



Independent Statistics & Analysis

U.S. Energy Information
Administration

Supporting Statement for Petroleum Supply Reporting System

Part B: Collections of Information Employing Statistical Methods

OMB No. 1905-0165

Form EIA-800 *Weekly Refinery and Fractionator Report*

Form EIA-802 *Weekly Product Pipeline Report*

Form EIA-803 *Weekly Crude Oil Stocks Report*

Form EIA-804 *Weekly Imports Report*

Form EIA-805 *Weekly Bulk Terminal Report*

Form EIA-809 *Weekly Oxygenate Report*

Form EIA-810 *Monthly Refinery Report*

Form EIA-812 *Monthly Product Pipeline Report*

Form EIA-813 *Monthly Crude Oil Report*

Form EIA-814 *Monthly Imports Report*

Form EIA-815 *Monthly Bulk Terminal Report*

Form EIA-816 *Monthly Natural Gas Plant Liquids Report*

Form EIA-817 *Monthly Tanker and Barge Movement Report*

Form EIA-819 *Monthly Biofuels, Fuels from Non-Biogenic Wastes, Fuel Oxygenates, Isooctane, and Isooctene Report*

Form EIA-820 *Annual Refinery Report*

January, 2020



Independent Statistics & Analysis

www.eia.gov

U.S. Department of Energy

Washington, DC 20585

Table of Contents

Part B: Collections of Information Employing Statistical Methods.....	i
B.1. Respondent Universe.....	1
B.2. Statistical Methods.....	4
B.3. Maximizing Response Rates.....	16
B.4. Test Procedures and Form Consultations.....	16
B.5. Statistical Consultations.....	17

B.1. Respondent Universe

B.1.1 Monthly and Annual PSRS Survey Frames

Monthly and annual Petroleum Supply Reporting System (PSRS) surveys are used to collect data on the primary petroleum supply system in the United States including U.S. territories and possessions, where applicable. Primary petroleum supply system activities covered by PSRS surveys include refinery operations, imports, pipeline movements, blending and large storage facilities, and those connected to bulk transportation modes (i.e. pipelines and waterborne transport of crude oil, petroleum products, and biofuels), natural gas processing, oxygenate production, biodiesel production and bulk transportation (i.e. transport by pipeline, tanker, and barge) between Petroleum Administration for Defense Districts (PADDs). Data on other primary petroleum supply activities, including field production of crude oil and exports, are obtained from other sources including state and federal agencies.

Each monthly and annual PSRS survey is a complete census of the subject activity. Therefore, there is no sampling error in monthly and annual PSRS surveys. However, in order to be considered as in-scope for monthly survey reporting, each reporting unit must have reportable quantities (usually this means at least one barrel of a reportable product) or satisfy other criteria such as minimum storage capacity requirements for petroleum products terminals. Facilities that fall below minimum reporting requirements are considered to be outside of the primary petroleum supply system and are considered out of scope for monthly and annual PSRS reporting.

The following are descriptions of the survey frame for each survey:

Form EIA-810 Monthly Refinery Report: Form EIA-810 must be completed by operators of all operating and idle petroleum refineries located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. Data are reported by refinery site. Refineries are installations that manufacture finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, biofuels, and oxygenates. Refiners report distillation capacity, crude oil quality, inventory, receipts, input, production, shipments, and fuel use and loss. Refiners report storage capacity for the month of March.

Form EIA-812 Monthly Product Pipeline Report: Form EIA-812 must be completed by every product pipeline operator in the 50 states and District of Columbia. Data are reported by company and PADD. Product pipelines are used for transportation of petroleum products as well as selected biofuels and oxygenates. Product pipeline operators report stocks held in pipelines and associated tanks and inter-PADD movements.

Form EIA-813 Monthly Crude Oil Report: Form EIA-813 must be completed by operators of facilities, located in the 50 states and District of Columbia that carry (transport) or store crude oil. Facilities include pipeline companies, terminal operators, companies transporting Alaskan crude oil by water, and other facilities that store crude oil (except refineries). Data are reported by company and PADD. Reporting on Form EIA-813 includes stocks held in tank farms, pipelines, and underground caverns, stocks in transit by water and rail, crude oil received by and shipped out of the Strategic Petroleum Reserve, stocks located in Cushing, OK that are deliverable under NYMEX contract and not deliverable under NYMEX contract. Pipeline operators report inter-PADD movements. Operators of storage terminals and tank farms report storage capacity for the month of March.

