Professional Audit Review Team

Report to the President
and the Congress

Performance Evaluation of the Energy Information Administration

Department of Energy

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PROFESSIONAL AUDIT REVIEW TEAM
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To the President of the United States, the President of the Senate, and the Speaker of the House of Representatives

This report discusses the results of the Professional Audit Review Team's (PART) evaluation of the performance of the Department of Energy's Energy Information Administration (EIA), as required by the Department of Energy Organization Act (P.L. 95-91, Aug. 4, 1977). The report covers EIA's activities during the period June 1990 through September 1992.

Copies of the report are being sent to the Secretary of Energy; the Director, Office of Management and Budget; the chairmen of energy-related congressional committees; and the heads of the PART member agencies.

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Executive Summary

PURPOSE

The energy crisis of the 1970s increased awareness of the need for comprehensive energy information programs. To meet this need, the Energy Information Administration (EIA) was established as an agency within the Department of Energy to develop and maintain information for national energy policy decisions.

The Congress created the Professional Audit Review Team (PART)—composed of members from leading statistical and analytical agencies—to evaluate periodically whether EIA performed its activities independently, objectively, and professionally. PART is reporting on its evaluation for the period June 1990 through September 1992. The principal objectives of this review were to evaluate the usefulness of energy information reports and the adequacy of contract management, including looking at various aspects of the technical monitor program. We also checked the actions EIA has taken on previous PART recommendations.

BACKGROUND

The Department of Energy Organization Act established EIA as the federal focal point to collect, process, and publish data and information relevant to energy resource reserves, production, demand, and technology. The act recognized the need to ensure that energy data collection and analysis functions are not biased by political considerations or energy policy formulation and advocacy activities. In past evaluations, PART concentrated on areas such as the: (1) effectiveness of EIA's programs to ensure the quality of data collection and analysis systems, (2) effectiveness of planning and management processes, and (3) independence from policy formulation and advocacy functions.

PRINCIPAL FINDINGS

PART's query of recipients of four EIA reports showed that, in general, recipients were confident in using the factual data in the reports and were fairly satisfied with the reports' content and would be willing to pay to receive them. Also, from 62 to 85 percent of the respondents told PART that the reports were useful when used as sources of basic facts and for maintaining trend information. However, only from 2 to 15 percent of the respondents said that the reports were useful for conducting investment analysis. Some 57 to 87 percent of the respondents thought the reports were timely as sources of basic facts and for maintaining trend information. However, 20 to 53 percent perceived the reports as timely for investment analysis. Several of the respondents commented in writing about wanting the data sooner. Although timeliness appeared to be an important issue for some respondents, EIA's use of more expedient reporting formats may not be viable because many respondents said that they would not likely use the more expedient reporting formats even a reasonable fee were charged.

During each of the last several years, EIA has spent about 50 percent of its appropriated funds or between $31.2 million and $36 million annually, on support service contracts. EIA relies heavily on technical monitors to manage these contracts, including developing task assignments, monitoring day-to-day contract progress, and evaluating contractor performance. PART found that the technical monitors are inadequately trained and must work with an out-of-date guidance manual. About 67 percent of the technical monitors responding to PART's questionnaire reported that they had not received any technical monitor training during the 3-year period from 1989 through 1991. In total, the respondents averaged less than 1 hour of training each year for the 3-year period. EIA's manual for guiding technical monitor work was issued in 1986, has not been revised since issuance, and provides only basic background information. The manual does not provide adequate "how to" guidance on what technical monitors need to do to perform their duties.

Recent audits of selected Department of Energy (DOE) support service contracts by the General Accounting Office (GAO) and by the Department's Office of Inspector General (OIG) showed that contracted support services cost from 25 to 40 percent more than the services would have cost if

federal employees had performed the work. Although no EIA contracts were included in those audits, PART observed that the types of services contracted for by EIA were similar to the services provided under DOE contracts reviewed by GAO and OIG. PART believes, therefore, that an opportunity may exist for EIA to cut operating costs by performing more of its support services with federal, instead of contractor, employees.

PART's previous report included several recommendations for helping EIA improve and ensure the quality of its data systems and models. PART had recommended that the EIA Administrator (1) develop a program and approach to adequately assess quality problems; (2) provide for the prompt, systematic evaluation of all models that have not been reviewed; and (3) issue a formal written policy statement covering quality audit recommendation implementation and follow-up. In addressing these recommendations, EIA issued Order EI-5720.1, EIA's Statistical and Model Quality Program, on September 12, 1991. The order assigns organizational responsibilities for quality and, if properly implemented, satisfies PART's recommendations relating to ensuring the quality of EIA's data systems and models.

RECOMMENDATIONS

To increase the abilities of technical monitors and improve their procedures and guidelines, PART recommends that the EIA Administrator (1) require that the technical monitors receive more training and (2) direct that the current manual for technical monitors be updated and include specific guidance for new monitors and monitors that assume tasks from other monitors.

AGENCY COMMENTS

On the basis of a review of a draft of this report, EIA agreed with PART's recommendations to increase its technical monitors' abilities and improve their procedures and guidelines. EIA said that (1) technical monitor orientation sessions have been initiated, (2) technical monitor training options would be identified on the basis of resource availability and training material suitability, and (3) the technical monitor manual would be updated.

EIA also said that cost comparison analyses for providing support services with its own staff and under contract would be conducted as required by DOE's revised order on support service contracts implemented in October 1992. See appendix IV for a copy of EIA's comments, dated March 19, 1993.

PART believes that the actions taken and proposed meet the intent of the recommendations. PART will revisit these areas in future quality audits to ensure full implementation of proposed corrective actions.

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ABBREVIATIONS

CD	Coal Distribution
DOE	Department of Energy
EIA	Energy Information Adminisration
GAO	General Accounting Office
HEC	Household Energy Consumption and Expenditure
MER	Monthly Energy Review
NEMS	National Energy Modeling System
OIAF	Office of Integrated Analysis and Forecasting
OIG	Office of Inspector General
OMB	Office of Management and Budget
OPMIS	Office of Planning, Management and Information Services
OSS	Office of Statistical Standards
PART	Professional Audit Review Team
PSM	Petroleum Supply Monthly

Chapter 1
Introduction

Energy crises during the 1970s increased the nation's awareness of its energy problems and the need for adequate information to formulate and develop energy policies and programs. In 1976, 23 executive departments and independent agencies operated 238 energy data-gathering programs.

In 1977, legislation made the Energy Information Administration (EIA) the federal focal point for developing and maintaining comprehensive energy information programs.[1] EIA was given the responsibility for information systems previously managed by the Federal Power Administration, the Bureau of Mines, and the Federal Energy Administration. EIA was also given the responsibilities of its predecessor, the Federal Energy Administration's Office of Energy Information and Analysis, which included carrying out a unified program to collect, process, and publish data and information relevant to energy resource reserves, production, demand, and technology.

The legislation specified that EIA be organized as a separate entity within the Department of Energy (DOE), separate from DOE's role in formulating and advocating national energy policy. EIA was to be headed by a professionally qualified administrator appointed by the President with the advice and consent of the Senate. In specifying the character of EIA and in describing some of the statistical and forecasting capabilities and reports it desired, the Congress attempted to create an organization capable of providing credible energy data and the analysis necessary for sound decisions on national energy policy.

EIA'S ORGANIZATIONAL STRUCTURE

Since its organization in 1977, EIA has reorganized twice, once in 1981 from a functionally based organization to a combination of offices based on fuel types and support functions, and in 1991 to establish a new forecasting and analysis group. The latest reorganization is designed to improve EIA's ability to revise, improve, and integrate its models into the National Energy Modeling System (NEMS) and the Department of Energy's National Energy Strategy; to address analytical issues such as environmental impacts, new technologies, and total fuel cycle cost analysis; and to produce integrated long-term energy forecasts and analyses. (See app. I for more details on the changes in EIA's organizational structure.)

EIA'S MISSION ACTIVITIES

To continue its comprehensive energy data and information program, EIA published 84 periodicals and one-time reports on energy issues in 1989, 73 in 1990, 95 in 1991, and 80 in 1992. Information, often by special request, is provided to Members of Congress and to congressional committees. EIA also provides support to state and local governments, industry and trade associations, the media, academia, foreign governments and international organizations, and the general public. EIA carried out its mission with a budget ranging from $62.9 million in fiscal year 1989 to $76.3 million in fiscal year 1992 and from 468 to 490 full-time equivalent staff members each year.

ROLE OF THE PROFESSIONAL AUDIT REVIEW TEAM

The DOE Organization Act mandates that the Professional Audit Review Team (PART) review and evaluate EIA's work and determine whether data collection and analytical activities are being performed in an objective and professional manner.

This is the eighth report that PART has issued since its initial report in 1977.[2] This report is intended for the use of the President of the United States and the Congress in obtaining a current perspective of EIA's operations and its overall performance.

In accordance with the authorizing legislation, PART consists of a chairman, designated by the Comptroller General of the United States,

[1]The Department of Energy Organization Act (42 U.S.C. 7101).

[2]Activities of the Office of Energy Information and Analysis (PART-77-1, Dec. 5, 1977).

and members drawn from the following federal agencies:

- Bureau of the Census.
- Bureau of Labor Statistics.
- Council of Economic Advisers.
- Federal Trade Commission.
- Securities and Exchange Commission.

