

EIA Publications Directory 1990

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MASTER

Preface

Enacted in 1977, the Department of Energy (DOE) Organization Act established the Energy Information Administration (EIA) as the Department's independent statistical and analytical agency, with a mandate to collect and publish data and prepare analyses on energy production, consumption, prices, and resources, and projections of energy supply and demand. This edition of the *EIA Publications Directory* contains titles and abstracts of periodicals and one-time reports produced by the EIA from January through December 1990. This edition supplements *EIA Publications Directory 1977-1989*.

The body of the *Directory* contains citations and abstracts arranged by broad subject categories, such as coal, petroleum, and natural gas and subcategories such as reserves, products and byproducts, and marketing and economics. All reports are indexed alphabetically by subject and title and numerically by report number.

The *Directory* was compiled by Paula L. Altman of the National Energy Information Center (NEIC), to whom questions about its contents should be addressed.

How to Use the Publications Directory

Availability. This directory contains abstracts and ordering information for individual issues of semiannual, annual, biennial and triennial Energy Information Administration (EIA) periodicals, analysis reports, service reports, and model documentations. (Service reports are prepared by EIA upon special request and may be based on assumptions specified by the requestor.) Most publications are available from the National Technical Information Service (NTIS), U.S. Department of Commerce. Order numbers and price codes are given. If there is no order number beginning with "DE," use the DOE/EIA number. The price codes are interpreted on page 44. The NTIS telephone number and an order form are on page 46.

All publications listed as available from NTIS are available on microfiche at the same price as the paper copy. Most publications are also available in paper copy. If no paper copy code is given, the publication is available in microfiche only.

Periodicals produced more frequently than semiannually--quarterlies, monthlies, and weeklies--are listed as single titles--individual issues are not listed, and no ordering information is given. If the periodical is current, it is available by subscription from the U.S. Government Printing Office (GPO). Some recent individual issues are also available from GPO. Most back issues of current and discontinued periodicals are available from NTIS; call NTIS directly for ordering information for these. If they are not available from NTIS, call the National Energy Information Center (NEIC). Annual and one-time reports published in the last 12 months may be available from GPO. The GPO telephone number and an order form are on page 45. Publications not available from NTIS are available from NEIC.

Abstracts. Abstracts are arranged by abstract number within subject categories as listed in the table of contents. The principal elements of an abstract entry are illustrated below.

Abstract number	Title	Report number	Frequency	NTIS ordering information
Abstract	472 <i>International Energy Annual, 1987.</i> (DOE/EIA-0219(87)) {Annual} Oct 1988 141p. {NTIS DE89002414 A07}			This report presents current data and trends for production, consumption, stocks, imports, and exports for primary energy commodities in more than 190 countries, dependencies, and areas of special sovereignty. Also included are prices on crude petroleum and petroleum products in selected countries. Data are included on: total primary energy production; crude oil and natural gas liquids production; petroleum consumption, trade, and stocks; natural gas production, consumption, and trade; coal production, consumption, and trade; hydroelectric power production; nuclear electric power production; and oil, gas, and coal reserves.

Indices. The directory has three indices: the subject index, the report number index, and the title index. Each index entry contains an abstract number which refers the reader to the abstract.

Subject Index: The subject index is arranged alphabetically by specific energy terminology. Each entry includes the document title, abstract number, and report number. First-level index terms used in the subject index are listed in

the table of contents for easy reference.

Bituminous Coal

Weekly Coal Production, 7 (DOE/EIA-0218)

Exports

Quarterly Coal Report, 6 (DOE/EIA-0121)

Report Number Index: The report number index is arranged alpha-numerically by the DOE/EIA number. The index begins with the report number, followed by the title, date, number of pages, ordering information, and the abstract number.

(DOE/EIA-0436(90)) *World Nuclear Fuel Cycle Requirements* Nov 1990. 88p; NTIS DE91001973 A03 34

Title Index: The title index provides an alphabetical title approach to the publications with the report number and the abstract number.

Costs and Indices for Domestic Oil and Gas Field Equipment and Production Operations 1987, 1988, 1989
(DOE/EIA-0185(89)) 19

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Abstracts

00 EIA Programs and Products

1 EIA Publications Directory 1977-1989 (DOE/EIA-0149(77-89)) (Annual) Jun 1990. 412pp. NTIS DE90012418 A18

This directory contains abstracts and ordering information for EIA publications released in the above time period. The abstracts are arranged by broad subject category such as coal, petroleum, natural gas, and energy planning/policy. A comprehensive subject index, a title index, and a report number index are included. Each entry gives the title, report number, publication frequency, date, number of pages, and ordering information.

2 Annual Report to Congress 1989 (DOE/EIA-0173(89)) (Annual) Mar 1990. 80pp. NTIS DE90007494 A05

Begun in 1982, the Energy Information Administration's *Annual Report to Congress* gives a general overview for the calendar year followed by descriptions of significant agency activities. Selected energy statistics and facts for several years are provided in separate sections. Active models and data collection surveys are described in the appendices along with a listing of publications and periodicals published during the year.

3 EIA New Releases (DOE/EIA-0204) (Bimonthly) Available: NEIC

The latest available Energy Information Administration (EIA) publications and upcoming reports are listed and described. Availability and ordering information are provided. News about EIA and other items of interest to users of EIA publications are also included.

4 Directory of Energy Data Collection Forms (DOE/EIA-0249(89)) (Annual) Jan 1990. 68pp. NTIS DE90006017 A04

This updated directory contains abstracts of forms used by the Energy Information Administration (EIA) to collect energy data. Each entry contains an abstract of the form, the energy source(s) and function(s) covered by the form, identification of group(s) responding to the form, report requirements, the legislative mandate under which the data in these forms were collected, and the frequency with which they were collected. The names and numbers of previous publica-

tions, of current publications resulting from the forms, and of parent reporting systems are also indicated.

01 Coal and Coal Products

5 Coal Production 1989 (DOE/EIA-0118(89)) (Annual) Dec 1990. 160pp. NTIS DE91004900 A08

U.S. coal production and related data are reported for the current year, with similar data for the previous year given for comparison. The data were collected on Form EIA-7A, "Coal Production Report," from U.S. mines that produced, processed, or prepared 10,000 or more short tons of coal. Among the items covered are production, prices, employment, productivity, stocks, and recoverable reserves. Some data are reported by State, county, coal producing district, type of mining, and by type of coal (anthracite, bituminous, subbituminous, and lignite). Also included are a glossary of coal terms used, a map of the coal producing districts, and Form EIA-7A with instructions. Beginning with the 1981 issue, annual trends are presented in the Appendix. Beginning with the 1982 issue, the demonstrated reserve base is provided in the Appendix. The 1984 issue contains results of the 1983 supplemental survey on coal preparation and shipments. Beginning with the 1986 issue, the Appendix contains State coal facts.

6 Quarterly Coal Report (DOE/EIA-0121) (Quarterly) Available: GPO Subscription

Comprehensive information about U.S. coal production, consumption, exports, imports, receipts, and stocks is provided for the most recent quarter, with aggregated quarterly data for previous years also given. To provide a complete picture of coal supply and demand, historical information and forecasts have been integrated in this report. Data are reported by State, Census region, end-use sector (electric utilities, coke plants, other industrial, and residential/commercial), and Standard Industrial Classification. Prices are also given for exports, imports, and receipts data. Explanatory notes, a discussion of data sources, and a glossary are provided. Appendices present detailed coke data; historical trends and projections for each year from 1960 through the most current date and for future years; U.S. coal imports data; and reference tables and maps. A section of highlights presents extensive coverage of recent developments.

7 Weekly Coal Production (DOE/EIA-0218) (Weekly)
Available: GPO Subscription

U.S. production of bituminous coal and lignite and the production of Pennsylvania anthracite are provided for each of the 2 most recent weeks, for a corresponding week in the previous year, and for the prior 52-week period and the corresponding period in the previous year, with percentage changes. Total U.S. production, State production, and the number of railroad cars loaded are also reported. In addition, data are provided at intervals about the following topics: export/import, individual State coal profiles, and coal at the electric utilities.

0130 Transport and Handling

8 Coal Distribution (DOE/EIA-0125) (Quarterly)
Available: GPO Subscription

U.S. coal distribution is reported quarterly; historical data for the same quarter of each of the 4 preceding years are also provided. Shown is distribution by: origin (Coal Producing District), destination (State, Canada, and overseas), consumer category (electric utilities, coke plants, other industrial plants, and residential/commercial), and method of transportation (railroad, water, truck, and tramway/conveyor/slurry pipeline). Coal production/purchases, stocks, and distribution by secondary methods of transportation (tidewater piers, coastal ports, Great Lakes coal-loading docks, and rivers) are also reported. Appendices describe the data collection form (Form EIA-6), present sources of data/technical notes, and provide maps. This publication was previously entitled *Bituminous Coal and Lignite Distribution* and *Bituminous and Subbituminous coal and Lignite Distribution*. Publication began July 1980.

0150 Marketing and Economics

9 Annual Outlook for U.S. Coal 1990
(DOE/EIA-0333(90)) (Annual) May 1990. 56pp. NTIS DE90011958 A03

This report presents a detailed forecast for U.S. coal supply and demand. Current events and factors affecting the outlook for coal are provided. Some examples are: the utility and industrial sectors, coking coal market, coal technologies, and the environment. The major legislative and regulatory initiatives that may affect the outlook for U.S. coal are also discussed. Projections, based on the *Annual Energy Outlook*, focus on the base case outlook for U.S. coal supply and demand through the year 2010. Appendices include: Regional Coal Data, Descriptions of the Models Used, and a Glossary of Acronyms and Technical Terms.