Form EIA-814 Monthly Imports Report: Form EIA-814 must be completed by every importer of record (or the ultimate consignee in some situations involving imports from Canada) of crude oil, petroleum products, and biofuels. Importers and ultimate consignees are identified on the following documents filed with U.S. Customs and Border Protection (CBP) and the U.S. Department of Commerce:

- CBP Form 7501 *Entry Summary*
- CBP Form 214A *Application for Foreign Trade Zone Admission and/or Status Designation*
- Department of Commerce Form 7525-V *Shippers Export Declaration*

Reported imports include barrels of foreign origin that enter the 50 states and District of Columbia as well as U.S. territories and possessions, including Foreign Trade Zones. In addition, imports from U.S. territories and possessions to the 50 states and District of Columbia are reported on Form EIA-814. Reporting on Form EIA-814 includes the country of origin, port of entry, type of commodity, quantity imported, sulfur and API gravity for crude oil and selected products, and processing facility for crude oil and selected unfinished products.

Form EIA-815 Monthly Bulk Terminal Report: Form EIA-815 must be completed by every operator of a bulk terminal and certain facilities storing natural gas liquids operated by end users located in the 50 states, District of Columbia, and U.S. territories and possessions. Data are reported by bulk terminal or storage facility site. Bulk terminals are storage facilities where petroleum products and biofuels are stored in tanks and/or underground caverns. Some bulk terminals are used for product blending, where unfinished and finished petroleum products and biofuels are blended in lines or in tanks to produce new or reclassified products (e.g. blending fuel ethanol with unfinished gasoline to produce finished gasoline). Bulk terminals reported on Form EIA-815 include facilities that have storage capacity of at least 50 thousand barrels and facilities with storage capacity less than 50 thousand barrels that receive or ship product by pipeline, tanker, or barge. Petroleum products storage facilities that have less than 50 thousand barrels of storage capacity and receive and ship product only by rail and truck do not report on Form EIA-815. These smaller petroleum products and biofuels storage facilities are sometimes called “bulk stations” to distinguish them from bulk terminals. Bulk stations are considered to be outside of primary petroleum supply channels and so they are excluded from reporting on Form EIA-815. Bulk terminal operators report inventory, receipts, input, production, shipments, and fuel use and loss. They report storage capacity for the month of March. Operators of end-user storage facilities (including storage at petrochemical plants) report stocks (on site and in transit) of natural gas liquids for facilities with at least 50 thousand barrels of storage capacity and capability to ship products by tanker, barge, or pipeline.

Form EIA-816 Monthly Natural Gas Plant Liquids Report: Form EIA-816 must be completed by every operator of a natural gas processing plant, natural gas plant liquids fractionator, and butane isomerization plant in the 50 States and the District of Columbia. Data are reported by plant facility. Natural gas processing plants extract natural gas liquids from a stream of natural gas. Natural gas liquids fractionators separate natural gas liquids into individual components (i.e. ethane, propane, normal butane, isobutane, and pentanes plus). Butane isomerization plants convert normal butane to isobutane. Form EIA-816 must be completed by operators of all natural gas processing plants. Operators of natural gas plant liquids fractionators only report stocks and are only required to file Form EIA-816 if their plant or plants hold stocks (most fractionators do not hold stocks). Form EIA-816 must be completed by all operators of butane isomerization plants that convert normal butane to isobutane, except in cases where a butane isomerization plant is part of a refinery and butane isomerization activity is reported on Form EIA-810.

Form EIA-817 Monthly Tanker and Barge Movements Report: Form EIA-817 must be completed by companies that move crude oil, petroleum products and biofuels by tankers and barges between Petroleum Administration for Defense Districts (PADDs) that include the 50 states and District of Columbia (i.e. PADDs 1-5). Movements that are entirely within one PADD are not reported. Reporting is by commodity, origin PADD, and destination PADD for each reporting company without regard to specific refinery, terminal, or port locations. Movements from the U.S. Gulf Coast region (PADD 3) to the U.S. East Coast Region (PADD 1) are further subdivided in terms of destination as New England (PADD 1A), Middle Atlantic (PADD 1B), and South Atlantic (PADD 1C).