PART staff members during the period covered by this report and their agency affiliations were

- Mr. Richard A. Hart, General Accounting Office,
- Mr. L. Lewis Adams, General Accounting Office,
- Mr. Paul K. Elmore, General Accounting Office, and
- Ms. Martha L. Mister, General Accounting Office.

OBJECTIVES, SCOPE, AND METHODOLOGY

The Congress has shown its concern for the quality and credibility of energy information not only by establishing EIA as a separate agency within DOE but also by creating PART to conduct an annual evaluation of EIA's operations. In past evaluations, PART has concentrated on areas such as:

- The effectiveness of EIA's programs to ensure the quality of its data collection and analysis systems.
- The effectiveness of planning and management processes.
- The independence from policy formulation and advocacy functions.

While our current review concentrated on the usefulness of energy information reports, we also evaluated the adequacy of EIA's contract management and followed up on the recommendations made in PART's 1991 report.

We sent questionnaires to a random sample of recipients of three different EIA reports and to all recipients of one report (one from each of the three program offices and one summarizing different energy uses) to obtain views on the usefulness, timeliness, completeness, and importance of the reports. Our purpose was to survey opinions about the overall utility of the reports.[3] We did not do a comprehensive study of the reports' benefits and costs or examine fully a specific data category or line item. The four reports were the (1) Monthly Energy Review (MER), (2) Petroleum Supply Monthly (PSM), (3) Household Energy Consumption and Expenditure (HEC), and (4) Coal Distribution (CD).[4] HEC is issued triennially and CD was issued quarterly. Recipients of these reports include DOE employees and contractors, other federal agency officials, state and local government officials, foreign government officials, EIA survey respondents, public and academic libraries, and the media. See appendix II for a listing of the categories of recipients and the number of recipients in each category for these four reports.

We used a probability sample of report recipients to develop our estimates. Each estimate has a measurable precision, or sampling error, and can be expressed as a plus/minus figure. A sampling error indicates how closely a sample can reproduce the results if a complete count of the universe were taken using the same measurement methods. The confidence interval or the upper and lower bounds for each estimate can be developed by adding the sampling error to or subtracting it from the estimate. Sampling errors and confidence intervals are stated at a certain confidence level. Our sample is at the 95-percent confidence level. In other words, in 95 out of 100 instances, the sampling procedure we used would produce a confidence interval containing the universe value we are estimating. Because we surveyed all of the HEC recipients, there are no sampling errors associated with any data reported from that questionnaire. See appendix III for our estimates and associated sampling errors.

Statistics on the number of recipients in our sample and their response rate follows.

[3]Our survey does not reflect the opinions of people who do not directly receive EIA's reports but who may use the reports.

[4]The Coal Distribution Report was discontinued after the April 1992 publication.

Table 1.1: Recipients in Our Sample and Their Response Rate

EIA reports	Universe	Sample	Returned	Percent of sample returned[a]
MER	2,603	345	227	65.8
PSM	1,033	284	200	70.4
CD	829	270	200	74.1
HEC	274	274	199	72.6
Total	4,739	1,173	826	70.4

[a]In this report, the estimates are based on the percentage of the sample who responded to the survey. Since the characteristics (opinions) of those responding to our survey may be different from the nonrespondents, caution should be used in making inferences to the universe. If there is a difference, the overall results could change had we obtained responses for all those originally in the sample (or in the universe for the HEC report since all recipients were sampled).

Regarding EIA's contract management, we also sent a questionnaire to all 111 of EIA's technical monitors (EIA employees who are responsible for overseeing contractor performance) that were managing contract tasks as of March 31, 1992. We reviewed reports on audits by the General Accounting Office and by DOE's Office of Inspector General comparing the costs of contracting for support services by DOE agencies with the estimated costs of performing such services in-house with federal employees. Also, we reviewed DOE guidance for contracting support services and obtained EIA expenditures for support services for fiscal years 1986 through 1992.

In performing our work, we examined laws establishing EIA, EIA's policies and procedures, budget documents, reports, records, and other documents related to the areas being evaluated. We also interviewed EIA officials responsible for program planning and day-to-day operations of the offices issuing the reports surveyed.

This report covers EIA's activities during the period June 1990 through September 1992. Our work was carried out at EIA headquarters in Washington, D.C., and was performed in accordance with generally accepted government auditing standards.

Chapter 2

EIA Reports Are Favorably Viewed

In general, recipients viewed favorably the four EIA reports we surveyed. From 84 to 93 percent of the respondents to our questionnaire were extremely or moderately confident in using the factual data in the reports. Also, the majority of the respondents said that the reports were useful and timely as sources of basic facts, for maintaining trend information, for forecasting, and for market research. However, only a few of them said that the reports were useful and timely for conducting investment analysis. The respondents were fairly satisfied with the reports' content and were generally willing to pay for the reports. Many respondents were not likely to use more expedient reporting formats, such as electronic reporting. The results of our survey are summarized in the following sections and shown in more detail in appendix III.

HOW USEFUL ARE THE REPORTS AND HOW ARE THEY USED?

Between 80 and 97 percent of the respondents used the reports from once a week to several times a year for maintaining trend information and as sources of basic facts, and between 62 and 85 percent said that the reports were extremely or moderately useful for these purposes. Also, from 49 to 75 percent used the reports for forecasting and market research and from 35 to 57 percent found the reports extremely or moderately useful for these purposes. However, only between 6 and 24 percent used the reports for investment analysis, and only 2 to 14 percent said that the reports were extremely or moderately useful for such purpose.

The percent of respondents who frequently used the reports for different purposes and who said the reports were extremely or moderately useful for such purposes are summarized in tables 2.1 and 2.2.

Table 2.1: Percent of Respondents Who Used the Reports From One Time a Week to Several Times a Year for Different Purposes

Purpose	Percent
Basic facts	91.8 to 96.7
Trend information	80.0 to 96.7
Forecasting	60.0 to 75.3
Market research	48.8 to 64.0
Other topics	37.0 to 63.8
Policy changes	37.9 to 47.3
Academic research	26.1 to 37.3
Investment analysis	6.1 to 23.8

Table 2.2: Percent of Respondents Who Said That the Reports Were Extremely or Moderately Useful for Different Purposes

Purpose	Percent
Basic facts	64.3 to 84.5
Trend information	62.1 to 83.9
Forecasting	40.0 to 56.7
Market research	35.3 to 48.4
Other topics	16.6 to 34.2
Policy changes	19.8 to 29.9
Academic research	16.2 to 28.9
Investment analysis	2.0 to 14.8

HOW TIMELY ARE THE REPORTS?

Between 53 and 87 percent of the respondents said that the reports were definitely or probably timely for maintaining trend information, as sources of basic facts, and for forecasting. Also, except for the HEC report, which is published every 3 years, between 51 and 61 percent said that the reports were definitely or probably timely for conducting market research and finding out about other topics. However, only 20 to 34 percent said that the reports were definitely or probably timely for investment analysis.

Because report timeliness varied widely for different roles addressed in the questionnaires and because the respondents commented frequently about wanting the data sooner, we contacted some of the respondents to obtain more information on why the reports were not timely. We found various reasons. For example, one respondent said that he needed weekly information on the natural gas market, not monthly information as provided for in the EIA report being discussed. Another said that it would be better if the information were more timely, but he was able to use the report for all desired uses and had not experienced any adverse effects because of untimely data. See table 2.3 for the percent of respondents who said the reports were definitely or probably timely for different purposes.

Table 2.3: Percent of Respondents Who Said That the Reports Were Definitely or Probably Timely for Different Purposes

Purpose	Percent
Basic facts	72.3 to 86.9
Trend information	57.0 to 79.9
Forecasting	52.6 to 65.3
Market research	41.6 to 59.3
Other topics	39.3 to 61.1
Policy changes	40.6 to 50.0
Academic research	36.2 to 52.7
Investment analysis	20.3 to 52.7

HOW MUCH ARE RESPONDENTS WILLING TO PAY FOR THE REPORTS?

Most of the respondents that now receive the reports without charge would be willing to pay up to $10.00 for each report. Also, most of the respondents that now pay for the reports would be willing to pay an additional $15.00 for each report. However, a large number, and in some cases the majority, would not be willing to pay more than an additional $20.00 for each report.

Currently, many report recipients receive EIA reports at no charge. EIA Order 5900.6A specifies that the following are entitled to complimentary copies of EIA reports: federal, public, and academic libraries; state and local governments; survey respondents; the Congress and congressional committees; press/media; DOE staff and contractors; and executive branch key staff. Others may obtain the publications from the Government Printing Office, which offers them for sale as individual or subscription items.

WHAT REPORT FEATURES SHOULD BE CHANGED?

The majority of the respondents were generally satisfied with the contents of the reports. In this regard, most respondents were satisfied with the amount of summary materials, numerical information, regional level data, feature articles, text readability, graphs, and colored charts and graphs. They were about equally divided as to whether the reports should provide more or about the same amount of analysis and state level data. Very few of the respondents were in favor of reducing the amount of data provided in the reports.

HOW LIKELY WOULD OTHER REPORT FORMATS BE USED?

