

Part A of Supporting Statement for 2014 Petroleum Marketing Surveys: OMB NUMBER 1905-0174

Office of Petroleum and Biofuels Statistics U.S. Energy Information Administration U.S. Department of Energy Washington, DC 20585

Table of Contents

Part A	
Table of Contents	
Appendices, Diagrams and Tables	i
Introduction	1
Background on Petroleum Marketing Program (PMP)	2
Uses of Data in Recurring EIA Publications	
A. Justification	9
A.1. Legal Justification	9
A.2. Need for and Uses of Petroleum Marketing Data	12
A.2.1. Overview of Data Uses	12
A.2.2. Overview of Data Collections	13
A.2.3. Individual Form Data Uses and Modifications	13
A.3. Use of Technology and Reduction of Burden	31
A.4. Efforts to Reduce Duplication	31
A.4.1. Analysis of Similar Existing Information	32
A.5. Provisions for Reducing Burden on Small Businesses	40
A.6. Consequences of Less-Frequent Reporting	42
A.7. Compliance with 5 CFR 1320.5	43
A.8. Summary of Consultations Outside the Agency	43
A.9. Payments or Gifts to Respondents	44
A.10 Provisions for Confidentiality of Information	44
A.11. Justification for Sensitive Questions	46
A.12. Estimate of Respondent Burden Hours and Cost	46
A.13. Annual Reporting and Record Keeping - Cost	47
A.14. Annual Cost to the Government	47
A.15. Changes in Burden	48
A.16. Collection, Tabulation, and Publication Plans	48
A.17. OMB Number and Expiration Date	49
A.18. Certification Statement	49
Part B	
B. Introduction to Collection of Information Employing Statistical Methods	
B.1. Frame and Target Population	_
B.2. Sampling Methodology and Estimation Procedures	
B.3. Methods to Maximize Response Rates	
B.4. Tests of Procedures	
B.5. Statistical Consultation	

Appendices

Appendix A: Description of Recurring EIA Publications

Appendix B: Consultation with Stakeholders and Data Users

Appendix C: List of References Appendix D: Public Comment

Diagrams and Tables

Diagram 1: Petroleum Marketing Data Collection Program 2	
Table A1: Petroleum Marketing Data Collection Forms	1
Table A2: Relationship between PMP Surveys and EIA Publications	8
Table A3: Estimated Reporting Burden	47
Table A4: Comparison of 2014 and 2011 Reporting Burden	48
Table B1: Summary of Sample Design	7
Table B2: Average Annual Response Rate for Weekly and Monthly PMP Surveys	17

Introduction

The U.S. Energy Information Administration (EIA) of the U.S. Department of Energy (DOE) is required to publish, and otherwise make independent, high-quality statistical data available to Federal government agencies, state and local governments, the petroleum marketing industry, and the general public.

To meet this obligation, EIA's Office of Petroleum and Biofuels Statistics (PBS), Petroleum Marketing Statistics Team conducts statistical surveys that collect information about many significant petroleum marketing industry activities. EIA is requesting approval to expand the number of states that participate in the State Heating Oil and Propane Program (SHOPP) using Form EIA-877. Due to sharp increases in residential propane prices earlier this year, there has been increased interest in more relevant propane prices from additional states from several levels of customers. On April 2, 2014, EIA sent an invitation to all non-participating states to solicit interest in joining SHOPP. An informational Webinar was held on April 14, 2014 to provide a program overview, benefits, and expectations. Since then, 14 states have either agreed to participate or expressed interest in participating in SHOPP. Upon approval, EIA will begin weekly data collection on October 6, 2014 for the 2014/2015 heating season.

Table A1: Petroleum Marketing Program (PMP) Data Collection Forms

Form EIA-14	Refiners' Monthly Cost Report
Form EIA-182	Domestic Crude Oil First Purchase Report
Form EIA-782A	Refiners'/Gas Plant Operators' 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 Product Sales Identification Survey
Form EIA-877	Winter Heating Fuels Telephone Survey
Form EIA-878	Motor Gasoline Price Survey
Form EIA-888	On-Highway Diesel Fuel Price Survey

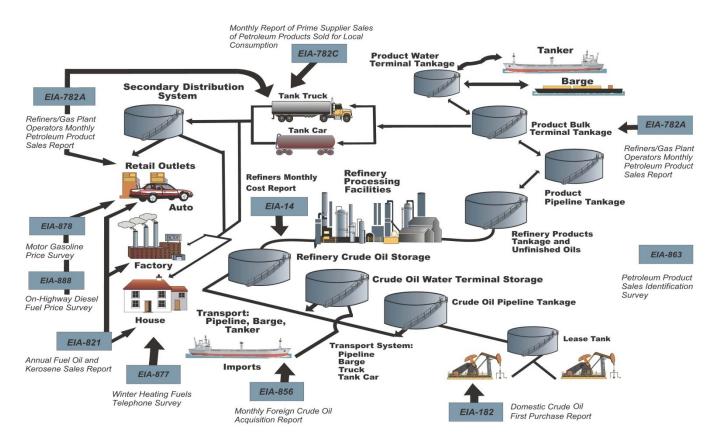
The information collection proposed in this supporting statement has been reviewed in light of applicable Information Quality Guidelines. It has been determined that the information will be collected, maintained, and used in a manner consistent with the Office of Management and Budget (OMB) and DOE's Information Quality Guidelines.

Background on Petroleum Marketing Program (PMP)

The Petroleum Marketing Program (PMP) collects and publishes data on the nature, structure, and efficiency of petroleum markets at the national, regional, and state levels. The following diagram displays the points of data collection in the petroleum distribution chain for the surveys in the PMP.

Through integration of ten surveys, EIA monitors petroleum volumes and prices as the commodity moves through the various stages from importation of the raw material to refining to create the finished products to transfer/distribution from the refiner to the retail outlets to sales to ultimate consumers. The program conducts three sub-groups of surveys. Each of these groups of surveys has its own sampling frame.

PETROLEUM MARKETING DATA COLLECTION



- The first sub-group of surveys includes the EIA-182, the EIA-856, and the EIA-14. These surveys collect data on crude oil acquisition costs and crude oil volumes.
- The second sub-group of surveys includes the EIA-782A, the EIA-782C, and the EIA-821. These surveys collect data on refined petroleum product sales volumes and/or prices. Appendix E contains the 782A Reference Guide and Appendix G contains the 821 Reference Guide.
- The third sub-group of surveys includes the EIA-877, the EIA-878, and the EIA-888. These surveys collect price data for end-users of refined petroleum products where the reporting unit tends to be the individual outlets. The published prices are average prices, which are computed using volume measures from the survey itself once a year or which are derived from a related survey. The data reported on the three weekly surveys are point-in-time estimates instead of an average price. More information is available about these point-in-time estimates in Part B.
- The last survey is the EIA-863 which collects size, type, and location data on companies engaged in sales of petroleum products. This survey is the sampling frame for several surveys in the Petroleum Marketing Program including the EIA-821 and the EIA-877. It also provides statistical support for the EIA-878 and EIA-888.

Crude Oil Acquisition Costs and Volumes Acquired

- The Monthly Domestic Crude Oil First Purchase Report (EIA-182) is a mandatory monthly census of firms that take or retain ownership of domestic crude oil leaving the lease on which it was produced for leases within the United States including the Outer Continental Shelf. Firms report, by stream, the volume in barrels and the weighted average cost per barrel for purchases they made in the reference month.
- The Monthly Foreign Crude Oil Acquisition Report (EIA-856) is a mandatory monthly census of two populations. The first population is comprised of firms that reported data as of June 1982 on the Transfer Pricing Report (ERA-51). The second population is comprised of firms acquiring more than 500,000 barrels of foreign crude oil for importation to the United States and its territories/possessions during the reporting month. Firms report country of origin, volume acquired in barrels, and cost for each acquisition made in the reference month.

• The Refiners' Monthly Cost Report (EIA-14) is a mandatory monthly census of firms who own or control refining operations in the United States and its territories/possessions. Firms report for the total volume of crude oil acquired in thousands of barrels during the month and all costs associated with its acquisition and transport to the refinery in thousands of dollars. This data is reported by Petroleum Administration for Defense Districts (PADD). It is reported for all domestic and imported crude oil purchases.