10 Annual Prospects for World Coal Trade 1990
(DOE/EIA-0363(90)) (Annual) Jun 1990. 124pp. NTIS DE90013084 A06

The future development of the world coal market is examined in a more detailed analysis of the projections contained in the Energy Information Administration's *Annual Energy Outlook* (DOE/EIA-0383). Both U.S. and world coal trade projections are highlighted, as well as the factors affecting the growth of world demand for metallurgical and steam coal. Coal import demand and the export market are discussed in addition to issues in the world coal trade such as environment, legislation, and transportation. Appendices include: Coal Trade Tables Using Metric Tons, Recent History of World Coal Trade, *Annual Energy Outlook* Variant Scenarios, and a Glossary of Acronyms and Technical Terms.

02 Petroleum

11 Energy Situation Analysis Report (DOE/EIA-ESAR) (Irregular) Aug 1990. 6pp. Available: NEIC The Iraqi invasion of Kuwait on August 2, 1990, resulted in a widespread need for accelerated public sharing of the energy information being collected and analyzed by the Energy Information Administration (EIA). From August 10, 1990, through March 4, 1991 EIA published a fact sheet entitled "Energy Situation Analysis Report." The report included daily spot and futures prices for crude oil, unleaded gasoline, No. 2 heating oil and kerosene-type jet fuel. Retail gasoline prices were presented. Various issues also included statistical and analytic information on topics related to the loss of oil supplies from Iraq and Kuwait and the resulting effects on oil supply, demand, and prices. The number of pages varied from 4 to 17.

12 Petroleum Supply Monthly (DOE/EIA-0109)
(Monthly) Available: GPO Subscription

Contains summary data on the supply and disposition of crude oil and petroleum products in the United States and major U.S. geographic regions. The data series describe monthly production, imports and exports, inter-Petroleum Administration for Defense (PAD) District movements, and inventories by the primary suppliers of petroleum products in the United States (50 States and the District of Columbia). The reporting universe includes petroleum refiners, motor gasoline blenders, operators of natural gas processing plants and fractionators, inter-PAD transporters, importers, and major inventory holders of petroleum products and crude oil. Data presented are divided into two sectors: (1) the "Summary Statistics" and (2) the "Detailed Statistics." The tables and figures in the "Summary Statistics" section present a time series of selected petroleum data on a U.S. level. Tables in the "Detailed Statistics" section present statistics for the most current month available as well as year-to-date. Publication began March 1982.

13 Weekly Petroleum Status Report (DOE/EIA-0208) (Weekly) Available: GPO Subscription

Current information on the petroleum supply situation in the United States is given for the most recent week and month. Some monthly data go back 2 or 3 years. Shown are the U.S. petroleum balance sheet; refinery activity; stocks; imports; products supplied; and prices. Refinery data cover inputs, utilization, and production. Data on stocks are given for crude oil and major products (gasoline, distillate fuel oil, residual fuel oil, etc.) and by Petroleum Administration for Defense District. Data on prices are refiner acquisition cost of crude oil; retail selling prices for motor gasoline and residential heating oil; world crude oil prices; and spot market product prices. Strategic Petroleum Reserve data are shown when appropriate. Five appendices discuss survey design and estimation methods for weekly data; interpretation and derivation of average inventory levels; projections from the *Short-Term Energy Outlook*, (DOE/EIA-0202); calculation of world oil prices; and explanation and coverage of spot market product prices. A glossary and list of data sources are also provided. Publication began April 1979.

14 Petroleum Supply Annual 1989, Volume 1 (DOE/EIA-0340(89)/1) (Annual) May 1990. 180pp. NTIS DE90012613 A09

14 Petroleum Supply Annual 1989, Volume 2 (DOE/EIA-0340(89)/2) (Annual) Jun 1990. 588pp. NTIS DE90016012 A25

The *Petroleum Supply Annual* consists of two volumes. Volume 1 contains annual supply, disposition, and stock data beginning in 1973. Monthly data are given for the most recent 3 years. Supply and disposition are reported for crude oil, natural gas liquids and LRGs, individual finished petroleum products and other liquids. The movements of crude oil and petroleum products between Petroleum Administration for Defense (PAD) Districts are detailed as well as imports and exports of crude oil and petroleum products by country, and the production of heavy oils by sulfur content. Volume 2 contains supply and disposition data for each month of the current year. Supply and disposition are reported for crude oil, natural gas plant liquids/liquefied refinery gases, other liquids, and individual finished petroleum products. Movements of crude oil and petroleum products between Petroleum Administration for Defense (PAD) Districts by pipeline, tanker and barge are detailed, as well as imports and exports of crude oil and petroleum products by country, and the production of heavy oils by sulfur content. Information from the annual report *Sales of Liquefied Petroleum Gases and Ethane* (DOE/EIA-0114) is included in the 1981 and 1982 issues. Also, information from the annual report *Deliveries of Fuel Oil and Kerosene* (DOE/EIA-0113) is provided in 1981-1983 issues.

15 International Petroleum Statistics Report (DOE/EIA-0520) (Monthly) Available: GPO Subscription

This report presents data on international oil production, consumption, imports, exports, and stocks. The

report has three sections. Section 1 contains time series on world oil production and oil consumption and stocks in the Organization for Economic Cooperation and Development (OECD). This section contains annual data beginning in 1973 and monthly data for the most recent 2 years. Section 2 presents an oil supply/consumption balance for the market economies (i.e. non-Communist countries). This balance is presented in quarterly intervals for the most recent 2 years. Section 3 presents data on oil imports by OECD countries. This section contains annual data beginning in 1982 and quarterly data for the most recent 2 years. Publication began January 1989.

0201 Reserves

16 U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 1989 Annual Report (DOE/EIA-0216(89)) (Annual) Oct 1990. 120pp. NTIS DE91001303 A06

Proved reserves of crude oil and natural gas and natural gas liquids in the United States are reported by State, with U.S. totals. A national summary is given, along with a discussion of areas of notable developments in the industry. Shown for each producing State and the United States are crude oil proved reserves and production, reserves in nonproducing reservoirs, and indicated additional reserves; natural gas proved reserves and production, reserves in nonproducing reservoirs, and commitment status. A glossary of terms and references is included. The methodology for the report is described in the appendices.

17 U.S. Oil & Gas Reserve by Year of Field Discovery (DOE/EIA-0534) (One-time) Sep 1990. 152pp. NTIS DE90017657 A07

This report provides EIA estimates of the total discovered oil and gas reserves, usually termed "ultimate recovery." It also allocates the ultimate recovery to categories according to the oil and gas field discovery years. Reserves credited to the period between the first U.S. oil field discovery, in 1859, through the year 1899 are shown in the aggregate. Also presented for each year-of-discovery vintage are the two components of ultimate recovery, cumulative production (reserves previously produced) and proved reserves (reserves yet to be produced). Annual production and counts of identified oil and gas fields are indicated for each vintage as well.

0202 Geology and Exploration

18 International Oil and Gas Exploration and Development Activities (DOE/EIA-0523) (Quarterly) Available: GPO Subscription

This quarterly report monitors discoveries of crude oil and natural gas in foreign countries. A discovery, as used in this publication, can be either a published report of ultimately recoverable reserves for a new field or reservoirs, or a well in a new area. The report contains an overview and a list of reserve additions for the quarter (with maps). All of the reserve additions obtained from the literature are presented in the "Foreign Oil and Gas Discoveries" table of Appendix A, with those appearing in the table for the first time highlighted. Entries in this table are arranged alphabetically by country and by report date within each country. Appendix B, "World Crude Oil and Natural Gas Reserves," presents published oil and gas estimates by country. A glossary of abbreviations used in this report is also included.

in the U.S. petroleum refining industry during the 1980's are presented. The report consists of six chapters and four appendices. Included is a detailed description of the major events and factors that affected the domestic refining industry during this period. Some of the changes that occurred in the 1980's are the result from events that started in the 1970's. The impact of these events on U.S. refinery configuration, operations, economics, and company ownership are examined.

0203 Drilling and Production

19 Costs and Indices for Domestic Oil and Gas Field Equipment and Production Operations 1987, 1988, 1989 (DOE/EIA-0185(89)) (Annual) Aug 1990. 116pp. NTIS DE90014685 A06

Estimated costs and cost indices for domestic oil field equipment and production operations are provided. The information is given for several depth categories in oil-producing regions, both offshore and onshore, of the United States. Narrative sections discuss the results and the indexing procedure and review the current year indexing. Beginning with the 1980 issue, a section on cost and indices for equipping and operating gas wells has been added. Also added was an analysis of equipment and operating costs for each area, depth, method of production, and type of production.

20 Oil and Gas Field Code Master List 1989 (DOE/EIA-0370(89)) (Annual) Jan 1990. 688pp. NTIS DE9005313 A99

The *Oil and Gas Field Code Master List* provides standardized field name spellings and unique 6-digit codes for all identified oil and/or gas fields in the United States. For each field, the master list displays the field code, the field name, State postal abbreviation and State subdivision code, county code, county name, field discovery year, and field type. Also provided is a list of "alias" or alternate field names. The master list field name spellings and codes are to be used by respondents to Department of Energy forms.