We asked about the likelihood of ordering EIA publications if they were available on (1) IBM computer floppy disk, (2) Apple computer floppy disk, (3) CD/ROM compact disk, or (4) on-line electronic data base using a telephone and modem and if charges for such services were reasonable. The majority of the respondents said that it would be unlikely that they would use the Apple floppy disk or the CD/ROM compact disk, and they were about equally divided on whether it would be likely or unlikely that they would use the electronic data base. It would be likely that more respondents would use the IBM computer floppy disk than the other reporting formats, but still, the number would be less than 50 percent of the total.

EIA MAY BE ISSUING THE REPORTS AS QUICKLY AS POSSIBLE

Because of the expressed desire to obtain information sooner and the likelihood that more expedient reporting formats would not be used, we looked into the development process from data gathering to report issuance for the two monthly reports included in our review scope (the Petroleum Supply Monthly and the Monthly Energy Review) to ascertain what, if anything, EIA could do to issue the reports quicker. For each report, the lag time between the date of the petroleum data and the date of the report was about 2 months.

We found that EIA may be unable to make much improvement in the timing of petroleum information for either report because of the availability of petroleum export data. These data are purchased from the Bureau of the Census. The data EIA collected for its September 1992 Petroleum Supply Monthly Report through seven data collection instruments--monthly refinery report, monthly bulk terminal report, monthly product pipeline report, monthly crude oil report, monthly imports report, monthly gas liquids report, and monthly tanker and barge movement report--were available for processing by EIA on September 8, 1992. The export data purchased from the Bureau were not available to EIA until September 17, 1992, or 9 days later. The timing of the petroleum information for the Monthly Energy Review was also affected by the availability of export data from the Census Bureau because the report used data developed for the Petroleum Supply Monthly Report. An EIA official told us that the Census Bureau would not release the information to EIA any earlier.

We asked a Census Bureau official what prevents the Bureau from making the data available to EIA earlier. He said that petroleum export data are highly market sensitive, and the Bureau's policy is not to release the data to anyone until after the data are released to the public via a press release, about 45 days after the close of the month being reported. Public Law 87-826, dated October 15, 1962, authorizing the Bureau to collect and publish foreign commerce and trade statistics gives the Bureau authority to establish rules and regulations over the publication and disclosure of information collected.

CONCLUSION

On the basis of the responses and comments to our questionnaire, we believe that EIA reports are of high quality, are useful and timely for multiple purposes, include the information in the quantities desired, and appear to be serving the public need. While more timely information was desirable for some purposes, EIA's use of more expedient reporting formats may not be viable because, given reasonable charges, most respondents said that they were unlikely to use more expedient reporting formats.

Chapter 3

Training and Updated Guidance Manual Needed for Technical Monitors

During the 7-year period ending September 30, 1992, EIA spent between $31.2 million and $36.9 million each year, or about 50 percent of its appropriated funds, on support service contracts. EIA relies heavily on technical monitors to manage these contracts, including developing task assignments, monitoring day-to-day contract progress, and evaluating contractor performance as part of the contract administration function. Despite their importance, PART found that training for technical monitors is almost nonexistent, and EIA's technical monitor guidance manual is out-of-date.

Of the 111 EIA technical monitors, 88 percent responded to PART's questionnaire. Those responding ranged in grade from SES to a GS-9, monitored up to 6 contract tasks, and spent from 0 to 100 percent of their time on technical monitoring duties. The respondents included individuals from EIA's operational, technical, and administrative offices.

In assessing their own performance, about 82 percent of EIA's technical monitors were extremely or very confident that technical monitors are necessary to ensure quality products from contractors, and 55 percent believed their managers also see their role as extremely or very important. However, only 33 percent said that they received a very great or great amount of support from their managers for their technical monitoring duties.

TECHNICAL MONITOR TRAINING IS ALMOST NONEXISTENT

The most glaring piece of information from the questionnaire was the lack of training that the technical monitors received to help them perform their duties. About 67 percent of the technical monitors responding to the questionnaire reported that they had not received any training related to technical monitoring during the 3-year period from 1989 through 1991. The respondents averaged less than 1 hour of training each year for the 3-year period, as shown in table 3.1.

Table 3.1: Average Hours of Training Received by EIA Technical Monitors During 3-Year Period

Fiscal year	Average hours of training received
1991	0.74
1990	0.46
1989	1.28

Without formal training and a good set of guidelines, the new monitors struggle to learn and perform their duties. Monitors who assume tasks from others are not given information about their predecessor's work, told what needs to be done, or given any other help in carrying out their newly assigned duties. This was evidenced from written comments to the questionnaire, which basically stated that as technical monitors change, there is no mechanism to train new monitors or to transfer the duties to them, leaving some technical monitors unaware of their responsibilities.

We discussed our survey results with EIA officials, who agreed that nothing special has been done to educate new technical monitors on their duties and responsibilities. These officials also agreed that there was nothing specifically available to assist monitors who have to assume tasks that are started by others and then transferred to a new technical monitor

for those tasks. They said that they would work on the development of an orientation program for new technical monitors and provide assistance when tasks are transferred.

To ascertain how new technical monitors become knowledgeable about their job, we contacted two recently appointed monitors who responded to our questionnaire. One new technical monitor said that it was a "sink or swim" situation trying to perform assigned monitoring tasks with no training and no up-to-date manual to assist them. Fellow employees provided some assistance, but the lack of training and guidance made the monitoring job much more difficult. The other monitor said that it was very difficult to perform assigned duties without up-to-date information and guidance and it took some "trial and error" to get started. Both agreed that orientation training, an up-to-date manual, and periodic technical training and information updates would be very helpful.

GUIDELINES FOR TECHNICAL MONITORS NEED TO BE UPDATED

Guidelines for technical monitors are provided through a manual and a monthly newsletter. EIA's manual *Guidelines for Technical Monitors of EIA Contracts* was issued on August 11, 1986. The manual, which has not been revised since issuance, serves as a basis for development of detailed policies and procedures of contract administration. The 113-page manual provides information on (1) the contracting process, (2) task assignment management, and (3) management tools (lines of communication and management information systems providing regular reports). Although out-of-date, the manual provides basic background information but does not serve as adequate guidance on what technical monitors need to do to perform their duties. Lacking the "how to" approach, the manual is very general and includes outdated information such as the names of offices and positions, office review systems, and the organizational responsibility for procurement. For example, the manual describes the Activities Resources Results Information System as one of the management tools available to technical monitors but that system has been replaced.

About 38 percent of the respondents to PART's questionnaire said that the manual was somewhat or of little value or of no importance to inform them about their duties. Respondents' comments emphasized the need to update the manual. One respondent said that the manual is so out of date for technical monitors that it is not useful. The respondent added that the document has been in existence as a procedural tool but has been disavowed, deemed "under revision," or otherwise removed from service if a disagreement occurs between a technical monitor and EIA management.

EIA has chosen to provide guidance to technical monitors through a monthly newsletter rather than revise the manual. The difficulty with the newsletter is that the guidance is scattered throughout the publications and does not provide all the guidelines needed to assist the technical monitors.

OTHER RELATED DATA FROM THE QUESTIONNAIRE

The questionnaire responses from EIA technical monitors showed the following:

- 57 percent of the monitors were extremely or very confident that EIA was receiving maximum benefit for the contract funds expended.
- 64 percent of the monitors were extremely or very confident that the contractors were using appropriate levels of qualified staff.
- 68 percent of the monitors were extremely or very confident that the contractors were adhering to EIA's data and model quality standards.
- 76 percent of the monitors were extremely or very confident that the technical monitors have a positive impact on contractor performance.

- 79 percent of the monitors were extremely or very confident that the contractors followed the descriptions of work.

- 80 percent of the monitors were extremely or very confident that the contractors followed technical direction.

CONCLUSIONS

Because EIA contracts for such a large part of its work activities and because EIA relies primarily on its technical monitors to oversee those contracts, PART believes that technical monitors need to have sufficient training to keep up with changes in contracting requirements, writing statements of work, evaluating deliverables, and working with the contract employees.

PART believes that the information contained in the newsletters should be consolidated with updated information from the manual and be directed to the specific needs of EIA's technical monitors. The technical monitors play a primary role in the administration of EIA's responsibilities and should receive the proper tools to assist them in their duties.

On the basis of the responses and comments from EIA's own technical monitors, PART believes that an updated manual or guidelines for technical monitors is needed. This should include guidance specifically for new monitors and monitors who assume tasks from other monitors. EIA should also provide more formal training for technical monitors so the ability to control tasks is not left to chance with inexperienced or untrained monitors.

RECOMMENDATIONS TO THE ADMINISTRATOR, EIA

To increase the abilities of technical monitors and improve their guidelines and procedures, we recommend that the EIA Administrator (1) require that the technical monitors receive more training and (2) direct that the current manual for technical monitors be updated and include specific guidance for new monitors and monitors who assume tasks from other monitors.

AGENCY COMMENTS

In a March 19, 1993, letter commenting on a draft of this report, EIA agreed with our recommendations to increase the abilities and guidance of technical monitors. EIA said that technical monitor orientation sessions have already been initiated and that training options will be identified based upon resource availability and training material suitability. Also, EIA said that the technical monitor manual would be updated and that the technical monitor newsletter would be strengthened and continued. EIA believes that the newsletter has been a valuable, low cost, and efficient means of communicating the most important and most current information to the technical monitors. We believe that these actions provide a basis for satisfying our recommendations.

