

**Supporting Statement for
Energy Information Administration
Petroleum Marketing Surveys
OMB# 1905-0174**

Forms EIA-14, 182, 782A/B/C, 821, 856, 863, 877, 878, and 888

Introduction

In order to fulfill its responsibilities under the Federal Energy Administration Act of 1974 (P. L. 93-275) and the Department of Energy (DOE) Organization Act (P. L. 95-91), the Energy Information Administration (EIA) is obliged to publish, and otherwise make available to the public, high-quality statistical data that accurately reflect national and regional petroleum marketing activities.

To meet this responsibility, as well as internal DOE requirements that are dependent on accurate data, the EIA conducts statistical surveys that encompass major petroleum marketing activities in the United States.

In keeping with its mandated responsibilities, EIA proposes to extend the petroleum marketing data collection forms listed below for 3 years through December 31, 2009:

Form EIA-14, "Refiners' Monthly Cost Report,"

Form EIA-182, "Domestic Crude Oil First Purchase Report (monthly),"

Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report,"

Form EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report,"

Form EIA-782C, "Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption,"

Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report,"

Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report,"

Form EIA-863, "Petroleum Products Sales Identification Survey (quadrennial),"

Form EIA-877, "Winter Heating Fuels Telephone Survey (weekly October through March),"

Form EIA-878, "Motor Gasoline Price Survey (weekly),"

Form EIA-888, "On-Highway Diesel Fuel Price Survey (weekly)."

In addition to the extension, EIA proposes revisions to:

Forms EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report",

EIA-782B, "Resellers'/Retailers Monthly Petroleum Product Sales Report,"

EIA-782C, "Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption,"

EIA-821, "Annual Fuel Oil and Kerosene Sales Report,"

EIA-863, "Petroleum Product Sales Identification Survey,"

EIA-878, "Motor Gasoline Price Survey,"

EIA-888, “On-Highway Diesel Fuel Price Survey”.

The changes proposed by EIA to its collection of diesel fuel statistics are to accommodate recent changes in the industry. From 1993 until June 2006, all highway diesel fuel had been limited to no more than 500 ppm sulfur content. Non-road, locomotive and marine engines could still use higher sulfur diesel fuel, and heating oil had no federal sulfur requirements. Another diesel fuel has just been added. In order to continue to reduce harmful air emissions, EPA’s Highway Diesel Rule (40 CFR Parts 69, 80, and 86, Control of Air Pollution From New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements; Final Rule, January 18, 2001) was established. This rule required a large reduction in the sulfur content of highway diesel fuel from 500 to 15 ppm, beginning in June 2006. The new fuel is referred to as ultra-low sulfur diesel fuel (ULSD). However, suppliers may still provide as much as 20 percent of their highway diesel fuel with 500 ppm sulfur until 2010, when all highway diesel fuel must be ULSD. In addition, EPA established sulfur restrictions for fuel used in non-road, locomotive and marine engines (40 CFR Parts 9, 69, et al., Control of Emissions of Air Pollution from Non-road Diesel Engines and Fuel; Final Rule, June 29, 2004). Starting in 2007, these engines will be required to use diesel fuel with not more than 500 ppm sulfur. In summary, diesel fuels with 15 ppm or less, greater than 15-500 ppm, and greater than 500 ppm will be in the market place until 2014, thus will require EIA to change its forms in order to track these volumes and prices. The survey forms are being changed to reflect the fact that the petroleum industry already has the data available.

The information collection proposed in this supporting statement has been reviewed in light of applicable information quality guidelines. It has been determined that the information will be collected, maintained, and used in a manner consistent with the OMB, DOE, and EIA information quality guidelines.

EIA will be requesting a three-year extension of approval to its petroleum marketing surveys with the following survey changes.

1. Forms EIA-782A, “Refiners’/Gas Plant Operators’ Monthly Petroleum Product Sales Report”, EIA-782B, “Resellers’/Retailers Monthly Petroleum Product Sales Report,” and EIA-782C, “Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption”

Forms EIA-782A, EIA-782B, and EIA-782C currently collect No. 2 Low Sulfur Diesel and No. 2 High Sulfur Diesel. New regulations issued by the Environmental Protection Agency mandate the use of lower sulfur fuels in diesel engines beginning in 2006 for highway diesel fuel, and 2007 for nonroad diesel fuel. The regulations are posted at <http://www.epa.gov/otaq/regs/fuels/diesel/420f06033.htm>. In order to measure market conditions for this new category of diesel fuel, EIA proposes to collect Ultra-Low Sulfur Diesel (ULSD) in addition to Low Sulfur and High Sulfur No. 2 Diesel. ULSD contains less than or equal to 15 parts per million (ppm) sulfur. The definitions for low and high sulfur will be converted to their equivalent parts per million, i.e. Low Sulfur No. 2 Diesel

is greater than 15 ppm and less than or equal to 500 ppm sulfur and High Sulfur No. 2 Diesel is greater than 500 ppm sulfur.

The surveys referenced above also collect Reformulated, Oxygenated and Conventional motor gasoline at the regular, mid-grade, and premium grades. EIA proposes to discontinue the collection of Oxygenated motor gasoline as a separate data item, but to include it in the collection of Conventional motor gasoline. Sales of oxygenated gasoline have declined over the past 10 years as most of the participating cities no longer implement winter oxygenated gasoline programs. There are only 12 areas in the U.S. remaining out of the original 39 areas that still implement an oxygenated gasoline program during the winter months. A list of those participating areas is shown at <http://www.epa.gov/oms/regs/fuels/420b05013.pdf>. The consolidation of Oxygenated gasoline into Conventional gasoline will also allow more data to be published because fewer cells in published tables will need to be suppressed when applying primary and complementary suppression rules. In addition, the change will be consistent with petroleum supply survey changes which combined the collection of Oxygenated motor gasoline with Conventional motor gasoline beginning in January, 2005. Maintaining consistency across the petroleum survey forms will allow for better data comparison across surveys.

Data on low sulfur diesel, high sulfur diesel, and Oxygenated gasoline will continue to be collected through December 2006 reference period to complete the data series for 2006. The new survey changes with the addition of ultra-low sulfur diesel and the consolidation of Oxygenated motor gasoline into Conventional motor gasoline will commence with the January 2007 reference period.

2. Form EIA-821, “Annual Fuel Oil and Kerosene Sales Report”

Form EIA-821 currently collects “No. 2 Diesel Sulfur, Low” and “No. 2 Diesel Sulfur, High” for Commercial Use and Total On-highway Use. For the same reasons discussed above that relate to EPA’s new ultra low-sulfur diesel regulations, a new low sulfur diesel category will be added to Form EIA-821. For data collected in 2007 for the 2006 report year, EIA proposes to collect “No. 2 Diesel Sulfur, Ultra Low” in addition to “No. 2 Diesel Sulfur, Low” and “No. 2 Diesel Sulfur, High” for Commercial and “No. 2 Diesel Sulfur, Ultra Low” and “No. 2 Diesel Sulfur, Low” for On-highway Use. Currently Form EIA-821 collects Diesel for Military and Farm Use. In the 2007 reference period EIA proposes to split Military Diesel and Farm Diesel uses into “No. 2 Diesel Sulfur, Low” and “No. 2 Diesel Sulfur, High.” Currently, Form EIA-821 does not breakout distillate for Oil Company, Railroad, Vessel Bunkering, Electric Power, Off-highway Construction, and Off-highway Other uses. For the 2007 report period, EIA proposes to split Oil Company, Railroad, Vessel Bunkering, Electric Power, Off-highway Construction and Off-highway Other uses into “No. 2 Diesel Sulfur, Low,” “No.2 Diesel Sulfur, High”, and “Other Distillate.”

3. Form EIA-863, “Petroleum Product Sales Identification Survey”

Form EIA-863 currently collects No. 2 Distillate for Residential, to all other end users, as well as, sold to Dealers, Resellers, and Refiners, and Total. EIA proposes to report No. 2 Fuel Oil and No. 2 Diesel separately for the two sales types: for all other end users and sold to Dealers, Resellers, and Refiners.

4. Form EIA-878, “Motor Gasoline Price Survey”

Form EIA-878 collects the retail price including tax for motor gasoline. EIA proposes the elimination of the collection of state and local taxes as separate data items.

5. Form EIA-888, “On-Highway Diesel Fuel Price Survey”

Form EIA-888 currently collects the retail price and tax for diesel fuel. EIA proposes to discontinue the collection of state and local taxes as separate data items. EIA proposes that the EIA-888 collect the retail price of Ultra-Low Sulfur Diesel and Low Sulfur Diesel fuel since both types of fuel will be sold as on-highway diesel fuel as new regulations are implemented

A. JUSTIFICATION

1. Legal Authority

The authorization for collecting data on the eleven Petroleum Marketing Program survey forms is set forth in the Federal Energy Administration Act of 1974, as amended (FEAA, Public Law 93-275). The mandate for collecting these data is in Section 13(b) of the FEAA, 15 U.S.C. ‘772(b) which states:

“All persons owning or operating facilities or business premises who are engaged in any phase of energy supply or major energy consumption shall make available to the [Secretary] such information and periodic reports, records, documents, and other data, relating to the purposes of this Act, including full identification of all data and projections as to source, time, and methodology of development, as the [Secretary] may prescribe by regulation or order as necessary or appropriate for the proper exercise of functions under this Act.”

The data provided by means of the forms will assist the Secretary to carry out the functions and duties described in Section 5(b) of the FEAA, 15 U.S.C. ‘764(b), which states that the Administrator of the FEA (now the Secretary of DOE) shall-

- (1) advise the President and the Congress with respect to the establishment of a comprehensive national energy policy in relation to the energy matters for which the [Secretary] has responsibility, and, in coordination with the

Secretary of State, the integration of domestic and foreign policies relating to energy resource management;

- (2) assess the adequacy of energy resources to meet demands in the immediate and longer range future for all sectors of the economy and the general public;
- (3) develop effective arrangements for the participation of State and local governments in the resolution of energy problems;...
- (9) collect, evaluate, assemble, and analyze energy information on reserves, production, demand, and related economic data;... and
- (12) perform such other functions as may be prescribed by law.

As the authority for invoking Section 5(b) above, Section 5(a) of the FEAA, 15 U.S.C. '764(a), states:

Subject to the provisions and procedures set forth in this Act, the [Secretary] shall be responsible for such actions as are taken to assure that adequate provision is made to meet the energy needs of the Nation. To that end, he shall make such plans and direct and conduct such programs related to the production, conservation, use, control, distribution, rationing, and allocation of all forms of energy as are appropriate in connection with only those authorities or functions-

- (1) specifically transferred to or vested in him by or pursuant to this Act;
- (3) otherwise specifically vested in the [Secretary] by the Congress.

Authority for invoking Section 5(a) of the FEAA in turn is conferred by Section 52 of the FEAA, 15 U.S.C. '790a, which states:

- (a) It shall be the duty of the Director to establish a National Energy Information System (hereinafter referred to in this Act as the "System") ... [which] shall contain such information as is required to provide a description of and facilitate analysis of energy supply and consumption within and affecting the United States on the basis of such geographic areas and economic sectors as may be appropriate to meet adequately the needs of--
 - (1) the [Department of Energy] in carrying out its lawful functions;
 - (2) the Congress;

- (3) other officers and employees of the United States in whom have been vested, or to whom have been delegated energy-related policy decision-making responsibilities; and
 - (4) the States to the extent required by the Natural Gas Act and the Federal Power Act.
- (b) At a minimum, the System shall contain such energy information as is necessary to carry out the Administration's statistical and forecasting activities, and shall include, at the earliest date and to the maximum extent practical subject to the resources available and the Director's ordering of those resources to meet the responsibilities of his Office, such energy information as is required to define and permit analysis of-
- (1) the institutional structure of the energy supply system including patterns of ownership and control of mineral fuel and non-mineral energy resources and the production, distribution, and marketing of mineral fuels and electricity;
 - (2) the consumption of mineral fuels, non-mineral energy resources, and electricity by such classes, sectors, and regions as may be appropriate for the purposes of this Act;...
 - (5) industrial, labor, and regional impacts of changes in patterns of energy supply and consumption;
 - (6) international aspects, economic and otherwise, of the evolving energy situation; and
 - (7) long-term relationships between energy supply and consumption in the United States and world communities.