0204 Processing

21 U.S. Petroleum Refining Industry in the 1980's, The (DOE/EIA-0536) (One-time) Oct 1990. 100pp. NTIS DE91001726 A06

An historical analysis of the changes that took place

0207 Marketing and Economics

22 Petroleum Prices and Profits in the 90 Days Following the Invasion of Kuwait (DOE/EIA-SR/OA/90-01) (Service report) Nov 1990. 84pp. NTIS DE91006828 A05

This report examines the performance of energy markets and energy firms during the 90 days following the Iraqi invasion of Kuwait on August 2, 1990. International implications of the disruption of the oil supply, both the pre-invasion and post-invasion scenarios, are discussed. Petroleum product and crude oil prices are tracked to give a proper perspective of what transpired in the energy marketplace. Other factors affecting petroleum market prices are discussed. The report reviews the petroleum industry profits during the time of rising oil prices and describes the magnitude of the income of petroleum companies, using the most current data available. Also, the report describes the futures market behavior and its relationship to petroleum marketing. Appendices contain supplementary tables and data for figures presented in the discussion.

23 Analysis of Heating Fuel Market Behavior 1989-1990, An (DOE/EIA-SR/OG-90-01) (Service report) Jun 1990. 148pp. NTIS DE91005275 A07

This service report presents an interpretation of the increase of heating fuel prices and market trends from December 1989 to January 1990, brought on by extremely cold weather in December, which initiated a dramatic increase in heating fuel prices as well as propane and No. 2 heating oil. This report provides essential background information on the nature of interrelationships among the markets in which heating fuels are bought and sold. An overview of the contract, spot, and future markets is presented that explains the similarities and differences between the three, and the ways in which each influences and is influenced by supply and pricing phenomena. The relationships among the various markets are discussed, including the possible effects of futures market trading and speculation on prices in the cash markets.

24 Petroleum Marketing Monthly (DOE/EIA-0380) (Monthly) Available: GPO Subscription

Petroleum product marketing data are reported for the United States, Petroleum Administration for Defense (PAD) Districts, and each State for the current month,

the previous month, and the corresponding month of the previous year. Some data are also summarized for each year from 1978 forward and for each month from the previous 2 years through the current month. Shown for 16 individual petroleum products are sales prices, sales volumes, percentages of sales, and first sales for consumption. Data are given by type of seller (major refiner, other refiner/gas plant operator, and reseller) and by type of sale (sales to end users and sales for resale). Crude oil price tables present data from 1978 through the current month on refiner acquisition cost; first purchase price by State; and FOB/landed cost of purchases for U.S. importation from selected countries, by API gravity, and for selected crude streams. Feature articles on current topics appear periodically. Standard errors and survey response percentages are also presented. Explanatory notes, a glossary, and a product guide to tables are also included. Publication began May 1983.

25 Annual Outlook for Oil and Gas 1990 (DOE/EIA-0517(90)) (Annual) Jun 1990. 128pp. NTIS DE90012192 A07

This report provides projections of crude oil and natural gas supply and prices through the year 2010. It discusses in detail recent developments in the crude oil and natural gas markets, emphasizing the dramatic changes in the price of these fuels, the regulatory changes affecting natural gas over recent years, and the implications of these changes over the longer term. A base case projection is presented together with alternative scenarios based upon differing projections of world oil prices and economic growth and of natural gas import levels.

26 Winter Fuels Report (DOE/EIA-0538) (Irregular) Oct 1990. Available: NEIC

This weekly report contains monthly and weekly propane and fuel oil data, natural gas supply and disposition data, and selected price information. Distillate fuel oil net production, imports, and stocks for all PADs, and product supplied on a U.S. level are given. Propane net production, imports, and stocks for PAD I, II, and III, are shown in addition to recent historical data. Natural gas supply and disposition and underground storage for the U.S. are provided together with consumption for all PADs. For selected States, residential and wholesale pricing data for propane and heating oil are shown. United States crude oil and No. 2 distillate and propane prices are listed. For a few selected cities, No. 2 distillate and propane prices are presented. Included is a brief weather summary with U.S. total heating degree days by city. Appendices include PAD descriptions and maps, explanatory notes, and a glossary. This report will only be published during the heating season, terminating the first week in April.

0210 Policy, Legislation, and Regulation

27 Implications of Lifting the Ban on the Export of Alaskan Crude Oil (DOE/EIA-SR/EMEU/90-01) (Service report) Apr 1990. 36pp. NTIS DE91005277 A03

The main objective of this report is to estimate the potential impacts on crude oil prices that would result from lifting the export ban on Alaskan crude oil. The report focuses on the Japanese market and the U.S. West Coast (Petroleum Administration for Defense District V) market. Japan is the principal potential export market for Alaskan crude oil. Exports to that market would also affect the price of Alaskan crude oil as well as crude oil and product prices on the West Coast and the volume of petroleum imported into that area.

28 Implications of Lifting the Ban on the Export of Alaskan Crude Oil: Price and Trade Impacts (DOE/EIA-SR/EMEU/90-3) (Service report) Jul 1990. 56pp. NTIS DE91005276 A04

The main objective of this report is to estimate the potential impacts on crude oil prices that would result from lifting the export ban on Alaskan crude oil. This report focuses on the Japanese market and the U.S. West Coast market. It presents a perspective on Alaskan crude oil and its decreasing production which is decreasing as proven reserves become increasingly depleted. It also describes the factors that would determine the trade flow of Alaskan crude oil if the export ban were abolished, as well as the methodology used in the analysis to generate values for Alaskan crude oil.

0240 Storage

29 Analysis of Increasing the Size of the Strategic Petroleum Reserve to One Billion Barrels, An (DOE/EIA-SR/ICID/90-01) (Service report) Feb 1990. 111pp. NTIS DE91005278 A06

This report analyzes the expansion in size of the Strategic Petroleum Reserve (SPR), from its originally planned 750 million barrels to 1,000 million barrels. At the time when this report was begun, the SPR contained only 580 million barrels. A cost-benefit approach was used to complete this analysis. The costs associated with the SPR include the development, operation, and maintenance costs of providing underground salt domes as well as the cost of acquiring the crude oil. Benefits from the SPR result mainly from the reduction in economic damage (during an oil supply disruption) due to its drawdown.

03 Natural Gas

30 Natural Gas Monthly (DOE/EIA-0130) (Monthly)
Available: GPO Subscription

Current data on natural and supplemental gas production, supply, consumption, disposition, interstate pipeline activities, storage, imports, exports, and prices in the United States are presented. Production data are given by State; consumption and price data are given by State and sector; company-specific data on storage operators and interstate pipelines are also presented. Explanatory notes, a discussion of data sources, and a glossary are included. Feature articles on current topics are published periodically. Annual reports on imports/exports and mainline sales to industrial users appear periodically. Publication began November 1982.

31 Natural Gas Annual 1989 (DOE/EIA-0131(89)) (Annual) Oct 1990. 252pp. NTIS DE91001333 A12
Contains national, regional and State level statistics on natural gas reserves, production, imports, exports, transportation, storage, consumption, and prices. Consumption and price data are broken down by end-use sector. Regional and State summaries present data for the most recent 5 years. Appendices review data for the collection methodology and thermal conversion factors. A glossary of terms is provided.

0306 Marketing and Economics

32 Natural Gas Production Responses to a Changing Market Environment 1978-1988 (DOE/EIA-0532) (One-time) Jun 1990. 140pp. NTIS DE90011844 A07
This publication presents an historical analysis of the activities of natural gas producers and their responses to market developments occurring since 1978. The report examines natural gas reserves and well production data for the period 1978 through 1988, particularly in respect to productive capacity in a changing market environment. In addition, the report examines productivity levels and the number of well abandonments or shut-ins relative to changes in market conditions and/or regulatory initiatives during the period

05 Nuclear Fuels

33 Uranium Industry Annual 1989 (DOE/EIA-0478(89)) (Annual) Sep 1990. 132pp. NTIS DE90017413 A07

Information on the U.S. uranium industry is presented. Uranium raw material activities described include exploration, resources, mine production, milling operations, and employment. Uranium marketing activities discussed include: utility purchases, uranium prices,

domestic procurement, foreign purchases, enrichment, inventories, market requirements, and availability. This information is collected on Form EIA-858, "Uranium Industry Annual Survey." This report contains data previously reported in *Survey of United States Uranium Marketing Activity* (DOE/EIA-0403) and *Survey of U.S. Uranium Exploration Activity* (DOE/EIA-0402). Appendices describe the survey methodology, provide technical notes, list respondents to the survey, and present the survey. A glossary is included.

0510 Marketing and Economics

34 World Nuclear Fuel Cycle Requirements 1990 (DOE/EIA-0436(90)) (Annual) Nov 1990. 88pp. NTIS DE91001973 A05

This report presents the projected requirements for uranium concentrate and uranium enrichment services to fuel the nuclear power plants expected to be operating under two nuclear supply scenarios. These nuclear supply scenarios are reported in *Commercial Nuclear Power: Prospects for the United States and the World* (DOE/EIA-0438). The report contains an analysis of the sensitivities of the nuclear fuel cycle projections to different levels and types of projected nuclear capacity, different enrichment tails assays, higher and lower capacity factors, changes in nuclear fuel burnup levels, and other exogenous assumptions. The report also presents annual projections of spent nuclear fuel discharges and inventories of spent fuel.

0520 Waste Management

35 Spent Nuclear Fuel Discharges From U.S. Reactors 1988 (DOE/EIA-SR/CNEAF/90-01) (Service report) Mar 1990. 176pp. NTIS DE91005279 A09

Information is provided on the amount and characteristics of radioactive waste material currently stored at commercial nuclear facilities and the amount of additional waste likely to be produced over the operating lives of existing and planned nuclear reactors. Data are reported on the shipment and storage of discharged nuclear fuel assemblies and storage site capacities and inventories as of December 31, 1988. The appendices contain site-specific detail data on current inventories and storage capacity.