Chapter 4

Contracting for Support Services May Not Be Cost-Effective

Recent audits of selected Department of Energy (DOE) support service contracts by the General Accounting Office (GAO) and by DOE's Office of Inspector General (OIG) showed that the services contracted, on average, were 25 percent to 40 percent more than what the cost would have been if federal employees had been used to perform the work. Although no EIA contracts were audited, EIA, like other DOE agencies, must obtain approval of its contracting from DOE's Office of Organization, Resources and Facilities Management, and must follow DOE-wide contracting procedures.

As noted in chapter 3, EIA spends over $31 million annually on support service contracts. While we did not conduct cost comparisons on these contracts, we observed that the types of services being contracted for by EIA were similar to the services provided under other DOE contracts reviewed by GAO and OIG. The similar support service contracts reviewed included data processing support; technical, management, and operating support; and information systems support. We believe that, therefore, an opportunity may exist for EIA to reduce operating costs by using federal employees to provide support services.

In its August 16, 1991, report,[1] GAO said that 11 of 12 DOE support service contracts for which cost comparisons were conducted were, on average, 25 percent, or about $5 million, more costly than if the activities had been carried out using federal employees. Although it is the government's policy to conduct its operations in a cost-effective manner, the Office of Management and Budget (OMB) does not require cost comparisons when agencies are (1) contracting for services needed to fulfill new agency requirements or (2) renewing existing contracts. Generally, DOE did not conduct such comparisons. According to DOE officials, they did not compare the costs of providing services with their own employees and under contract because they could not get additional staff to perform the work in-house due to personnel ceilings.

In its August 30, 1991, report,[2] DOE's Inspector General estimated that, on average, the costs to perform the work in-house would have been 40 percent less than the costs to provide the services under contracts. The report stated that contracted activities were nevertheless continued because DOE policy did not require a cost comparison as part of the program office request for support services. Program officials were reluctant to perform cost comparisons because of concerns about the time required to complete them and because of the uncertainty of getting additional staff if a decision was made to perform the services in-house. OMB officials acknowledged that agencies have had little opportunity to increase their staffing levels.

Both the OIG and GAO recognized that obtaining additional staff has been a major stumbling block to providing support services in-house. However, as part of its effort to assess progress in implementing recommendations contained in its August 1991 report, GAO facilitated a meeting between DOE and OMB officials on August 5, 1992. The meeting resulted in the formation of a task force consisting of DOE and OMB officials, with GAO continuing to serve as a facilitator and moderator. Among other things, the task force will discuss the results of DOE's cost comparisons (see below) and determine what additional steps DOE would need to perform to justify increases in its personnel ceiling for converting costly support service contracts to in-house performance. OMB task force members have expressed concern that problems such as insufficient competition, inadequate contract administration, and poorly written statements of work could be contributing to DOE's higher contract prices.

Effective October 1, 1992, DOE Order 4200.C—the order that outlines the policies, procedures, and responsibilities for the manage-

[1] *Using DOE Employees Can Reduce Costs for Some Support Services*, (GAO/RCED-91-186, Aug. 16, 1991).

[2] *Audit of the Cost Effectiveness of Contracting for Headquarters Support Services* (DOE/IG-0297, Aug. 30, 1991).

ment of support service contracts for EIA and other DOE agencies—was revised to require cost comparison analyses before awarding or renewing support service contracts. If a cost comparison shows that total in-house costs are less than total contractor costs, the requesting organization must provide a justification to document any request to contract for support services. According to the order, factors to be considered in assessing sufficient justification for contracting the work may include: (1) the need for a selected mix of technical skills, (2) contracting for short-term tasks, (3) the need for immediate staffing to accomplish secretarial or congressional mandates, (4) the intermittent nature of the work, or (5) the need for highly specialized skills that may not be available due to pay limitations or geographic location. The order specifies that a statement that sufficient staffing is not available to perform the proposed work does not, however, in and of itself, justify contracting for the work.

Directors of the Offices of Coal, Nuclear, Electric and Alternate Fuels; Oil and Gas; and Energy Markets and End Use said that, if given a choice, they would generally prefer to have their own staff, rather than contractor staff, to perform work. In spite of their preferences, we found that EIA had not conducted any cost comparison analysis for several years between performing work in-house and performing work under contract. Also, as of January 1993, EIA had not conducted any cost comparison analysis under the revised procedures. EIA officials told us that it would be the fall of 1993 before any of EIA's 14 support service contracts would be subject to a cost analysis.

CONCLUSION

On the basis of the results of GAO's and DOE/OIG's recent audits showing that some support services can be provided in-house cheaper than under contract and the fact that EIA has not conducted any cost comparison analysis on work contracted in recent years, we believe that an opportunity may exist for EIA to reduce operating costs by using federal, instead of contract, employees to provide support services. We will continue to monitor EIA's actions for providing support services and include contracting activities as they affect data quality as a part of our next review.

AGENCY COMMENTS

EIA said that it would follow DOE's requirements for conducting cost comparison analyses on support service contract requests for new and continuing services. Also, EIA said that it had worked very hard to maintain an acceptable balance of federal and contractor staff under the constraints of (1) full-time equivalent controls, (2) the need to have certain inherently governmental functions performed with government staff, and (3) the requirements of OMB Circular A-76 to contract for noninherently governmental functions when it is a cost advantage.

Chapter 5

EIA Action on Past Part Recommendations

Our previous report (PART-91-1, June 1991) included several recommendations for helping the Energy Information Administration (EIA) improve and ensure the quality of its data systems and models. Among others, we recommended that the EIA Administrator (1) develop a program and approach to adequately assess quality problems; (2) provide for the prompt, systematic evaluation of all models that have not been reviewed; and (3) issue a formal written policy statement covering quality audit recommendation implementation and follow-up. To improve and ensure the quality of its data systems and models, EIA issued Order EI-5720.1, the Energy Information Administration's Statistical and Model Quality Program, on September 12, 1991. This order generally assigns organizational responsibilities for quality and covers Professional Audit Review Team's (PART's) recommendations relating to assuring the quality of EIA's data systems and models.

Since EIA was reorganized to make model development a priority area (see app. I), and to provide time to implement changes as a result of the new order, PART did not make quality an issue in the current audit's scope and did not look at implementation of the requirements set forth in the new order. However, PART continues to be concerned about the quality of EIA's models and data systems. Our concern is fueled by September 1992 evaluation reports on modeling standards and documentation for four models by EIA's independent expert reviewers. These reports state such things as:

- Although "impressed with the standards, the implementation of the standards [on these models] leaves quite a bit to be desired. . . .It is our conclusion that EIA must 'ratchet up' their enforcement of model documentation standards in order to ensure continued utility and credibility of their inventory of Models."

- "Each model fails by lacking some, if not major portions of the required information, especially the following: descriptive information on model theory, model choices, empirical support for the model, critical assumptions and information on model validation. . . .We suggest that EIA take a more aggressive approach to model documentation in that documentation should be done in parallel with model development and produce a full range of analysis and software documents."

Because of PART's continued concern of the quality of EIA's data systems and models, PART will make implementation of the new order and enforcement of standards a part of its next review.

AGENCY COMMENTS

EIA's comments on our draft report stated that the September 1992 evaluation of modeling documentation and standards compared a new standard to model documentation that had been in existence prior to the new standard. Also, when the new standard was introduced, development of National Energy Modeling System (NEMS) had already begun, and a management decision was made not to upgrade the old model documentation, but to document NEMS to the new standard.

EIA's comments do not recognize that two of the four models that were reviewed by the independent expert reviewers will not be replaced by NEMS documented models but will be maintained and used in their current state of documentation until the models themselves are revised. EIA could not predict when these models would be revised. The new standard requires more documentation to support the models, thus resulting in the comments from the reviewers.

PART fully recognizes EIA's comments on the documentation for the models that are being replaced by the NEMS models. However, EIA's comments have not alleviated our concern about the quality of its data systems and models, and we will make enforcement of model and documentation standards a part of our next review, including models under NEMS and models that are being maintained by the individual divisions. The results of that effort will appear in our next report.

Appendix I

EIA's Organizational Structure

When the Energy Information Administration (EIA) was created in 1977, it was organized into functionally related offices (data development, data dissemination, special program development, and analytical activities). In July 1981, the organizational structure was realigned to comprehensive program offices based on fuel types—Oil and Gas; Coal, Nuclear, Electric, and Alternate Fuels; and Energy Markets and End Use.

The Office of Oil and Gas collects, processes, and interprets data about crude oil, petroleum products, natural gas, and natural gas liquids. The Office of Oil and Gas also analyzes and projects the level and distribution of petroleum and natural gas reserves and production.

The Office of Coal, Nuclear, Electric, and Alternate Fuels gathers and integrates data on coal, nuclear energy, electric power, and alternate fuels. The office also develops projections of supply and demand for the fuels.

The Office of Energy Markets and End Use develops and operates EIA's statistical and forecasting information systems on energy consumption and supply. The office collects and processes data on energy consumption, supply and demand balances, prices, and economic and financial matters. The office also prepares and publishes reviews of foreign energy developments that could affect the nation's economy.

Although the exact names have varied over the years, three offices now provide support services for EIA. The Office of Statistical Standards (OSS) provides EIA with strategies for survey and statistical design and assesses the quality and meaningfulness of energy information and the process used to collect, analyze, and forecast information. OSS develops standards and coordinates standard definitions that govern collection, processing, and documentation of energy information. OSS also manages the clearance process of energy data forms for public use.

