 James B. Duke Fellow
1968-69 Shell African Studies Fellow

Publications

"Can Measuring Results Produce Results: One Manager's View," Evaluation and Program Planning, Vol. 24, pp. 319-327.
"Prospects for 30 TCF," Natural Gas, August, pp. 12-16. John Wiley and Sons, Inc. With James M. Kendell.

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- 1970 “Election Year Politics in Kenya,” Current History, Vol. 58 (March), pp. 154-59,
177.
- 1969 Study Guide for Kenya. Boston: African Studies Center of Boston University, pp.
76.

Other Activities

- Member, National Academy of Sciences Committee, “Research and Development
Statistics at the National Science Foundation,” 2002-2004.
- Member, Advisory Board, Florida Growth Management Conflict Resolution Consortium,
1990-93.
- Adjunct Professor, Department of Public Administration, Florida State University, 1990.
Course topic: State and Federal Perspectives on Executive Leadership.
- Alternate Member, Southeast Compact Commission for Low-Level Radioactive Waste
Management, 1984-86.
- Member, Advisory Panel on Energy Priorities, U.S. General Accounting Office, 1984.
- Member, National Governors' Association review team for U.S. Department of Energy
proposal, “Technology Transfer in the 1980s,” 1984.
- Member, National Governors' Association Electric Utility Task Force, 1982.
- Member, Advisory Board, Florida Solar Energy Center (University of Central Florida),
1981-89.
- Alternate Member for Governor Bob Graham, Southern States Energy Board, 1981-85
- Florida Negotiator, Southeast Regional Compact on Low-Level Radioactive Waste, 1981.

Philip Sharp

President, Resources for the Future

Philip R. Sharp became President of *Resources for the Future* on September 1, 2005. His career in public service over the last 35 years includes ten terms as a member of the U.S. House of Representatives from Indiana, and a lengthy tenure on the faculty of the John F. Kennedy School of Government and the Institute of Politics at Harvard University.

Founded in 1952 as an independent and nonpartisan research institution, RFF is the oldest Washington think tank devoted exclusively to policy analysis on energy, environmental, and natural resource issues. Sharp leads a research and administrative staff of more than 80 persons and oversees an institutional endowment of nearly \$70 million.

Prior to his service in Congress from 1975 to 1995, Sharp taught political science at Ball State University from 1969 to 1974. Following his decision not to seek an eleventh consecutive term in the House, Sharp joined Harvard's Kennedy School, where he was a Lecturer in Public Policy from 1995 to 2001. He served as Director of Harvard's Institute of Politics from 1995 to 1998 and again from 2004 until August 2005. He also was a Senior Research Fellow in the Environmental and Natural Resources Program from 2001 to 2003.

Sharp was Congressional chair of the National Commission on Energy Policy, a panel established by the Hewlett Foundation and other major foundations to make energy policy recommendations to the Federal government. The commission issued its findings in a major report, *Ending the Energy Stalemate: A Bipartisan Strategy to Meet America's Energy Challenges*, in December 2004. The report has been widely recognized as a comprehensive roadmap for future energy policy, receiving considerable attention from Congress during the recent debate over the 2005 Energy Policy Act.

During his 20-year congressional tenure, Sharp took key leadership roles in the development of landmark energy legislation. He was a driving force behind the Energy Policy Act of 1992, which led to the restructuring of the wholesale electricity market, promoted renewable energy, established more rigorous energy-efficiency standards, and encouraged expanded use of alternative fuels. He also helped to develop a critical part of the 1990 Clean Air Act Amendments, providing for a market-based emissions allowance trading system.

Sharp served on the House Energy and Commerce Committee, where he chaired the Fossil and Synthetic Fuels Subcommittee from 1981 to 1987 and the Energy and Power Subcommittee from 1987 to 1995. He also was a member of the House Interior and Insular Affairs Committee, where he served on the Energy and Environment Subcommittee and the Water and Power Resources Subcommittee.

After leaving Congress, Sharp was a member of the National Research Council's Committee on Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards, which issued its report in 2001. He chaired the Secretary of Energy's Electric Systems Reliability Task Force, which issued its report in 1998.

Sharp is co-chair of the Energy Board of the Keystone Center and a member of the National Research Council's Board of Energy and Environmental Systems. He headed the advisory committee for a Massachusetts Institute of Technology study on the future of nuclear power and now heads the advisory committee of a second study on the future of coal.