08 Multifuel

36 Monthly Energy Review (DOE/EIA-0035) (Monthly) Available: GPO Subscription

The *Monthly Energy Review* presents current U.S. total

energy summaries and key data series for production, consumption, stocks, imports, exports, and prices of the individual energy commodities. Most of the data series are from 1973 forward. Also included are data on the international production of crude oil, consumption of petroleum products, petroleum stocks, and production of electricity from nuclear power facilities.

37 State Energy Data Report Consumption Estimates 1960-1988 (DOE/EIA-0214(88)) (Annual) May 1990. 484pp. NTIS DE90010700 A20

The *State Energy Data Report* presents estimates of annual energy consumption at the State and national levels by principal energy type (petroleum, natural gas, coal, and electricity) and by major economic sector (residential, commercial, industrial, transportation, and electric utility) from 1960 forward. Data are presented in both physical units and British thermal units for the current year. State rankings for total energy consumption, consumption per capita, and by individual energy commodity are presented. Included in the report are documentation describing how the estimates are made for each energy source, sources of all input data, and a summary of changes from the previous report.

38 Energy Information Sheet (series) (DOE/EIA-0240) (Irregular) Jun 1990. 1p. Available: NEIC

Information Sheets are 1-page flyers highlighting a specific energy theme and based on a regularly-issued publication of the Energy Information Administration (EIA). Current issues highlight: production, consumption, reserves, and prices for petroleum, natural gas, and coal; electricity production, consumption, capacity, and prices; nuclear power generation; renewable energy, degree-days, and energy measurement using Btu's.

39 State Energy Price and Expenditure Report 1988 (DOE/EIA-0376(88)) (Annual) Oct 1990. 260pp. NTIS DE91000925 A12

Estimated annual energy prices and expenditures are presented for the 50 States, the District of Columbia, and the United States for selected years, from 1970 forward. Data for all years from 1970 forward are available on computer-readable diskettes. Estimates are shown by energy source (coal, natural gas, petroleum products, nuclear, wood/waste at electric utilities, and electricity) and by sector (residential, commercial, industrial, transportation, and electric utility). Also given are various State rankings for total expenditures, expenditures per capita, and prices by fuel type. Documentation on the price and expenditure estimates is provided, including sources of data, methods of estimation, conversion factors, and a summary of changes since the previous report.

40 Annual Energy Review 1989 (DOE/EIA-0384(89)) (Annual) Jun 1990. 324pp. NTIS DE90012064 A14

The *Annual Energy Review* presents historical energy data summaries (total U.S. consumption, imports, and exports) as well as complete data coverage of the prin-

cipal energy commodities. Additionally, price, inventory, and resource reserve information are provided by fuel. Most of the data series are from 1949 forward. Key international data series for major energy sources and activities are also included.

41 Energy Facts 1989 (DOE/EIA-0469(89)) (Annual) Dec 1990. 128pp. NTIS DE91004629 A07

A broad range of domestic and international energy data is provided for the current year, as well as historical data. This report is designed for quick reference to major facts about energy. Separate chapters present an overview for each energy source (petroleum, natural gas, coal, electric power, and nuclear power). A glossary is included. Source publications are listed.

20 Electric Power

2001 Power Plants and Power Generation

42 Inventory of Power Plants in the United States 1989 (DOE/EIA-0095(89)) (Annual) Oct 1990. 400pp. NTIS DE91000630 A17

Detailed information on all operable electric utility generating units in the United States for the present year is included, as well as aggregate capacity at the national, regional, and State levels. Detailed data on generating units include: name of operating utility, location of unit, primary/alternate energy sources, installed nameplate capacity, net summer capability, and net winter capability. Also included are detailed data on units retired in the past year, projected to go into service within 10 years, planned capacity retirements, and units that are jointly owned by two or more utilities.

43 Cost and Quality of Fuels for Electric Utility Plants 1989 (DOE/EIA-0191(89)) (Annual) Jul 1990. 244pp. NTIS DE90014382 A11

Annual information on the cost and quality of fossil fuel receipts at electric utility plants is presented, with some data presented in a historical series. Data on receipts, cost, and quality are reported by individual plant and utility company, and data on receipts and cost are also aggregated by State and Census division. Through 1983, data are reported for plants with a capacity of 25 megawatts or greater. Since 1984, the data are for plants with 50 megawatts or greater capacity.

44 Electric Power Monthly (DOE/EIA-0226) (Monthly) Available: GPO Subscription

This report presents monthly summaries of electric utility statistics at the national, Census division, and State level for net generation, fuel consumption, fuel stocks, quantity and quality of fuel, cost of fuel, elec-

tricity sales, and average retail prices of electricity. Data on net generation are also displayed at the North American Electric Reliability Council (NERC) region level. Additionally, company and plant level information are published on the capability of new plants. Beginning with the February 1989 issue, plant level data are given for net generation, fuel consumption, fuel stocks and the quantity, cost, and quality of fuel receipts each month. Publication began June 1980.

45 Financial Statistics of Selected Electric Utilities 1988 (DOE/EIA-0437(88)) (Annual) Mar 1990. 1116pp. NTIS DE90008781 A99

Financial data for both privately and publicly owned electric utilities are reported for the current year with summary data given for 4 prior years for privately owned utilities. Data include balance sheets; income/retained earnings statements; statement of changes in financial position; electric utility operating revenues, sales, and customers by classes of service; electric utility operation/maintenance expenses; physical quantities; selected financial indicators; research/development/demonstration; and environmental protection facilities investments/expenses. Data for privately owned utilities are given for all utilities combined and for each individual utility, while data for publicly owned utilities are given only for each individual utility. Two appendices present additional information on rural electric cooperative borrowers and Federal power marketing agents. Data for the private utilities were collected on FERC Form 1, "Annual Report of Major Electric Utilities, Licensees, and Others"; data for the selected public utilities were collected on Form EIA-412, "Annual Report of Public Electric Utilities." Before the 1982 report, this information was found in two publications: *Statistics of Privately Owned Electric Utilities* (DOE/EIA-0044) and *Statistics of Publicly Owned Electric Utilities* (DOE/EIA-0172).

46 Electric Plant Cost and Power Production Expenses 1988 (DOE/EIA-0455(88)) (Annual) Aug 1990. 172pp. NTIS DE90015997 A06

Information on the historical plant cost and annual power production expenses for selected hydroelectric, fossil-fueled steam-electric, gas-turbine, and nuclear steam-electric plants is provided for the current year. Some summary data are provided for several years. Historical plant cost is the initial investment in plant (cumulative to the start of commercial operation), plus the cost of all additions to the plant, less the value of retirements. Thus, these costs include expenditures made over several years. Power production expenses include operation, maintenance, and fuels. Also reported are data on installed generating capacity, net generation, net capability, fuel consumption, and physical plant characteristics. Data and narrative discussions on each type of power plant are contained in separate chapters. Plant-level data are arranged alphabetically by State, utility, and plant. This publication combines the following: *Thermal-Electric Plant Construction Cost and Annual Production Expenses* (DOE/EIA-0323) and *Hydroelectric Plant Construction Cost*

and *Annual Production Expenses* (DOE/EIA-0171). A glossary and technical notes are included.

47 Annual Outlook for U.S. Electric Power 1990: Projections Through 2010 (DOE/EIA-0474(90)) (Annual) Jun 1990. 80pp. NTIS DE90012750 A05

Historical data and projections of the U.S. electric utility market are presented. Summary information on the generation of electric power, its distribution to end-use sectors, and electric power costs and prices is also presented. The text describes the U.S. electric utility market, discusses alternatives to traditional new capacity construction and legislation affecting capacity growth, and examines the outlook for electric power in the future.

48 Electric Sales, Revenue and Bills 1988 (DOE/EIA-0540(88)) (Annual) Mar 1990. 236pp. NTIS DE90008854 A11

This report, which replaces the EIA publication *Typical Electric Bills* (DOE/EIA-0040), presents a summary of electric utility statistics at the national, regional, State, and electric utility levels. The publication provides information about sales, revenue, average revenue per kilowatthour of electricity sold, and typical monthly electric bills to residential, commercial, and industrial consumers throughout the United States.

2003 Power Transmission and Distribution

49 Electric Trade in the United States 1986 (DOE/EIA-0531(86)) (Biennial) Jun 1990. 304pp. NTIS DE90012819 A13

This report provides data on the U.S. electric utility industry's domestic and international wholesale trade and the quantities of electricity carried by the U.S. transmission system. Data for the purchased power, sales for resale, exchanges, and transmission for and by others (wheeling) are presented. Data are at the national, North American Electric Reliability Council (NERC) region, and electric utility levels and cover all utility ownership classes. An introduction discusses current conditions and emerging issues affecting electricity trade. Appendices and a glossary are also provided.

21 Nuclear Power Plants

50 Commercial Nuclear Power: Prospects for the United States and the World 1990 (DOE/EIA-0438(90)) (Annual) Oct 1990. 160pp. NTIS DE91000877 A07

Historical data, current status, and outlook projections for commercial nuclear power reactors for all countries in the world outside centrally planned economic areas

(WOCA) are described. Documentation of the U.S. nuclear capacity and generation projections through 2000 that are presented in the *Annual Energy Outlook* (DOE/EIA-0383) is provided. In addition, U.S. nuclear capacity and generation projections through 2020 are presented for various nuclear power supply scenarios. Foreign nuclear power projections are provided through 2010. Institutional and technological developments are discussed. WOCA nuclear power programs are reviewed. Appendices present additional material, including listings of both U.S. and foreign nuclear power plants that are operable and in the construction pipeline. Information regarding operable reactors in countries with centrally planned economies is also presented. A glossary is included.