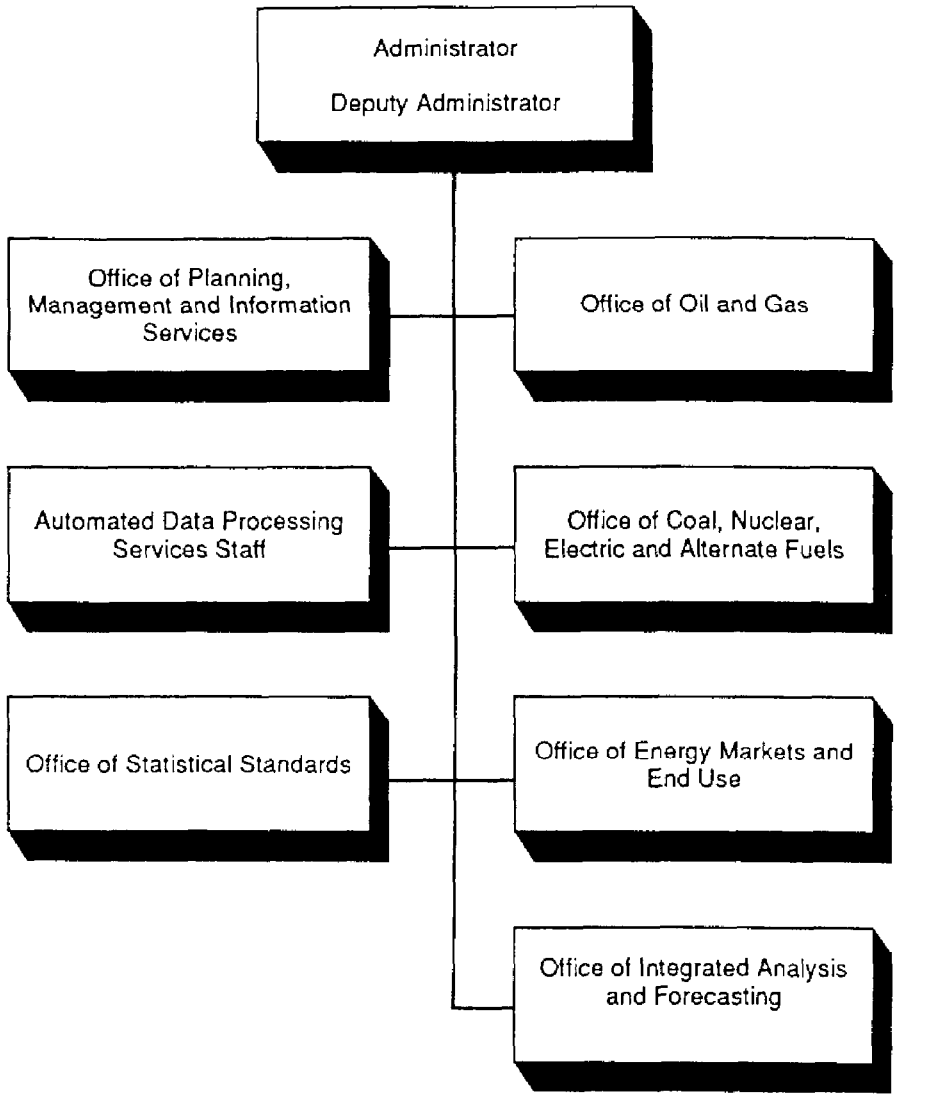
The Office of Planning, Management and Information Services (OPMIS) provides overall management support to EIA and information dissemination to the public. Among its management support responsibilities are program planning, financial management, budgeting, procurement, program evaluation, personnel management, and legislative support services. OPMIS also includes branches that edit, publish, and disseminate EIA information and respond to public inquiries for energy information.

The ADP Services Staff provides information technology support for the Department of Energy's (DOE) energy information programs, including those of EIA and the Federal Energy Regulatory Commission.

OFFICE OF INTEGRATED ANALYSIS AND FORECASTING WAS ESTABLISHED IN OCTOBER 1991

On October 6, 1991, the EIA Administrator created the Office of Integrated Analysis and Forecasting (OIAF) through a reorganization of EIA. This office was created to develop and maintain the National Energy Modeling System (NEMS) and other modeling systems necessary to analyze energy information and data used for mid-term and long-term energy forecasting. Previously, most of these functions had been dispersed among the program offices based on fuel types. With the reorganization, the analytical activities and the mid-term and long-term forecasting for all fuels were consolidated into the new office. OIAF prepares analytical studies, plus mid- and long-term forecasts of integrated energy markets, international markets, environmental and macroeconomic issues, and the effects of various energy policies.

Figure I.1: EIA's Organizational Chart



Source: EIA.

Appendix II

Summary of EIA Mailing List for Selected Reports

Recipient	MER	HEC	CD	PSM	Tota
Congress	61	9	15	19	10
DOE/DOE contractors	276	86	74	151	587
Other federal agencies	158	20	36	86	300
U.S. Embassies	11	1	4	6	2
National Coal Council	1	•	95	•	9
State/local governments	150	35	67	101	35
Foreign governments	90	18	20	55	1
Foreign Embassies	15	5	6	10	3
EIA survey respondents	169	43	184	137	53
Public and academic libraries	99	14	20	33	16
Print/broadcast media	118	9	15	74	21
Other	9	6	7	9	31
Total	**1,157**	**246**	**543**	**681**	**2,627**

Appendix III

Summary of Survey of Recipients of Selected Energy Information Administration Reports

	MER	HEC	CD	PSM
Question concerning recipient confidence in reports				
How confident, if at all, are you in using the factual data in this report?				
Response:				
Extremely confident	49.7	32.2	37.0	43.6
	(±6.7)		(±6.3)	(±6.5)
Moderately confident	42.8		47.4	49.7
	(±6.6)	55.0	(±6.5)	(±6.5)
Somewhat confident	7.0	10.7	11.0	6.1
	(±3.4)		(±4.1)	(±3.1)
A little confident	[a]	1.3	3.2	
			(±2.3)	
Not at all confident		.7	[a]	[a]
Question concerning recipient satisfaction with reports				
Overall, how satisfied or dissatisfied are you with this report?				
Response:				
Very satisfied	35.3	23.2	25.5	35.0
	(±6.4)		(±5.8)	(±6.3)
Generally satisfied	54.5	58.1	54.4	51.5
	(±6.7)		(±6.6)	(±6.6)
Neither satisfied nor dissatisfied	8.6	17.4	17.4	12.3
	(±3.7)		(±5.0)	(±4.3)
Generally dissatisfied	[a]	1.3	2.7	
			(±2.1)	
Very dissatisfied	[a]		[a]	[a]

	MER	HEC	CD	PSM
Questions concerning frequency of reports use				
How often do you use this report for maintaining trends information?				
Response:				
At least weekly	5.5	2.9	3.4	8.3
	(±3.1)		(±2.4)	(±3.7)
Several times a month	34.1	7.9	17.0	32.5
	(±6.4)		(±5.0)	(±6.3)
Several times a year	57.1	69.3	68.7	52.2
	(±6.7)		(±6.2)	(±6.7)
Never or almost never	3.3	20.0	10.9	7.0
	(±2.4)		(±4.1)	(±3.4)
How often do you use this report for source of basic facts?				
Response:				
At least weekly	11.1	1.4	4.2	11.1
	(±4.3)		(±2.7)	(±4.1)
Several times a month	33.9	14.4	17.5	28.4
	(±6.5)		(±5.1)	(±5.9)
Several times a year	51.7	76.0	70.6	56.8
	(±6.8)		(±6.2)	(±6.5)
Never or almost never	3.3	8.2	7.7	3.7
	(±2.4)		(±3.6)	(±2.5)

	MER	HEC	CD	PSM
How often do you use this report for market research?				
Response:				
At least weekly	2.6	1.6	[a]	[a]
	(±2.3)			
Several times a month	15.5	4.8	13.2	13.7
	(±5.3)		(±4.7)	(±5.0)
Several times a year	40.0	42.4	50.0	40.5
	(±7.2)		(±6.9)	(±7.2)
Never or almost never	41.9	51.2	36.0	44.3
	(±7.2)		(±6.7)	(±7.3)
How often do you use this report for forecasting?				
Response:				
At least weekly	3.5	1.5	2.2	4.3
	(±2.6)		(±2.0)	(±2.9)
Several times a month	14.7	8.9	8.7	13.6
	(±5.0)		(±3.9)	(±4.8)
Several times a year	57.1	49.6	53.6	55.0
	(±7.0)		(±6.9)	(±7.0)
Never or almost never	24.7	40.0	35.5	27.1
	(±6.1)		(±6.6)	(±6.3)

	MER	HEC	CD	PSM
How often do you use this report for finding out about other topics in the field?				
Response:				
At least weekly	[a]	.8		3.9
				(±2.8)
Several times a month	11.3	.8	9.0	5.4
	(±4.9)		(±4.2)	(±3.3)
Several times a year	51.1	35.3	35.2	47.3
	(±7.7)		(±7.0)	(±7.4)
Never or almost never	36.2	63.0	55.7	43.4
	(±7.4)		(±7.3)	(±7.3)
How often do you use this report for policy changes?				
Response:				
At least weekly	[a]	1.6		3.1
				(±2.6)
Several times a month	9.6	1.6	10.4	7.0
	(±4.5)		(±4.4)	(±3.8)
Several times a year	32.2	34.7	33.6	37.2
	(±7.1)		(±6.8)	(±7.1)
Never or almost never	56.8	62.1	56.0	52.7
	(±7.5)		(±7.2)	(±7.4)