He serves on the boards of directors of the Energy Foundation, the Cinergy Corporation, the Distributed Energy Systems Corporation, and the Electric Power Research Institute (EPRI). Before accepting the RFF presidency, he was senior policy advisor to the Washington law firm of Van Ness Feldman, and a senior advisor to the Cambridge economic analysis firm of Lexecon/FTI.

Born in Baltimore in 1942, Sharp was raised in Elwood, Indiana. After a year at DePauw University, he transferred to Georgetown University's School of Foreign Service, where he graduated *cum laude* in 1964. He spent the summer of 1966 at Oxford University and received his Ph.D. in government from Georgetown in 1974.

Appendix C. Congressional Feedback

Recent Congressional Comments about EIA

Pro:

- Chairman Pete Domenici (R-NM), Senate Energy and Natural Resources Committee, February 2005: "...you have become a very formidable organization...and we have great trust in what you tell us. So we hope you will keep the professionalism up because you are pretty important to us." (comment made to Guy Caruso at a hearing)
- Chairman Jim Gibbons (R-NV), House Resources Subcommittee on Energy and Mineral Resources, March 2005: said at a hearing with Guy Caruso that the Subcommittee appreciates the "insights" of EIA
- A senior staffer to Rep. Jo Ann Emerson (R-MO), April 2005: "The Congresswoman was very impressed with your office and the work you do...." (comment made after a meeting that Guy Caruso had with Rep. Emerson)
- Diane DuVaul, Northeast-Midwest Institute (a congressional support organization), May 2005: "Inadequate funding for the EIA over the last decade threatens the agency's ability to provide timely, accurate, congressionally-mandated energy information needed by the public, energy markets, and policy makers."
- Rep. Jim Gerlach (R-PA), July 2005: "The quality of the event (town hall meeting on gasoline—ed.) was due largely to the excellence of the [EIA] presentations and to your knowledge of the subject." (comment made in letters to 2 EIA participants in the town hall meeting)
- Numerous compliments from congressional staffers about the quality of the EIA website and usefulness of the data
- Numerous requests for, and mentions of, EIA data during House and Senate committee markup and floor debate on the comprehensive energy bill, Spring and Summer 2005
- Chairman Domenici, September 2005: "You have done an excellent job in the past and we appreciate your performance and your testimony." (comment made to Guy Caruso at a hearing)
- Chairman Ted Stevens (R-AK), Senate Committee on Commerce, Science and Transportation, September 2005: "We find that Energy Outlook (STEO) very helpful, so. . . appreciate that." Later in the hearing he said "You've been here several times. . .we really value your opinion. . . ." (comments made to Guy Caruso)

- Chairman Domenici, October 2005: “. . .we thank you again for your excellent work and for your help in this area.” (comment made to Guy Caruso at a hearing)
- Chairman Joe Barton (R-TX), House Committee on Energy and Commerce, October 2005: “I want to begin by thanking Guy Caruso. . .for testifying before the subcommittee today. He has been guiding and advising the Energy and Commerce Committee since his appointment in 2002 and we are always very appreciative and grateful for his analysis and views.”
- Congressman Rick Boucher (D-VA), Ranking Democrat on the House Energy and Commerce Subcommittee on Energy and Air Quality, October 2005: “. . .thank you for. . .preparing your always very thorough presentation for us.” (comment made to Guy Caruso at a hearing)

Con:

- Senator Jeff Bingaman (D-NM), Ranking Democrat on the Senate Energy and Natural Resources Committee, February 2005: questioned whether our AEO projections for U.S. and world oil demand were realistic (i.e., too high)
- Rep. Roscoe Bartlett (R-MD), March 2005: disagreed with our AEO forecast of increased worldwide oil production to 2025; felt that the U.S. has probably reached “peak oil” production already
- Senator Ken Salazar (D-CO), Spring 2005: felt that our AEO projections for wind energy did not adequately take technology-driven price reductions into account
- A senior staffer on the House Science Subcommittee on Energy, Spring 2005: felt that the NEMS under-represented the potential contributions of renewable energy to electricity production
- Rep. John Peterson (R-PA) and staff, July 2005: felt that our forecast of natural gas prices was very low, considering what is happening in the market currently; did not feel that our explanation of our AEO assumptions was sufficient
- Several congressional Members and staffers have commented that the *AEO2005* oil price projections were out of date within a few months of publication, vis-à-vis the run-up in prices beginning in late 2004.