29 Economics, Analysis, and Forecasting

2901 Energy Modeling

51 Oil Market Simulation Model User's Guide (DOE/EIA-M028(90)) (One-time) Jul 1990. 10pp. NTIS DE90015982 A03

The Oil Market Simulation model (OMS) is a LOTUS 1-2-3 Spreadsheet that simulates the world oil market. OMS is an annual model with a data base that begins in 1979 and computes projections through the year 2000. The geographic coverage includes all market economies, with net imports from the centrally planned economies taken as an assumption. The model estimates the effects of price changes on oil supply and demand and computes an oil price path over time that allows supply and demand to remain in balance within the market economies area as a whole. This user's manual is designed to be used with the 1989 OMS model on diskette.

52 PC-AEO Forecasting Model for the Annual Energy Outlook 1990 (DOE/EIA-M036(90)) (One-time) Mar 1990. 444pp. NTIS DE90007664 A16

The objective of the PC-AEO modelling system is to make forecasts of national energy trends by fuel and sector for the *Annual Energy Outlook*. The model was built with the aim of representing the most significant national characteristics of U.S. energy markets, but entirely within the operating capability of a large personal computer, typically a fast "386" type of machine. The integrated PC-AEO model consists of a series of linked spreadsheets, most of which are specific to a fuel supply or end-use sector of consumption. Many are written to characterize the data at the four Census

regions level for the United States of America. The individual spreadsheet models were designed so that each could be run on a conventional but capable IBM personal computer using Lotus 1-2-3 as the host language.

53 Short-Term Integrated Forecasting System: Model Documentation (DOE/EIA-M041) (One-time) Aug 1990. 136pp. NTIS DE90017380 A07

The Short-Term Integrated Forecasting System (STIFS) is the integrated system for the development of supply and demand forecasts that are published quarterly in the *Short-Term Energy Outlook*. The demand and price forecasts for petroleum, electricity, coal, and natural gas are described in this report, followed by a description of the integrated model.

54 Directory of Energy Information Administration Models 1990 (DOE/EIA-0293(90)) (Annual) Jun 1990. 100pp. NTIS DE90012082 A05

Abstracts of Energy Information Administration (EIA) models are presented. The main body is an alphabetical listing of all basic and auxiliary models. Brief statements regarding each model's title, acronym, purpose, and status are given, followed by more detailed information on characteristics, cases, and requirements. Sources for additional information are identified. This report revises and updates *Applied Analysis Model Summaries* (DOE/EIA-0293).

2902 Economics and Sociology

55 Performance Profiles of Major Energy Producers 1988 (DOE/EIA-0206(88)) (Annual) Feb 1990. 176pp. NTIS DE90006865 A09

Pursuant to Section 205(h)(2) of the Department of Energy Organization Act, the Energy Information Administration, through Form EIA-28, has collected financial information and other measures of energy related business efforts and results for major energy companies on a uniform, segmented basis. In 1988, 23 companies filed Form EIA-28. The comparability of information across energy lines of business is unique to this reporting system. For example, petroleum activities can be compared to activities in other lines of business or nonenergy areas, and domestic activities can be contrasted to foreign activities. The purpose of this publication is to examine year-to-year developments in the operations of the 23 major U.S. energy-producing companies on a corporate level, by major line of energy business, by major functions within each line of business, and by geographic area. This report presents data collected on Form EIA-28 for the reporting year. Although the focus is on developments in the reporting year, important trends since 1974 are also featured.

Economic performance, in financial and physical dimensions, continues to serve as a significant factor in evaluating past decisions and guiding future options in the development and supply of energy resources. The information contained in this report is intended to promote both an understanding and a critical review of the possible motivations and apparent consequences of investment decisions by some of the largest corporations in the energy industry.

2920 Supply, Demand, and Forecasting

56 Improving Technology: Modeling Energy Futures for the National Energy Strategy (DOE/EIA-SR/NES/90-01) (Service report) Jan 1991. 148pp. NTIS DE91009199 A07

This report was prepared as a contribution to the formulation of the National Energy Strategy. It is an attempt to examine how commercializing and deploying known technologies might affect America's energy future. The report does not examine a full range of energy policy issues; rather, it examines a limited set of energy technology and regulatory issues. In the long run, technological changes are one of the most important sources of economic growth. The report estimates the impact of a number of frequently discussed technologies on U.S. energy production, consumption, and prices. Most technologies considered have been demonstrated in a laboratory setting or reduced to practice, though many have not yet been adopted for commercial use. Consequently, some technology assumptions used in this report may prove to be very optimistic.

57 Energy Consumption and Conservation Potential: Supporting Analysis for the National Energy Strategy (DOE/EIA-SR/NES/90-02) (Service report) Dec 1990. 272pp. NTIS DE91009200 A12

This report serves as an auxiliary document to Chapter 3 of the National Energy Strategy (NES) publication, *Improving Technology: Modeling Energy Futures for the National Energy Strategy* (DOE/EIA-SR/NES/90-01).

As requested by the Department of Energy (DOE) Office of Conservation and Renewable Energy (CE), this report presents a detailed assessment of the conservation potential in the end-use energy sectors of the U.S. economy. Three projections are presented. The first projection, the reference case, is an update and extension to the year 2030 of the base case projection in the Energy Information Administration (EIA) publication titled the *Annual Energy Outlook 1990* (AEO). The second and third projections presents a High Conservation (HC) excursion and a Very High Conservation (VHC) excursion. The DOE Office of Policy, Planning and Analysis (PE) specified the general nature

of the conservation excursions to be used in the report as part of the NES, while CE defined the overall strategies to be addressed in each economic sector.

58 Electricity Supply: Supporting Analysis for the National Energy Strategy (DOE/EIA-SR/NES/90-03) (Service report) Jan 1991. 52pp. NTIS DE91009201 A04

This report has been prepared by the Energy Information Administration at the request of the Department of Energy's Office of Policy, Planning and Analysis. The results are based on the assumptions provided by the Department of Energy's Office of Conservation and Renewable Energy, the Office of Nuclear Energy, the Office of Fossil Energy, and the Office of Policy, Planning and Analysis. This report serves as an auxiliary document to Chapter 4 of the publication, *Improving Technology: Modeling Energy Futures for the National Energy Strategy*, prepared by the Energy Information Administration (EIA), to be used as input to the development of a National Energy Strategy. The excursions discussed in this report are not necessarily the policy options which will be selected for inclusion in the National Energy Strategy (NES). This report examines the effects of various supply side options for the electric utilities. The three excursions presented are: (1) "Effects of Clean Air Act Amendments on Reducing SO₂/NO_x Emissions" (Chapter 1); (2) "Nuclear Life Extensions/New Nuclear Orders" (Chapter 2), which illustrates the impact of new nuclear power plant orders and the life extension of existing the impact of new nuclear power plant orders and the life extension of existing nuclear plants; and (3) "Nuclear and Accelerated Fossil-Fueled Generating Technologies" (Chapter 2), which portrays accelerated research and development of advanced fossil-fueled generating technologies, making them commercially available earlier, with the inclusion of the nuclear option.

59 Renewable Energy Excursion: Supporting Analysis for the National Energy Strategy (DOE/EIA-SR/NES/90-04) (Service report) Jan 1991. 28pp. NTIS DE91009202 A03

This report serves as an auxiliary document to three chapters of the National Energy Strategy publication *Improving Technology: Modeling Energy Futures* (DOE/EIA-SR/NES/90-01). It has been prepared by the Energy Information Administration (EIA) at the request of the Department of Energy's Office of Policy, Planning and Analysis. The results are based on a variety of sources, assumptions, forecasts, and in several cases, technologies still in the research and development and demonstration phases. The analysis undertaken for the development of the National Energy Strategy (NES) examines several potential energy supply and demand scenarios over the period 1990-2030. This component of that overall effort addresses the prospects for enhancing the development of the wide-ranging set of energy supplies derived from renewable

resources. Expanding the use of renewable resources is of interest because it could potentially alleviate problems which arise from the depletion of domestic oil and gas resources and because, in general, the renewable forms of energy are more environmentally benign.

60 Domestic Oil and Gas Recoverable Resource Base: Supporting Analysis for the National Energy Strategy, The (DOE/EIA-SR/NES/90-05) (Service report) Dec 1990. 72pp. NTIS DE91009203 A04

This report presents the results of a study conducted by the Energy Information Administration (EIA) to estimate U.S. recoverable hydrocarbon resources in support of the National Energy Strategy (NES). NES is intended to serve as a long-term strategy, based on a balancing of numerous interests involving economic growth, energy security, the environment, and energy costs. NES required an analytic background and framework for the formulation of long-term policy. As part of the overall effort, analytic excursions were also undertaken to investigate distinct energy issues relevant to the NES.