	MER	HEC	CD	PSM
How often do you use this report for academic research (not applied research)?				
Response:				
At least weekly	[a]	2.5	[a]	2.4
				(±2.3)
Several times a month	10.6	3.3	5.0	3.3
	(±4.7)		(±3.2)	(±2.7)
Several times a year	24.6	28.3	20.2	23.6
	(±6.6)		(±5.9)	(±6.4)
Never or almost never	62.7	65.8	73.9	70.7
	(±7.4)		(±6.5)	(±6.9)
How often do you use this report for investment analysis?				
Response:				
At least weekly	2.8			[a]
	(±2.5)			
Several times a month	2.8		4.1	2.4
	(±2.5)		(±2.9)	(±2.3)
Several times a year	18.2	6.1	14.6	11.9
	(±5.9)		(±5.2)	(±4.8)
Never or almost never	76.2	93.9	81.3	84.9
	(±6.5)		(±5.7)	(±5.3)

	MER	HEC	CD	PSM
Questions concerning reports usefulness				
How useful is this report for maintaining trend information?				
Response:				
Extremely useful	52.2	28.5	32.2	50.0
	(±6.8)		(±6.2)	(±6.7)
Moderately useful	31.7	33.6	30.1	31.4
	(±6.3)		(±6.1)	(±6.2)
Somewhat useful	12.8	18.2	19.2	7.7
	(±4.6)		(±5.3)	(±3.6)
A little useful	2.2	8.8	12.3	6.4
	(±2.0)		(±4.4)	(±3.3)
Not at all useful	[a]	1.5	2.1	[a]
			(±1.9)	
Not applicable	[a]	9.5	4.1	3.8
			(±2.7)	(±2.6)
How useful is this report for source of basic facts?				
Response:				
Extremely useful	56.3	41.1	36.4	53.2
	(±6.9)		(±6.6)	(±6.6)
Moderately useful	28.2	29.8	27.9	27.2
	(±6.2)		(±6.1)	(±5.9)
Somewhat useful	12.1	15.6	23.6	12.7
	(±4.5)		(±5.8)	(±4.4)
A little useful	[a]	12.1	7.9	5.1
			(±3.7)	(±2.9)
Not at all useful	[a]		2.1	1.9
			(±2.0)	(±1.8)
Not applicable	2.3	1.4	2.1	
	(±2.1)		(±2.0)	

	MER	HEC	CD	PSM
How useful is this report for market research?				
Response:				
Extremely useful	20.1	11.2	16.0	26.7
	(±6.0)		(±5.2)	(±6.8)
Moderately useful	22.1	24.1	29.0	21.7
	(±6.2)		(±6.4)	(±6.3)
Somewhat useful	18.1	17.2	17.6	12.5
	(±5.8)		(±5.4)	(±5.1)
A little useful	3.4	15.5	9.9	5.8
	(±2.7)		(±4.2)	(±3.6)
Not at all useful	[a]		4.6	4.2
			(±3.0)	(±3.1)
Not applicable	34.2	31.9	22.9	29.2
	(±7.1)		(±5.9)	(±7.0)
How useful is this report for forecasting?				
Response:				
Extremely useful	28.6	20.0	20.0	27.6
	(±6.3)		(±5.7)	(±6.5)
Moderately useful	29.8	20.0	27.7	29.1
	(±6.5)		(±6.3)	(±6.6)
Somewhat useful	19.6	26.9	19.2	17.2
	(±5.6)		(±5.6)	(±5.5)
A little useful	3.0	10.0	10.8	3.7
	(±2.4)		(±4.4)	(±2.7)
Not at all useful	[a]	.8	4.6	4.5
			(±3.0)	(±3.0)
Not applicable	18.5	22.3	17.7	17.9
	(±5.5)		(±5.4)	(±5.5)

	MER	HEC	CD	PSM
How useful is this report for finding out about other topics in the field?				
Response:				
Extremely useful	9.5	8.3	7.0	9.2
	(±4.6)		(±3.9)	(±4.4)
Moderately useful	24.1	8.3	17.5	25.0
	(±6.7)		(±5.8)	(±6.6)
Somewhat useful	29.2	21.3	20.2	25.0
	(±7.1)		(±6.1)	(±6.6)
A little useful	12.4	13.9	11.4	9.2
	(±5.2)		(±4.8)	(±4.4)
Not at all useful	[a]	5.6	5.3	5.0
			(±3.4)	(±3.3)
Not applicable	22.6	42.6	38.6	26.7
	(±6.5)		(±7.4)	(±6.8)
How useful is this report for policy changes?				
Response:				
Extremely useful	5.9	6.0	5.3	9.1
	(±3.7)		(±3.4)	(±4.4)
Moderately useful	20.0	13.8	24.6	15.7
	(±6.3)		(±6.5)	(±5.5)
Somewhat useful	19.3	18.1	18.4	18.2
	(±6.2)		(±5.9)	(±5.9)
A little useful	14.8	12.9	10.5	15.7
	(±5.6)		(±4.6)	(±5.5)
Not at all useful	5.2	6.0	5.3	2.5
	(±3.5)		(±3.4)	(±2.4)
Not applicable	34.8	43.1	36.0	38.8
	(±7.5)		(±7.3)	(±7.4)

	MER	HEC	CD	PSM
How useful is this report for academic research (not applied research)?				
Response:				
Extremely useful	15.9	12.4	7.2	15.9
	(±5.7)		(±4.0)	(±5.8)
Moderately useful	13.0	12.4	9.0	8.8
	(±5.3)		(±4.4)	(±4.5)
Somewhat useful	11.6	11.5	13.5	8.0
	(±5.0)		(±5.2)	(±4.3)
A little useful	4.3	12.4	9.9	7.1
	(±3.2)		(±4.6)	(±4.0)
Not at all useful	3.6	.9	4.5	3.5
	(±2.9)		(±3.2)	(±2.9)
Not applicable	51.4	50.4	55.9	56.6
	(±7.8)		(±7.6)	(±7.8)
How useful is this report for investment analysis?				
Response:				
Extremely useful	4.4		[a]	4.3
	(±3.2)			(±3.2)
Moderately useful	10.4	2.0	10.0	5.2
	(±4.8)		(±4.6)	(±3.5)
Somewhat useful	12.6	5.9	16.4	13.9
	(±5.2)		(±5.7)	(±5.4)
A little useful	5.2	11.9	7.3	7.0
	(±3.5)		(±4.0)	(±4.0)
Not at all useful	3.7	5.9	7.3	6.1
	(±3.0)		(±4.0)	(±3.7)
Not applicable	63.7	74.3	58.2	63.5
	(±7.6)		(±7.6)	(±7.5)

	MER	HEC	CD	PSM
Questions concerning reports timeliness				
Is this report timely for maintaining trend information?				
Response:				
Definitely yes	29.6	16.2	27.1	34.9
	(±6.2)		(±6.0)	(±6.5)
Probably yes	50.3	40.8	49.3	42.3
	(±6.8)		(±6.7)	(±6.8)
Uncertain	10.1	29.2	13.2	10.7
	(±4.1)		(±4.6)	(±4.2)
Probably no	7.8	11.5	8.3	8.7
	(±3.7)		(±3.7)	(±3.9)
Definitely no	2.2	2.3	2.1	3.4
	(±2.0)		(±1.9)	(±2.5)
Is this report timely for source of basic facts?				
Response:				
Definitely yes	38.4	24.1	29.9	40.8
	(±6.8)		(±6.4)	(±6.7)
Probably yes	46.5	48.2	50.7	46.1
	(±7.0)		(±7.0)	(±6.8)
Uncertain	7.6	18.2	11.2	9.9
	(±3.7)		(±4.4)	(±4.1)
Probably no	4.1	8.0	6.7	2.0
	(±2.8)		(±3.5)	(±1.9)
Definitely no	3.5	1.5	[a]	[a]
	(±2.6)			

	MER	HEC	CD	PSM
Is this report timely for market research?				
Response:				
Definitely yes	17.2	11.9	20.3	25.7
	(±6.1)		(±5.9)	(±7.0)
Probably yes	39.8	29.7	39.0	29.4
	(±7.9)		(±7.1)	(±7.3)
Uncertain	28.1	41.6	27.6	30.3
	(±7.3)		(±6.5)	(±7.4)
Probably no	8.6	14.9	7.3	5.5
	(±4.5)		(±3.8)	(±3.7)
Definitely no	6.3	2.0	5.7	9.2
	(±3.9)		(±3.4)	(±4.6)
Is this report timely for forecasting?				
Response:				
Definitely yes	22.4	14.7	19.7	25.8
	(±6.1)		(±5.8)	(±6.6)
Probably yes	42.9	37.9	49.2	40.3
	(±7.3)		(±7.3)	(±7.4)
Uncertain	23.1	30.2	18.9	24.2
	(±6.2)		(±5.7)	(±6.4)
Probably no	6.4	12.1	7.4	2.4
	(±3.6)		(±3.8)	(±2.3)
Definitely no	5.1	5.2	4.9	7.3
	(±3.2)		(±3.2)	(±3.9)
Is this report timely for finding out about other topics in the field?				
Response:				
Definitely yes	1.8	14.6	13.1	20.0
	(±6.6)		(±5.5)	(±6.5)
Probably yes	41.3	24.7	37.4	41.0
	(±8.2)		(±7.9)	(±8.0)
Uncertain	27.3	44.9	33.3	29.5
	(±7.4)		(±7.7)	(±7.5)
Probably no	4.1	13.5	8.1	2.9
	(±3.3)		(±4.4)	(±2.7)
Definitely no	7.4	2.2	8.1	6.7
	(±4.4)		(±4.4)	(±4.1)