In addition, these surveys partially satisfy the requirements of Section 507 of Part A of Title V of the Energy Policy and Conservation Act of 1975 (42 U.S.C. '6385) as amended by the Energy Emergency Preparedness Act of 1982, P.L. 97-229, which states:

“The President or his delegate shall, pursuant to authority otherwise available to the President or his delegate under any other provision of law, collect information on the pricing, supply, and distribution of petroleum products by product category at the wholesale and retail levels, on a State-by-State basis, which was collected as of September 1, 1981, by the Energy Information Administration.”

Sections 252 through 254 of the Energy Policy and Conservation Act of 1975 (P.L. 94-163) (EPCA) provide for the U.S. participation in the International Energy Agency (IEA) through its Emergency Allocation System and its special information systems. The

EPCA provides additional authority for collection of the EIA-856 data as provided in 42 U.S.C. '6274 (a)(1) which states:

“Except as provided in subsections (b) and (c), the Secretary, after consultation with the Attorney General, may provide to the Secretary of State, and the Secretary of State may transmit to the International Energy Agency established by the international energy program, the information and data related to the energy industry certified by the Secretary of State as required to be submitted under the international energy program.”

In addition, Section 407(a)(3) of the Energy Policy Act of 1992 (P.L. 102-486) (EPACT) (42 U.S.C. '13233) requires the Energy Information Administration to establish a data collection program which collects cost data on alternative fuels. EPACT provides additional authority for collection of EIA-782A and B data on propane sales as provided by Section 407(a)(3) which states:

- (a) “Not later than one year after the date of enactment of this Act, the Secretary, through the Energy Information Administration, and in cooperation with appropriate State, regional, and local authorities, shall establish a data collection program to be conducted in at least 5 geographically and climatically diverse regions of the United States for the purposes of collecting data which would be useful to persons seeking to manufacture, convert, sell, own, or operate alternative fueled vehicles or alternative fueling facilities. Such data shall include-...
 - (3) cost, performance, environmental, energy, and safety data on alternative fuels and alternative fueled vehicles.”

2. Need for and Uses of Petroleum Marketing (PM) Data

The purpose of the EIA petroleum product price, supply, and market distribution data program is to collect the basic data required to meet DOE legislative mandates and user community data needs. The program provides a set of basic data pertaining to the nature, structure, and efficiency of petroleum markets. Adequate evaluation of market behavior requires price, demand (or sales), product supply, and market distribution data. Specifically, these data collection efforts are predicated upon the following points:

- (a) EIA has clearly mandated specific data collection responsibilities. These responsibilities are delineated in the Federal Energy Administration Act of 1974, as amended (FEAA, Public Law 93-275) and the Energy Policy and Conservation Act of 1975 as amended by the Energy Emergency Preparedness Act of 1982, P.L. 97-229. General energy data collection responsibilities are granted by the requirements to collect information on the institutional structure of the energy supply system; on the production, distribution, marketing and consumption of energy commodities; and on the international aspects of the energy situation. EIA is also explicitly directed to collect energy price data and to collect such data (i.e.,

both supply and price data) with particular reference to the distribution area of States.

- (b) The data that DOE collects are used to address significant energy industry issues. In line with its mandated responsibility to collect data that adequately describe the petroleum marketplace, DOE has been and will continue to be asked to evaluate the significance of a number of important issues related to the energy industry in general and the petroleum industry in particular. Topical issues such as divorcement, mergers, market pullouts, predatory practices, and product margins require DOE's continuing involvement. According to the significant users within the Congress, the Executive Branch, and among the States, the data collected by the PM surveys are among those that are required to address these issues.
- (c) DOE must collect some data at the State level. Congressional and State users have strongly emphasized their need for such data. DOE's collection of these data are consistent with its mandated responsibilities to collect specific product information for appropriate geographic areas and economic sectors, to act as a central clearing house, and to disseminate relevant information to the States. In addition, DOE has a continuing mission to minimize the industry burden that might be caused by the institution of a large number of individual and disparate State data collection systems.
- (d) Alternative data sources do not adequately satisfy the needs of EIA and its user communities. Accurate, meaningful, and independent price, supply and demand statistics are essential to describe and measure phenomena in the marketplace. It is necessary that this information be collected by an unbiased, independent source, if the data are to be credible.

EIA maintains that the data collected on these forms are unique. While somewhat similar or related data may be available from private and/or industry sources, as well as from other Federal agencies, such data are not reasonable alternatives for the data provided by the PM survey forms.

DETAILS ON THE USE AND PURPOSE FOR EACH FORM:

(A). **“Refiners’ Monthly Cost Report”: EIA-14**

The EIA-14 survey provides data used to determine the acquisition cost of crude oil paid by refiners. These statistics are widely used primarily for the following purposes:

- Projecting crude oil and petroleum product prices.
- As an input component for calculation of the Gross Domestic Product (GDP).
- Monitoring current national price levels.
- Performing market analyses.

The Department of Energy uses the foreign, domestic and composite prices as inputs to various models in the Short-Term Integrated Forecasting System (STIFS). Refiners' acquisition costs of crude oil collected on the EIA-14 are input to models to forecast prices of refined product in various sectors, and to determine the sensitivity of demand and supply to changes in inventory and prices. These prices are used in the preparation of the crude and product price projections published in the *Short-Term Energy Outlook*.

The EIA-14 based costs are also published in EIA's *Monthly Energy Review*, *Annual Energy Review*, *Petroleum Marketing Monthly*, and *Petroleum Marketing Annual*. These reports are widely used by Congress, the public, and industry to represent the raw materials component cost of finished petroleum products.

The Bureau of Economic Analysis, Department of Commerce uses the EIA-14 statistics to determine the costs of crude oil to refiners for calculating the U.S. Gross Domestic Product (GDP). EIA-14 statistics are used as an index to adjust the cost of crude oil.

Data collected by the EIA-14 on the composite (domestic and imported) acquisition cost per barrel of crude oil by refiners are used by the Bureau of Economic Analysis on a monthly basis to calculate a measure of price change for purchases of crude oil. (Information on crude oil prices from the *Producer Price Index* covers only domestically produced oil.) This price index is used to deflate crude oil held in inventory by refiners for the change in private inventory component of GDP.

The Canadian Ministry of Energy Mines & Resources use EIA-14 data on a monthly basis to compare Canadian and U.S. prices of crude costs, taxes, refinery costs, and retail margins.

Congress, DOE, and State energy offices use aggregate statistics based on EIA-14 data, in conjunction with EIA's other petroleum price data, to monitor current national price levels and to benchmark State-collected data. The data are also used to meet State and congressional requirements for price projections and to determine the impact on national or State demand. The planning/purchasing offices of a number of oil corporations also use the crude oil prices which are published by EIA from EIA-14 collected data.

The statistics serve as the most reliable and accurate indicators of price paid by U.S. refiners for crude oil. These price indicators are used to compare a company's average purchasing price to the U.S. and PADD average price, and as a key variable in models used to forecast future price trends. EIA-14 statistics are also used throughout the industry as a basis for adjusting prices in escalator clauses in contracts.

The importance and usefulness of EIA-14 data to industry are demonstrated by the frequent appearance of these data in industry newsletters, trade journals and the general press. Articles quoting the EIA-14 data are regularly found in a variety of publications.

(B). “Domestic Crude Oil First Purchase Report”: EIA-182

The EIA-182 survey provides the only detailed Federal information on the wellhead price of domestic crude oil. The survey collects total cost and sales volume data for all first purchases of domestic crude oil for the current month by the State of production. A weighted average first purchase price is then calculated from the cost and volume data. EIA-182 data have a variety of users, including Federal and State government agencies, private industry firms and universities. The information is most frequently used for the following purposes:

- Projecting prices for crude oil markets.
- Forecasting prices downstream for refined products at the refinery gate and subsequent wholesale and retail sales.
- Forecasting tax revenues - State severance taxes.
- Forecasting State-level production volumes for the *Short-Term Energy Outlook*, *Monthly Energy Review*, and *Petroleum Supply Monthly*.
- Calculating income tax credits.
- Verifying futures, spot and posted prices, and revenues.
- Conducting market analyses and economic studies.
- Evaluating legislative, administrative, and regulatory issues involving domestic crude oil markets.
- Measuring the level of industry concentration and the distribution of ownership of domestic crude oil.
- Monitoring the petroleum refining industry.
- Emergency preparedness planning.
- Publication by a variety of State and private users, as well as EIA.

The California Energy Commission publishes EIA-182 data on their website at http://www.energy.ca.gov/oil/statistics/crude_prices_1st_purchase.html and uses the data to assess crude oil market conditions within the state.

The EIA-182 data are used extensively by EIA and other Federal agencies. EIA uses the data primarily for forecasting revenues and production of crude oil, monitoring key energy markets, and conducting economic analyses and projections. The Dallas Field Office of EIA inputs State level data to a forecasting model to project U.S. production levels and associated prices for domestic crude. The DOE Naval Petroleum Reserve and Strategic Petroleum Reserve offices use the EIA-182 for modeling issues and as a source of benchmark data. EIA publishes the crude oil first purchase price data in the *Monthly Energy Review*, *Petroleum Marketing Monthly*, *Petroleum Marketing Annual* and *Annual Energy Review*.

Crude oil data are used frequently and routinely by other Federal agencies including, but not limited to: the Internal Revenue Service (IRS), Treasury Department; the Congressional Joint Committee on Taxation; Bureau of Economic Analysis, Department of Commerce; and the Minerals Management Service, Department of Interior. These Federal agencies represent the variety of usages that EIA-182 data receive in the Federal sector.

The IRS relies on data obtained from the Form EIA-182, to publish notices required under the Internal Revenue Code, in order to calculate the available amount of the non-conventional source fuel credit under Section 45K of the Code. The tax credit is subject to an annual adjustment and potential phase-out, calculated by reference to the IRS's determination of the annual average wellhead price per barrel for all domestic crude oil. The domestic crude oil first purchase price is also used to determine the available percentage depletion under Section 613A and the enhanced oil recovery credit under Section 43. The EIA-182 data are the only source of information available to the IRS for these purposes and are critical to the proper administration of these Code sections.

The Joint Committee on Taxation and the IRS use the data to validate severance tax receipts, which have been a major component of Federal excise tax receipts. In addition, estimates based on EIA-182 data are used in fiscal projections and economic forecasts. The only available alternative is IRS data, which are not available for three to six months after EIA-182 data are published. Data reported on the EIA-182 have also been used extensively by the Joint Committee on Taxation and the IRS in analyzing the economic effects of possible oil supply disruptions, as well as various tax proposals.

The Bureau of Economic Analysis (BEA) of the Department of Commerce is responsible for preparing the official estimates of the Gross Domestic Product and related measures that are widely used by government and business to formulate and evaluate policy decisions. The EIA-182 data are used by BEA as an input to the petroleum component in the energy sector of the input-output model for the US economy. Data collected on the domestic weighted average first purchase prices for crude oil, along with EIA first purchase volume data, are used to prepare estimates of the total value of production of domestic crude oil in gross product originating by industry and the annual input-output accounts. EIA-182 data are also used to estimate monthly price changes for petroleum products purchased by the electric and gas utilities in BEA's estimates of constant-dollar value added by industry. These historical tables are used widely by economic analysts and forecasters.

(C). “Monthly Petroleum Product Sales Reports”: EIA-782A, B, and C

The EIA-782 surveys collect State-level information on petroleum product price, supply, and market distribution on an end-use-sector basis. This information is used as basic statistical data by a wide range of Federal, State and public users such as oil companies and trade publications.

The most frequent users include Congress, State governments, other Federal agencies (such as the Bureau of Economic Analysis, Federal Trade Commission, Federal Highway Administration, and the Defense Energy Support Center), private users such as industry analysts, trade publications, and the Northeast-Midwest Institute.