61 Outlook for Natural Gas Imports: Supporting Analysis for the National Energy Strategy, The (DOE/EIA-SR/NES/90-06) (Service report) Jan 1991. 54pp. NTIS DE91009201 A05

This report presents the results of a study conducted by the Energy Information Administration (EIA) to estimate the potential for future natural gas imports into the United States in support of the National Energy Strategy (NES). NES is intended to serve as a long-term strategy, based on a balancing of numerous interests involving economic growth, energy security, the environment, and energy costs. NES required an analytic background and framework for the formulation of long-term policy. As part of the overall effort, analytic excursions were also undertaken to investigate distinct energy issues relevant to the NES. There are two natural gas import cases addressed in this study: the Reference case and the Expanded LNG Import Capacity case. This report documents the direct contribution of the Energy Information Administration (EIA) to NES: estimates of the levels of Canadian and Mexican pipeline imports and imports received at the four current LNG sites. LNG imports projected from new import terminals depend on projected economic conditions, and so they are dependent on the particular NES scenario and were not specified directly by EIA.

62 Potential for Coal Liquefaction: Supporting Analysis for the National Energy Strategy, The (DOE/EIA-SR/NES/90-07) (Service report) Jan 1991. 39pp. NTIS DE91009205 A03

This service report was prepared by the Energy Information Administration (EIA) at the request of the Office of Policy, Planning and Analysis of the U.S. Department of Energy (DOE). To assist in the formulation of the National Energy Strategy (NES), the EIA, in cooperation with other DOE program offices, pre-

pared a reference forecast through 2030, modeled various excursions from the reference case, and analyzed the model results to be used as input to the development of the NES. One of the topics analyzed by the EIA was the potential for coal liquefaction. The EIA's overall work was summarized in *Improving Technology: Modeling Energy Futures for the National Energy Strategy*. This service report is an auxiliary document to the summary publication, describing in detail the topic of coal liquefaction. Also included in the report are the background information on coal liquefaction technology, illustrations of its benefits and costs, and the model input assumptions. The report focuses on the comparison of two cases, a reference case and an accelerated coal liquefaction case, and details their respective coal liquefaction potential as well as their effects on world oil prices and U.S. coal supply and demand. Also summarized in Appendix A are the results of eight other sensitivity cases that were developed to further examine the uncertainty surrounding coal liquefaction potential.

63 Short-Term Energy Outlook, Quarterly Projections (DOE/EIA-0202) (Quarterly) Available: GPO Subscription

The Energy Information Administration's (EIA) quarterly forecasts of energy supply, demand, stocks, and prices are presented for each quarter. The forecasts are produced using the Short-Term Integrated Forecasting System (STIFS), which uses two principal driving variables, a macroeconomic forecast, and world oil price assumptions. The three projections for petroleum supply and demand are based on low, middle, and high economic growth scenarios that incorporate high, middle, and low crude oil price trajectories. The tables and discussion in this volume primarily refer to the middle, or base case, scenario and to the domestic situation. Other cases examining the sensitivity of total petroleum demand to varying assumptions about prices, weather, and economic activity are presented. The petroleum outlook includes detailed projections of domestic crude oil production, motor gasoline, distillate fuel oil, residual fuel oil, other products, and inventories. Other projections include natural gas, coal, and electric power. The international petroleum situation is also discussed. An annual companion volume analyzes previous forecast errors. Publication began October 1979.

64 Annual Energy Outlook 1990, Long-Term Projections (DOE/EIA-0383(90)) (Annual) Jan 1990. 112pp. NTIS DE90006009 A06

Annual projections of energy supply, demand and prices are presented for the major fuels and electricity. The projections are based on assumptions about world oil prices, economic growth and other factors affecting energy markets. A base case is presented, which is the central forecast. To reflect the uncertainty inherent in any forecast of the future, additional cases are presented. They are based on reasonable lower and upper bounds on two key factors that affect energy

trends--world oil price and the rate of economic growth. The forecasts are policy neutral--they are based on current law, and no new energy laws or regulations are introduced for any purpose. This publication replaces the report entitled *Annual Report to Congress, Volume 3: Energy Projections* (DOE/EIA-0173/3). Due to a change in the naming convention, there was no 1988 issue.

65 International Energy Outlook 1990
(DOE/EIA-0484(90)) (Annual) Apr 1990. 68pp. NTIS DE90009069 A04

This report presents the current Energy Information Administration (EIA) assessment of the long-term outlook for international energy markets. It emphasizes oil market developments, particularly future world oil prices and oil production potential. Also presented are projections of the consumption of oil, natural gas, coal, nuclear, and "other" energy sources for selected countries and country groups. The world oil price projections developed in this international setting are used as assumptions for analyses of the U.S. domestic energy markets. Since the U.S. energy market is affected by the international market, the methodology incorporates this interaction to the extent possible. Assessments are revised and published annually.

66 Assumptions for the Annual Energy Outlook 1990
(DOE/EIA-0527(90)) (Annual) Feb 1990. 116pp. NTIS DE90007086 A06

This auxiliary document to the *Annual Energy Outlook* (AEO) (DOE/EIA-0383) presents assumptions underlying the forecasts in the *AEO*. The forecasts presented in the *AEO* and discussed in this report are outputs of the PC-AEO Forecasting Model (PC-AEO), a personal computer-based modeling system. This is an economic equilibrium modeling system, with component modules representing electric utility pricing and fuel consumption, coal supply and end-use pricing, petroleum product pricing, crude oil production, and natural gas production and pricing. Also included are energy demand models representing end-use energy consumption by major end-use sector. PC-AEO accounts for the interactions among these components of energy markets and projects prices and quantities for which energy supply equals demand. The projections are presented in the *AEO* as a base case forecast of energy markets and as alternative cases that vary a key determinate of energy market activity, and world oil prices, to characterize a reasonable range of uncertainty for domestic oil production and petroleum imports. This report presents oil price and economic growth assumptions, as well as other quantitative assumptions for specific demand and supply modules of PC-AEO, that were used by EIA in developing the *AEO* base case and alternative scenario projections. Further details on the methodology, data, and assumptions are available from the contacts listed in the preface.

2980 Consumption and Utilization

67 Indicators of Energy Efficiency: An International Comparison (DOE/EIA-SR/EMEU-90-02) (Service report) Aug 1990. 16pp. NTIS DE91005289 A03

This report presents the results of an analysis that examined energy intensity trends in the major industrialized countries and the differences in these trends. In this analysis, the industrialized economies considered are the Group of Seven (G-7): the United States, Canada, Japan, France, Italy, West Germany, and the United Kingdom. The United States is compared with the other G-7 countries on the efficiency of energy; specifically, a comparison of total energy consumption per unit of gross domestic product (GDP) as one of the most common measures of "energy efficiency." The report is shown in colorful graphic charts for the G-7 countries as it examines sectoral energy consumption, industry energy intensity, energy consumption per capita in transportation, population density per square mile, vehicles per person, gasoline prices and taxes, new car fuel efficiency, heating intensities for dwellings/floor space as a measure of climate correction, and energy self-sufficiency.

68 Household Energy Consumption and Expenditures 1987, Part 2: Regional Data (DOE/EIA-0321(87)/2) (Triennial) Feb 1990. 316pp. NTIS DE90006853 A13

This two-part report presents data from the Residential Energy Consumption Survey on the consumption and expenditures of energy in all types of housing units--single-family (including townhouses), apartments, and mobile homes. Part 1 (DOE/EIA-0321(87)1) (published in 1989) contains national-level household energy consumption, expenditures, and the price households pay for electricity, natural gas, fuel oil and kerosene, and liquefied petroleum gas. Part 2 contains household energy consumption, expenditures, and price data for four Census regions and nine Census divisions. Data are presented by household characteristic, such as type of housing structure, number of rooms, area, age of house, degree-day category, ownership, income, and other demographic categories. The number of households and the average amount of fuel consumed are shown for households using each fuel as the main heating fuel along with the average price of each fuel. Appendices include the survey methodology described in detail. The 1987 survey is the first to collect the data on a calendar-year basis. The 1987 issue (Part 1) also includes estimates of end-use consumption and expenditures for space heating, water heating, air conditioning, and appliances.

69 Household Vehicles Energy Consumption 1988 (DOE/EIA-0464(88)) (Triennial) Mar 1990. 216pp. NTIS DE90007867 A10

Information on how energy is used for personal transportation by households is presented. These data are collected by the Residential Transportation Energy Consumption Survey (RTECS). Data on energy use

in personal-use vehicles in 1979 through 1981 were collected by the Residential Energy Consumption Survey (RECS). Energy used in household vehicles is compared with energy used in the home. RTECS collects data on the number and type of vehicles per household and, for each vehicle, annual miles traveled, gallons of fuel consumed, type of fuel used, price paid for fuel, and vehicle miles-per-gallon. A summary of findings is presented along with a glossary. Appendices discuss the survey methodology and quality of the data as well as geographic area. Data were collected monthly from June 1979 to September 1981 and then annually in 1983, 1985, and 1988. In 1988, the survey name was dropped from the title. The new title is *Household Vehicles Energy Consumption*.

70 Energy Consumption by End-Use Sector: A Comparison of Measures by Consumption and Supply Surveys (DOE/EIA-0533) (One-time) Apr 1990. 48pp. NTIS DE90015858 A03

This report presents an analysis of how data from the consumption surveys compare with data from the supply surveys. The consumption surveys provide valuable details about energy use by the consumers, while the supply surveys provide valuable detail on trends in total consumption. This report highlights those areas where the two types of surveys overlap and reinforce each other and those areas where they have differences.