	MER	HEC	CD	PSM
Is this report timely for policy changes?				
Response:				
Definitely yes	14.7	7.1	8.8	13.2
	(±6.0)		(±4.5)	(±5.5
Probably yes	35.3	34.7	38.2	27.4
	(±8.1)		(±7.8)	(±7.3)
Uncertain	31.0	38.8	35.3	46.2
	(±7.9)		(±7.7)	(±8.1)
Probably no	6.9	15.3	9.8	2.8
	(±4.3)		(±4.8)	(±2.7)
Definitely no	12.1	4.1	7.8	10.4
	(±5.5)		(±4.3)	(±5.0
Is this report timely for academic research (not applied reseach)?				
Response:				
Definitely yes	22.7	15.2	8.5	21.3
	(±7.3)		(±4.6)	(±7.1)
Probably yes	30.0	29.3	27.7	19.1
	(±8.0)		(±7.5)	(±6.8)
Uncertain	35.5	43.5	40.4	44.7
	(±8.3)		(±8.2)	(±8.6)
Probably no	[a]	8.7	10.6	[a]
			(±5.1)	
Definitely no	9.1	3.3	12.8	12.8
	(±5.0)		(±5.6)	(±5.8)

	MER	HEC	CD	PSM
Is this report timely for investment analysis?				
Response:				
Definitely yes	5.8	5.1	3.3	10.8
	(±4.2)		(±3.0)	(±5.4)
Probably yes	27.9	15.2	23.9	22.6
	(±8.1)		(±7.2)	(±7.3)
Uncertain	45.2	55.7	47.8	44.1
	(±9.0)		(±8.4)	(±8.6)
Probably no	7.7	19.0	14.1	6.5
	(±4.8)		(±5.9)	(±4.3)
Definitely no	13.5	5.1	10.9	16.1
	(±6.1)		(±5.3)	(±6.4)
Question concerning recipient dependency on reports				
How much, if at all, do you depend solely on this EIA report for the information you need regarding reports' contents?				
Response:				
Depend solely on this EIA report	5.3	10.5	20.3	8.4
	(±3.0)		(±5.2)	(±3.6)
Depend mostly on this EIA report	31.6	34.6	27.5	44.3
	(±6.2)		(±5.8)	(±6.4)
Depend equally on this EIA report and other material	43.2	23.5	24.8	28.1
	(±6.6)		(±5.6)	(±5.8)
Depend mostly on other material	18.9	30.7	21.6	16.8
	(±5.2)		(±5.4)	(±4.8)
Depend solely on other material	[a]	.7	5.9	2.4
			(±3.1)	(±2.0)

	MER	HEC	CD	PSI
Questions concerning recipient willingness to pay for reports				
If you or your organization were charged $5.00 or less for this report, would you still want it?				
Response:				
Definitely yes	57.9	55.8	48.6	49.
	(±10.4)		(±7.8)	(±8.
Probably yes	15.8	20.2	18.7	21.
	(±7.7)		(±6.1)	(±7.
Uncertain	14.5	8.7	12.1	15.
	(±7.4)		(±5.1)	(±6.
Probably no	[a]	6.7	6.5	7.
			(±3.9)	(±4.
Definitely no	10.5	8.7	14.0	5.
	(±6.5)		(±5.4)	(±4.
If you or your organization were charged $5.01 to $10.00 for this report, would you still want it?				
Response:				
Definitely yes	41.1	44.1	35.7	34.
	(±10.6)		(±7.8)	(±8.
Probably yes	26.0	23.5	22.4	28.
	(±9.4)		(±6.8)	(±8.
Uncertain	15.1	10.8	13.3	24.
	(±7.7)		(±5.5)	(±7.
Probably no	6.8	7.8	7.1	5.
	(±5.4)		(±4.2)	(±4.
Definitely no	11.0	13.7	21.4	7.
	(±6.7)		(±6.7)	(±4.

	MER	HEC	CD	PSM
If you or your organization were charged $10.01 to $15.00 for this report, would you still want it?				
Response:				
Definitely yes	23.6	31.4	21.4	21.7
	(±9.2)		(±6.7)	(±7.6)
Probably yes	29.2	20.6	26.5	16.9
	(±9.8)		(±7.2)	(±6.9)
Uncertain	19.4	19.6	17.3	31.3
	(±8.6)		(±6.2)	(±11.2)
Probably no	11.1	9.8	10.2	21.7
	(±6.8)		(±4.9)	(±7.6)
Definitely no	16.7	18.6	24.5	8.4
	(±8.1)		(±7.0)	(±5.1)
If you or your organization were charged $15.01 to $20.00 for this report, would you still want it?				
Response:				
Definitely yes	13.7	29.1	14.6	16.5
	(±7.4)		(±5.8)	(±6.8)
Probably yes	23.3	10.7	18.8	18.8
	(±9.1)		(±6.4)	(±7.1)
Uncertain	23.3	22.3	26.0	17.6
	(±9.1)		(±7.2)	(±6.9)
Probably no	19.1	14.6	11.5	30.6
	(±8.5)		(±5.3)	(±8.4)
Definitely no	20.5	23.3	29.2	16.5
	(±8.7)		(±7.5)	(±6.8)

	MER	HEC	CD	PSM
If you or your organization were charged over $20.00 for this report, would you still want it?				
Response:				
Definitely yes	5.5	22.4	8.3	12.8
	(±5.0)		(±4.6)	(±6.0)
Probably yes	13.9	15.0	13.5	9.3
	(±7.5)		(±5.7)	(±5.3)
Uncertain	29.2	18.7	27.1	26.7
	(±9.8)		(±7.3)	(±8.0)
Probably no	19.4	12.1	13.5	19.8
	(±8.6)		(±5.7)	(±7.2)
Definitely no	31.9	31.8	37.5	31.4
	(±10.1)		(±8.0)	(±8.4)
If you or your organization were charged an additional $5.00 or less for this report, would you still want it?				
Response:				
Definitely yes	66.7	72.7	66.7	81.0
	(±9.8)		(±18.4)	(±10.2)
Probably yes	20.5	27.3	16.7	11.9
	(±8.4)		(±14.5)	(±8.4)
Uncertain	10.3		[a]	[a]
	(±6.3)			
Probably no				
Definitely no	[a]		[a]	[a]

	MER	HEC	CD	PSM
If you or your organization were charged an additional $5.01 to $10.00 for this report, would you still want it?				
Response:				
Definitely yes	52.0	70.0	33.3	47.6
	(±10.6)		(±18.4)	(±13.0)
Probably yes	26.7	30.0	44.4	40.5
	(±9.3)		(±19.4)	(±12.8)
Uncertain	9.3		[a]	[a]
	(±6.2)			
Probably no	6.7			[a]
	(±5.3)			
Definitely no	5.3		[a]	[a]
	(±4.8)			
If you or your organization were charged an additional $10.01 to $15.00 for this report, would you still want it?				
Response:				
Definitely yes	34.7	50.0	[a]	37.2
	(±10.1)			(±12.4)
Probably yes	28.0	30.0	41.2	20.9
	(±9.5)		(±19.8)	(±10.5)
Uncertain	20.0	20.0	29.4	27.9
	(±8.5)		(±18.3)	(±11.6)
Probably no	5.3		[a]	7.0
	(±4.8)			(±6.6)
Definitely no	12.0		[a]	7.0
	(±6.9)			(±6.6)

	MER	HEC	CD	PSM
If you or your organization were charged an additional $15.01 to $20.00 for this report, would you still want it?				
Response:				
Definitely yes	27.6	40.0	[a]	32.6
	(±9.4)			(±12.1
Probably yes	21.1	40.0	25.0	16.3
	(±8.6)		(±17.9)	(±9.5
Uncertain	22.4		31.3	14.0
	(±8.8)		(±19.3)	(±8.9
Probably no	11.8	20.0	[a]	25.6
	(±6.8)			(±11.2)
Definitely no	17.1		25.0	11.6
	(±7.9)		(±18.0)	(±8.3)
If you or your organization were charged an additional $20.01 or more for this report, would you still want it?				
Response:				
Definitely yes	17.3	30.0	[a]	25.0
	(±7.7)			(±10.5)
Probably yes	22.2	20.0	18.3	25.0
	(±8.5)		(±16.2)	(±10.5)
Uncertain	19.8	30.0	18.8	10.4
	(±8.1)		(±16.2)	(±7.4)
Probably no	12.3	10.0	18.8	10.4
	(±6.7)		(±16.2)	(±7.4)
Definitely no	28.4	10.0	37.5	29.2
	(±9.2)		(±20.1)	(±11.1)