Form EIA-817 must be completed by companies that have custody of crude oil, petroleum products, and biofuels transported by tanker and barge between PADDs. Reportable movements include those that originate in one PADD and are then transported to the Panama Canal and, then, proceed from the Panama Canal to another PADD. Custody is defined as physical possession of crude oil, petroleum products, or biofuels on a company-owned tanker or barge. Companies that lease vessels or contract for movement of crude oil, petroleum products, or biofuels by water between PADDs are also considered to have custody. Companies reporting on Form EIA-817 are typically refiners and/or marketers of crude oil, petroleum products, and biofuels. Form EIA-817 reporting companies are waterborne shippers rather than carriers (i.e. operators of tankers, barges, and tug boats), except in cases where refiners and marketers are also vessel operators.

Form EIA-819 Monthly Biofuels, Fuels from Non-Biogenic Wastes, Fuel Oxygenates, Isooctane, and Osooctene Report: Form EIA-819 must be completed by operators of facilities in the 50 states, District of Columbia, and U.S. territories and possessions that produce one or more of the following products: fuel alcohol; biodiesel that meets ASTM D 6751-07B specification and is used for commercial purposes; renewable diesel fuel, heating oil, jet fuel, naphtha, gasoline, and other renewable fuels and intermediate products; fuel oxygenates other than fuel alcohol; and isooctane or isooctene. Data are reported by plant facility. Fuel oxygenates reported include ethanol, Methyl Tertiary Butyl Ether (MTBE), Ethyl Tertiary Butyl Ether (ETBE), and “other” fuel oxygenates. Oxygenates may also be biofuels (e.g. fuel ethanol and bio-ETBE). Reported facilities include merchant plants as well as plants associated with refineries and petrochemical facilities. Monthly reports include beginning and ending stocks, stocks in-transit to the plant, production, inputs, receipts, shipments, and plant use and losses. In addition, production capacity on the first day of the report month and consumption of fuels and feedstocks are reported.

Form EIA-820 Annual Refinery Report: Form EIA-820 must be completed by operators of all operating and idle petroleum refineries located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. The Form EIA-820 survey frame is normally identical to the survey frame of Form EIA-810, though there are cases where differences arise, such as during periods when a refinery is in transition from operable to shut down. Data are reported on Form EIA-820 by refinery site. Refineries are installations that manufacture finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, biofuels, and oxygenates. Reports are filed each year in February. Refinery operators report fuel, electricity, and steam purchased and consumed, and crude oil received by method of transportation at the refinery during the prior year. Operating, idle, and total operable (sum of operating plus idle capacities) capacities of atmospheric crude oil distillation units are reported for January 1 of the current year and operable distillation capacity is projected for January 1 of the following year. Downstream charge (input) capacities are reported for selected process units as of January 1 of the current year

and projected for January 1 of the following year. Production capacities of selected refinery units are reported for January 1 of the current year and projected for January 1 of the following year.

B.1.2 Weekly PSRS Surveys

The EIA weekly reporting system, as part of the PSRS, was designed to collect data similar to those collected monthly. The samples of companies that report weekly in the Weekly Petroleum Supply Reporting System (WPSRS) are selected from the universe of companies that report on the corresponding monthly forms. The following describes the relationships between the samples for the weekly PSRS surveys and the corresponding monthly survey that provide the universes of companies for sampling:

Form EIA-800 Weekly Refinery and Fractionator Report: The universe of possible reporting units is provided by Form EIA-810 for refineries and Form EIA-816 for natural gas liquids fractionators.

Form EIA-802 Weekly Product Pipeline Report: The universe of possible reporting units on Form EIA-802 is provided by Form EIA-812.

Form EIA-803 Weekly Crude Oil Report: The universe of possible reporting units on Form EIA-803 is provided by Form EIA-813.

Form EIA-804 Weekly Imports Report: The universe of possible reporting units on Form EIA-804 is provided by Form EIA-814.