Appendix D. Questions from the Media

Selected weeks in September 2005

Total number of news media inquiries for the week ending 9/9/05: 91

Total number of news media inquiries for the week ending 9/2/05: 156

9/9/05

- Marquette Tribune (Milwaukee, WI) wanted our outlook for residential natural gas heating costs this upcoming heating season.
- Washington Post wanted to know if we could point to a source of information that might know if the number of incidents of gasoline thefts has increased recently.
- Washington Post wanted to know if we had information that responds to an e-mail circulating concerning a call to boycott certain brands of gasoline whose parent companies import oil from the Middle East.
- ABC News needed information on the number of oil production platforms and oil drilling rigs in the offshore Gulf of Mexico and how many workers are employed on them.
- Denver Post wanted data on retail gasoline margins.
- Scranton Times wanted our outlook for heating fuel costs.
- Associated Press wanted to know the percentage of households in New England using heating oil.
- Fox News wanted recent data on gasoline consumption and our outlook for heating fuel prices.
- Investors Business Daily wanted our outlook for heating oil and natural gas prices.
- Columbus Dispatch wanted our outlook for heating fuel prices.
- Cincinnati Enquirer wanted our outlook for heating costs this winter.
- CNN wanted our outlook for natural gas prices and the percent of electricity that is generated by natural gas in the U.S.

- CBS affiliate in Philadelphia wanted our natural gas price forecast for the Mid-Atlantic region.
- Ladies Home Journal wanted to know how the Energy Policy Act might help consumers.
- Boston Globe wanted our outlook for heating fuel costs in New England.
- Wall Street Journal wanted to look at recent trends in gasoline demand.
- Washington Post wanted to compare the percentage of households using heating oil in New England versus in the Mid-Atlantic region.
- Kiplinger's Personal Finance called for forecasts of energy costs for the coming winter.

9/8/05

- Newsday wanted our outlook for home heating oil and natural gas prices.
- Boston Globe wanted to see if our data showed a drop in premium gasoline's share of total gasoline sales.
- Associated Press wanted the average retail price of gasoline in 1955.
- Investors Business Daily wanted to know what information EIA has related to energy security.
- Smart Money wanted current and historical data on the profitability of the U.S. refining industry.
- Greenwire wanted to find our "Short-Term Energy Outlook."
- Post-Standard (Syracuse, NY) wanted our outlook for heating fuel costs.
- Newsday wanted our outlook for natural gas prices.
- Roanoke Times wanted our outlook for heating fuel prices.
- San Jose Mercury News wanted to look at historical retail gasoline prices back to 1990.
- Arizona Republican wanted our outlook for natural gas prices.

- Washington Post wanted to know how fast the local gasoline market would respond to a waiver of the reformulated gasoline requirement for Washington, DC.
- Knight-Ridder wanted data on the price of crude oil back to 1970.
- CNN requested a television interview on our "Short-Term Energy Outlook."
- Bloomberg wanted information on the methodology of our weekly petroleum inventory estimates.
- WRC-TV (Washington, DC) wanted our forecast of gasoline and heating fuel prices.
- CBS TV affiliate in Philadelphia wanted our outlook for natural gas prices.
- Daily Herald (Chicago, IL) wanted our outlook for natural gas prices this winter.
- Washington Post wanted to be able to describe the financial transactions that occur from the point of production of crude oil to the point of sale of gasoline.
- Denver Post wanted to track trends in crude oil prices, wholesale gasoline prices, and retail gasoline prices.
- Cox Broadcasting requested a television interview on the outlook for heating fuel prices.
- NBC News Channel requested a television interview on the outlook for heating fuel prices.
- Newsweek wanted historical inflation-adjusted crude oil prices.
- CNBC requested a television interview on the outlook for heating fuel prices.
- Wall Street Journal wanted to know if EIA had done an analysis of the impact of a tax policy or other policy that would keep gasoline prices at or above \$3.00 per gallon.
- On Wall Street magazine wanted to see recent price trends in retail gasoline prices.
- San Jose Mercury News wanted State level data on the natural gas share of total electricity generation.
- Kansas City Star asked for historical gasoline prices.

- CNN called for information on the status of the situation in the Gulf with regard to refineries and oil and gas production.
- Roanoke Times called for help with the recent STEO forecast for winter heating costs.