Most requests for petroleum and petroleum product information are handled by DOE's National Energy Information Center (NEIC). NEIC oversees both subscriptions and phone requests for information. EIA-782 data, as evidenced by NEIC requests, are

widely used throughout the private sector and academia. EIA-782 data are so highly regarded that they are reprinted and/or cited in various publications and journals.

Within DOE, the data are used as input to the State Energy Data System (SEDS) (and its related output) and the Short-Term Integrated Forecasting System (STIFS) model (and its resulting publication, *The Short-Term Energy Outlook*). DOE also includes the data in other widely used publications, including the *Petroleum Marketing Monthly (PMM)*, *Petroleum Marketing Annual (PMA)*, *Monthly Energy Review (MER)*, *Annual Energy Outlook*, and *Annual Energy Review*. DOE analysts use the EIA-782 information for a variety of statistical and analytical purposes.

The EIA-782 data series are primarily used to track, review and analyze petroleum product supply, marketing, and distribution; and to anticipate and respond to potential supply disruptions or market structure changes.

Congressional users (primarily members of the Northeast-Midwest Congressional Coalition) use State-level energy information on a regular basis and for a wide variety of purposes, including:

- Predicting the consequences to State economies of future energy supply disruptions or market changes;
- Evaluating and implementing relevant legislative proposals, programs, and policies (for example, the Federal Low Income Energy Assistance and Weatherization Programs);
- Allocating Federal energy block grants to the States;
- Evaluating the effects and impacts of energy prices on State-level cost-of-living; and
- Responding to Congressional inquiries regarding petroleum product seasonal price trends.

EIA is the only independent source of price and distribution data covering all energy sources and key products, markets, and end-use sectors at the State level. The 1982 passage of the Energy Emergency Preparedness Act, and subsequent requests for analysis using EIA-782 data during energy emergencies, attest to the ongoing Congressional interest in having access to reliable and timely petroleum marketing data at the State level.

State government agencies are frequent and regular users of petroleum product supply, marketing and distribution data. EIA-782 data are utilized by many - if not most - States in developing and managing their energy programs. Petroleum data offer States (and industry analysts) a valid base upon which to analyze, and develop an understanding of energy production, flow, use and markets. Because a wide variety of energy production and consumption patterns exist among States and industry, their needs for and uses of petroleum data also vary. States have a common need for petroleum data from the following categories.

- Prices - petroleum prices, including crude oil, motor gasoline, residual fuel oil, distillate fuel oil, kerosene, propane, and aviation fuels.
- Supplies - the availability of petroleum supplies, including crude oil and finished products.
- Consumption - petroleum consumption by end-use sectors, including residential and commercial, industrial, transportation, and utilities.
- Imports - petroleum imports, including crude oil and refined products.
- Production - field production of crude oil, stock withdrawals of crude oil and petroleum products, and ending stocks.

Through analyzing data associated with the above petroleum-related categories, each State is able - from its unique perspective - to establish a baseline showing the amounts and patterns of energy supply, distribution, and use over time. Having formulated a baseline, each State is favorably positioned to analyze and develop energy emergency contingency plans and other policy alternatives. In fact, State officials concur that, were an oil shortage to occur, the EIA-782 derived data base would serve as a reliable historical reference-point from which to measure and respond to the resulting changes that would occur in the supply and consumption of crude oil and petroleum products.

On the whole, State officials consider EIA data important to their energy emergency planning and analysis. According to these officials, an important aspect of EIA data is their uniformity and comparability from State to State. In their view, this allows comparison of similar data from one State to another and provides a common base from which to assess the effects of an oil supply disruption.

The value States place on EIA-provided data is by no means confined to the formulation and implementation of energy policies. EIA data serve States in more practical, day-to-day ways, such as in investigative hearings, statistical applications, analysis, forecasting and responding to constituents.

Specific uses of the data by State governments include:

- to compare sales volumes and prices in their State compared with other State data. The data are used in emergency management to track major suppliers in case of fuel shortages.
- to determine the amount of diesel and distillate produced by State
- to track the economy of the State versus the nation based on gasoline consumption.
- to compare consumption of refined petroleum products and national consumption on a monthly basis.
- to analyze and forecast demand for refined petroleum products and long term planning.
- to analyze and forecast petroleum product prices.
- to establish semi-annual road tax rates.
- to obtain historical data for crisis intervention.

- to track petroleum product demand for short-term forecasting. The data are also used to make projections of monthly supply for emergency management purposes.
- to investigate price increases of refined petroleum products during periods of supply instability.

In summary, the EIA-782 series surveys are heavily depended upon and valued by States.

EIA-782 data are widely recognized and used by the Federal sector for the comprehensive and unbiased portrait they offer of national, regional, and State petroleum marketing activity. The EIA-782 surveys provide valuable information to Federal analysts and policy makers for varying types and levels of analysis.

The Bureau of Economic Analysis of the Department of Commerce uses EIA-782A and B data (unit prices) in the preparation of the benchmark input-output (I-O) tables of the United States. The data collected by the EIA-782A and B are important to the quality of the I-O tables. These tables are prepared every five years and trace purchases and sales among all industries in the economy, and serve as the benchmark for estimates of the Gross Domestic Product. Volumetric data collected on these forms, by end-use category are used to prepare estimates of the types of fuel consumed by broad categories of intermediate and final users. The price data collected on Forms EIA-782A and B, by end-use category, are used to convert the quantity data to dollar values for the quarterly estimates of consumption by various consumers for selected products. Specific data used are:

- No. 2 diesel fuel (EIA-782A and B) - Unit price for residential sales and for sales through company-operated retail outlets.
- No. 2 fuel oil (EIA-782A and B) - Unit price for residential sales.
- No. 1 distillate (EIA-782A) - Unit price for retail sales and for wholesale sales.
- Residential fuel oil (EIA-782A and B) - Unit price for retail sales.
- Propane, consumer grade (EIA-782A) - Unit price for retail sales and for wholesale sales.

Data collected on the EIA-782C on volumes of first sale of motor gasoline by grade are used by the Bureau of Economic Analysis to prepare estimates of the gasoline and oil component of personal consumption expenditures (a major component of GDP). The volumetric data, by grade of gasoline, are used in constructing a weighted price per gallon, which is then used to prepare estimates of gasoline and oil expenditures in real dollar terms.

EIA-782 data are also useful in the investigation of company mergers. The Federal Trade Commission (FTC) requests data from the EIA-782C survey to perform market shares impact studies relating to impending company mergers.

The Defense Logistics Agency, Defense Energy Support Center (DESC), regularly uses EIA-782 data to ascertain the going market prices or price ranges for the products they

buy. The data serve as a measure of price reasonableness in connection with exempting sellers from submitting cost data. Certain prices published by EIA are used in DESC contracts as escalator indices. Additionally, the data provide an indicator to evaluate consumer price series for the purpose of price adjustments, and they provide a basis for possible resolution of conflicts over price or contract prices.

DESC specifically uses the gasoline data shown on the EIA-782A survey for gasoline market analysis in support of gasoline procurement, and also to determine the alternate use value of the naphtha portion of JP-4. DESC also requires price data for kerosene-based jet fuel and aviation gasoline. The price data are not available from any other source and are used by DESC to perform market price analyses in support of JP-4, JP-5 (grades of kerosene-type jet fuel), and aviation gasoline procurement. EIA-782 data are indispensable to DESC in satisfactorily demonstrating the legality of their fuel purchases.

The DESC uses the PMM data as an economic price adjustment index in conjunction with their handling of virtually all domestic bulk contracts issued by Department of Defense. Such contracts involve more than five billion gallons each year.

The Field Operations and Support Division of Environmental Protection Agency use EIA-782C data to analyze trends between states in the consumption of refined petroleum products.

The Federal Highway Administration (FHWA) uses the data for their annual regulatory analysis of sales of aviation fuel, and for such other special studies as their evaluation of non-highway uses of gasoline at the State level. Highway Trust fund disbursements to States are determined by FHWA in part through using EIA-782C data to validate State-provided data.

Petroleum industry analysts find EIA-782 data useful for performing market evaluations, trend analyses, and planning. EIA regularly receives data requests from both large energy producers, and numerous small-to-medium size energy firms.

The diversity of private firms using PMM data, suggests the varied purposes and applications to which the data are applied. Publishing companies, computer software firms, consultants, automobile manufacturers, and stock brokerage/investment firms, as well as, oil industry and oil and gas trade group analysts are among the users of PMM data.

Some oil industry uses include:

- Department of Pacific Resources, Inc. oversees fuel oil and military marketing. They depend on the PMM to develop contract pricing formulas for fuel oil and military marketing.
- to oversee sales to airlines and sales of JP fuel to the military.
- for a variety of forecasting-related applications.

- to input into energy models, to project U.S. energy market futures, and to try and simulate interaction between markets.

Many firms and individuals request EIA-782 related data for various purposes. Rounding-out the diverse users of EIA-782 data are national and regional oil industry institutes, associations, and organizations. The American Gas Association, American Petroleum Institute (API), Petroleum Marketers Association of America, Independent Petroleum Association of America, and Empire State Petroleum Association represent some of the petroleum industry associations that frequently solicit data from the EIA-782 data system.

The range of coverage (from exploration/production to end-use data) of the petroleum marketing publications was remarked upon by Robert Lynch, an Executive Vice President of the Empire State Petroleum Association, who found the data to be a valuable and credible reference with regard to supplies, prices, and trends. David Morehead, a Vice President at Petroleum Marketers Association of America, uses the EIA-782 data for the associations' weekly newsletter and magazine.

The Northeast-Midwest Institute considers EIA-782 data essential for congressional research, analysis of legislative proposals, gas tax, and oil import fees.

(D). “Annual Fuel Oil and Kerosene Sales Report”: EIA-821

The EIA-821 survey collects annual sales volumes of distillate and residual fuel oils and kerosene by a variety of end-use categories at the State level. These data are used by the Federal Government for energy policy activities, and for forecasting and consumption programs to determine current and projected fuel oil needs on a national, regional and State basis. Aggregations of these data are also used by Congress, State government agencies and petroleum industry analysts for a variety of analytic studies.

Within the Energy Information Administration, the Office of Oil and Gas uses end-use data for a variety of statistical analyses. The Office of Energy Markets and End Use enters the data into the State Energy Data System's (SEDS), a database of end-use consumption price and expenditure data for all fuels categorized by State. SEDS supplies the regional historical data for EIA's demand-side forecasting models. Aggregate data are included in following DOE publications, the *Fuel Oil and Kerosene Sales* and *Annual Energy Review*. This published information is used by Federal, State, and petroleum industry analysts to determine marketing patterns to evaluate end-use consumption patterns, and to analyze how changes in fuel oil supplies affect economic conditions at the State, regional and national level.

Data collected on Form EIA-821 on the quantity of kerosene and fuel oil sold by end-use category are used by all levels of government from the federal through state and regional to local jurisdictions.

Numerous federal departments and agencies make use of data in the EIA-821. Federal

energy policy development, forecasting and consumption programs would be impaired if this data collection were discontinued. The widespread use of these data became apparent when EIA discontinued the predecessor survey, the EIA-172, for one year. Numerous letters were received from State Governors, Congress, trade associations, oil companies, trade publications, and industry analysts citing their need for the data.

- Department of Commerce's Bureau of Economic Analysis used the data in estimating personal consumption expenditures (PCE) of these fuels by broad consuming categories in the annual I-O accounts.
- In 1991, the National Oceanic and Atmospheric Administration used the data to determine whether to assess a fuel tax on ocean-going vessels.
- The U.S. Environmental Protection Agency (EPA) and the petroleum industry used the EIA-821 data to analyze the impact on end-use consumption patterns of new EPA regulations to lower the sulfur content of diesel fuel oil. The EPA also relies on the EIA-821 and makes regular use of the data especially in inventory modeling as a cross check on their own numbers.
- Other Federal agencies have also demonstrated practical applications for EIA-821 data. The Administration for Children and Families currently uses EIA-821 data to calculate allocations for approximately 1.8 billion dollars annually to the Low Income Housing Energy Assistance Program. These data have been determined by Congress to be vital to the allocation of funds to the Low Income Housing Energy Assistance Program. The Internal Revenue Service currently uses the data to determine taxes on products such as diesel fuel and kerosene.