Form EIA-805 Weekly Bulk Terminal Report: The universe of possible reporting units on Form EIA-805 is provided by Form EIA-815.

Form EIA-809 Weekly Oxygenate Report: The universe of possible reporting units on Form EIA-809 is provided by Form EIA-819.

B.2. Statistical Methods

B.2.1 Monthly and Annual Statistical Methods

The nine monthly supply surveys and one annual survey, Forms EIA-810 through EIA-820, are census surveys. As such, the estimates generated from these data are the sum of the reported and edited data. Imputation is performed for companies that fail to file. Response rates for Forms EIA-810 through 813, 814, 815, 816, and 819 are generally 99 to 100 percent, necessitating less frequent data imputation. For these data collections, the data reported in the previous month can be used as imputed values for missing data, unless there is reason to believe that another value would provide a more reasonable estimate (e.g. based on weekly reporting or other information about a facility that would be likely to influence the data, such as down time at a refinery). Data are rarely imputed for Forms EIA-814 and EIA-817 because the data at the respondent level are highly variable across weeks. The reason for this high variability is that import activity and tanker/barge movements tend to be somewhat opportunistic and highly dependent on market conditions. As a result, there is a relatively high incidence of respondents legitimately reporting values as zeros or questions left blank. Avoiding imputation of values (i.e. leaving data cells empty for non-responses) is the best approach to address non-response on Forms EIA-814 and EIA-817.

Non-response rates for biodiesel plants reporting on Form EIA-819 are somewhat higher than non-response rates observed on other monthly PSRS surveys. In many cases, biodiesel facilities that are non-

respondents reflect inactivity at biodiesel plants. Biodiesel plant operators mistakenly believe that inactivity relieves them of their requirement to report each month. EIA continues to work with biodiesel producers to improve response rates. At present, only biodiesel production capacity is imputed for non-responding plants.

After the flagged respondent data have been resolved, preliminary tables of aggregated response data are produced and used to identify anomalies. These tables are created as pivot tables in Excel and allow EIA analysts to develop various views of the data in the context of other data (e.g. examining stock changes and imports) as well as historical estimates for the U.S. and by PADD. Anomalies identified through this process result in further review of respondent item level data which, in turn, may result in identification of additional data for review and possible imputation.

In addition to the above procedure, other adjustments may be made to the aggregated data. For example, unusual industry conditions, including seasonal fuel transitions, business practice shifts, or hurricane dislocations may generate reporting anomalies and require manual adjustments. Measurement error and frame deficiencies may occasionally result in inconsistencies that require adjustment when individual respondent data are aggregated to publication levels. Monthly supply data are reviewed throughout the year and certain estimates may be replaced with newly available or resubmitted respondent data when the Petroleum Supply Annual (PSA) is published.

B.2.2 Weekly PSRS Surveys Statistical Methods

All of the weekly PSRS surveys, Forms EIA-800 through EIA-809, are sample surveys based on the monthly census surveys.

Sample Design

The sampling procedure used for the weekly surveys is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers approximately 90 percent of the total volumes for each item and each geographic region for which data may be published. For example, for distillate fuel oil stocks, the weekly sample includes those respondents whose combined volumes of stocks for distillate fuel oil from refineries, bulk terminals, and pipelines constitute at least 90 percent of the total volume of distillate fuel oil stocks as reported in the corresponding monthly surveys.

The 90% cutoff threshold was established in April, 1982 and EIA has maintained a 90% threshold coverage in the weekly PSRS surveys since 1982. The cutoff sampling method is appropriate when the frequency distribution of the item measured by the survey is highly skewed. This situation occurs in the petroleum industry in which a relatively small number of companies contribute a large share to the total volume being estimated. A cutoff sample is drawn by ranking the potential respondents (using values from the monthly frame file) from largest to smallest by the volume of the item of interest, cumulating down the list, and stopping when the pre-specified 90% coverage has been achieved. Estimates of weekly totals are obtained by multiplying the historical monthly total (available with a two-month lag) by the ratio of the weekly volume to the monthly volume for units in the cutoff sample. This type of sampling and estimation yields acceptable results as long as the relative contribution to the total for the

small and large units remain relatively constant, and the sample coverage remains over 90 percent of the aggregate being estimated.