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PB91-506741	Annual	Annual Electric Generator Report (EBCDIC Version)	1989
PB90-502352	Annual	Annual Electric Utility Report	1984-1988
PB91-505495	Annual	Annual Energy Outlook 1990 (Diskettes)	1990
PB91-505099	Annual	Annual Energy Review (Diskette)	1989
PB90-501594	Annual	Annual Report of Major Electric Utilities: Licensees and Others	1988
PB90-501701	Annual	Annual Report of Public Electric Utilities	1988
PB90-502378	Annual	Coal Production and Related Data	1986-1988
PB91-507285	Annual	Levelized Nuclear Fuel Cost Code (LNFCC 1990) (Diskette)	1990
PB90-591200	Monthly	Monthly Electric Sales and Revenue Report	01/90-12/90
PB90-591650	Monthly	Monthly Energy Review Data Base (Diskettes)	01/90-11/90
PB90-591250	Monthly	Monthly Power Plant Report	01/89-12/90
PB91-507038	Annual	National Utility Financial Model	1990
PB90-591220	Monthly	Natural Gas Policy Act Notices of Determination	12/78-12/90

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*	Annual	Annual Energy Review (2 Diskettes)	1949-1989

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61 Sparks Street

Ottawa

Tel: (613) 238-8985

• Italy

Diffusione Edizioni
Anglo-American
via Lima, 28
00198 Roma
Tel: 84444745

Tlx: 622492 DEALIB I

via della Delle Arti, 48/C
40126 Bologna
Tel: (051) 236.100

via Pascoli, 56
20133 Milano
Tel: (02) 23.64.306

piazzetta Nilo, 20
80134 Napoli

10129 Torino
Tel: (011) 503.202

via Daurant, 15
34143 Trieste
Tel: (040) 30.12.57

• Saudi Arabia

AI-Khazindar Co. Ltd.
P.O. Box 157
Jeddah 21411
Tel: 6827736

Tlx: 600871 KE SJ

Fax: 6825051

• United Kingdom

Books Express

P.O. Box 10 Saffron Walden

Essex CB11 4EW

Tel: (0799) 513726

Fax: (0799) 25047

• All other countries

Feffer & Simons

A Baker & Taylor Company

1114 Avenue of the Americas
New York, NY 10036-7794

Tel: 1-212-819-7474

Tlx: 760-7824 BTBKS-UC

760-7825 BTBKS-UC

Fax: 1-212-819-7481

Cable: FASBAT NEW YORK

Items ordered through distributors may cost more than if ordered directly from GPO.

Orders directly from GPO for delivery outside of the United States are subject to a 25-percent surcharge for special handling, as required by international mailing regulations. Such orders will be shipped by surface mail. Airmail delivery is available at additional cost, based on the International Postal Zone of the recipient. For airmail delivery, contact GPO by mail, telephone (1-202-783-3238), telex (710-822-9413 USGPO WSH), or fax (1-202-275-0019) for the total cost of the order.

Orders sent directly to GPO must be in English. Remittance in U.S. dollars must accompany every order sent directly to GPO, or GPO will accept checks drawn on banks located in the United States or Canada, UNESCO coupons, International Postal Money Orders, and charges to prepaid Superintendent of Documents deposit accounts or NTIS deposit accounts, or to international Visa and MasterCard accounts. The expiration date of the credit card must be with the order. Checks and money orders should be made payable to the Superintendent of Documents. GPO cannot accept checks drawn on Canadian banks for less than U.S. \$4.00, foreign currency, checks on foreign banks, or postage stamps. Allow a minimum of 10 weeks for delivery. The GPO address is Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, USA.

Deposit Accounts. More than 30,000 customers find the use of a prepaid deposit with the Superintendent of Documents a convenient way to do business. A deposit account can be established by sending a minimum of \$50.00 and receiving a unique deposit account number, which can be used to charge future purchases. Order blanks are provided and monthly statements are mailed to customers with active deposit accounts. Tele-

phone orders will be accepted on any deposit account if sufficient funds are available in the account.

Orders for 100 or More Copies. Any customer ordering 100 or more copies of a single publication or subscription for delivery to a single destination will be allowed a 25-percent discount on the domestic price of the item, with the exception of those items specifically designated "no discount allowed."

Bookdealers. Designated bookdealers and educational institution bookstores are authorized a 25-percent discount on the domestic price of any publication or subscription ordered when delivered to the dealer's normal place of business. This rule applies to single as well as multiple copies of a publication, except on items specifically designated "no discount allowed." No discounts will be allowed when the publication, pamphlet, periodical, or subscription service is mailed to a third party (unless in quantities of 100 or more), or on those periodicals or subscription services which fall into a special pricing category. The maximum discount allowed is 25 percent.

Customer Service. For problems with subscription orders, call (202) 275-3054.

Government Printing Office Priority Announcement Service. In response to numerous requests on how to be informed when annual or one-time publications are available for sale, the Government Printing Office (GPO) maintains a priority announcement service for all EIA annual and one-time reports available from GPO. This service includes all annual reports and one-time reports and is a FREE service.

All energy titles are included in Order Processing Code N562. Individuals may be added to the mailing list for this category and, when a new publication is available for sale, a notice will be sent with an order form. Please include the code number when requesting this service. To be placed on the mailing list, contact:

Superintendent of Documents
U.S. Government Printing Office
Mail List Branch (Stop: SSOM)
Washington, D.C. 20402

U.S. Government Depository Libraries. U.S. Government Depository Libraries are congressionally designated libraries throughout the United States which automatically receive some or all U.S. Government publications. Their Government documents collection is available free for the use of the general public. Depository libraries are located in each State and congressional district in order to make Government publications widely available. Most States have one Regional Depository which carries all Government documents. The remaining 1,350 depository libraries carry selected Government documents. Most full-service public libraries will borrow EIA and other Government doc-

uments from depository libraries through inter-library loan.

How to Order from the National Technical Information Service

The National Technical Information Service (NTIS) maintains microfiche of most EIA publications; paper copies can be produced from the microfiche in most cases.

Customers ordering from NTIS have a number of options to choose from.

Reaching NTIS

Telephone Orders 1-800-553-NTIS

In Virginia, call (703)487-4650. The NTIS telephone sales desk is available between 8:30 a.m. and 5:30 p.m., Eastern time. (TDD for the hearing impaired (703)487-4639.)

Mail Orders

Send orders to: NTIS, Springfield, VA 22161. Do not mail Rush or Express orders.

FAX or Telex Orders

FAX--(703)321-8547. For assistance, call (703)487-4679.

Telex--89-9405 (domestic) or 64617 (international).

Orders may be charged to an NTIS Deposit Account, to American Express, VISA, or MasterCard. Orders for foreign destinations are subject to foreign prices.

FAXing your order? Get order forms designed to speed your order. Call 1-800-553-NTIS (in Virginia (703)487-4650) and ask for PR-OFA.

QuikSERVICE

With QuikSERVICE you place your order directly into the NTIS order system, so you avoid the mail order delay. QuikSERVICE lets you:

- Speed up your order
- Request rush processing
- Display any order you have placed with NTIS during the past 6 months
- Display your orders that are still being processed

QuikSERVICE lets you know in advance the cost, availability restrictions, and the approximate time of shipment.

The \$3 handling fee is waived for all orders placed with QuikSERVICE.

For more information and an application for NTIS

QuikSERVICE, call 1-800-553-NTIS (in Virginia (703)487-4650) and ask for PR-846.

Ordering Through Online Services

DIALOG, OCLC, ORBIT, and STN allow you to order NTIS technical reports online. Inquiries should be addressed to:

DIALOG, 1-800-334-2564
OCLC, 1-800-848-5800
(in Ohio, 1-800-848-8286)
ORBIT, 1-800-421-7229
(in Virginia, (703)442-0900)
STN, 1-800-848-6533
(in Ohio, 1-800-848-6538)

To order, call 1-800-553-NTIS. In Virginia, call (703)487-4650. Charge to an NTIS Account, American Express, VISA, or MasterCard.

Economy Second-Day Rush Service

Technical report express orders are guaranteed to be processed by NTIS within 24 hours of receipt and delivered by 5:00 p.m. within 2 business days. Add \$15 per title. (U.S. addresses only.)

To order, call 1-800-553-NTIS. In Virginia, call (703)487-4650. Charge to an NTIS Deposit Account, American Express, VISA, or MasterCard.

Express Order Service

Technical report express orders are guaranteed to be processed by NTIS within 24 hours of receipt and delivered by overnight courier to most U.S. cities. Add \$22 per title and \$5 for each additional copy of the same title. (U.S. addresses only.)

To order, call 1-800-553-NTIS (in Virginia, call (703)487-4650). Charge to an NTIS Deposit Account, American Express, VISA, or MasterCard.

Computer Product Rush Service

Computer product rush orders are guaranteed to be processed by NTIS within 5 business days and delivered by overnight courier to most U.S. cities. Add \$50 for each title ordered in magnetic tape; \$25 for each title with 10 or fewer diskettes; or \$50 for each title with more than 10 diskettes. This service is only available in the U.S., Canada, and Mexico.

To order, call 1-800-553-NTIS. In Virginia, call (703)487-4650. Charge to an NTIS Deposit Account, American Express, VISA, or MasterCard.

How To Pay

Credit Cards

American Express, MasterCard, or VISA.

Check or money order

Payable to NTIS in U.S. dollars.

NTIS Deposit Account

This convenient debit account service makes it easier to order from NTIS. The advantages include:

- Easy ordering--by telephone, online, or by mail
- An account number to simplify all ordering
- Use of NTIS QuikSERVICE for ordering
- Monthly statements with detailed transactions and routing information
- A free subscription to NTIS *Newsline*, issued quarterly

To open an account, call the Deposit Account Department at (703)487-4064, or write for Form PR-33/827.

Purchase Order

Add \$7.50 to the total order (U.S., Canada, and Mexico only). A late payment charge is applied to all billings more than 30 days overdue.