State agencies, including energy offices and environmental agencies, also widely use EIA-821 data for energy planning, analysis, and information dissemination. A number of state agencies assert that discontinuance of the data would have broad, adverse effects on their State energy or air quality programs. The following are examples of how States made use of data from the EIA-821:

- The California Air Resources Board has used EIA-821 data to analyze No. 2 diesel fuel consumption patterns in the State of California, in order to estimate the impacts arising out of lowering the sulfur and aromatic content of No. 2 diesel fuel.
- The California Board of Equalization uses the EIA-821 in on-going research.
- Connecticut has used EIA-821 data to evaluate energy use patterns, conservation and fuel switching among sources.
- Ohio Public Utilities Commission relies on the EIA-821 every year for kerosene and petroleum product data for long-term analysis, they also use data by end-use sector, and for their biennial reports. They consider the EIA-821 very important for the work of the Ohio PUC.
- Maine Environmental Protection and Air Quality Agency relies on data available only in the EIA-821 to refine emissions inventory for EPA on an annual basis.
- Maryland Energy Administration has used the EIA-821 to check supply data on an on-going basis, to a certain extent to help establish base levels to determine emergency conditions.

- Massachusetts uses the data on an annual basis in forecasting energy demands and future prices.
- Michigan uses EIA-821 data extensively to estimate sulfur dioxide (SO₂) emissions from for all end use sectors, from No. 1 distillate, No. 2 distillate, and residual fuel. The Michigan Department of Natural Resources needs data on sales of No. 2 diesel fuel separated into two categories of less than or equal to .05 percent sulfur and greater than .05 percent sulfur. Michigan requires low sulfur fuels in certain geographic areas as an alternative to installing pollution control devices to reduce SO₂ emissions. Michigan is interested in using the data for low sulfur diesel fuel to improve their estimates of SO₂ emissions and to evaluate the effectiveness of their state regulations on low sulfur fuels.
- Michigan Department of Natural Resources, Air Quality Division depends on the EIA-821 to meet EPA filings of county emission estimates. The agency regularly uses the data in conjunction with their own sample estimates to derive county totals by end use category. The EIA-821 is seen as indispensable to this effort.
- Minnesota uses the data for energy analysis and information dissemination activities.
- New York develops, reviews and updates a comprehensive, long-range State Energy Master Plan using EIA-821 data. New York also uses the data to develop the State end-use energy accounts, for the New York Annual Energy Review, and for a variety of energy analyses and assessments.
- New York State Energy Research and Development Authority uses the EIA-821 along with other EIA reports to produce *Patterns and Trends* a report that looks at supply and demand and is published on Internet. [The Internet site gets 40,000 hits per year.]
- Wisconsin uses EIA-821 information to inform the Governor and Legislature on energy usage in Wisconsin. They also prepare a detailed forecast of future energy usage within the State by economic sector.
- Wisconsin Department of Administration, Division of Energy & Intergovernmental Relations, Bureau of Energy uses the EIA-821 on a regular basis for energy statistics by end use segment in Wisconsin.
- Other States, including Ohio, Arkansas, Vermont, and Illinois have also forwarded correspondence to EIA stating strong support and genuine need for the data reported on the EIA-821 survey.

Local agencies also regularly use data from the EIA-821 such as:

- South Coast Air Quality Management District has used EIA-821 data in the analysis of diesel fuel consumption patterns in southern California with respect to the impact of changing No. 2 diesel fuel specifications.
- Maricopa County Air Quality, Phoenix, Arizona makes on-going use of most recent information to develop emission estimates for Maricopa County by end use category. The agency uses state data and applies population data to derive their estimates. They consider the EIA-821 the sole source of needed information since there are no reliable local data available.

- City of Baltimore, Bureau of Budget Management Research made use of EIA-821 data to help establish a base year for a new tax on energy.
- Metropolitan Washington Council of Governments uses data from the EIA-821 as part of the input to strategic planning process for the metropolitan region.

The Petroleum industry makes extensive use of the data collected through the EIA-821. National and regional trade associations, as well as individual companies, have made use of EIA 821 data in analysis and forecasting. For example:

- Along with other EIA and DOE publications, data from the EIA-821 are also republished in the American Petroleum Institute publication *Basic Petroleum Data Book, Petroleum Industry Statistics*, widely used by industry analysts. In addition, the American Petroleum Institute uses EIA-821 data for analyzing total distribution sales of No. 2 distillate by end-use and the National Petroleum Council uses the EIA-821 from time to time for various statistical purposes and reports.
- The New England Fuel Institute has stated that its 1,100 members (independent retail and wholesale home heating oil distributors) depend on the EIA-821 data to project the supply needs of the New England States, to estimate appropriate product inventories, and to direct their marketing practices. The Independent Fuel Terminal Operators Association, composed of 16 companies operating deep water oil terminals, use the data to make purchase decisions and estimate necessary inventory levels.
- Petroleum companies, such as Citgo, Texaco and Marathon, have made frequent use of the data uniquely available in the EIA-821 survey. Companies have used the data in forecasting, trend analysis, and market segment analysis.

Other users of EIA-821 data include:

- Bechtel Corporation has used data from the EIA-821 for internal reports, and for articles they write for the trade publications.
- Colonial Pipeline has used EIA-821 data in developing new business markets and assisting in planning system expansion.
- Woodrock and Company uses the EIA-821 on an on-going basis in their work as investment banking. They view the data as an important component for their analysis of the economic drivers underlying the general economic conditions.
- Data Resources Incorporated (DRI) has used EIA-821 data to update a refinery model at the PADD level and to monitor the industry in bench marking for modeling prices and supply.
- Detroit Diesel Corporation has used EIA-821 data for congressional testimony and for a breakdown of fuel oil by diesel engines.
- Allegro Energy Consulting regularly uses the EIA-821 in analysis of various end-use sectors including residential, agriculture, and industrial. The user sees the EIA-821 as a vital unique source, the only source for data by sector at the state level.

- Cohen & Dax PC used data from the EIA-821 for an article about alternative uses of Bio-diesel including the possibility of using Bio-diesel as a heating fuel in the New England and Mid Atlantic regions of the U.S.
- Muse Stancil uses the EIA-821 regularly for fuel oil market studies, for heavy fuel oil in particular
- Tamura Environmental has used the EIA-821 for estimating air emissions.

(E). **“Monthly Foreign Crude Oil Acquisition Report”: EIA-856**

Foreign crude oil prices and volumes are key components of the U.S. balance of trade picture, and are necessary for evaluating the impacts of oil market trends on the U.S. economy and future product wholesale and retail prices. The EIA-856 survey supplies comprehensive information, not available from other sources. Form EIA-856 continues to be the only source of U.S. crude oil imports which collects cargo-level prices and actual gravities associated with specific crude types. The EIA-856 data are essential in evaluating any impacts to the petroleum industry as a result of changes in the quality of U.S. imports due to trade embargoes, supply shortages, or cut-offs such as those experienced during the Persian Gulf crisis.

The statistically reliable information collected by the survey is also used by EIA, other Federal agencies, and the private sector, primarily for the purposes of analysis and forecasting. For example:

- The EIA-856 data were used to assess the impact to the U.S. economy of the trade embargo on Iraq and cut-off of Kuwait oil as a result of Iraq’s invasion of Kuwait. The EIA Administrator, as well as the staff of the Secretary of Energy, analyzed EIA-856 data by the gravity/sulfur content of U.S. crude oil imports to evaluate the impacts of the loss of high gravity Iraqi crude on the petroleum industry.
- The Bureau of Labor Statistics (BLS) of the Department of Labor uses the EIA-856 as a primary input for calculating the price indices for foreign crude oil as a component of the U.S. Import Price Index.
- Over the years, the EIA-856 data have been used in a number of studies. The Bureau of Economic Analysis of the Department of Commerce requested EIA-856 quantity and price information for those countries engaged in net back pricing arrangements, and to aid in a quarterly analysis of the petroleum industry, inventory stocks of crude oil, and active rig levels of crude oil. The data were used by the Balance of Payments Division to adjust the value of crude oil imports reported by the Census Bureau to more accurately reflect the true value of oil imported into the United States.
- DOE uses EIA-856 data to support their legislatively mandated responsibilities, some of which reside in the areas of modeling and forecasting. In an effort to alleviate confusion about the difference between imported refiners acquisition cost and the prices for premium crudes typically reported in the media, the Office

of Integrated Analysis and Forecasting, used crude oil prices collected on the EIA-856 to forecast the *Annual Energy Outlook 2006* world oil price path for imported light sweet crude. EIA-856 data are also published in the *Monthly Energy Review*, *Petroleum Marketing Monthly*, *Petroleum Marketing Annual*, *Annual Energy Review*, *Annual Energy Outlook*, and *International Energy Outlook*. The Office of Strategic Petroleum Reserve for DOE uses EIA-856 data to assess distribution capabilities of domestic crude oil versus foreign crude oil. The Financial Analysis Team in the Office of End Markets and End Use uses the EIA-856 data to create a graph of the price spread between light and heavy crude oil in the publication, *Performance Profiles*, as a discussion on refinery investments.

- The data are also frequently used by petroleum company analysts, consultants, and investment bankers to assess their company's crude oil purchasing performance relative to the industry average, and on forecasting the cost of various foreign crude oil streams.
- These data are used to perform the important function of providing the U.S. data submissions to the International Energy Agency (IEA). The IEA is an intergovernmental organization with binding commitments from 20 signatory nations. The Standing Group on the Oil Market within the IEA is responsible for tracking developments in the international oil market. Two IEA requirements, which were established in June of 1979, are supported by data collected on the EIA-856.

The first requirement is to maintain the Crude Oil Import Register of oil imported into the United States on a cargo-by-cargo basis. The second requirement is to produce a monthly price report of average prices and total volumes of imported oil for selected crude streams. The United States agreed at the November 10, 1981 meeting of the IEA Governing Board to extend the IEA agreement. The Crude Oil Import Register and the monthly price report allow the United States to fulfill this multinational obligation.

(F). **“Petroleum Product Sales Identification Survey”: EIA-863**

The EIA-863 collects information on size, type and geographic location of fuel oil related businesses to form an attribute sampling frame for use by EIA sample surveys. Specifically, the data are used to provide:

- A comprehensive frame file for sampling. The information is also used to identify births (new companies including sales and mergers) and deaths (companies going out of business) in the universe, as well as updates to mailing addresses and contact information.
- Volumetric State-level data necessary for efficient use of stratified or probability proportional to size sampling. These sampling methods yield substantial

- reductions in respondent burden and reduce sampling error in the weekly, monthly and annual sample surveys.
- Basic aggregate data to determine aggregate population estimates. These estimates are used to design efficient samples and estimators, and to measure previous sample deterioration and changes in the distribution of the population.
 - Parent/subsidiary relationships to avoid both under reporting and double counting, and to minimize sample sizes and company burden.
 - Company-level profiles and detail which allow for sample rotation to minimize individual company burden.
 - Data for examining edit and imputation procedures and methodologies in the monthly and annual sample surveys, and testing those methodologies. The data are also directly used for editing and imputation procedures as a benchmark for new sample members and for nonrespondents.

The list of companies, their operational status, volumetric data and information on their corporate relationships together serve as the sampling frame for the following EIA surveys:

- EIA-782B, “Resellers’/Retailers’ Monthly Petroleum Product Sales Report,”
- EIA-821, “Annual Fuel Oil and Kerosene Sales Report,”
- EIA-877, “Winter Heating Fuels Telephone Survey,”
- EIA-888, “On-Highway Diesel Fuel Price Survey,”
- Ad hoc surveys, such as the National Petroleum Council Surveys.