Sample control procedures were developed in April 1982 for two reasons: 1) to maintain comparability of weekly and monthly data systems and 2) to ensure that the 90 percent coverage requirement is met. The comparability goal requires that changes in the monthly frame (births, deaths, mergers, splits, and changes of ownership) be reflected in the corresponding weekly sample. Comparability is required both for estimation and quality control.

To assure 90-percent coverage of the national and PADD totals for each product item collected in each geographic region for each weekly survey, each weekly survey sample is reviewed each month. This review focuses on changes in the current monthly data as it relates to the weekly surveys, changes in the weekly surveys that impact the monthly surveys, and changes in respondent reporting patterns. Companies are added or removed from the surveys based on the changes. See Supporting Statement A.12 for the estimated number of companies selected for the weekly survey sample.

Imputation and Estimation Procedures

In any survey, non-response can be a major concern because the effects can cause serious bias in survey results. Non-response occurs whenever requested information is not obtained from all active reporting units in a survey frame. Whenever PSRS survey responses are not received in time to be included in published statistics, the data are imputed. Although imputing for missing data may not eliminate the error associated with non-response, it usually reduces variance and may improve the accuracy of the estimates.

After responding entities' survey responses have been validated and entered into the weekly database for Forms EIA-800 through EIA-809, item non-response values are imputed for companies that either have not responded, reported incomplete data, or reported data that failed editing and could not be confirmed. The imputed values are calculated using the exponentially smoothed mean values of recent weekly reported values for a specific responding entity.

The equation for the exponential smoothing is:

$$y_{t+1} = \alpha * y_t + (1 - \alpha) * y_{t-1}$$

Where

y_{t+1}	is the response item-level prediction for reporting week t+1 (using data through week t),
y_t	is the previous week's reported value (or imputed value, if the response was imputed for week t),
y_{t-1}	is the value that was generated by the equation for reporting week t-1, and
α	is a number between 0 and 1, chosen specifically by survey/product/type

In the equation for exponential smoothing, the size of α controls the importance of the previous reporting week's reported value relative to the aggregate of all prior weeks' reported values as

represented by the prediction for the previous week. For example, if $\alpha = 0.8$, then the previous week's value is much more important in predicting this week's value than all the previous week's values, because the weight of last week is 0.8, which is greater than the weights of the previous weeks (powers of 0.2.). In general, the α values are low for imports measured by the Form EIA-804 (where the previously reported week's value is much less important than history) and much higher for the other surveys which measure production, inputs and stocks.

Next, the imputed values are treated like reported values in the estimation procedure for published aggregated data. The estimation procedure uses ratio estimates of the weekly totals to produce published totals, as is described below.

First, the current reporting week's data for a given product reported (or imputed) for each entity in a geographic region are summed (weekly sum, W_s). Next, the most recent complete reporting month's data for the product reported (or imputed) for those same respondents are summed (monthly sum, M_s). Finally, the most recent complete reporting month's data for the product as reported by all respondents, including adjustments made in the monthly process, are summed (M_t). The current week's ratio estimate for that product for all respondents, W_t , is given by:

$$W_t = (M_t / M_s) * W_s$$

The W_t 's are used directly to estimate total weekly inputs to refineries and production. To estimate stocks of finished products, the W_t 's are independently calculated for the establishments of refineries, bulk terminals, and pipelines. Estimates of totals are calculated by summing over the establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-to-week basis. Therefore, an exponentially smoothed ratio is used for estimating weekly imports. The estimate of total weekly imports is the product of the smoothed ratio and the sum of the weekly reported values and imputed values.

For imports, the ratios are smoothed as follows:

$$R_{t+1} = \gamma * r_t + (1 - \gamma) * R_{t-1}$$

Where

- R_{t+1} is the smoothed ratio for reporting week t+1 (using ratios through week t),
- r_t is week t's ratio of the most recent complete monthly total for all respondents to the monthly total of respondents from the weekly sample,
- R_{t-1} is the smoothed ratio for week t (using ratios through week t-1),
- γ is a number between 0 and 1, chosen by product, and is the same for all PADDs and Respondent IDs for that product.