A \$3 handling fee per order applies to orders from the U.S., Canada, and Mexico. For other countries, the handling fee is \$4 per order.

Local Delivery and Pickup

Courier Service

In the Washington, DC metropolitan area, rush or regular service orders can be delivered. Fees start at \$13 depending on the customer's location. For more information, call (703)487-4650.

Pickup Service

Orders may be picked up at 5285 Port Royal Road, Springfield, Virginia (I-495 Exit 5 West) between 8:30 a.m. and 5:30 p.m. The \$3 handling fee is waived. Customers may also use the Bookstore to research their information needs.

Rush Services

Rush Order Service

Technical report rush orders are guaranteed to be processed by NTIS within 24 hours of receipt and sent First Class mail or equivalent service. Add \$12 per title. For customers outside the U.S., Canada, and Mexico, add \$14.50 (Air Mail postage is additional).

Additional Information

Order Numbers

All NTIS orders are processed using the NTIS order number. Always use it to speed your request. It is pro-

vided in each NTIS information citation.

If you do not have the order number, NTIS can provide it if you have a complete title. Write or call the NTIS Identification Department (703)487-4780. A limit of three titles will be identified by telephone. Help is available from 8:30 a.m. to 5:00 p.m., Eastern time.

Prices

Prices are usually identified with a price code. To convert price codes to a dollar amount, see page 44. To get additional copies of the price schedule, call 1-800-553-NTIS (in Virginia, (703)487-4650) and ask for PR-360-3 for U.S., Canada, and Mexico. For other countries, ask for PR-360-4.

Handling Fee

A \$3 handling fee per order applies to orders from the U.S., Canada, and Mexico. For other countries, the handling fee is \$4 per order.

The handling fee does NOT apply to Rush, Express, Economy Second-Day Rush, NTIS QuikSERVICE, pick-up orders, subscriptions, or Selected Research in Microfiche (SRIM).

Postage and Shipping

Orders are sent First Class or equivalent in the U.S. Orders to other countries are shipped surface mail unless Air Mail is requested.

Air Mail for printed reports is \$3.50 per report to Canada and Mexico and \$7.50 per report to other countries. Air Mail for microfiche is 75 cents per report to Canada and Mexico and \$1 per report to other countries.

Tracing an Order

If you have questions about your order, write or call

NTIS Customer Services at (703)487-4660 between 8:30 a.m. and 5:30 p.m., Eastern time.

Discounts for Technical Reports

A 25 percent discount is available for most documents if 5 to 100 copies of a single title are ordered at the same time and shipped to the same address. For discounts on more than 100 copies, call the NTIS Sales Desk at 1-800-553-NTIS (in Virginia, call (703)487-4650).

Library Discounts

Academic libraries can receive a 10 percent education credit on orders. Call NTIS Customer Service at (703)487-4660 for information.

State and Local Governments

State and local governments and State universities can get immediate credit and shipment of orders with "special credit" accounts. With this service, you may use your purchase order system without being charged the standard \$7.50 purchase order fee. For more information, call (703)487-4064 or write for PR-220.

Refund Policy

NTIS does not permit return of items for credit or refund. A replacement will be provided if an error is made in filling your order, if the item was received in damaged condition, or if the item is defective.

Holiday Openings

The NTIS Sales Desk, Bookstore, and Customer Services are open from 8:30 a.m. to 5:00 p.m., Eastern time on four Federal holidays: Martin Luther King, Jr.'s Birthday, Washington's Birthday, Columbus Day, and Veterans Day.

NOTICE

Prices of EIA publications and diskettes sold by the U.S. Government Printing Office (GPO) and the National Technical Information Service (NTIS) are subject to change without notice.

When EIA publications are discontinued and consolidated into other reports, the individuals who received copies of the terminated publication through the EIA mailing list are automatically placed on the mailing list for the new publication. Subscribers to discontinued, paid publications through the U.S. Government Printing Office (GPO) are generally sent refunds for any balances remaining on their subscription. For further information about paid subscriptions, please contact GPO at (202) 783-3238.

NTIS Price Schedules 1991

NTIS generally uses price codes to indicate the cost of items sold. The following schedules convert these codes into actual 1991 prices for customers in the United States, Canada, and Mexico.

A 25-percent discount is available for most documents if five or more copies of a single title are ordered at the same time and shipped to the same address. Discounts are greater for more than 100 copies. For more information call NTIS at 1-800-553-NTIS, in Virginia call (703)487-4650.

The prices in the following tables are for the United States, Canada, and Mexico only and are subject to change. For the most recent schedule write or call (703)487-4650 and request PR-360-3. For customers in other countries, ask for PR-360-4.

Microfiche and Paper Copy Reports

Note: "A" codes apply to standard prices.

Price Code	Price-\$
A01	8.00
A02	11.00
A03	15.00
A04 through A05	17.00
A06 through A09	23.00
A10 through A13	31.00
A14 through A17	39.00
A18 through A21	45.00
A22 through A26	53.00
A99	Contact NTIS for price

How to Order from the National Energy Information Center

Subscriptions and current in-stock single issues are available free of charge from the National Energy Information Center (NEIC) for the following users: government, media, public and academic libraries, and EIA's survey respondents.

Call (202) 586-8800 (or TDD 202-586-1181) for more information or use Order Form C. This form is also used for change of address, for deleting a name from the NEIC mailing list, or for ordering free publications.

How to Use Order Forms

To order EIA publications, first identify the distribution agency: the Government Printing Office (GPO), the National Technical Information Service (NTIS), or the National Energy Information Center (NEIC).

Please note separate order forms, marked A, B, and C.

To ensure expedient processing of your order(s), it is imperative to use the appropriate order form. General instructions for the use of the order forms follow; more specific instructions are included on the form.

Use Order Form A for EIA publications available on a subscription basis from GPO. When placing your subscription order, always specify the publication title and include payment in full, a charge card number, or deposit account information. Send the completed order form to GPO at the address on the order form. Or you may call (202) 783-3238 or send a fax on (202) 275-0019.

Use Order Form B for ordering EIA publications available from NTIS. Send the completed form to NTIS at the address on the order form. Always include payment in full, charge card number, or deposit account information with your order. Or you may call (703) 487-4650 or telex 89-9405 or fax (703) 321-8547.

Use Order Form C for ordering free publications, free subscriptions, and for mail list changes/additions. Send the completed form to NEIC using the address on the order form.

Figure 2. Order Form B: NTIS Order Form

**U.S. Department of Energy
Energy Information Administration**

National Technical Information Service (NTIS) Order Form
(For use in ordering EIA Publications only)

Please Type or Print

(Company or personal name)

Include full payment for publications desired except where deposit accounts are used. Payments may be made by check, money order, or American Express, VISA or Master Card.

(Additional address/attention line)

Enclosed is \$ _____ Check

(Street address)

Money order, or charge to my Deposit Account No. -

Credit Card Orders Only _____

Total charges \$ _____ Fill in the boxes below

(City, State, ZIP Code)

Credit Card No.

()
(Daytime phone including area code)

Expiration Date

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Signature _____

 American Express

Report No.	Title	HARD COPY PRICE	MICROFICHE PRICE	TOTAL PRICE
Regular Service Handling Fee per order (\$3 U.S., Canada, Mexico; \$4 others)				

SEND ORDER FORM TO:

**National Technical Information Service
Document Sales
5285 Port Royal Rd.
Springfield, Va. 22161**

**Regular Service Handling Fee per order
(\$3 U.S., Canada, Mexico; \$4 others)**

SPECIAL RUSH and EXPRESS ORDERING OPTIONS

RUSH SERVICE - Orders are processed within 24 hours and sent First Class or equivalent. U.S., Canada, and Mexico, add \$12 per item, other countries add \$14.50 per item.

Telephone: (800) 336-4700
in Virginia call
(703) 487-4700

EXPRESS SERVICE - Orders are processed within 24 hours AND delivered by overnight courier. Available to U.S. addresses only, add \$22 per item.

Figure 3. Order Form C: NEIC Order Form

NATIONAL ENERGY INFORMATION CENTER ORDER FORM

TO ORDER FREE PUBLICATIONS --- TO BUY SINGLE ISSUES --- TO NOTIFY NEIC OF CHANGE OF ADDRESS
OR CANCELLATION OF A MAILING LIST PUBLICATION

Mail to: National Energy Information Center, EI-231
Energy Information Administration
Room 1F-048, Forrestal Building
Washington, DC 20585

Name _____

Mail List I.D. Number
(Found in upper left
corner of your mailing
label.)

Business Affiliation

Address

City and State Zip Code Phone number with area code

- Change of address
- Add name to mailing list for free publication(s) as listed below.
- Take name off mailing list for publication(s) as listed below.
- Free publication(s) as listed below.
- For sale publication(s) (single issues only!) as listed below.

Payment enclosed:

VISA MasterCard

GPO deposit account

—

(Credit card expiration date)

Check (payable to Superintendent of Documents)

Money Order (payable to Superintendent of Documents)

(Signature)

Allow 2 weeks for delivery. Receipt of payment is required before shipment.

Information

Information from the Federal Government on subjects ranging from agriculture to zoology is available at Depository Libraries across the nation.

You can visit these libraries and use the Depository collections without charge.

To find one in your area, contact your local library or write: Federal Depository Library Program, Office of the Public Printer, Washington, DC 20401.



**Federal Depository
Library Program**

**Energy Information Administration
U.S. Department of Energy
Forrestal Building, EI-231
Washington, DC 20585**

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