Each of these surveys requires a frame that is relatively current because of the high turnover rate and ongoing changes in the petroleum industry. Previous surveys have shown a turnover of roughly 25 percent between surveys without including ongoing updates made to align the larger petroleum sellers. It is necessary that the frame for sampling be both comprehensive and up-to-date with the industry for unbiased and efficient sampling. Lack of identification of out-of-scope and out-of-business firms greatly increases sample sizes, respondent burden, and data error, as well as government costs for nonresponse follow-up. The high birth and death rate of fuel oil dealers means that samples deteriorate rapidly through time and must be updated to maintain sample efficiency and estimation accuracy.

(G). “Winter Heating Fuels Telephone Survey”: EIA-877

The EIA-877, “Winter Heating Fuels Telephone Survey,” is designed to collect data on retail prices of No. 2 heating oil and propane during the heating season (October 1-March 15) for 24 Eastern and Midwestern states. EIA selects the sample in each state and defines the data elements to be collected. Each state energy office collects the data, from the sample provided by EIA, over the telephone and the data are transmitted to EIA using the Internet Data Collection (IDC) system. EIA tabulates the data and publishes the aggregate estimates on the Internet. The data collected are used to monitor the price of these heating fuels during the heating seasons and for reports to the Congress and others when requested. The EIA-877 survey meets the need for timely price and supply

information on these fuels. The data has been used by the Federal and State governments, industry analysts, and Congressional Committees to assess the hardships experienced by heating oil and propane users during periods of critical short supplies such as during the winters of 1989 and 1999 in the Northeast and Mid-Continent areas. The severe weather in those years contributed to supply shortages and large price increases for both heating oil and propane. EIA responded to this need for timely information by implementing the EIA-877 telephone survey to collect State-level, weekly information during the heating season on the price of No. 2 heating oil and propane from a sample of suppliers. The need for this information was expressed in Congressional hearings and meetings of State energy office officials. Transcripts of these hearings are available upon request.

Several major respondents and petroleum industry association representatives, including the American Petroleum Institute [Dr. Edward Murphy, (202) 682-8495] and the Natural Gas Processors Association [Mr. James Burroughs, (703) 979-3560], agreed that more timely data on No. 2 heating oil and propane is required and that EIA should collect such data.

(H). “Motor Gasoline Price Survey”: EIA-878

The EIA-878 survey collects, on a weekly basis, the retail price by grade of unleaded gasoline, self-service, cash only, including all taxes. The data may be collected on a more frequent basis during emergency situations such as war, common disasters, severe price fluctuations, and other supply shortages. When these emergency situations arise, EIA notifies OMB before implementing the change in frequency and states the reasons and what the effect is on burden. The EIA-878 survey provided daily estimates from April 29, 1996 through August 2, 1996 to Congress, Federal officials, and the transportation industry in order to measure the rapid price increases at both regional and national levels. During the 1991 Iraq war, the data were used by Congress and Federal officials to monitor the retail price of gasoline on a daily basis. The EIA-878 data provide weekly information on retail market conditions and on the price impacts of "clean fuel programs" mandated by the Clean Air Act Amendments of 1990 to both government and industry. More recently, these data were used to monitor the effect in 2005 of hurricane Katrina on the retail gasoline market.

U.S., regional, and city retail gasoline price estimates calculated from EIA-878 data are used in a wide range of analytical reports and are routinely accessed by the public through a telephone hotline number (202) 586-6966 maintained by the U.S. Department of Energy, as well as accessing the data from the EIA website at:

http://www.eia.doe.gov/oil_gas/petroleum/data_publications/wrgp/mogas_home_page.html.

Data are released for 9 states and 10 cities, in addition to the five PADD and three sub-PADD areas, and the U.S. During 2005, the telephone hotline, which disseminates both gasoline prices from the EIA-878 survey and diesel prices from the EIA-888, received an

average of 28,739 calls per month, ranging as high as 40,412 in October following hurricanes Katrina and Rita.

The Secretary of Energy routinely uses EIA-878 data to monitor regional price levels and relies on the data in his reports to the Congress and the White House. During periods of rapid price fluctuations data from this survey have been used to prepare reports for Congress during special hearing sessions. Most recently in September 2005, EIA's administrator used these gasoline price data in a briefing *Gasoline Prices in the U.S. and Recent Developments in World Oil Markets* to the Committee on Energy and Commerce, U.S. House of Representatives. Additionally in September 2005, these prices were used in a statement before the Energy and Natural Resources Committee, U.S. Senate. Within EIA, the Office of Energy Markets and End Use uses EIA-878 price data to forecast the retail price of gasoline in their monthly *Short Term Energy Outlook* report released on the web. EIA also uses EIA-878 price data each spring for its *Summer Motor Gasoline Outlook* report on the web.

The EIA-878 data are routinely relied upon by the press, industry, the media and government as a measure of retail prices of reformulated, oxygenated, and conventional gasoline. Every major newspaper has cited and published retail gasoline price data from the EIA-878 in stories concerning retail gasoline prices including the Los Angeles Times, New York Times, Boston Globe, Chicago Tribune, Washington Post, Wall Street Journal, and USA Today, along with hundreds of other local newspapers across the United States. The financial markets have also become customers of the EIA-878 prices. Late in 2005, the Chicago Board of Trade began offering new futures' contracts with the cash settlement price based on the published weekly retail gasoline price from the EIA-878 survey. The data are routinely published in all the major wire services including Reuters Ltd, Bloomberg News, Dow Jones, and Associated Press. U.S. price estimates for regular grade gasoline are regularly quoted on the CBS and NBC television news networks. EIA-878 data are published in the *Washington Daybook - Economic Reports*.

Retail gasoline price estimates for the State of California are published on the California Energy Commission's home page at <http://www.energy.ca.gov/gasoline/index.html>. The EIA-878 data are routinely relied upon as a measure of the price level by the State of California. The EIA-878 data were used in the report by EIA, *2003 California Price Study*, to explain the high price levels for gasoline on the west coast. In April 2000, the General Accounting Office released a special report, "Motor Fuels - California Gasoline Price Behavior" which was based primarily on EIA-878 data.

The data are relied upon by both government, industry, and the public for explaining price movements and levels across regions. EIA-878 data were used in the report *An Analysis of Gasoline Markets*, Spring 1996 prepared by the U.S. Department of Energy at the request of President Clinton. The data were used in two EIA reports, *Why are Gasoline Prices Falling So Rapidly*, and *Gasoline Prices: What's Happening?* in order to explain large price swings in the market during the 2001 summer driving season. The national and regional retail gasoline price estimates from the EIA-878 survey are accessed daily by the public through a telephone hotline number (202) 586-6966

maintained by the U.S. Department of Energy. During 2005, the telephone hotline, which disseminates both gasoline prices from the EIA-878 survey and diesel prices from the EIA-888, received an average of 28,739 calls per month, ranging as high as 40,412 in October following hurricanes Katrina and Rita.

The New York State Department of Finance uses EIA-878 to measure the price level of retail gasoline in that state and to forecast budget revenues from gasoline excise taxes. The New York State Energy Research Development Authority uses retail gasoline price estimates for New York State to monitor supply conditions and price levels in the state. They also publish the price estimates in the New York State Gasoline Watch report. The New York State Department of Taxation and Finance, Office of Tax Policy Analysis uses EIA-878 retail gasoline price estimates, by grade and by formulation, to estimate gasoline sales tax revenue in their quarterly forecasting models. These forecasts for gasoline sales tax revenues are used by the New York State legislature to estimate future revenue for the state's annual budget. New York State also publishes EIA-878 data on their website at <http://www.nyserda.org/prices.html>. Other state programs, such as Minnesota Department of Public Services, and New Hampshire's Office of Energy & Community Services, use the EIA-878 prices also.

(I). "On-Highway Diesel Fuel Price Survey": EIA-888

The EIA-888 survey collects the retail price of on-highway ultra low and low sulfur diesel fuel, self service, cash only, including all taxes. The data may be collected on a more frequent basis during emergency situations such as war, common disasters, severe price fluctuations, and other supply shortages. When these emergency situations arise, EIA notifies OMB before implementing the change in frequency and states the reasons and what the effect is on burden. The data are used by Congress, Federal and state officials, and the transportation industry to monitor the retail price of on-highway diesel fuel. During 1994 and 1995, EIA-888 data was used to measure the price impacts of the low sulfur diesel fuel requirements for on-highway diesel fuel as mandated by the Clean Air Act Amendments of 1990. From April 29, 1996 through July 5, 1996 the data were collected three times per week and used to measure national and regional price levels during a period of rapid escalating retail prices for on-highway diesel fuel.

Since April 1996, EIA-888 data are regularly used by the California Energy Commission to measure retail price levels for low-sulfur California Air Resources Board specification diesel fuel in California. The EIA-888 price estimates for the State of California are published on the California Energy Commission's homepage at <http://www.energy.ca.gov/gasoline/index.html>. New York State also publishes EIA-888 data on their website at <http://www.nyserda.org/prices.html>.

During February 2000, EIA-888 retail price data were used as part of testimony given by EIA to the U.S. Congressional House Committee on International Relations, U.S. Senate Energy Committee, and New York State General Assembly. These data were also used in an EIA briefing to the White House during December 1999, and in an EIA briefing to

the Secretary of Energy during January 2000, because of the rapid price rise in No. 2 distillate products on the East Coast during this time period.

Shipping contracts with the federal government, both military and civilian, require the use of EIA-888 published data as the price mechanism for calculating fuel surcharges. The General Services Administration Federal Supply Service uses EIA-888 data as an indicator to determine when carriers should be allowed relief from sudden or unexpected increases in fuel prices. Pursuant to GAO National Rules Tender No. 100-D, the GSA Freight Program Management Office requires the use of EIA-888 data to calculate a 52 week moving average of the published Monday price as the baseline for the Neutral Range when issuing a Standard Tender of Service notice. The annual average is updated on the Monday before the first Monday in February and the first Monday in August of each year. In addition to the standard tender of service notices, GSA has agreements with customers that supplement government fuel contracts. These agreements, or fuel policies, allow companies to raise their rates or get a discount depending on the cost of diesel as measured by the EIA-888 survey. Fuel policies for civilian government shipping contracts are revised every six months and are based on the previous 52 weeks of published EIA-888 data. The Military Traffic Management Command for the Department of the Army uses EIA-888 to measure price changes over a moving 12-week period to determine when a fuel adjustment shall be granted to a shipper under a military contract.

The EIA-888 data are used to provide weekly information to both government and industry on retail market conditions. The EIA-888 data are routinely relied upon by the press, industry and government as a measure of change in the fuel costs for transportation and shipping contracts. Federal Express at <http://www.fedex.com/cgi-bin/fuelsurcharge.cgi?link=4&cc=us&language=english> and United Parcel Service at http://www.ups.com/content/us/en/resources/find/cost/fuel_surcharge.html use EIA-888 published data in their fuel surcharge formula for adjusting shipping rates for ground transportation. The EIA-888 data has generally been adopted by the majority of the private trucking firms and shippers as the price adjustment mechanism in fuel surcharge formulas.

The national and regional retail diesel fuel price estimates from the EIA-888 survey are accessed daily by motor carriers, both haulers and bus companies, shippers, and other members of the public through a telephone hotline number (202) 586-6966 maintained by the U.S. Department of Energy as well as accessing the data from EIA's website at <http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp>. During 2005, the telephone hotline, which disseminates both gasoline prices from the EIA-878 survey and diesel prices from the EIA-888, received an average of 28, 739 calls per month, ranging as high as 40,412 in October following hurricanes Katrina and Rita.

EIA-888 data are also published on a weekly and monthly basis in several trucking industry newsletters including the American Trucking Association www.ttnews.com/members/fuel/, Traffic World, www.trafficworld.com/index.asp, RPM

magazine, www.rpmag.com and other transportation news services such as TCHEK, www.tchek.com/estop.asp. The national and regional prices are broadcast twice per day on Interstate Radio Network, a radio network with 40 affiliates (with coverage of 95% of the continental United States) at www.midnighttrucking.com. The EIA-888 data are also analyzed and used by the National Industrial Transportation League, the National Association of Truck Stop Operators, and the American Automobile Manufacturer's Association. EIA-888 data are routinely quoted on all the major news and wire services including Reuters Ltd, Bloomberg News, Dow Jones, and Associated Press.