When $M_s = 0$, then r_t is not defined for the reporting week, and the smoothed ratio is not updated (i.e., the previous smoothed ratio is used as the multiplier).

B.3. Maximizing Response Rates

To maximize response rates, data collection forms are designed to be easily completed, and instructions are written to be clear, concise, and easily understood. Forms and instructions are made available on the EIA website. Alternative modes of data collection and follow-up are employed to encourage maximum response to the surveys in the PSRS.

Respondents who do not report any data for a given survey form in a given collection period are considered “non-respondents” for the PSRS. Automated email messages are sent out to any respondent who has not reported by the relevant submission deadline. EIA staff also contact survey non-respondents by telephone to discuss the requirement to file and any problems or questions that are delaying filing. Follow-up letters regarding the failure to file may be sent by email message to respondents who show persistent problems with non-response.

Specific schedules are followed for telephone calls and letters to non-respondents for the various PSRS surveys. Every effort is made to assist respondents in completing the survey and submitting the data in a timely manner. The 2018 response rate for weekly and monthly PSRS surveys averaged 98 -100 percent.

Average Annual Response Rates for PSRS

Weekly Survey	EIA-800	EIA-802	EIA-803	EIA-804	EIA-805	EIA-809
Response Rate	98%	100%	100%	98%	99%	100%

Survey	EIA-810	EIA-812	EIA-813	EIA-814	EIA-815	EIA-816	EIA-817	EIA-819	EIA-820
Response Rate	99%	100%	100%	98%	99%	99%	100%	100%	100%

B.4. Test Procedures and Form Consultations

In preparation for clearance of the 2019 Petroleum Supply Program by the Office of Management and Budget (OMB), EIA’s Survey Development Team (SDT) received approval from OMB to conduct cognitive testing in 2018 on a few of the surveys to assess the impact of potential changes for future iterations of the surveys.

SDT designed two research projects to collect information from survey respondents on proposed changes to forms in the PSRS. The first research project evaluated proposed changes to EIA-816 *Monthly Natural Gas Liquids Report*. The objectives of this project were to assess Form EIA-816 respondents ability to report information related to their gas processing and condensate stabilization activities; determine if respondents are able to report fractionation output production data on a weekly basis; and estimate any changes in reporting burden associated with collecting this additional information as well as obtain feedback on the accuracy of the current reporting burden.

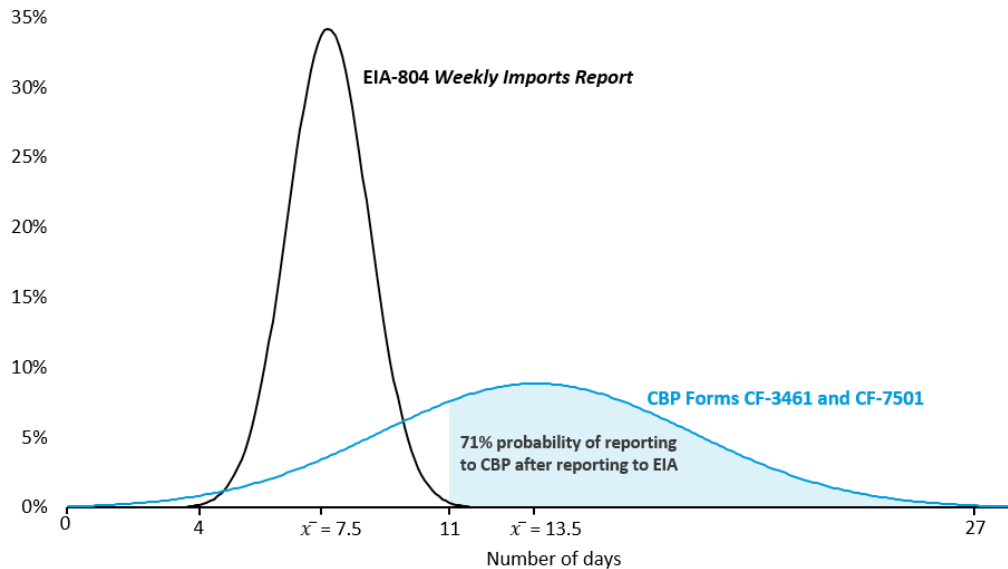
The second project collected information from survey respondents on the proposal to merge Forms EIA-819 *Monthly Oxygenate Report* and EIA-22M *Monthly Biodiesel Production Survey* to create a single survey instrument that collects information on biofuels, ethanol, and fuel oxygenates. The objectives of this research project were to assess respondents' ability to report the requested information on the new form; assess respondents' interpretations of, and reactions to the wording of column and row labels on the form; estimate any changes in reporting burden associated with collecting this information; and check on the current reporting burden on Forms EIA-22M and EIA-819.