Petroleum Product Prices and Sales Volumes

- The Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report (EIA-782A) is a mandatory monthly census of firms who either directly, or indirectly e.g., through a subsidiary company control a refinery or a gas plant located in the United States. Firms submit their sales volumes, measured in thousands of gallons, and the average selling price per gallon, excluding taxes, for each of the selected finished petroleum products by state, sales type, and user category. The petroleum products are motor gasoline (by formulation and grade), No. 2 diesel fuel (by sulfur content), No. 2 fuel oil, propane, No. 1 distillate, kerosene, aviation gasoline, kerosene-type jet fuel, No. 4 fuel oil, and residual fuel oil (by sulfur content).
- Retail sales of gasoline are partitioned into sales through company-operated retail outlets and direct sales to other end-users, while wholesales, or sales for resale, are partitioned into dealer tank wagon (DTW) sales, rack sales, and bulk sales.
 - DTW sales are defined as sales priced on a delivered basis to a retail outlet.
 - Rack sales are defined as truckload sales or smaller where the title transfers at a terminal rack loading facility.
 - Bulk sales are individual sales transactions that exceed the size of a truckload (for example, barge, railcar, or pipeline loads).
- Retail sales of No. 2 distillates and propane are partitioned by customer type. The categories include: residential sales, commercial/institutional sales, industrial sales, sales through company-operated retail outlets, petrochemical sales (propane only), and sales to other end-users.

In contrast to the differentiation of gasoline wholesales, No. 2 distillates and propane wholesales are reported as a group.

- The Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption (EIA-782C) is a mandatory monthly census of petroleum product suppliers who make the first sale of specified petroleum products and then deliver that product into a state for consumption in that state. Firms report by State on their monthly sales in thousands of gallons for finished motor gasoline (by formulation and grade), No. 2 diesel fuel (by sulfur content) No. 2 fuel oil, propane, No. 1 distillate, kerosene, aviation gasoline, kerosene-type jet fuel, No. 4 fuel oil, and residual fuel oil (by sulfur content).
- The Annual Fuel Oil and Kerosene Sales Report (EIA-821) is a mandatory annual sample survey of companies that deliver or sell distillate, residual fuel oils and kerosene. Firms report annual sales volume in gallons by State of destination by product type and by energy end use residential, commercial, industrial, oil company, railroad, vessel bunkering, farm, military, on-highway, off-highway, electric power, and other uses. Annual sales are reported for kerosene, distillates by type of distillate No. 1 fuel oil, No. 2 fuel oil, No. 2 ultra-low sulfur diesel, No. 2 low sulfur diesel, No. 2 high sulfur diesel, No. 4 fuel oil and residual fuel oil.

End-User Prices for Petroleum Products

- The Winter Heating Fuels Telephone Survey (EIA-877) is a mandatory sample survey by telephone of No. 2 heating oil and propane dealers in 38 Eastern, Midwestern, Gulf Coast, and Rocky Mountain states. During the heating season from October 1 to March 15, sample dealers report each week on their residential prices for No. 2 heating oil and propane as of the reference day for each of the states for which they were sampled. During the first telephone call at the beginning of the heating season, sampled dealers report their annual sales volume in thousands of gallons for each of the States for which they were sampled for the 12-month period from September 1 to August 31.
- The Motor Gasoline Price Survey (EIA-878) is a mandatory sample survey by telephone of retail outlets selling motor gasoline. Each week, sampled outlets report the retail pump price of regular, midgrade, and premium grades of cash only, self-service unleaded gasoline including taxes.

• The On-Highway Diesel Fuel Price Survey (EIA-888) is a mandatory sample survey by telephone of retail outlets selling on-highway motor vehicle diesel fuel. Each week, sampled outlets report the retail pump price of cash only, self-service, on-highway motor vehicle diesel fuel - including taxes.

Companies Engaged in Petroleum Product Sales

The Petroleum Product Sales Identification Survey (EIA-863) is a mandatory census of (1) resellers and retailers of No. 2 distillate, motor gasoline, propane, and residual fuel oil and (2) companies that sell kerosene, No. 1 distillate, crude oil, other Liquefied Petroleum Gas (LPG), No. 4 fuel oil, aviation gasoline, jet fuel, or other petroleum products. The census occurs every four years and is used to build the frame for the EIA-821, the EIA-877, the EIA-878, and the EIA-888. EIA-821 respondents are not asked to report for this survey, but have the equivalent data extracted from their EIA-821 responses.

Uses of Data in Recurring EIA Publications

EIA publishes numerous recurring publications, including the following petroleum publications which contain data from the surveys in the PMP:

Annual Petroleum Supply Annual (PSA), Volume 1

Petroleum Supply Annual (PSA), Volume 2

Fuel Oil and Kerosene Sales (FOKS)

Monthly Petroleum Marketing Monthly (PMM)

Petroleum Supply Monthly (PSM)

Prime Supplier Report

Weekly <u>Gasoline and Diesel Fuel Update (GDFU)</u>

Heating Oil and Propane Update (HOPU)

This Week In Petroleum (TWIP)

Weekly Petroleum Status Report (WPSR)

The following EIA publications integrate data from the PMP with other data sources:

Annual <u>Annual Energy Review (AER)</u>

Annual Energy Outlook (AEO)

International Energy Outlook (IEO)

State Energy Data System (SEDS)

U.S Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Report

Monthly Monthly Energy Review (MER)

Short-Term Energy Outlook (STEO) including Market Prices and Uncertainty Report

A description of these recurring EIA publications is provided in Appendix K. The following table identifies recurring EIA publications which use data from each of the surveys in the Petroleum Marketing Program. The data is critical (C), Very Important (V), or Somewhat Important (S) to the AEO, the AER, the MER and the STEO.

Table A2: Relationship between PMP Surveys and EIA Publications

Table A2: Relationship between PMP Surveys and EIA Publications						
Survey No.	MER	AER	STEO	AEO	Other recurring EIA Publications	
EIA-14 Crude Oil Acquisition Costs	V	V	V	С	Petroleum Marketing Monthly, Weekly Petroleum Status Report, State Energy Data System: Total Energy Through 2010, and Market Prices and Uncertainty Report	
EIA-182 Crude Oil First Purchases and Costs	S	С	-	С	Petroleum Marketing Monthly, Petroleum Supply Monthly, Petroleum Supply Annual, Volume 1, Petroleum Supply Annual, Volume 2, and Oil and Gas Lease Equipment and Operating Costs 1994 Through 2009	
EIA-782A Refiners'/ Gas Plant Operators' Petroleum Sales	С	С	С	С	Petroleum Marketing Monthly, State Energy Data System: Total Energy Through 2010, and Market Prices and Uncertainty Report	
EIA782C Suppliers, Local Sales	С	С	S	V	Petroleum Marketing Monthly, State Energy Data System: Total Energy Through 2010, and Prime Supplier Report	
EIA-821 Fuel Oil and Kerosene Sales	С	С	-	V	Fuel Oil and Kerosene Sales and State Energy Data System: Total Energy Through 2010	
EIA-856 Foreign Crude Acquisition	V	V	-	V	Petroleum Marketing Monthly	
EIA-877 Winter Heating Oil Sales	-	-	С	-	Heating Oil and Propane Update, This Week In Petroleum and Weekly Petroleum Status Report	
EIA-878 Gasoline Prices	-	С	С	-	Gasoline and Diesel Fuel Update , This Week In Petroleum, and Weekly Petroleum Status Report	
EIA-888 Diesel Prices	-	С	С	-	Gasoline and Diesel Fuel Update , This Week In Petroleum, and Weekly Petroleum Status Report	

A. JUSTIFICATION

A.1. Legal Authority

The authorization for collecting data on the ten 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:...
 - 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 IEA (International Energy Agency) 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 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."

Additional Justification:

A recent testimony by Melanie Kenderdine, Director Of The Office Of Energy Policy And Systems Analysis And Energy Counselor, U.S. Department of Energy to the Senate Committee On Energy And Natural Resources entitled "Short On Gas: A Look Into The Propane Shortages This Winter" highlights the current issues faced in analyzing the propane market. Some highlights and commentary are added below:

- "The propane market is highly fragmented; 30 percent of the retail propane distribution market is held by three firms, with the remaining 70 percent market share held by another 3,500 firms. This fragmentation creates challenges for information awareness, data collection, and risk management. Bulk propane is typically delivered to centralized storage locations via rail, common carrier pipeline and truck. Propane is further delivered to local distributors by truck and then from these local distributors to residential consumers, also via truck. A large percentage of propane is delivered to the upper Midwest via pipeline."
- "Shortages were most acute in states at the tail end of distribution networks, and retail prices were highest in Iowa, North Dakota, South Dakota, and Minnesota in the Midwest; and Rhode Island and Vermont in the Northeast."