3. Using Automated, Electronic, Mechanical, or other Technological Collection Techniques to Reduce Burden on Respondents

All Petroleum Division survey forms are available in a Microsoft Excel spreadsheet format (.XLS) on the EIA website at http://www.eia.doe.gov/oil_gas/petroleum/survey_forms/pet_survey_forms.html and may be downloaded by respondents. Respondents may fax or email their survey forms using XLS survey file format. Since email is an unsecured means of transmission because the data is not encrypted, and there is some possibility that data could be compromised; EIA offers an additional method for submitting Excel files using a secure method of transmission: HTTPS. Surveys can be sent using the secure method at: <https://idc.eia.doe.gov/upload/noticeoog.jsp>.

The Petroleum Division also developed software, "PC Electronic Data Reporting Option" (PEDRO) to allow the respondents on the EIA-14, EIA-182, EIA-782A/B/C, and EIA-877 to transmit their data electronically through a modem. Data entry in the PEDRO system may be done on-line using electronic images of the printed forms, or data may be imported from mainframe or other microcomputer systems using a pre-defined format. The PEDRO data entry programs include a wide variety of edit checks to detect data errors at the time of entry. This reduces the amount of resources used to correct or confirm questionable data items with the EIA.

The EIA-821 and EIA-863 surveys each utilize bar coding, which reduces processing errors and costs.

EIA-877 data are collected by telephone.

EIA-878 and EIA-888 data are collected through a Computer Assisted Telephone Interview (CATI) survey processing system.

4a. Efforts to Identify Duplication

EIA has carefully examined all surveys and published data identified as having potential overlap with any of these eleven petroleum marketing survey forms. There are data that are somewhat similar to those available from several other sources, including other Federal agencies, industry associations, and private firms. However, these data are not a reasonable alternative for data collected by these eleven surveys. Specific surveys and published data and the inadequacies of these data as a substitute for the eleven surveys

are discussed in Section 4b. Below is a survey-by-survey discussion concerning investigations (and their results) undertaken to identify possible duplication of data.

(A). “Refiners’ Monthly Cost Report”: EIA-14

The EIA-14 provides the only source of comprehensive, current period-weighted costs of crude oil as it is booked into the refinery. Form EIA-182, “Domestic Crude Oil First Purchase Report,” is designed to collect data on the value and volume associated with the physical and financial transfer of domestic crude oil from the property on which it was produced. EIA-182 data are used to represent the initial market value of domestically produced crude oil. The EIA-182 holds a similar relationship with the EIA-14, with respect to domestic oil, that the EIA-856 does with respect to imported oil. Costs that accrue subsequent to its first purchase (e.g., transportation, storage, resale markups and markdowns, et cetera) are included in the EIA-14, but not in the EIA-182.

The EIA-14 provides a crucial link in the evaluation of crude oil and refined products from the wellhead to ultimate consumption. EIA collects data at critical stages in this process: the EIA-182 collects wellhead data; the EIA-14 collects data on crude oil as it enters the refinery stage, and the EIA-782 collects data on the sales of the finished products.

(B). “Domestic Crude Oil First Purchase Report”: EIA-182

The EIA-182 is the only data collection instrument that gathers data on average crude oil wellhead prices paid by the first purchasers to producers.

Similar statistics, such as those published in *Platt’s Oilgram*, *Petroleum Intelligence Weekly*, and *Oil Buyers Guide International* focus on what refiners and resellers are asking publicly for crude (posted prices and spot prices). These publications do not provide data on sales of equity and non equity crude oil, nor information as to what the actual price and amount of oil is involved; in fact, no actual transactions may occur as posted prices.

The Bureau of Labor Statistics, in conjunction with its Producer Price Index, calculates a price index for crude oil. Their primary source of data is posted prices for domestic crude oil at the wellhead. A price index is published monthly, but no average price is published or calculated. Furthermore, no regional or State-level prices are available.

The EIA-23, “Annual Survey of Domestic Oil and Gas Reserves,” collects data on the reserves of crude oil, natural gas and natural gas liquids from well operators. No price data are collected.

Annual collection of first purchase prices would not be adequate given the widely fluctuating prices of crude oil in the current environment.

(C). **“Monthly Petroleum Product Sales Reports”: EIA-782A, B and C**

The State-level product price and volume data provided by the EIA-782 series are not provided either by other DOE surveys, or by other government and private sources. The Bureau of Labor Statistics (BLS) collects only voluntarily-provided wholesale and retail price-related information on refined petroleum products. Furthermore, the aggregate statistics provided by BLS not only fail to satisfy the needs of EIA-782 users, but are inadequate as a base upon which to respond to various U.S. Congress inquiries.

Both the Consumer Price Index (CPI), and the Producer Price Index (PPI) are statistically designed to measure price change and use fixed weights, i.e., they do not use current volumes. However, EIA users require measures of both total volumes and actual average prices as calculated using a current month’s weights for accuracy. More particularly, user needs would not be met because of the following deficiencies in BLS data or sampling frames:

- Many retail sales of major products are not represented.
- Disaggregation by sector is not provided for distillates.
- Wholesale prices at the national, regional, and State levels are not provided.
- Retail prices at the State-level are not provided.
- Reseller activity is not reflected in the Producer Price Index.
- BLS sampling frames, because they depend on North American Industrial Classification System codes, may result in the exclusion of product sales by secondary businesses.

The 1985 adoption by the Bureau of Labor Standards of a new/revised methodology for pricing refined petroleum products at the wholesale level has also, albeit indirectly, resulted in users ‘crossing-over’ from BLS-provided-data to EIA-provided-data. For example, while the revised BLS methodology has improved the timeliness of their prices, regional prices and indexes for products on the PPI were eliminated. Currently, BLS refers users seeking regional data to the *Petroleum Marketing Monthly* publication. Furthermore, due to the elimination of these data by BLS, industry and State governments are now using EIA-782 data to determine contract prices for fuel sales.

The *Petroleum Marketing Monthly* (July 2004) feature article, titled “A Comparison of Selected EIA-782 Data with Other Data Sources” describes and quantifies retail price data (motor gasoline, on-highway diesel fuel and No. 2 fuel oil) differences between EIA-782A/EIA-782B, BLS price data, and Federal Highway Administration motor gasoline volume data. Retail price comparisons were made on annual data from 1994 through 2003 for regular grade finished motor gasoline, retail on-highway diesel fuel prices, and residential No. 2 fuel oil.

BLS utilizes a fixed-volume weighted scheme to produce several levels of statistics of which the U.S. city average price was used for comparison purposes in the article. The BLS prices were based on 1982-1984 expenditures weights.

Regarding motor gasoline, the biggest difference between EIA-782A/EIA-782B and BLS surveys is the weighting. Major shifts in marketing strategies, such as cash discounts, self-serve, geographic movements in gasoline markets, or the introduction of reformulated gasoline into the market, would be identified immediately by the EIA surveys through the current volume weighting it employs. The BLS fixed weights, in comparison, lag behind in reflecting these changes in the average prices. Although the BLS adopted (in 1987) a new pricing policy that allowed weights to be adjusted annually by ongoing consumer data, the data still lagged by 4 to 5 years. In addition, the BLS Point of Purchase Survey (POPS), which is rotated 20 percent each year, affects the BLS averages, and how the mix of self-service, cash-discounts, etc., are represented. When market conditions change, the BLS price data could lag behind until new sample units are rotated into the survey and/or CPI survey weights are updated.

For Residential No. 2 Fuel prices, the change in the difference between EIA-782A/EIA-782B and BLS data for the years 1995 through 2003 reflects the change in weights for BLS. One reason for the discrepancy is that the EIA-782A/EIA-782B surveys use current volumes while BLS uses fixed volumes to compute monthly weighted average prices. Also, BLS collects prices mainly from urban areas. EIA studies have shown that residential heating oil prices tend to be higher in urban areas.

On the average, one might expect the BLS prices to be higher because taxes are excluded from the EIA, but are included in the BLS prices. If taxes increase over time, the price spread between the data series would increase too. The BLS annual prices were derived by using a 12-month simple average. However, residential fuel oil prices and volumes are seasonal in nature, and computing a simple average for the BLS price would not reflect this trend as would the EIA data series.

FHWA's "*Monthly Motor Gasoline Reported by States*" report is a tabulation of gross gasoline gallons reported by wholesale distributors to State motor fuel tax agencies. The data are used to determine the disbursement of Federal highway trust funds to the States.

Some users of gasoline sales data have suggested the FHWA report as an alternative to the EIA-782C. It is a weak alternative, however, if only due to the considerable time (sometimes approaching six months) elapsing between gasoline sales data being collected and published in the "*Monthly Motor Gasoline Reported by States*" report. Recent analysis of FHWA data showed that not only did more than 90 days elapse between the capture and publication of data, but State coverage was low. FHWA is a poor alternative to EIA-782C data for other reasons. For instance, unlike EIA-782C data, FHWA data: (1) does not cover other petroleum products, (2) is not published as timely as EIA-782C data, and the methodology for reporting is based on sales and gross receipts taxes which is not uniform across the States, and (3) does not break out the data by grade or formulation of gasoline.

Furthermore, the FHWA report does not include prices. In conclusion, EIA-782 data are more accurate, more timely, cover more products, and reflect a higher State response rate than does FHWA data.

Other private and public sources providing petroleum product data purportedly equivalent to the EIA-782 survey series were also studied and were found to be inadequate in fulfilling the mandated requirements of the EIA-782 series surveys. Each of the alternate sources differed importantly and significantly from the EIA-782 in one or more of the following areas: data collection methodology, periodicity, survey frame, sales category disaggregation, product slate, geographic breakdown, and purpose. Furthermore, only the EIA-782 series surveys provide detailed State-level breakdowns of information by end-use sector.

(D). “Annual Fuel Oil and Kerosene Sales Report”: EIA-821

There is no similar information available for sales of distillate, residual fuel oil and kerosene by end-use at the State level. The EIA-782A and B collect monthly sales data for distillate and residual fuel oil; however, the product breakouts and end-use categories on the EIA-782A and B are more limited than the disaggregation provided by the annual EIA-821 survey. Furthermore, the product slate for the EIA-782B is limited in order to provide minimum burden on a monthly basis. Kerosene, No. 1 and No. 4 distillate are not collected on the EIA-782B.

Notwithstanding the limitations imposed by the differences in reporting categories, it would be impossible to obtain the same accuracy of annual volume statistics by summing the 12 reported monthly numbers. Respondents to the EIA-782 do not provide prior-period adjustments for their monthly estimated data. However, revisions to prior estimates are figured into the reported EIA-821 annual volume totals. Also, the EIA-782B, which uses reported volumes for weighting, does not have a sample large enough to provide volume data with a reasonable degree of accuracy.

(E). “Monthly Foreign Crude Oil Acquisition Report”: EIA-856

The EIA-856 collects information on costs and quantities of imported crude oil. There are no data collected by alternate forms that provide similar information. One data source that has been cited as a potential replacement for the EIA-856 is the U.S. Customs Entry Document, CF-7501, which collects landed volumes and customs valuations for crude oil by country of loading. The CF-7501 is the entry document filed for all imports into the United States.

U.S. Customs, as the collector of import/export data and duties, is required to process information for thousands of transactions each month. Given the range of goods crossing the U.S. border, Customs must collect a limited, general class of data sufficient to perform its primary duties. However, EIA requires more specific data elements which are not collected by Customs. In particular, the requirement to provide a monthly crude oil report to the International Energy Agency (IEA) is an important application of the EIA-856 data. To create the report, data must include detailed, cargo-level information not found in the Customs data. Specifically, the following data elements are required:

- API Gravity. Customs data provide only two TSUSA (Tariff Schedule of the United States Annotated) codes for crude oil, distinguishing only oil above/below 25 degrees API. Actual API gravity is collected by the EIA-856 as needed.
- Crude Stream. In order to place crude oil in the precise categories required by IEA, the crude stream (e.g., Saudi Light) is necessary. Customs currently collects only country-of-origin information which does not specify the crude stream.