The first step of the process was for SDT to meet with PNGBS managers to determine material issues for each survey and formulate the research objectives of the testing. SDT then developed draft cognitive interview protocols for PNGBS to assess respondent's ability to report new information, clarify areas of confusion or misreporting of data elements, possible deletion or collapsing of data categories, and verifying reporting burden. After the protocols were reviewed and accepted, a clearance request for research on Forms EIA-816, 819, and 22M was submitted to OMB and subsequently approved. SDT contacted potential respondents based on recommendations from PNGBS. Since the testing was voluntary, several phone calls were made to identify participants for the study. 14 interviews were conducted for EIA-816. 34 interviews were conducted in preparation for a combined Form EIA-819. These interviews included 23 ethanol producers and 11 bio-diesel producers. The confidential interviews lasted 45 minutes to 1 hour. The interviews consisted of an introduction of the interviewers, the purpose of the call, background information on reporting practices, survey-specific questions, and a final opportunity for respondents to comment on any matter they wished to mention. Final reports were drafted for each survey summarizing the objectives, methodology, and specific findings and provided to PNGBS for consideration.

EIA's SDT was also used to conduct a data quality study involving respondents of Form EIA-804 *Weekly Imports Report* and Form EIA-814 *Monthly Imports Report*. The purpose of the study was to determine what sources of information do respondents use when they are reporting for both forms as well as a check on reporting burden. Confidential interviews were conducted with five refiners, three blenders and wholesalers, and seven trading/importing companies. The cognitive study found out that 80% of respondents report imports to EIA before their Custom's and Border Protection (CBP) forms are completed and filed. To obtain the data required by EIA-804, 60% of respondents relied directly on transportation documents such as bills of lading, tanker receipts, pipeline delivery tickets, and port operations schedules.

Companies engaged in import activity also have to declare their imports to CBP. Reporting imports to CBP is a two-step process that has longer reporting deadlines than EIA. According to CBP regulations, an importer has up to 15 calendar days to file initial entry documentation CF-3461. Once CBP examines and releases the import, the importer must file an Entry Summary CBP Form CF-7501 within 10 business days (12 calendar days). This means that it may take anywhere from zero to 27 days for a petroleum import to be reported on CBP Form CF-7501. In contrast, it takes between four and 11 days from the date a petroleum import physically arrives at the U.S. borders to be reported on Form EIA-804.

Time estimation in reporting to Energy Information Administration (EIA) and U.S. Customs and Border Protection (CBP) probability when an oil import transaction is reported



Note: Assumes a normal probability distribution of reporting to EIA and CBP
 Source: U.S. Energy Information Administration based on Form EIA-804 and CBP forms CF-3461 *Entry* and CF-7501 *Entry Summary*

The above graph depicts the timeliness of EIA-804 data versus when an importer may begin to file their required CBP forms. At day 11, there is a 99% chance that an import transaction will be reported to EIA on Form EIA-804. In contrast, there is a 29% chance that the same import transaction will be reported on CBP Form CF-7501 by day 11. Conversely, there is a 71% chance that the same import transaction will be reported on CBP Form CF-7501 and complete the CBP process after the eleventh day. This is outside the EIA-804 reporting time period. EIA and CBP have different reporting methodologies because they measure different aspects of import activity. Data reported by one agency is not a proxy for data collected by the other. Form EIA-804 collects timely information on imports to accurately measure supply conditions whereas Form CF-7501 collects information on imports to accurately assess import duties owed.

B.5. Statistical Consultations

For additional information concerning this data collection, please contact Michael Conner, at PetroleumSupplyForms@eia.gov.