"Propane prices at Mont Belvieu, TX and Conway, KS, the major propane trading hubs on the U.S. Gulf Coast and in the Midwest, respectively, have historically been within pennies of each other. In late January the price of propane at Conway reached a record \$2.97/gal above the price at Mont Belvieu. This differential sent a strong signal to producers and distributors, and market participants responded by moving additional supplies northward via pipeline (but also via truck from Mont Belvieu to the Midwest). High prices in New England also attracted incremental global supplies via ship."

In summary, the states proposed to be added (e.g., Illinois, Georgia, Kansas, Texas) are either at the beginning of the pipelines or the end of the pipelines. The addition of these states will strongly improve the robustness of the data collected for analysis of propane markets.

A.2. Need for and Uses of Petroleum Marketing Program (PMP) Data

A.2.1. Overview of Data Uses

The purpose of the agency's 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 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 EIA collects are used to address significant energy industry issues. For example in line with its mandated responsibility to collect data that adequately describe the petroleum marketplace, EIA 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. This includes issues such as divorcement, mergers, market pullouts, predatory practices, and product margins require the Department of Energy's continuing involvement. According to the significant users within the Congress, the Executive Branch, and among the states, the data collected by the surveys in the Petroleum Marking Program 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 is 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 survey forms in the PMP.

The information to be collected will provide weekly, monthly and annual time series data on volumes and sales of crude oil (both imports and domestic) and for the petroleum marketing industry.

A.2.2. Overview of Data Collections

A.2.2.1. Individual Form Data Uses and Modifications

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 most frequent users of the Petroleum

Marketing Program data include Congress, government agencies, industry analysts and trade publications. EIA data are often reprinted and/or cited in various publications and journals, including recurring EIA publications.

Federal and State government agencies are frequent and regular users of petroleum product supply, marketing and distribution data. For example, the EIA-782 data are utilized by many states in developing and managing their energy programs. Petroleum data offer government 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 government and industry, their needs for and uses of petroleum data also vary and include:

- 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.

On the whole, Federal and 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. A partial list of Federal and State data users, including many agencies which are mentioned below, is provided below.

Select Federal agencies which use data from PMP include:

- U.S. Customs and Border Patrol (CBP)
- U.S. Department of Commerce's <u>Bureau of Economic Analysis (BEA)</u>
- <u>U.S. Department of Energy (DOE)</u>'s <u>Energy Efficiency and Renewable Energy (EERE)</u>, <u>Energy Information Administration</u>, <u>Office of Fossil Fuels (FF)</u>, <u>Federal Weatherization Program (WAP)</u>, and other offices
- U.S. Department of Interior (DOI)'s <u>Congressional Joint Committee on Taxation</u> and the <u>Minerals Management Service</u>
- U.S. Department of Labor (DOL)'s <u>Bureau of Labor Statistics (BLS)</u>
- U.S. Department of Treasury's <u>Internal Revenue Service</u>
- U.S. Department of Transportation's <u>Federal Highway Administration's (FHWA)</u>
- U.S. Environmental Protection Agency (EPA)
- <u>U.S. General Services Administration (GSA)</u>

Select state agencies which use data from PMP include:

- California's Energy Commission (CEC)
- Connecticut's Energy & Policy Unit
- Delaware Energy Office in the State's <u>Division of Clean Energy and Climate</u>
- Illinois Energy Office in the Department of Commerce and Economic Opportunity
- Indiana's Office of Energy Development
- Louisiana's Department of Natural Resources
- Maryland's Energy Administration
- Massachusetts' <u>Department of Energy Resources</u>
- New Hampshire's Office of Energy and Planning
- New Jersey's <u>Office of Clean Energy</u>
- New York State Energy Research and Development Authority
- Pennsylvania Department of Environmental Protection
- Virginia's Department of Mines, Minerals and Resources

A.2.3.2. Summary of Modifications to Surveys in the PMP

References to the separate categories for sulfur content of on-highway diesel fuel have been eliminated on the EIA-782A, EIA-821 and EIA-888 as there are no sales of low sulfur diesel for on-highway use. This change is the consequence of a decision mandated by the U.S. Environmental Protection Agency (EPA). As of December 1, 2010 (September 1, 2006 in California), any on-highway diesel fuel sold in the United States is ultra-low sulfur diesel as mandated by EPA in the Clean Diesel Trucks, Buses, and Fuel: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements (the "2007 Heavy-Duty Highway Rule"). This rule prohibits the sale of low sulfur No. 2 diesel fuel with sulfur content of greater than 15 parts per million (ppm) and less than or equal to 500 ppm for on-highway use.

- Form EIA-14, "Refiners' Monthly Cost Report" No change.
- Form EIA-182, "Domestic Crude Oil First Purchase Report" No change.
- Form EIA-782A, Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report " No change.
- Form EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report" Suspended in 2011 due to budget cuts and EIA does not request to reclear it.
- Form EIA-782C, "Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local <u>Consumption</u>" - No change. The EIA-782C Exclusionary List is updated annually due to industry changes.
- Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report" No change.
- Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report" No change. The list of Crude
 Stream Codes in Appendix A and U.S. Port Codes in Appendix B will be updated as needed.

- Form EIA-863, "Petroleum Product Sales Identification Survey" No change. \
- <u>Form EIA-877, "Winter Heating Fuels Telephone Survey"</u> EIA will expand the collection of propane prices from 24 states to 38 states.
- Form EIA-878, "Motor Gasoline Price Survey" No change.
- Form EIA-888, "On-Highway Diesel Fuel Price Survey" No change.

A.2.3.3. Details on the Use and Purpose for Each Form:

A.2.3.3.1. Monthly Crude Oil Surveys (EIA-14, EIA-182, and EIA-856)

<u>EIA-14, "Refiners' Monthly Cost Report"</u>

The EIA-14 is a mandatory survey of refiners and collects data used to measure the acquisition cost of crude oil. These data are widely used 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 data 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

Petroleum Administration for Defense Districts (PADD) average price, and as a key variable in models used to forecast future price trends.

Congress and government agencies - Federal, State and Local - 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 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. Examples include:

BEA uses the EIA-14 data to determine the costs of crude oil to refiners for calculating the U.S. Gross

Domestic Product (GDP). These data are used as an index to adjust the cost of crude oil.

DOE and select State Energy Offices (SEO) use aggregate statistics based from the EIA-14, in conjunction with EIA's other petroleum price data, to monitor current national price levels and to benchmark state 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.

These statistics serve as the most reliable and accurate indicator of crude oil acquisition price paid by U.S. refiners. 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 the industry are demonstrated by the frequent appearance of these data in industry newsletters, trade journals and the general press. The EIA-14 data are republished or quote in articles in journals and publications, including:

<u>WTRG Economics Oil Price and History Analysis</u> use both Refiner Acquisition Cost of Crude Oil and Domestic First Purchase in its analysis

The "Oil and Gas Journal" references the Refiner Acquisition Cost of Crude Oil on its webpage

The Refiner Acquisition Cost used in analysis in *EIA Today* article, April 6, 2012, on "Regional differences for cost of crude oil to refiners widen in 2011"

Bloomberg references the Imported Refiners' Acquisition Cost of Crude Oil on its webpage.

• <u>EIA-182</u>, "Domestic Crude Oil First Purchase Report"

The EIA-182 is a mandatory survey conducted monthly to collect detailed information on the wellhead price of domestic crude oil. This survey collects the average cost per barrel and total volume purchased in a state for requested crude streams. 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. This data is used for the following purposes:

 Revenue and tax credits – e.g., calculating income tax credits and verifying futures, spot and posted prices, and revenues.

- Industry and market analysis e.g., measuring the level of industry concentration and the distribution of ownership of domestic crude oil and monitoring the petroleum refining industry.
- Policy analysis and forecasting e.g., emergency preparedness planning, evaluating legislative, administrative, and regulatory issues pertaining to domestic crude oil markets, forecasting prices downstream for refined products at the refinery gate and subsequent wholesale and retail sales, and for forecasting tax revenues, state-level production volumes and prices in the MER and the STEO.
- Crude oil data from the EIA-182 are used frequently by congress and federal agencies, including:
 the Office of Fossil Fuels and EIA at the Department of Energy; IRS at the Treasury Department; BEA
 and the U.S. Census Bureau at Department of Commerce; and the Congressional Joint Committee
 on Taxation at the Department of Interior; and the IRS at the Department of Treasury.