The need for API gravity and crude stream data was particularly important during the Persian Gulf crisis for comparisons of quality of Iraqi and Kuwaiti crude oils versus replacement crude oils.

One difference between the data series is due to Customs' treatment of net-back purchases. Net-back purchases are peculiar in that a cargo's value will not be assessed until after the crude has landed. Because the EIA-856 allows companies to resubmit, an estimated price or no price may be reported on the original submission when the crude is first reported; but when the actual value has been calculated the company resubmits their correct values. Since Customs does not have re-submissions, the original estimates do not get corrected. The difference occurs because EIA uses a value based on after landing adjustments and Customs uses invoice value which can differ significantly in a volatile market. Thus, due to the lack of important information such as API gravity and crude stream, the lack of accuracy due to using an unrevised bill of landing price, and timing problems; the Customs' data are not considered an adequate alternative to the EIA-856 data.

(F). “Petroleum Products Sales Identification Survey”: EIA-863

The EIA-863 is the primary petroleum survey used to construct and maintain the petroleum marketing sampling frame of petroleum product sellers. There are no known surveys that collect data comparable to the EIA-863 that can be used by EIA. In particular, EIA's other surveys do not provide a comprehensive list of product sellers. Lists or frames of the U.S. Census Bureau or the Bureau of Labor Statistics can not be shared with EIA due to privacy/confidentiality restrictions. Lists constructed by private firms, industry associations, and state governments are acquired by EIA to construct the EIA-863 mailing lists, but these other lists do not contain measures of size, corporate relationships, or other information needed for sampling.

(G). “Winter Heating Fuels Telephone Survey”: EIA-877

As part of EIA's review process, EIA examined all surveys and published data identified as having potential overlap with this survey. The data are collected weekly from October 1 through March 15.

Monthly, State-level residential home heating oil and propane prices are collected by EIA on Forms EIA-782A and EIA-782B, “*Monthly Petroleum Product Sales Reports*.” However, since these prices are weighted by the volume of residential sales, the data are not available until approximately 60 days after the end of the month. Thus, the EIA-782

data do not provide timely enough or frequent enough information for monitoring a potential emergency situation.

The Bureau of Labor Statistics publishes monthly residential heating oil prices for metropolitan areas as part of the *Consumer Price Index*. As above, the BLS geographic coverage of selected metropolitan areas does not meet the need for State-level prices for each heating oil state in the Mid-west, East Coast, and West Coast regions.

(H). “Motor Gasoline Price Survey”: EIA-878

The EIA-878 collects the retail price, by grade and formulation of gasoline at the national, regional, and select state, and city levels. There is no comparable data series available for the different formulations of gasoline in ozone non-attainment areas, and attainment areas as designated by the Environmental Protection Agency that satisfy EIA’s and EIA’s customers’ requirements for unbiased, representative, current price data. The Lundberg survey is considered inadequate since it only collected prices every other Friday which isn't frequent enough to monitor fast developing market shifts. The American Automobile Association (AAA) releases daily retail price information from its website at <http://www.aaanewsroom.net/Main.asp> based on data provided by OPIS. These prices are credit card transaction based and do not represent a specific point in time. In addition, it is not known how representative the set of transactions are of all retail outlets. They also do not provide separate prices by formulation of gasoline, such as reformulated or conventional gasoline. The EIA-782, "Monthly Petroleum Product Sales Report" survey and the Bureau of Labor Statistics Consumer Price Index only publish a retail gasoline price once a month. Thus, due to timeliness, frequency, and reliability problems, other data sources do not meet DOE's needs for timely, independent source prices.

(I). "On-Highway Diesel Fuel Price Survey": EIA-888

The Oil Price Information Service, TCHEK, and AXXIS collect daily prices for on-highway retail diesel fuel from an unspecified sample of outlets and sell the data for a fee. Their samples lack adequate refiner coverage in some regions, have an insufficient rural/urban mix, and also draw heavily from outlets that have a data link with credit companies and are not probability based. The Lundberg survey publishes a retail low sulfur diesel fuel price by PADD and nationally. The Lundberg survey is inadequate to monitor changes in retail motor vehicle diesel fuel prices because it only publishes monthly prices. In addition, its methodology is not made publicly available. The EIA-782, "Monthly Petroleum Product Sales Report" survey and the Bureau of Labor Statistics Consumer Price Index also publish a retail on-highway diesel fuel price once a month, one month after the reference period. A monthly data series available one month later is not adequate to measure sudden price spikes in the retail market or supply shortages such as the market shifts which occurred in November 1993, April 1996 and December 1999, spring 2001 and 2003, and the fall 2005 and 2006. The Interstate Commerce Commission (ICC) published a national diesel fuel price but discontinued their weekly survey as of May 31, 1994 after meetings with EIA which resulted in the

implementation of the EIA-888. The EIA-888, which makes use of statistical sampling and estimation methodology, was designed to replace the ICC national diesel fuel price.

4b. The Inadequacies of Similar Data

There are three different methodologies used for calculating crude oil and petroleum product price data: posted or spot prices, base period weighted average prices, and current period weighted average prices. Posted or spot prices are collections of bid/post prices from a supplier or suppliers at a given location for a given size shipment. These prices are primarily useful to purchasers and sellers who are intimately involved in evaluating marginal prices in a volatile market on a daily basis. The primary disadvantage of posted or spot prices is that they represent a small percentage of the market. Therefore, these prices cannot effectively be used to represent State, regional, or national average prices. Also, posted or spot prices do not reflect the extensive contribution of contract transactions in determining the prices of crude oil or products; nor do they indicate how much volume is purchased or sold at that price (i.e. no product may have been sold at all at a particular posted price). Among the daily/weekly journals publishing posted/spot prices are: *Petroleum Intelligence Weekly*, *Oil Daily*, *Journal of Commerce*, *Mid-East Journal*, *Arab Oil and Gas*, *Oil Express*, *Platts Oilgram*, and *Oil Buyers Guide International*.

Base period weighted average prices employ fixed weights. By using a fixed weight methodology, only the current prices are collected each month, promoting rapid turnaround for publication. Base period weighted average prices tend not to reflect the contributions of structural and institutional changes, thus misrepresenting the market when weights do not reflect current activity. For example, an overall shift in sales from conventional gasoline to reformulated gasoline is a market shift that may not be reflected using a fixed weight methodology. Among the best known sources using this method are the Department of Agriculture, the Bureau of Labor Statistics, and *The Lundberg Letter*.

The current period weighted average price method employed by EIA takes the reference month's sales volumes and the revenue for the reference month to calculate a weighted average price for that month. This is the only method that takes into account all transactions, including contracts, discounts, and distress sales weighted by their actual volumes of sales, and aggregates them into a representative average price.

In addition, EIA provides the only available source of State prices for the full range of petroleum products and by various types of sales. For reasons of content, methodology, industry geography, customer coverage, and the purposes for which the data are collected, EIA data are necessary to allow for the reliable macro/micro analysis of current conditions and trends.

Regarding Form EIA-877, as stated in Section 4, "Efforts to Identify Duplication," an evaluation of similar data found no other sources that provided the required frequency, timeliness, and geographic coverage needed to monitor No. 2 heating oil and propane prices and inventories.

Regarding Form EIA-878, as stated in Section 4, "Efforts to Identify Duplication," an evaluation of similar data found no other sources that provided the required frequency, timeliness, and coverage needed to monitor regional retail motor gasoline prices.

Regarding Form EIA-888, as stated in Section 4, "Efforts to Identify Duplication," an evaluation of similar data found no other sources that provided the required frequency, timeliness, and coverage needed to monitor regional retail on-highway diesel fuel prices.

5. Reduction of the Burden on Small Businesses or Other Small Entities

Minimizing burden to small businesses is a primary concern to EIA. It is important that all sizes of firms, large and small, participate in surveys such as the EIA-782, EIA-821, EIA-877, and EIA-878 to obtain a proper representation of the petroleum industry. The inclusion of smaller firms is necessary to accurately portray State volumes and prices. Within the EIA-782B sample design, however, the EIA has taken several steps to minimize burden to small, individual dealers:

- The sample contains a certainty strata including multi-State companies dealing in four or more States and dealers whose volumes account for 5 percent or more of a State's volume for either any sampling target variable or specific end-use category. The certainty strata results in accounting for approximately 95 and 98 percent of residual fuel oil volumes, retail and resale, respectively; 88 percent of wholesale distillate volumes; and 83 percent of the reseller motor gasoline wholesale volumes by using only 2 percent of the number of companies that are in scope.
- Noncertainty respondents are sampled by State using a form of probability proportional to size. This sampling method was shown to produce the minimal total sample sizes that preserve the accuracy of the estimates required.
- Sample sizes reflect sampling with respect to only published geographic areas to reduce the total number of respondents, i.e. not all residential distillate States are published so sampling in those areas occurs only as necessary for the estimates at a more aggregated geographic level. Accuracy targets vary by product and geographic level to further reduce burden.
- The EIA-782 design also provides for sample rotation through the use of permanent random numbers. Rotations generally rotate 50% of the smaller volume dealers in order to not only reduce individual respondent burden but also protect data continuity. The sample is rotated when it is decided that sample deterioration and non-response is becoming a problem, subject to annual budgets.

Similarly, the EIA-821 is also required to collect data from both large and small businesses. In the EIA-821 sample design, refiners, multi-State dealers and large companies greater than five percent of the total sales for a particular category in a State are selected with certainty. The remainder of the universe is cross-stratified by type of sale and volume for each State. In general, this allocation yields smaller sampling fractions for smaller companies and thereby reduces total small business burden.

The quadrennial EIA-863 survey, by the nature of its purpose (to develop a sampling frame), is mailed to all potential respondents to petroleum marketing surveys except those firms already reporting on the EIA-821 form. This includes both large and small businesses. The EIA-863 sampling frame, however, assists in maintaining low respondent burden by allowing for the use of sophisticated sampling techniques, and by providing up-to-date information that alleviates the need for over-sampling to correct for sample frame limitations.

All sizes of firms, large and small, participate in the EIA-877 survey in order to accurately estimate State-level residential prices. However, to minimize the burden on small No. 2 heating oil dealers, a sample design similar to the EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product is used for the EIA-877 survey. In this design, dealers are stratified for each State by size of sales volumes, according to the volumes reported in the EIA-863 frame. This results in smaller sampling fractions overall and smaller sampling fractions for smaller dealers than for larger dealers.

To minimize the burden of propane dealers, certainty companies are selected in those states where the company represents 5% or more of the state volume. Outlets within the company are then selected to represent the company where the number of outlets is defined by the multiples of 5% that the company represents. Non-certainty outlets are then stratified by size, to further reduce burden. The sampling fractions varies by State according to the variance in the State and the size of the population.

The EIA-14, EIA-182, and the EIA-856 surveys do not include small businesses in their respondent populations.

6. Results of Collecting Data Less Frequently

The Petroleum Marketing survey forms vary in periodicity depending on the requirements and uses for the subject survey data. Forms filed on a monthly basis include EIA-182, EIA-856, EIA-14, and EIA-782A, B and C. All of these forms collect product price and volume data, with the exception of the EIA-782C which collects only product volumes. The annual survey, EIA-821, and the quadrennial universe frame survey, EIA-863, collect only product volume data.

The forms collecting product price data must be current in order to be meaningful, which necessitates monthly collection. The one monthly form that collects only volumetric data, the EIA-782C, is widely used by State governments on a monthly basis. When the EIA-782 survey was initially proposed in April 1982, a quarterly form, the EIA-783, was included in the series. However, during the extensive public hearings and consultations with data providers and users, State governments in particular objected strongly to the quarterly data collection. State governments are frequent, regular, monthly users of petroleum products supply, marketing and distribution data. The monthly EIA-782 data collection and publication enables these governments and other data users to receive accurate and timely data for use in trend analysis, demand modeling and forecasting,

policy evaluation and analysis, contingency planning, and budgetary planning. At the same time, data providers indicated that no savings in cost or effort would result from implementation of a quarterly form. The data providers were also concerned that since the State governments needed the data monthly, the States would conduct 50 separate surveys. The data providers preferred to provide the data once to EIA rather than separately to each State government.