9/7/05

- CNBC wanted a forecast of residential heating bill this winter.
- New York Post wanted information about the effects of Hurricane Katrina on gasoline and heating oil prices.
- The Journal News (Westchester, NY) wanted our outlook for heating fuel prices.
- Dayton Daily News wanted our forecast for household heating oil bills this winter.
- New York Times wanted current and historical data on gasoline imports and consumption
- NPR requested a radio interview on the outlook for heating fuel prices this winter.
- Business Week wanted to compare electricity costs this year to costs a year ago.
- Platts Inside FERC wanted to know if EIA would be doing a study on the impacts of economic dispatch of electricity generation that is required under the Energy Policy Act of 2005.
- Inside EPA wanted to locate the "Short-Term Energy Outlook."
- Reuters wanted to go over our forecast of changes in consumer energy expenditures.
- Omaha World Herald (Omaha, NE) wanted a breakdown of the cost components of the retail price of gasoline.
- Consumer Reports wanted data showing U.S. gasoline consumption as a percentage of total world petroleum consumption.
- Scranton Times wanted help in interpreting our historical data series on inflation-adjusted gasoline prices.

- Hometown News (Vero Beach, FL) wanted the outlook for gasoline prices in Florida.
- Newsweek wanted long term historical trends in fuel economy for cars and light trucks.
- Washington Post wanted a ranking of the top U.S. refining companies by refining capacity.
- Messenger Post newspaper (Canadigua, NY) called for information on current gasoline prices and market conditions.
- Fox News called to confirm information that Reuters recently released about the STEO forecast for natural gas, heating oil and electricity costs.
- Breaking Views asked for information about gasoline prices, sales volumes, and fuel consumption.
- Citizens Voice and Scranton Times wanted information comparing present oil markets with the early 1970's oil crisis.

9/6/05

- Press-Democrat (Northern California) wanted to know why California gasoline prices are normally higher than prices in the rest of the country.
- Houston Chronicle wanted data on retail diesel prices.
- Akron Beacon-Journal wanted to know the factors behind the rapid rise in gasoline prices.
- Newsday wanted to know when gasoline prices peaked in inflation-adjusted terms.
- Bloomberg wanted information on the current conditions in and the outlook for distillate markets.
- Fox News wanted information on the current status of refinery operations in the Gulf of Mexico region.
- Houston Chronicle wanted to confirm the gasoline price projections presented by the Administrator in his testimony before the Senate Energy Committee.
- Bloomberg wanted a source of data on daily retail gasoline prices.

- Detroit Free Press wanted information on the current status of refineries that had been affected by Hurricane Katrina.
- Washington Post wanted to know how we could have spot shortages of gasoline with inventory levels over 200 million barrels.
- New York Times wanted the location and capacity of all refineries in the U.S.
- CNN wanted to know how much U.S. refining capacity is currently unavailable.
- Bloomberg wanted to know the normal level of gasoline production from the refineries that are currently shut down.
- Lincoln Journal (Lincoln, NE) wanted historical inflation-adjusted gasoline prices.
- Harpers magazine wanted historical gasoline prices and a chronology of releases of crude oil from the SPR.
- Scranton Times wanted historical inflation-adjusted gasoline prices.
- Naperville Sun called for our forecast for natural gas prices for the coming winter.
- Congressional Greensheets wanted information about heating oil stocks and our short term forecast.
- Fox News Channel (New York) asked about refinery activity affected by hurricane Katrina.
- Florida Times Union (Jacksonville) called for gasoline price forecasts and history.
- National Journal magazine wanted information about the gasoline price outlook.
- Umweltschutz (Environment Protection) Austrian newsmagazine asked about future increases of nuclear power in India.

9/2/05

- CNN wanted to confirm that there are currently eight refineries shut down along the Gulf Coast.
- Wall Street Journal wanted to confirm the operational status of the refineries in the Gulf that had been affected by Hurricane Katrina.

- Reuters wanted to know approximately how much gasoline can be refined from 30 million barrels of crude oil.
- Fox News wanted to know how many refineries are in the Gulf Coast region and what percentage of total refinery capacity those refineries account for.
- Reuters wanted long-term historical data on Iran's crude oil production.
- Forbes wanted regional refinery capacity and utilization data.
- Buffalo News wanted information on the speed of gasoline price pass-through from the wholesale to the retail level.
- Chicago Tribune wanted to know how much gasoline prices have increased this week.
- NPR wanted to discuss the status of oil production and refining in the Gulf Coast region.
- WUSA-TV (Washington, DC) wanted to know if gas stations would be out of gas this Memorial Day weekend.
- The Independent (Collierville, TN) wanted to know what EIA could say about the oil market impacts of Hurricane Katrina.
- Post-Register (Idaho Falls, ID) wanted information about current gasoline prices and the possible effects of Hurricane Katrina on gasoline prices.
- PBS wanted to know how much gasoline prices have increased so far this week.
- Houston Chronicle wanted information on the Gulf Coast region's share of total crude oil production and total refining capacity.
- Voice of America called for information about natural gas and oil production in the Gulf of Mexico and total U.S. production.
- WGRC Radio (Lewisburg, PA) wanted information about gasoline prices and regulations.
- Tribune Review (Pittsburgh) wanted information about the cost components in the retail price of gasoline.
- Augusta Chronicle asked about current gasoline prices and our forecast for prices.