EIA uses the data primarily for forecasting revenues and production of crude oil, monitoring key energy markets, and conducting economic analyses and projections. The Reserves and Production Division of EIA inputs state level data to a forecasting model to project U.S. production levels and associated prices for domestic crude. EIA publishes the crude oil first purchase price data in the MER, the PMM, the PSM, the PSA, the AER and the U.S Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Report.

For example, EIA's publishes monthly and annual U.S. crude oil production estimates in the <u>Petroleum Supply Monthly</u>, <u>Petroleum Supply Annual</u>, and <u>Petroleum Navigator</u>. In order to make these monthly estimates EIA relies on external data sources (from states) and EIA-182 first purchaser volume data to calculate estimates. EIA currently has no survey of crude oil producers.

The initial estimates of <u>U.S. Petroleum Administration for Defense District</u> (PADD) and state crude oil production for the current reference month published in the Petroleum Supply Monthly (PSM) and Petroleum Navigator are based on: (a) crude oil production data from State Government agencies and the Department of the Interior, Bureau of Safety and Environmental Enforcement (BSEE) and (b) first purchase data (volume) reported on Form EIA-182, "Domestic Crude Oil First Purchase Report."

EIA normally calculates an estimate by using the lagged average ratio of the state reported data to EIA-182 data, applied to the current EIA-182 data. Thus, there are three parameters involved in making the

estimates: the state data from State Government agencies, the EIA-182 data, and the average ratio between these two over a lagged 6-month period. In this method the lagged average ratio has the biggest influence on the level of production, while the current EIA-182 data have the biggest influence on the trend.

Estimated Barrels of Crude Oil Production per day, = FP, * AvgRatio, L

Where FP_i = First Purchase in barrels of crude oil per day, from EIA-182 survey for month i

AvgRatio_{i-L} = 1/6 *
$$\sum_{j=i-L}^{j=i-L-5} \dot{c} \dot{c}$$
 State_j/FP_j)

State_i = Barrels of crude production per day from state agency for month j

L= lag in months for the state

The following programs in DOE's Office of Fossil Fuels use these data for modeling: <u>Strategic Petroleum Reserve</u>, <u>Naval Petroleum Reserve</u> and <u>Strategic Petroleum Reserve</u>, and <u>Northeast Home Heating Oil</u> Reserve.

Data from the EIA-182 are integrated into <u>Section 18: Forestry</u>, <u>Fishing and Minerals of the Statistical Abstract of the United States</u> and <u>Table A-52</u>. <u>States -- Natural Resource Industries and Minerals</u> of the National Data Book, both published by the U.S. Census Bureau.

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 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.

Numerous state agencies use data from the EIA-182. Below are a few examples:

- California Energy Commission (CEC) republishes EIA-182 data and uses these data to assess crude oil market conditions within the state
- **Louisiana Department of Natural Resources**
- Virginia's Department of Mines, Minerals and Energy
- Wyoming's Department of Employment, Research, and Planning

EIA data from EIA-182 are initially published monthly in the PMM and often reprinted or cited in articles in numerous publications and journals, including articles in the five major newspapers - Los Angeles Times, New York Times, USA Today, Wall Street Journal, and Washington Post.

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

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 gathers information on 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 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 International Energy Agency (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.

The EIA-856 data are used by BEA, BLS, EIA, other Federal agencies for the purposes of analysis and

forecasting. For example:

- The EIA-856 data have been used in numerous studies. For example, the Balance of Payments
 Division at the BEA uses the total crude oil import prices and quantities from this survey for BEA's
 goods projections for the advance estimate of Gross Domestic Product (GDP).
- BLS uses the EIA-856 data as a primary input for calculating the <u>price indices for foreign crude oil</u> as
 a component of the U.S. Import Price Index. BLS's Crude Oil Price Index is calculated from data
 collected on the EIA-856 and used by BEA's Balance of Payments.
- DOE uses EIA-856 data to support their legislatively mandated responsibilities, some of which reside in the areas of modeling and forecasting. For example, 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, EIA's Office of Petroleum, Gas & Biofuels Analysis used crude oil prices collected on the EIA-856 to forecast the world oil price path for imported light sweet crude and publishes these results annually in the AEO.
- •—EIA integrates EIA-856 data in several recurring publications the PMM, the MER, the AER, and the IEO.
- DOE's Office of Strategic Petroleum Reserve uses EIA-856 data to assess the types of crude oil imported into the United States and to determine the appropriate crude streams to store in the Strategic Petroleum Reserve.
- 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.

Additional examples of international and industry uses of the EIA-856 include:

- 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 statistically reliable information is originally published in *the PMM* and republished in other EIA publications, journals and other publications.

A.2.3.3.2. Monthly Petroleum Product Survey (EIA-782A and EIA-782C)

• <u>"EIA-782A" (Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report," and EIA-782C,</u> <u>"Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption"</u>

Data gathered through the EIA-782 series of surveys are 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.

More specifically, the EIA-782A is a mandatory survey conducted on a monthly basis to collect state level price and volume information from refiners and gas plant operators on 14 selected petroleum products' price, supply, and market distribution on an end-use-sector basis. The EIA-782C is a mandatory survey administered on a monthly basis to collect data on the sales of selected petroleum products by prime suppliers delivered into states for local consumption. A prime supplier is a firm that produces, imports, or transports any of the 14 selected petroleum products across state boundaries and local marketing areas and sells the product to local distributors, local retailers, or end users.

The refiner sales volumes collected on the EIA-782A are related to the prime supplier sales volumes collected on the EIA-782C, but conceptual differences exist that cause variations between these data. In general, EIA-782A volumes are intended to reflect refiner sales of petroleum products into all secondary and tertiary markets to non-refiners, while EIA-782C volumes are designed to measure prime supplier sales into the local market of final consumption.

The 1982 passage of the Energy Emergency Preparedness Act, and numerous subsequent requests for analyses using EIA-782 data during energy emergencies, attests to the ongoing Congressional interest in having access to reliable and timely petroleum marketing data at the state level.

These data are used to allocate Federal energy block grants to the states. An example of this process is the Federal Weatherization Program (WAP). DOE provides funding to states, U.S. overseas territories, and Indian tribal governments, which manage the day-to-day details of the program (DOE WAP, Oregon Low-Income Weatherization Assistance Program). These governments, in turn, fund a network of local community action agencies, nonprofit organizations, and local governments that provide these weatherization services in every state, the District of Columbia, U.S. territories, and among Native American tribes. During the process to determine the funding, EIA-782 data is used in the State Energy Data System (SEDS). SEDS is EIA's source for comprehensive state energy statistics. Included are estimates of energy production, consumption, prices, and expenditures broken down by energy source and sector.

The EIA-782A and 782C data are used to:

- Evaluate the effects and impacts of energy prices on state-level cost-of-living.
- Predict the consequences to state economies of future energy supply disruptions or market changes.
- Respond to Congressional inquiries regarding petroleum product seasonal price trends.

The value states place on these data is by no means confined to the formulation and implementation of energy policies. These data are used in investigative hearings, statistical applications, analysis, forecasting and responding to constituents. State Energy Offices use EIA-782 data to:

- Analyze and forecast demand for refined petroleum products and long term planning.
- Analyze and forecast petroleum product prices.
- 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.
- Compare consumption of refined petroleum products and national consumption on a monthly basis.
- Determine the amount of diesel and distillate produced by state.
- Establish state-level fuel tax rates.
- Investigate price increases of refined petroleum products during periods of supply instability.
- Obtain historical data for crisis intervention.
- Track the economy of the state versus the nation based on gasoline consumption.
- Track petroleum product demand for short-term forecasting. The data are also used to make projections of monthly supply for emergency management purposes.

Through conducting the above analyses, 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 database 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.