	MER	HEC	CD	PSM
Questions concerning recipient satisfaction with report content				
Would you like more, about the same, or less analyses in this report?				
Response:				
More	45.5	47.8	39.3	45.8
	(±6.9)		(±6.8)	(±6.7)
About the same	50.6	47.8	57.8	49.7
	(±6.9)		(±6.9)	(±6.7)
Less	4.0	4.4	3.0	4.5
	(±2.7)		(±2.4)	(±2.8)
Would you like more, about the same, or less summary material in this report?				
Response:				
More	35.3	31.9	30.2	23.9
	(±6.7)		(±6.5)	(±5.7)
About the same	64.2	64.5	67.4	74.8
	(±6.7)		(±6.7)	(±5.8)
Less	[a]	3.6	2.3	[a]
			(±2.1)	
Would you like more, about the same, or less regional level data in this report?				
Response:				
More	40.8	43.7	33.3	31.6
	(±6.9)		(±6.7)	(±6.2)
About the same	53.3	50.4	65.1	62.0
	(±7.0)		(±6.8)	(±6.5)
Less	5.9	5.9	[a]	6.3
	(±3.3)			(±3.2)

	MER	HEC	CD	PSI
Would you like more, about the same, or less state level data in this report?				
Response:				
More	45.7	66.9	48.1	4(
	(±6.9)		(±7.0)	(±
About the same	47.4	29.5	49.6	4
	(±6.9)		(±7.0)	(±
Less	6.9	3.6	2.3	6
	(±3.5)		(±2.1)	(±3
Would you like more, about the same, or less feature articles in this report?				
Response:				
More	41.3	25.2	41.9	38.
	(±7.0)		(±7.0)	(±6.
About the same	53.3	65.6	50.4	54.
	(±7.1)		(±7.1)	(±6.
Less	5.4	9.2	7.8	7.
	(±3.2)		(±3.8)	(±3.

	MER	HEC	CD	PSM
Would you like more, about the same, or less numerical information in this report?				
Response:				
More	24.0	32.3	17.5	19.7
	(±6.0)		(±5.5)	(±5.3)
About the same	73.7	60.9	77.8	77.1
	(±6.2)		(±6.0)	(±5.6)
Less	2.3	6.8	4.8	3.2
	(±2.1)		(±3.1)	(±2.3)
Would you like more, about the same, or less improved text readability in this report?				
Response:				
More	12.7	22.7	21.0	12.5
	(±4.7)		(±5.9)	(±4.5)
About the same	86.7	75.0	75.8	86.2
	(±4.8)		(±6.2)	(±4.7)
Less	[a]	2.3	3.2	[a]
			(±2.6)	
Would you like more, about the same, or less graphs in this report?				
Response:				
More	22.2	30.8	27.9	23.9
	(±5.8)		(±6.4)	(±5.7)
About the same	71.9	62.4	65.9	68.4
	(±6.3)		(±6.7)	(±6.3)
Less	5.8	6.8	6.2	7.7
	(±3.3)		(±3.4)	(±3.6)

	MER	HEC	CD	PSM
Would you like more, about the same, or less color in charts and graphs in this report?				
Response:				
More	19.0	16.7	22.1	23.4
	(±5.8)		(±6.3)	(±6.1)
About the same	69.3	64.3	63.7	60.6
	(±6.8)		(±7.3)	(±7.0)
Less	11.8	19.0	14.2	16.1
	(±4.8)		(±5.3)	(±5.3)
Questions concerning recipient use of other reporting formats				
Given reasonable charges, how likely or unlikely are you to order this and other EIA publications if they were available on the IBM computer floppy disk?				
Response:				
Very likely	23.2	30.6	21.2	20.9
	(±5.7)		(±5.5)	(±5.4)
Somewhat likely	27.1	24.5	21.2	26.6
	(±6.0)		(±5.5)	(±5.9)
Unsure	13.3	14.3	15.8	19.0
	(±4.6)		(±4.9)	(±5.2)
Somewhat unlikely	8.3	12.9	11.6	5.7
	(±3.8)		(±4.3)	(±3.1)
Very unlikely	28.2	17.7	30.1	27.8
	(±6.1)		(±6.1)	(±6.0)

	MER	HEC	CD	PSM
Given reasonable charges, how likely or unlikely are you to order this and other EIA publications if they were available on the Apple computer floppy disk?				
Response:				
Very likely	4.9	6.2	2.9	3.4
	(±3.1)		(±2.3)	(±2.5)
Somewhat likely	6.7	5.4	3.7	6.1
	(±3.6)		(±2.6)	(±3.3)
Unsure	7.3	10.0	11.0	9.5
	(±3.7)		(±4.3)	(±4.1)
Somewhat unlikely	6.7	8.5	8.1	6.1
	(±3.6)		(±3.8)	(±3.3)
Very unlikely	74.4	70.0	74.3	74.8
	(±6.2)		(±6.1)	(±6.0)
Given reasonable charges, how likely or unlikely are you to order this and other EIA publications if they were available on the CD/ROM (information on compact disk)?				
Response:				
Very likely	9.8	7.4	3.7	8.1
	(±4.1)		(±2.6)	(±3.7)
Somewhat likely	14.4	17.8	14.8	11.4
	(±4.9)		(±4.9)	(±4.4)
Unsure	18.4	18.5	17.0	21.5
	(±5.4)		(±5.2)	(±5.6)
Somewhat unlikely	8.6	14.8	9.6	9.4
	(±3.9)		(±4.1)	(±4.0)
Very unlikely	48.9	41.5	54.8	49.7
	(±6.9)		(±6.9)	(±6.9)

	MER	HEC	CD	PSM
Given reasonable charges, how likely or unlikely are you to order this and other EIA publications if they were available on a online electronic data base using a telephone and modem?				
Response:				
Very likely	16.9	10.9	12.4	22.7
	(±5.1)		(±4.6)	(±5.7)
Somewhat likely	24.7	23.2	19.0	23.4
	(±5.9)		(±5.4)	(±5.7
Unsure	17.4	16.7	19.0	11.0
	(±5.2)		(±5.4)	(±4.2
Somewhat unlikely	10.1	17.4	10.2	7.8
	(±4.1)		(±4.2)	(±3.6)
Very unlikely	30.9	31.9	39.4	35.1
	(±6.3)		(±6.7)	(±6.4)

Notes:The percentages are based on the number of respondents answering each question.

The table contains sampling errors in parentheses for the values presented for MER, CD, and PSM. We surveyed all of the HEC recipients, and there are no sampling errors associated with the values presented for that report.

[a]Unreliable estimate—sampling error is greater than the estimate.

Appendix IV

Comments from the Energy Information Administration

Department of Energy
Washington, DC 20585

MAR 1 9 1993

Mr. James Duffus III
Chairman
Professional Audit Review Team
Room 1842
441 G Street, NW
Washington D.C. 20548

Dear Mr. Duffus:

Thank you for the opportunity to review the draft Professional Audit Review Team (PART) report *Performance Evaluation of the Energy Information Administration* (PART-93-1).

I was pleased to see the level of customer satisfaction with the quality, reliability, and timeliness of the four Energy Information Administration (EIA) publications surveyed by PART. This is additional confirmation of the high quality and standards we believe that we have established for the EIA and its products.

EIA agrees with the recommendations contained in the report, that the Technical Monitor (TM) orientation, training, and written guidance need to be strengthened. Orientation sessions have already been initiated. Training options will be identified based upon resource availability and suitable training material. The manual for Technical Monitors will be updated. EIA believes that the Technical Monitor Newsletter has been a valuable, low cost, and efficient means of communicating the most important and most current information to TM's. TM's have consistently provided constructive feedback on its usefulness. EIA plans to continue the newsletter and strengthen it.

With regard to the PART comments regarding the conduct of cost comparison analyses, EIA will follow the guidelines established by the Department of Energy (DOE) pilot test program for continuing support service contract requirements under DOE Order 4200.3D. Over the course of its existence, EIA has worked very hard to maintain an acceptable balance of Federal and contractor staff under the constraints of Full Time Equivalent controls, the need to have certain inherently governmental functions performed by Government staff, and the requirements of OMB Circular A-76 to contract for non-inherently governmental functions where it is a

cost advantage. EIA has tried unsuccessfully on numerous occasions to increase its Federal staff. The agreement of the Office of Management and Budget to consider the results of such studies is a valid reason to reconsider our approach to this issue.

I believe a clarification is needed in the discussion of model documentation contained in Chapter 5 of the report. The September 1992 evaluation of modeling documentation and standards compared a new standard to model documentation which had been in existence prior to the standard. When the new standard was introduced, development of the National Energy Modeling System (NEMS) had already begun; a management decision was made not to upgrade the old model documentation, but to document NEMS to the new standard. The methodology for NEMS has been documented in 39 Component Design Reports which have been shared with over 5000 interested parties in academia, industry, and government. Independent Expert Reviewers are following the entire process from the design and implementation to final documentation of the individual modules. A NEMS Users Conference held in February 1993 provided a public forum to comment on the NEMS design which will be documented by published proceedings. One of the panelists at the September 1992 meeting, who was quoted in the PART report, attended that Conference and complimented the NEMS approach, indicating that he felt it should be the standard for future documentation efforts. I am confident that the PART review of NEMS documentation will reflect significant improvements.

Thank you again for the opportunity to comment on the draft report. If you have any questions or desire further information please contact me on 586-6351, or Mr. William A. Dorsey on 586-6585.

Sincerely,

L. A. Pettis
Acting Administrator
Energy Information Administration