- Fox News called for information on how long it takes for crude oil to be processed into gasoline.
- State News (East Lansing, MI) called for information on current gasoline prices.

9/1/05

- Budget Living magazine wanted to know what percentage of U.S. households have programmable thermostats.
- CNBC wanted to know when the next Office of Energy Assurance Situation Report would be available.
- Virginia Pilot (Norfolk, VA) wanted the latest information on retail gasoline prices.
- CNN wanted to know if there was a legal definition of “price gouging” under Federal law.
- Newsday wanted to compare U.S. gasoline prices to the prices in other countries.
- Wall Street Journal wanted the percentage of total domestic crude oil production from the Gulf of Mexico region.
- Washington Post wanted to know the primary statistical components of gasoline supply and demand and how they fit together.
- Fox News wanted a breakdown of the cost components of the retail price of gasoline.
- Telegraph-Herald (Dubuque, IA) wanted to know current and potential gasoline supply impacts of Hurricane Katrina.
- Wall Street Journal wanted to know the status of the Gulf Coast refineries that have been affected by Hurricane Katrina.
- Times-News (Burlington, NC) wanted the outlook for gasoline prices.
- Fox News wanted to know when there were last Federal prices controls on petroleum.
- Houston Chronicle wanted data on the capacity of those refineries currently shutdown and recent data on the volume of gasoline imports.
- Dow Jones wanted current gasoline prices versus a year ago.

- Chicago Tribune wanted regional and city-level gasoline prices.
- Calgary Herald requested an interview on the potential for Canada's oil sands.
- Newsday wanted historical trends in the Gulf of Mexico's share of total U.S. crude oil production and current information on the share of U.S. refining capacity that is shut down.
- Maryland Gazette wanted to look at jet fuel price trends.
- Dominion Post (Morgantown, WV) wanted the outlook for gasoline prices.
- Citizen's Voice (Wilkes-Barre, PA) want to know what percentage of households in Pennsylvania use heating oil and what is our outlook for heating oil prices.
- NBC wanted to know the historical peak gasoline price in inflation-adjusted terms.
- Platts wanted to know if EIA had done any studies looking at the market impacts of releasing crude oil from the SPR.
- PBS wanted data on oil imports into Port Fourchon, LA.
- New York Times wanted to look at recent trends in wholesale gasoline prices.
- Bloomberg wanted statistics on Massachusetts' share of total residential heating oil use.
- Houston Chronicle wanted data on State offshore oil and gas production for Louisiana and Mississippi.
- Washington Post wanted information on when the U.S. last implemented gasoline rationing at the Federal level.
- Congressional Quarterly wanted our forecast of residential heating oil prices and residential natural gas prices.
- Philadelphia Inquirer wanted historical trends in U.S. refining capacity and profitability.
- Berkshire Eagle (Pittsfield, MA) wanted the outlook for gasoline prices.
- Baltimore Sun wanted to find historical inflation-adjusted gasoline prices.

- Nightly Business Report wanted to know the number of hits on the Department of Energy's gas price reporting Web page.
- Platts wanted to know the time and date of release of our current Hurricane Katrina Report.
- Newsweek wanted historical Henry Hub natural gas spot prices.
- Bloomberg wanted to know what the current gasoline inventories in terms of days of supply.
- Expo and Telegram (Clarksburg, WV) wanted our outlook for gasoline prices.
- New York Times wanted information on trends in wholesale gasoline prices.
- Wall Street Journal wanted information about inflation-adjusted gasoline prices.
- Sarasota Herald Tribune called about EIA's gas pump price components graphic.
- Financial Times London wanted information on where China's oil imports come from.
- Times Leader (Martin's Ferry, OH) called for information on the relative importance of Gulf Coast refinery gasoline production.
- Altavista Journal (Altavista, VA) called for information on current gasoline prices.
- Florida Today called for information on current gasoline prices.
- CBS News called for information about the relative cost to refine gasoline for the California market.
- Investors Business Daily called to see if EIA has a map showing where drilling rigs and wells are located in the U.S.
- CNN called for information on what percentage of U.S. heating oil production is from the Gulf Coast.