Petroleum industry analysts regularly use EIA-782 published data available on the EIA website to perform market evaluations, trend analyses, and planning. In addition, EIA regularly receives Freedom of Information Act (FOIA) data requests from both large energy producers, and numerous small-to-medium size energy firms. These data are frequently used to:

- Establish contract pricing formulas for fuel oil and military marketing.
- Oversee sales to airlines and sales of jet-propulsion fuel to the military.
- Input into energy models, to project U.S. energy market futures, and to try and simulate interaction between markets.

The EIA-782 data are initially published in the *PMM* and used in the *STEO* and the *AEO*. These data are reprinted or cited in articles in numerous publications and journals, including articles in the five major newspapers – *Los Angeles Times*, *New York Times*, *USA Today*, *Wall Street Journal*, *and Washington Post*.

A.2.3.3.3. Annual Petroleum Product Survey (EIA-821)

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

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.

Aggregated 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 – Federal, State and local government. Numerous government agencies make use of data collected on the EIA-821 for energy policy analysis, forecasting and

consumption programs. State agencies, including energy offices and environmental agencies, also use EIA-821 data for energy planning, analysis, and information dissemination.

The widespread use of these data became apparent when EIA discontinued the predecessor survey, the EIA-172, after collecting data for reference year - 1982. The EIA-821 was established to collect data beginning with reference year 1984 after receiving numerous letters from State Governors, Congress, trade associations, oil companies, trade publications, and industry analysts citing their need for the data. A number of state agencies previously asserted that discontinuance of the data would have broad, adverse effects on their state energy or air quality programs.

EIA initially publishes EIA-821 in the annual *Fuel Oil and Kerosene Sales (FOKS) Report*. These data are reprinted or cited in various publications and journals, including articles from the five major newspapers – <u>Los Angeles Times</u>, <u>New York Times</u>, <u>USA Today</u>, <u>Wall Street Journal</u>, and <u>Washington Post</u>.

A.2.3.3.4. Weekly Petroleum Product Survey (EIA-877, EIA-878, and EIA-888)

• EIA-877, "Winter Heating Fuels Telephone Survey"

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 to mid-March) for 38 states in the Eastern, Midwestern, Gulf Coast, and Rocky Mountain states, and the District of Columbia through the State Heating Oil and Propane Program (SHOPP). SHOPP is a joint data collection effort between large heating oil and propane consuming states in the Northeast and Midwest and the US Department of Energy/Energy Information Administration (EIA). The current program is a continuation of a program that was initiated in the 1990/91 heating season in response to congressional requests for concise, timely price information on distillate fuel oil and propane. Prior to 1990, states collected only heating oil data.

SHOPP provides State and Federal governments, the press, policy makers, consumers, analysts and others with up-to-date information on retail heating fuels prices during the heating season.

Because of supply and price instability in heating fuel markets, there is a need for communication between heating fuel marketers and the government. The data has been used by Congressional

Committees, Federal and State governments, and industry analysts to assess the hardships experienced by heating oil and propane users during periods of critical short supplies. For example, data were used in the winters of 1989 and 1999 in the Northeast and Mid-Continent regions to evaluate supply shortages and price increases for both heating oil and propane due to severe weather. 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 previously in Congressional hearings and meetings with state energy office officials, petroleum industry leaders and trade associations.

These data are initially published in the HOPU and are reprinted or cited in articles in numerous publications and journals, including articles in the five major newspapers – <u>Los Angeles Times</u>, <u>New York Times</u>, <u>USA Today</u>, <u>Wall Street Journal</u>, and <u>Washington Post</u>.

For the first time since 1994, EIA is expanding SHOPP to additional states to collect propane prices in response to sharp price increases in early 2014. EIA wrote several articles in response to the price increases: January 15 This Week in Petroleum, January 23 Today in Energy, and March 12 Today in Energy. In consultation with the National Association of State Energy Offices (NASEO), EIA sent an invitation letter and held an informational Webinar to solicit interest in joining the program. Several states attended the Webinar and expressed interest in participating. Several states were impacted by the propane supply shortage this past winter and rely on EIA's information for emergency heating fuel programs.

EIA-878, "Motor Gasoline Price Survey"

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. In such an emergency situation EIA will notify OMB prior to initiating efforts to collect the data more frequently. EIA will follow subsequent OMB guidance regarding accounting of the additional burden hours incurred.

Congress, government officials, and transportation industry leaders have used EIA data in order to measure rapid price increases at both regional and national levels. For example, 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. In addition, 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 government, industry, and

the public. Furthermore, in 2005 these data were used to monitor the effect of Hurricane Katrina on the retail gasoline market.

Retail gasoline price estimates are released for nine states and ten cities, in addition to the five PADD and three sub-PADD areas, and the United States. EIA also uses EIA-878 price data each spring for STEO's *Summer Transportation Fuels Outlook*, *e.g.* the 2012 Summer Transportation Fuels Outlook (PDF). These data are routinely relied upon by the press, industry, the media and government as a measure of retail prices of reformulated and conventional gasoline. Every major newspaper has cited and published retail gasoline price data from the EIA-878 in stories concerning retail gasoline prices. 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.

These data are initially published in the *GDFU* and are reprinted or cited in articles in numerous journals and publications, including articles in the five major newspapers – <u>Los Angeles Times</u>, <u>New York Times</u>, <u>USA Today</u>, <u>Wall Street Journal</u>, and <u>Washington Post</u>.

EIA-888, "On-Highway Diesel Fuel Price Survey"

The EIA-888 survey collects the retail price of on-highway 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. In such an emergency situation EIA will notify OMB prior to initiating efforts to collect the data more frequently. EIA will follow subsequent OMB guidance regarding accounting of the additional burden hours incurred.

These data are used by Congress, Federal and state officials, and transportation industry leaders to monitor the retail price of on-highway diesel fuel, including the following two examples.

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 (GSA) 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 the 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.

In addition, the Military Surface Deployment and Distribution Command uses EIA-888.

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. 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, regional, and State of California 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 via accessing the EIA's website.

EIA-888 data are also published on a weekly and monthly basis in trucking industry newsletters, including the <u>American Trucking Association</u> and <u>The Journal of Commerce</u>. The national and regional prices are broadcast twice per day on Interstate Radio Network, a radio network with 40 affiliates with coverage of 95 percent of the continental United States. The EIA-888 data are also analyzed and used by the <u>National Industrial Transportation League</u>, <u>the National Association of Truck Stop Operators</u>, <u>and the American Moving and Storage Association</u>. EIA-888 data are routinely quoted on the wire services - <u>Reuters Ltd</u>, <u>Bloomberg News</u>, <u>Dow Jones</u>, and the <u>Associated Press</u> - and in articles in the five major newspapers - <u>Los Angeles Times</u>, <u>New York Times</u>, <u>USA Today</u>, <u>Wall Street Journal</u>, <u>and Washington Post</u>.

A.2.3.3.5. Petroleum Marketing Frame (EIA-863)

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

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. 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-821, "Annual Fuel Oil and Kerosene Sales Report"
- EIA-877, "Winter Heating Fuels Telephone Survey"
- EIA-888, "On-Highway Diesel Fuel Price Survey"

The data are used by EIA for the following purposes:

- To develop 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.
- To produce 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.
- To produce 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.
- To identify relationships between parent/subsidiary and thus avoid both under reporting and double counting, and to minimize sample sizes and respondent burden.
- To update company-level profiles and detail which allow for sample rotation to minimize respondent burden.
- To review 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 non-respondents.

The petroleum surveys require a frame that is updated frequently because of the high turnover rate and ongoing changes in the petroleum industry. Previous EIA-863 data have shown a turnover of roughly 25 percent between survey cycles without including ongoing updates made from an annual petroleum marketing survey to align the larger petroleum sellers. For any sampling survey, it is necessary that the frame 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 over time and must be updated to ensure accuracy. Additional information regarding the frame and sampling plan is available in Part B.

A.3. Use of Technology

In an effort to reduce respondent burden and to provide for timelier processing of filings, EIA offers mixedmode data collection. The weekly surveys use the following modes of data collection.

- The EIA-877 collects data via telephone and other electronic modes. For example, several larger companies with multiple outlets in the sample can send data directly to EIA via email in an Excel spreadsheet or other table format. This saves time for the personnel at each of the individual outlets.
- The EIA-878 and EIA-888 utilize computer-assisted telephone interviewing (CATI), facsimile, email, and manual retrieval of data from company websites as modes of collecting data. In addition to these current modes of data collection, EIA plans to offer respondents the capability of submitting their data via Interactive Voice Response (IVR) and web survey.