The EIA-856, EIA-14 and EIA-182 are required on a monthly basis because of the integral role these surveys play in the analysis of the nationally critical crude oil market. The EIA-856 must fulfill the requirements of the IEA agreement, provide critical information to the Strategic Petroleum Reserve Office for evaluating market conditions in connection with its purchases of crude oil, and meet the analytic requirements of EIA and other data users. Data gathered by the EIA-182 and EIA-14 are also used on a regular monthly basis by Congress, DOE and other users for monitoring, forecasting and market analysis. The price data collected by these survey forms would not be adequate for realistic industry analysis if collected less than monthly.

The EIA-821 form is an annual collection. EIA uses the EIA-821 data to report to Congress on fuel oil supplies by economic sector in the *Annual Energy Review*. Data collected at greater intervals than annually would severely handicap modeling performed by the Department for use in energy policy development, and in its energy forecasting and consumption programs.

The EIA-863 is a quadrennial survey used to maintain the adequacy and currency of the petroleum marketing sampling frame of petroleum product sellers. The four-year schedule is necessary to correct for the frame deterioration that occurs as a result of the dynamic nature of the petroleum industry. The sampling frame deteriorates rapidly over time because of the high birth and death rate in the retail sector of fuel oil dealers and other small businesses. The industry also has a characteristically high rate of mergers and consolidations. If the identification survey is not performed on a quadrennial cycle, then sample deteriorations would occur resulting in over sampling, increased burden and decreased statistical quality.

The EIA-877 is a six month, weekly survey. Less frequent reporting would not permit EIA to meet its obligation of providing timely, reliable information in order to monitor these critical fuels during the heating season. The "Needs For and Uses of Petroleum Marketing (PM) Data" describes the need by Congress for timely information.

The EIA-878 and EIA-888 are weekly surveys. Less frequent reporting would not permit EIA to meet its obligation of providing timely, reliable information in order to monitor these critical transportation fuels which are more volatile during market disruptions due to short term supply disruptions, price fluctuations, natural disasters or other catastrophic events.

7. Special Circumstances

The justification requiring respondents to report information more frequently than every quarter has been described above. Form EIA-782C is requested in only 20 days after the end of the reporting period because the state energy offices need information on supply conditions by the earliest review of the prime supplier reports which are generated by the EIA-782C. In the event of fuel shortages, the prime supplier reports are used by a governor to request that 3% of the total volume expected to be sold in a state be set aside as a special product reserve for that state.

8. Summary of Consultations Outside the Agency

On June 7, 2006, EIA published a Federal Register Notice (Volume 71, Number 100, page 32941) inviting public comments on the proposed extension of the Petroleum Marketing (PM) survey forms. The Bureau of Economic Analysis responded to the notice with a letter of support for the Petroleum Marketing Surveys. BEA stated that it uses the EIA-14 and the 782C to prepare the national income and product accounts. BEA supports the proposed addition of ultra-low-sulfur diesel (ULSD) fuel, although it has no immediate plans to incorporate the information into its programs. In addition, the Diesel Technology Forum wrote *“The diesel industry is at the precipice of a number of significant regulatory changes mandated by the Environmental Protection Agency (EPA) that affect both highway and non-highway diesel fuel specifications over the next 5 years. The importance of this information is even greater now as this information becomes essential for understanding the state of the petroleum product market, supply and pricing owing to these major changes form 2007-2014”* in support of the Petroleum Marketing Surveys. To prepare for the introduction of Ultra-Low Sulfur Diesel, EIA had teleconferences with representatives of NACS (National Association of Convenience Stores), Sigma (Society of Independent Gasoline Marketers of America), and NATSO (National Association of Truck Stop Operators), and coordinated with the Clean Diesel Alliance.

In the March 23, 2006 *Federal Register* (71 FR 14690), EIA announced its plan to discontinue the collection of Forms EIA-182 and EIA-856 due to budget constraints after the data for July 2006 was collected. As a result of that notice, users of the survey data from US Legislature, International Energy Agency (IEA), Federal and State Government Agencies and Petroleum Industry/Private Sector submitted letters requesting EIA to reconsider the decision to discontinue the forms citing the importance of the information. EIA subsequently released a second Federal Register Notice announcing the continuation of the collection of the surveys through the October 2006 reference month which are due by November 30, 2006. After EIA’s budget for Fiscal Year 2007 is finalized, EIA will make a decision regarding further continuation of those two surveys based on funding availability and EIA priorities. On October 17, 2006, the *Federal Register* notice (71 FR 61033) was published stating its submission of the Petroleum Marketing Program to the Office of Management and Budget.

To avoid the disruption and costs that would be inherent in any temporary suspension followed by a restart, EIA had informed the Congress that it would try to continue the

surveys until the Congress completes action on EIA's FY 2007 budget. Since the timing of final Congressional appropriations action still remains uncertain, EIA subsequently has secured bridge funding to enable continuation of the surveys pending completion of Congressional budget action. EIA will defer a final decision regarding the discontinuance of the EIA-182 and 856 forms until the Congress completes all action on EIA's Fiscal Year 2007 budget. EIA is therefore requesting clearance for the EIA-182 and 856 survey forms.

9. Remuneration

There are no plans to pay respondents to respond to these surveys.

10. Provisions for Confidentiality of Information

The information reported on the petroleum marketing survey Forms EIA-863 (only Parts II, Preparer Information, and III, Total Sales Volumes by State, of the EIA-863), EIA-878, and EIA-888 is considered confidential in accordance with the Confidential Information Protection and Statistical Efficiency Act of 2002 (P.L. 107-347) and the information will be used solely for statistical purposes. Instructions to the forms will include the following:

The information you provide will be used for statistical purposes only. In accordance with the Confidential Information Protection provisions of Title 5, Subtitle A, Public Law 107-347 and other applicable Federal laws, your responses will be kept confidential and will not be disclosed in identifiable form to anyone other than employees or agents without your consent. By law, every EIA employee as well as every agent has taken an oath and is subject to a jail term, a fine or up to \$250,000, or both if he or she discloses any identifiable information about you.

The information reported on the petroleum marketing survey Forms EIA-14, EIA-182, EIA-782A, EIA-782B, EIA-782C, EIA-821, EIA-856, EIA-863 (only Part I, Respondent Identification Data of the EIA-863), and EIA-877 will be treated as protected, but is excluded from coverage under the Confidential Information Protection and Statistical Efficiency Act of 2002 (P.L. 107-347). The information collected on these forms will be used for statistical purposes and may be made available for non-statistical purposes. Except for Form EIA-821, disclosure limitation methods will be applied to protect against any unauthorized or inadvertent disclosure through publication of aggregate estimates in tables. The respondents are informed of the confidentiality provisions by the following statement that appears in the instructions for these forms.

The information reported on this form will be protected and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the DOE regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.

The Federal Energy Administration Act requires the EIA to provide company-specific data to other Federal agencies when requested for official use. The information reported on this form may also be made available, upon request, to another component of the Department of Energy (DOE); to any Committee of Congress, the Government Accountability Office, or other Federal agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order. The information may be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

Disclosure limitation methods are not used on tabular information for statistics based on information reported on Form EIA-821. For Form EIA-821, the following will also be included in the forms instructions.

The statistical tables based on the EIA-821 survey information are not subject to statistical nondisclosure procedures. Thus, there may be some table cells which are based on data from only one or two respondents, or which are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable user of the data to make inferences about the data reported by a specific respondent.

Respondents to Form EIA-782C are informed that State energy offices are interested in receiving a copy of the EIA-782C and the respondent may chose to provide a duplicate of each monthly report directly to the appropriate state energy office where the respondent made sales.

For Form EIA-782C, the following will also be included in the forms instructions.

Information provided to state energy offices are not subject to federal regulations governing disclosure of company level data. Contact your state energy office for details on their data confidentiality policies and regulations.

11. Justification for Sensitive Questions

There are no questions of a sensitive nature asked on the eleven Petroleum Marketing survey forms.

12. Estimated Average Reporting Burden

The overall annual burden for this package is estimated to be 121,156. Below is the reporting burden estimates for Petroleum Marketing surveys, for the burden for the individual forms contained in this package.

Survey Number	Freq .	Size of Universe	Average Number of Respondents Annually	Number of Responses Annually	Response Burden Per Respondent	Total Burden Hours	Response Rate
EIA-14	M	67	67	804	1.75	1407	99.8
EIA-182	M	84	84	1008	4.3	4334.4	100
EIA-782A	M	95	95	1140	15	17100	99.5
EIA-782B	M	24400	2067	24804	2.5	62010	91
EIA-782C	M	185	185	2220	2.1	4662	98.8
EIA-821	A	24400	4041	4041	4.4	17780	90.9
EIA-856	M	39	39	468	6.1	2854.8	99.7
EIA-863	Q	24400	5017	5017	1	5017	90
EIA-877	S	14000	1200	30000	0.1	3000	99
EIA-878	W	115000	800	41600	0.05	2080	98
EIA-888	W	24400	350	18200	0.05	910	99
TOTAL			13945	129302		121156	

Q=Quadrennial
A=Annually
M=Monthly
S=Semi-monthly
(October-March)
W=Weekly

13. Total Annual Cost Burden to Respondents

There are no additional capital, start-up, or operation and maintenance costs associated with these surveys. Based on the reporting burden, the Cost to the respondents is estimated to be:

\$6,905,892 (121,156 hours x \$57 per hour).

An average cost per hour of \$57 is used because that is the average loaded (salary plus benefits) cost for an EIA employee. EIA assumes that the survey respondent workforce completing surveys for EIA is comparable with the EIA workforce.

14. Estimate of Costs to the Federal Government

The annual cost including personnel, for development/maintenance, collection, processing, analysis, and publication for the eleven Petroleum Marketing survey forms is \$3,675,000.

15. Changes in Burden

Respondent burden has decreased by 1,378 hours (program change) primarily due to the consolidation of Oxygenated gasoline into Conventional gasoline. The decline would have been more substantial except for the additional break-out necessary for Ultra-Low

Sulfur Diesel. See Section 3. "Using Automated, Electronic, Mechanical, or other Technological Collection Techniques to Reduce Burden on Respondents" and Section 12, reporting burden estimates by PMD survey, for additional burden information.

16. Schedule for Collecting and Publishing Data

(A) The data reported on Forms EIA-878 and EIA-888 is collected on Monday of each week. Prices are as of 8:00 a.m. The data are compiled and published the same day on EIA's website at www.eia.doe.gov by 5:00 P.M, and also 2 days later in the Wednesday 9:00 A.M. release of Weekly Petroleum Status Report. The data are also published daily internally within EIA in the Energy Situation Analysis Report.

(B) The data reported on Form EIA-877 are collected weekly from October 1 through mid March. The data are compiled and published on EIA's website at www.eia.doe.gov.

(C) Monthly Surveys - (EIA-14; EIA-182; EIA-782A, B, C; EIA-856)

(1) EIA-782C forms due	20 calendar days after end of reference month
(2) All other monthly forms due	30 calendar days after end of reference month
(3) Processing of data completed	45 calendar days after end of reference month
(4) 782C data reports published electronically	50 calendar days after end of reference month
(5) <u>Petroleum Marketing Monthly</u> (PMM) production completed	60 calendar days after end of the reference month

(D) Annual Survey (EIA-821)

(1) Forms Mailed	Mid January
(2) Responses due	Early March
(3) Second Mailing to nonrespondents	Early April
(4) Close-out data collection	Early August
(5) Completion of analysis/validation	Mid August

(6) Post on Internet	End August
(E) Quadrennial Survey (EIA-863 collecting 2006 sales information)	
(1) Forms Mailed	Mid January, 2007
(2) Responses due	Early March, 2007
(3) Second mailing to nonrespondents	Late April, 2007
(4) Load EIA-821 data	Mid August, 2007
(5) Complete validation phone calls	End of August, 2007
(6) File ready for sampling purposes	September, 2007

17. OMB Expiration Date

The expiration date will be displayed on the petroleum marketing survey forms.

18. Exception to Certification Statement

There are no exceptions to the certification statement of OMB Form.