The remaining surveys in the PMP are conducted via paper and electronic modes. Respondents submit data via secure file transfer, facsimile, email, and electronic modes. EIA accepts electronic records from respondents provided such reports are prepared and transmitted to EIA in the same format as the data collection form.

A.4. Efforts to Reduce Duplication

EIA has conducted extensive reviews to ensure its petroleum marketing surveys do not duplicate data available from other sources. In addition, EIA petroleum data analysts with subject matter expertise review these survey forms. As changes are proposed to petroleum marketing survey forms, EIA conducts extensive review processes to ensure the avoidance of the unnecessary collection of data. Numerous efforts have been made to identify, through discussions with trade associations, private companies, and other government offices, potential duplication of data, data that is no longer necessary, or data that can be collected more efficiently by another survey.

EIA reviewed known sources of data relating to petroleum marketing and found no other sources to be comprehensive or detailed enough to replace the data collections currently utilized by the Federal government. EIA determined that other sources are not sufficient to replace or approximate the information collected because of differences in classification, or due to the lack of universe estimation

procedures.

A.4.1. Analysis of Similar Existing Information

EIA evaluated all known sources of data relating to the petroleum marketing industry and has found no other source as comprehensive, timely, or detailed, to replace these proposed EIA data collection activities. EIA has determined that other sources cannot replace or even approximate the information proposed for collection here because of differences in classification, inconsistency, incompleteness, unavailability, or lack of universal coverage. Some of the EIA data collections complement, rather than duplicate, other Federal agency data collections. These efforts taken together capture the entire petroleum marketing industry and keep the burden on industry to a minimum.

The Petroleum Marketing Data Collection Diagram (on p.3) indicates the relationship among the surveys in the program. There are three weekly surveys, five monthly surveys, one annual survey and one quadrennial survey. The three weekly surveys collect different petroleum products – the EIA-877, the EIA-878, and the EIA-888.

The following monthly surveys are used to monitor crude oil and refined products from the wellhead to ultimate consumption – the EIA-182 collects wellhead data; the EIA-856 collects crude oil imports data; the EIA-14 collects data on crude oil as it enters the refinery stage; the EIA-782A collects data on the sales of the finished products; and the EIA-782C collects data on the volume of the delivered finished products.

The following are explanations regarding the collection of similar data and the reasons why these similarities are not duplicative collections. This includes comparison across petroleum marketing surveys for the (a) monthly crude oil surveys; (b) monthly petroleum products surveys; (c) the monthly petroleum product surveys with the annual fuel oil and kerosene survey; and (d) weekly surveys.

A.4.1.1. Monthly Crude Oil Surveys (EIA-14, EIA-182, and EIA-856)

The EIA-14, EIA-182 and EIA-856 all collect data on crude oil yet do not duplicate efforts. The EIA-182 collects domestic wellhead prices, the EIA-856 collects foreign crude oil prices, and the EIA-14 collects the average price domestic and imported crude oil at the refinery gate.

The EIA-182 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. Similarly, the data from Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report" are used to represent the initial value of imported oil. The EIA-14, "Refiners' Monthly Cost Report," provides the only source of comprehensive, current period-weighted costs of crude oil as it is booked into the refinery. Both the EIA-182 and the EIA-856 share a relationship with the EIA-14 data which includes costs that accrue subsequent to the first purchase - e.g., transportation, storage, resale markups and markdowns, et cetera.

Below is a comparison of EIA-182 with other data sources:

Similar statistics to those obtained from the EIA-182 are published in <u>Platt's Oilgram</u>, and <u>Petroleum Intelligence Weekly</u>, both of which focus on what refiners and resellers are asking publicly for crude, e.g. posted prices and spot prices. By comparison, 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.

Similar statistics are published by BLS in the <u>Producer Price Index (PPI)</u> as this calculates a price index for crude oil. Their primary source of data is posted prices for domestic crude oil at the wellhead. By comparison BLS publishes a monthly price index whereas EIA publishes average price. EIA also publishes more disaggregated prices at the regional and state level.

Similar volume data is collected on the EIA-23L, "Annual Survey of Domestic Oil and Gas Reserves (Field Version)" which collects data on the reserves and production of crude oil, natural gas and natural gas liquids from well operators. By comparison, only the 182 collects price data associated with these volumes.

Annual collection of first purchase prices, similar to the monthly data produced by the EIA-182, would not be adequate given the widely fluctuating prices of crude oil in the current environment.

The EIA-856, "Monthly Foreign Crude Oil Acquisition Report," 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 Department of Homeland Security, U.S. Customs and Border Protection (CBP) Form 7501, which collects landed volumes and customs valuations for crude oil by country of loading. The Form 7501 is the entry document filed for all imports into the United States.

CBP, 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, CBP 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 CBP. In particular, the requirement to provide a monthly crude oil report to the 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 CBP data. Specifically, the following data elements are required:

- API Gravity. CBP Form 7501 collects only two categories of crude oil, Above and Below 25 degrees API.
 Actual API gravity is collected by the EIA-856 for each cargo.
- Crude Stream. In order to place crude oil in the precise categories required by IEA, the crude stream
 (e.g., Saudi Light) is necessary. CBP currently collects only country-of-origin information which does not
 specify the crude stream.

Thus, due to the lack of important information such as API gravity and crude stream data, CBP 7501 data are not considered an adequate alternative to the EIA-856 data. 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.

A.4.1.2. Monthly Petroleum Product Surveys (EIA-782A and EIA-782C)

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.

Below is a comparison of EIA-782A/C with BLS and other data 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 <u>Consumer Price Index</u> and the <u>Producer Price Index</u> are statistically designed to measure price change. 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 may result in the exclusion of product sales by secondary businesses, because they depend on North American Industrial Classification System (NAICS) codes.

The 1985 adoption by the Bureau of Labor Statistics 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 <u>PPM</u>. 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.

A feature article in the <u>PMM</u> (March 2010), <u>A Comparison of EIA-782 Petroleum Product Price and Volume Data With Other Sources, 1998 - 2008</u>, describes and quantifies retail price data for residential No. 2 distillate (e.g., home heating oil), on-highway diesel fuel and regular grade motor gasoline. These are compared with the equivalent U-series (Urban area) prices given by the BLS CPI with no seasonal adjustments. Wholesale/Resale prices for No. 2 diesel fuel, No. 2 fuel oil, regular grade gasoline and kerosene-type jet fuel) differences between EIA-782A/EIA-782B and BLS PPI price data, although

comparison cannot be done directly since EIA uses prices directly and BLS only publicly reports price indices for the PPI. Retail and wholesale/resale price comparisons were made on annual data from 1999 through 2008. The article also compares volumes between EIA-782C sales data, EIA-821 data, the EIA product supplied data from Petroleum Supply Annual (PSA) and Federal Highway Administration data for finished motor gasoline (all grades combined), distillate fuel oil, kerosene-type jet fuel, and residual fuel oil.

BLS utilizes a fixed-volume weighted scheme to produce several levels of statistics of which the CPI and PPI indexes were used for comparison purposes in the article. Previously the BLS prices were based on 1982-1984 expenditures weights.

Regarding motor gasoline, the biggest difference between EIA-782A 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 they employ. The BLS fixed weights, in comparison, lag behind in reflecting these changes in the average prices.

The FHWA's <u>Monthly Motor Gasoline Reported by States</u> reports tabulates gross gasoline gallons reported by wholesale distributors to state motor fuel tax agencies and these 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 although it is a poor alternative source because of the considerable time elapsing between gasoline sales data being collected and published in FHWA's "Monthly Motor Gasoline Reported by States" report.

Previous 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 data is a poor alternative to EIA-782C data for other reasons, including:

- 1. Only cover gasoline and special fuels (diesel fuel and alternate fuels)
- 2. Are not published as timely as EIA-782C data
- 3. Are reported using a methodology based on sales and gross receipts taxes which is not uniform across the states
- 4. Do not break out the data by grade or formulation of gasoline

- 5. Do not break out the data by grade or sulfur content of distillate fuel
- 6. Does not include prices

EIA-782 data are more accurate, timelier, cover more products, and reflect a higher response rate by state 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.

A.4.1.3. 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 collects monthly sales data for distillate and residual fuel oil; however, the product breakouts and end-use categories on the EIA-782A are more limited than the disaggregation provided by the annual EIA-821 survey.

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-782A do not always provide prior-period adjustments for their monthly estimated data. However, revisions to prior estimates are figured into the reported EIA-821 annual volume totals.

A.4.1.4. Weekly Petroleum Product Surveys (EIA-877, EIA-878, and EIA-888)

A review of the EIA-877, "Winter Heating Fuels Telephone Survey," data comparison with other data sources found no other sources that provided the required frequency, timeliness, and geographic coverage needed to monitor fuel oil and propane prices and inventories.

Monthly, state level residential home heating oil and propane prices are collected by EIA on Forms EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report." 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.

BLS publishes monthly residential heating oil prices for metropolitan areas as part of the <u>Consumer Price</u> <u>Index</u>, however the BLS geographic coverage of selected metropolitan areas does not meet the need for state level prices for each heating oil state in the SHOPP Program.

Below is a comparison of EIA-878 with other data sources:

- 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 survey data enable EIA to publish weekly retail prices by grade and formulation of gasoline at the national, regional, and select state and city levels. There are no comparable data series available for different formulations of gasoline in ozone non-attainment and attainment areas as designated by the EPA that satisfy EIA and EIA's customers' requirements for unbiased, representative, current price data. The Lundberg Survey is considered inadequate since it only collects prices every other Friday which isn't frequent enough to monitor fast developing market shifts.
- The American Automobile Association releases daily retail price information from its website based on data provided by the Oil Price Information Service (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-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report" survey only publishes a retail gasoline price once a month, three months after the reference period, but it only represents refiner prices and not prices from the retailers. BLS's Consumer Price Index is available for select cities, but state averages and averages by PADDs are unavailable. Thus, due to timeliness, frequency, and reliability problems, other data sources do not meet the EIA's need for timely, independent source prices.
- Other data sources did not provided the required frequency, timeliness, and coverage needed to monitor regional retail motor gasoline prices.

A review of the EIA-888 data comparison with other data sources found no known surveys that use statistical sampling and estimation methods to publish the most representative and current on-highway diesel fuel prices on a weekly basis.

- The Oil Price Information Service (OPIS) T-CHEK and AXXIS Petro 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 <u>Lundberg Survey</u> publishes retail diesel fuel prices by PADD and nationally. The Lundberg survey is inadequate to use to monitor changes in retail motor vehicle diesel fuel prices because it only publishes prices twice-monthly. In addition, its methodology is not made publicly available.
- BLS' <u>Consumer Price Index</u> is available for select cities, but state averages and averages by PADDs are not available.

An evaluation of similar diesel fuel data found no other sources that provided the required frequency, timeliness, and coverage needed to monitor regional retail on-highway diesel fuel prices.

A.4.2. The Inadequacies of Similar Data

There are three different method for calculating crude oil and petroleum product price data: (1) posted or spot prices, (2) base period weighted average prices, and (3) 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 <u>Lundberg Survey</u>.
- 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. No comparable sources of weekly No. 2 heating oil and propane prices, regional retail motor gasoline prices, and regional retail on-highway diesel fuel prices publish prices using this methodology.

In addition, EIA provides the only available source of state prices for a selection of petroleum products 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.

None of these other data sources provided the required frequency, timeliness, and geographic coverage needed to monitor No. 2 heating oil and propane prices and inventories, regional retail motor gasoline prices, and regional retail on-highway diesel fuel prices, respectively.

A.5. Provisions for Reducing Burden on Small Businesses

Minimizing burden to small businesses is a primary concern to EIA. Alternative modes of data collection seek to reduce respondent burden. For example, some respondents provide data which can be uploaded, and thus reducing the need for data entry.

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

On the annual and weekly sample surveys - EIA-821, EIA-877, EIA-878, and EIA-888 - it is important that all sizes of firms, large and small, participate in order to obtain a proper representation of the petroleum industry. The inclusion of smaller firms is necessary to accurately portray state volumes and prices while seeking to minimize burden for small businesses through sampling techniques.

The EIA-821 is 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.

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 stratified sample design 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 on the EIA-877, certainty companies are selected in those states where the company represents five percent or more of the state volume. Outlets within the company are then selected to represent the company. In this design, outlets are stratified by size for each state to further reduce burden of small businesses.

To reduce burden on the EIA-878 survey an area sample of 801 companies was selected from a sampling frame of over 115,000 gasoline outlets.

To reduce burden on the EIA-888 survey a stratified sample of 403 outlets was selected from a sampling frame of about 62,000 service stations and 4,000 truck stops which sell on-highway diesel fuel in the contiguous United States.

See Part B for further details regarding the sampling procedures for these surveys.

A.6. Consequences of Less Frequent Reporting

The Petroleum Marketing survey forms vary in periodicity depending on the requirements and uses of the survey data. Forms filed on a monthly basis include EIA-182, EIA-856, EIA-14, and EIA-782A and EIA-782C. All of the monthly crude oil forms collect product price and volume data. The EIA-782A collects price/volume and the EIA-782C collects volumes of petroleum products. 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 International Energy Agency (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 AER. Data collected at greater intervals than annually would severely handicap modeling performed by DOE for use in energy policy development, and in its energy forecasting and consumption programs.

The EIA-877 is a weekly survey conducted over a six month period every year. 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 PMP 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. These data are collected and published on the same day.

A.7. Compliance with 5 CFR 1320.5

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 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 three percent (3%) of the total volume expected to be sold in a state be set aside as a special product reserve for that state.

A.8. Summary of Consultations Outside the Agency

On May 8, 2014, EIA published a 60-day Federal Register Notice in <u>Volume 79</u>, <u>Number 89</u> regarding the renewal of the Petroleum Marketing Program, including expansion of the weekly SHOPP survey to additional states. The Bureau of Economic Analysis (BEA) responded to the notice with a letter of support for the Petroleum Marketing Program as these data are critical to BEA's economic analysis (see Appendix D).

In 2012, EIA published two 60-day Federal Register Notices (FRN). The first FRN was published in Volume

77, No. 66, March 6, 2012 and the second published in Volume 77, No. 66, Thursday, April 5, 2012) These FRN invited public comments on the proposed extension of the surveys (except the EIA-782B which is not being renewed) in the Petroleum Marketing Program.

The Bureau of Economic Analysis (BEA) responded to the notice with a letter of support for the Petroleum Marketing Surveys. BEA stated that it uses the EIA-14, EIA-856, and EIA-782C to prepare the national income and product accounts. BEA uses the EIA-14 data on composite (domestic and imported) acquisition cost per barrel of crude oil by refineries to calculate a measure of price change for purchases of crude oil. This price index is used to deflate crude oil held in inventory by refiners for the change in private inventory component of gross domestic product (GDP). These data are also used for research and analysis (not current production) by BEA's Balance of Payments Division Methodology and Special Studies Branch. BEA uses the EIA-782C data on volumes of first sale of motor gasoline by grade to prepare estimates of the gasoline and oil component of personal consumption expenditures, PCE, a major component of GDP. The gallon sales by grade are used in constructing a weighted price per gallon which is then used to prepare estimates of real gasoline and oil expenditures. BEA uses EIA-856 data in the Balance of Payments for the total crude oil import prices and quantities for BEA's goods projections for the advance estimate of GDP. The BLS uses the EIA-856 to compute their crude oil price index which is also used by BEA's Balance of Payments.

Another user wrote to request the EIA-877, "Winter Heating Fuels Telephone Survey," be extended by two months, from the first week in September to the last week of April. They speculated that expanding the survey for two months would allow customers to have better pricing information, information which would be useful in strategizing as to when it may be advantageous to order heating oil supplies. They requested EIA provide clarification regarding discontinuation of low sulfur No. 2 diesel fuel oil, as No. 2 diesel fuel oil and home heating oil as these terms are sometimes synonymous. EIA explained that they intend to discontinue collection of low sulfur No. 2 diesel fuel oil for on-highway purposes only and that they plan to continue collecting data on home heating oil.

Another user wrote in support of the Petroleum Marketing Program, indicating they used data collected from the EIA-14, the EIA-182, the EIA-782A, and EIA-856.

A press release in April 2011 was released on EIAs website that announced significant cuts to several EIA

programs reacting to a budget reduction to FY 2011 funding that would "Curtail collection and dissemination of monthly state level data on wholesale petroleum product prices, including gasoline, diesel, heating oil, propane, residual fuel oil, and kerosene." The reference above refers to the elimination of the Form EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report." It was identified as a candidate for elimination due to the high cost of administration of the survey.

There was feedback to this press release from internal customers as well as several external data users after the elimination of the EIA-782B. Most of the internal customers have developed models to forecast the missing series or have found other sources to replace data used previously. Several external customers have expressed disappointment over the elimination of various price data series that the EIA-782B contributed to, including but not limited to state level residential heating oil and propane prices; and retail and wholesale gasoline and diesel prices. EIA does collect and publish weekly residential prices for selected states during the heating season via the EIA-877. EIA also collects and publishes retail gasoline and diesel prices for selected states via the EIA-878 and EIA-888 on a weekly basis. The feedback was received via email and phone calls from various government, industry, media, and public stakeholders. The Massachusetts Department of Energy Resources used some of the price series for tracking and forecasting prices in support of their energy assurance plans.

A.9. Payments or Gifts to Respondents

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

A.10. Provisions for Confidentiality of Information

The information reported on the petroleum marketing survey Forms EIA-863 (Part 1, items 9-18, Part II, and Part III), 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. Form EIA-863 instructions will include the following statement:

The information reported in items 1-8 of Part I, Respondent Identification Data, of the EIA-863 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 Department of Energy (DOE) regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.

With regard to the information reported in items 1-8 of Part I, the Federal Energy Administration Act requires the EIA to provide company-specific data to other Federal agencies when requested

for official use. That information reported in Part I may also be made available, upon request, to another component of the 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. That Part I information may be used for any non-statistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

The information reported in Part I item 9-18, Parts II, Preparer Information, and III, Total Sales Volumes by State, of the EIA-863 will be used for statistical purposes only. In accordance with the Confidential Information Protection provisions of Title V, Subtitle A of 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, is subject to a jail term, a fine of up to \$250,000, or both if he or she discloses ANY identifiable information about you.

Forms EIA-878 and 888 are telephone surveys and have a shorter version of the CIPSEA pledge that is read to the respondent over the telephone.

The information you provide will be used for statistical purposes only. In accordance with the Confidential Information Protection provisions in Public Law 107-347, your responses will be kept confidential and will not be disclosed in identifiable form. By law, everyone working on this EIA survey is subject to a jail term, a fine, or both if he or she discloses ANY information that could identify any confidential survey response.

The instructions to Forms EIA-878 and EIA-888, that are available on EIA's web site, include the full CIPSEA pledge:

The information you provide will be used for statistical purposes only. In accordance with the Confidential Information Protection provisions of Title V, Subtitle A of 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, is subject to a jail term, a fine of up to \$250,000, or both if he or she discloses ANY identifiable information about you

The instructions to the petroleum marketing survey Forms EIA-14, EIA-182, EIA-782A, EIA-782C, EIA-821, EIA-856, EIA-863 (Part 1, Items 1-8) and EIA-877 state:

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 Department of Energy (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 form's instructions:

Disclosure limitation procedures are not applied to the statistical data published from this survey's information. There may be some statistics that are based on data from fewer than three respondents, or that are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable person to closely estimate the information 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 choose 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 form's 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.

A.11. Justification for Sensitive Questions

There are no questions of a sensitive nature asked on the ten surveys in the Petroleum Marketing Program.

A.12. Estimated Average Reporting Burden

The overall annual burden for this package is estimated to be \$3,968,172. Based on the reporting burden, the cost to the respondents is estimated to be: 57,236 hours x \$69.33 per hour. An average cost per hour of \$69.33 is used because that is the average salary plus benefits for an equivalent EIA employee in 2014. This is an increase over the 2013 average hourly rate of 67.74. EIA assumes that the survey respondent workforce completing surveys for EIA is comparable to the EIA workforce.

Table A3 displays the reporting burden estimates for Petroleum Marketing surveys.

Table A3: Estimated Reporting Burden and Costs

Survey Number	Frequency	Size of Universe	Average Number of Respondents Annually	Number of Responses Annually	Response Burden Per Respondent	Total Burden Hours	Total Burden Costs		
EIA-14	М	72	72	864	1.75	1,512	\$104,827		
EIA-182	М	82	82	984	4.3	4,231	\$293,335		
EIA-782A	М	95	95	1,140	15	17,100	\$1,185,543		
EIA-782C	М	200	200	2,400	2.1	5,040	\$349,423		
EIA-821	Α	24,400	3,184	3,184	4.4	14,010	\$971,313		
EIA-856	М	43	43	516	6.1	3,148	\$218,251		
EIA-863	Q	24,400	5,017	5,017	1.0	5,017	\$347,829		
EIA-877 EIA-878	S W	16,000 115,000	1620 800 403	40,500 41,600	0.1 0.05 0.05	4,050 2,080 1,048	\$280,787 \$144,206		
EIA-000	VV	66,000	403	20,956	0.05	1,048	\$72,658		
TOTAL			12,373	117,161		57,236*	\$3,968,172		
Frequency Q=Quadrennial A=Annually M=Monthly S=Semi-monthly (October-March) W=Weekly *Due to rounding									

A.13. Estimates of Cost Burden to Respondents

EIA estimates that there are no additional costs to respondents associated with the surveys in the Petroleum Marketing Program other than the costs associated with the burden hours as set forth in item 12 above.

A.14. Annual Cost to the Federal Government

The annual cost estimate which includes personnel, development/maintenance, collection, processing, analysis, and publication for the ten surveys in the Petroleum Marketing Program is 4,091,107. This includes an overhead cost of 20 percent for the Federal staff to cover indirect costs such as space, supplies, etc. and the total contractor staff cost which already included the overhead costs.

A.15. Changes in Burden

The addition of 14 states to the EIA-877 will increase the burden by 1050 hours annually beginning with the 2014/2015 heating oil season in October 2014.

Since conducting the quadrennial EIA-863 is optional during this 3-year OMB clearance, EIA has annualized the respondent burden over four years since this is a quadrennial survey.

Table A4: Comparison of 2014 and 2011 Reporting Burden

Survey	EIA-14	EIA-182	EIA-782A	EIA-782C	EIA-821	EIA-856	EIA-877	EIA-878	EIA-888	EIA-863	EIA-782B
2014	1512	4231	17100	5040	14010	3148	4,050	2080	1048	5017	О
2011	1512	4231	17100	5040	14010	3148	3000	2080	1048	5017	О
Difference	0	0	0	0	0	0	1, 050	q	0	0	0

A.16. Collection, Tabulation, and Publication Plans

- A. Gasoline and Diesel Fuel Update (GDFU): Weekly data reported on the EIA-878 and the EIA-888 are collected on Monday. Prices are reported as of 8:00 a.m. local time. These data are published the same day by 5:00 p.m. Eastern Time (ET). Two days later at 10:30 a.m. ET these data are also released in the Weekly Petroleum Status Report (WPSR) and they are released again at 1:00 p.m. ET on Wednesday in the This Week In Petroleum (TWIP).
- B. Heating Oil and Propane Update (HOPU): Weekly data reported on the EIA-877 are collected from October 1 through mid-March. These data are initially published in the WPSR at 10:30 a.m. ET on Wednesday and again the same day in the TWIP on at 1:00 p.m. ET, and utilized in the STEO.
- C. Petroleum Marketing Monthly (PMM): Data collected from the monthly surveys (EIA-14, EIA-182, EIA-782A, EIA-782C, and EIA-856) are collected and published in the PMM according to the following schedule:

(1) EIA-782C forms due 20 calendar days after the end of reference month

30 calendar days after the end of reference month (2) All other monthly forms due

(3) Processing of data completed 45 calendar days after the end of reference month

(4) EIA-782C data published electronically

in the Prime Supplier Report 50 calendar days after the end of reference month

(5) PPM published 60 calendar days after the end of the reference month

D. <u>Fuel Oil and Kerosene Sales (FOKS)</u>: Data collected from the annual survey (EIA-821) are originally published in the *FOKS* Report according to the following schedule and republished in other publications, including the *AER*.

(1) Forms Mailed Early January

(2) Responses due Early March

(3) Second Mailing to nonrespondents Mid-April

(4) Close-out data collection Early September

(5) Completion of analysis/validation Mid-October

(6) Post in Tables on Petroleum Navigator and update FOKS webpage End October

A.17. OMB Number and Expiration Date

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

A.18. Certification Statement

There are no exceptions to the certification statement of OMB Form 83-I.