

**U.S. Energy Information Administration** 

Office of Energy Statistics

Office of Electricity, Renewables and Uranium Statistics

# **Supporting Statement for Survey Clearance**

# QUARTERLY ELECTRICITY IMPORTS AND EXPORTS REPORT

**OMB NUMBER 1905-0208** 

**Background and Proposal** 

Part A

Original Date: June 2015

# **Table of Contents**

3
3
4
4
5
7
9
9
9
10
10
10
10
10
10
10
11
11
2
2
2
3

# INTRODUCTION

The U.S. Energy Information Administration (EIA) of the U.S. Department of Energy (DOE) is required to make independent, high-quality statistical data that reflect national electric capacity, generation, sales, trade, transmission, and pricing available to Federal and other government agencies, the electric power industry, and the general public.

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

On February 4, 2015, the OMB authorized EIA to receive comments regarding the proposed collection under OMB No. 1905-0208, Form Number EIA-111, "Quarterly Electricity Imports and Exports Report." Form EIA-111 will collect U.S. electricity import and export data and be used to develop accurate measures of the flow of electricity into and out of the United States from Canada and Mexico. The comments received and responses are in Appendix A of this document.

# PROPOSED CHANGES TO THE QUARTERLY ELECTRICITY IMPORTS AND EXPORTS REPORT

EIA requests a 3-year approval from the OMB for clearance of the following electric power survey form:

# Form EIA-111, "Quarterly Electricity Imports and Exports Report"

This form is proposed pursuant to the authority granted to the Department of Energy by the Federal Energy Administration Act (FEA Act) (Public Law 93-275). The mandatory Form EIA-111 would collect monthly data on a quarterly basis.

There two proposed changes to Form EIA-111:

- (1) The data element "Transfer Facility's Presidential Permit numbers" is changed to "Transmission Provider/Transfer Facility(ies)" and
- (2) A new schedule for reporting metered flow on transfer facilities is added to collect monthly metered cross border flow over Presidential Permit holder and other transfer facilities:

<u>The Metered Flow on Transfer Facilities</u> schedule collects information on the metered flow of electricity from Presidential Permit holders and other owners/operators of transmission/distribution facilities crossing U.S. international borders. The metered flow is to be measured on an hourly integrated basis in megawatt-hours (MWh).

Key information required:

• Presidential Permit #/transfer facility name

- Metered Flow Received and Delivered (MWh)
- Comments

# **Justification**

# 1. Legal Justification

The authority for this data collection is derived from the following provision:

Section 13(b), 15 U.S.C. §772(b), of the Federal Energy Administration Act (FEA Act), Public Law 93-275, outlines the types of individuals subject to the data collection authority delegated to the Administrator and the general parameters of the type of data that can be required. Section 13(b) 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 objectives of the FEA Act are set forth in Section 5(b), 15 U.S.C. §764(b), of the FEA Act, which states that the Secretary shall, to the extent (s)he is authorized by Section 5(a) of the FEA Act,

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

As the authority for invoking Section 5(b) above, Section 5(a), and 15 U.S.C. §764(a), of the FEA Act in turn 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 FEA Act is provided by Section 52, 15 U.S.C. §790(a) and (b), of the FEA Act, which states that the EIA Administrator:

- "(a)... [Shall] establish a National Energy Information System... [which] shall contain such information as is required to provide a description of and facilitate analysis of energy supply and consumption...
- (b) ...the System shall contain such energy information as is necessary to carry out the Administration's statistical and forecasting activities..., and 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;
  - (3) the sensitivity of energy resource reserves, exploration, development, production, transportation, and consumption to economic factors, environmental constraints, technological improvements, and substitutability of alternate energy sources; . . .
  - (5) ...industrial, labor, and regional impacts of changes and patterns of energy supply and consumption..."

# 2. Needs and Uses of Data

The purpose of the Form EIA-111 is to collect statistical and regulatory data about imports and exports of electricity into and out of the U.S.

# 2.1. Overview of Data Uses

The form is designed to collect data from all entities engaged in the sale, purchase, transfer or operational support for cross-border transmission of electricity.

Form EIA-111 survey data will directly support the mission of the DOE Office of Electricity Delivery and Energy Reliability (DOE-OE) which monitors compliance with the terms of

Presidential Permits and Export Authorizations. DOE-OE needs the import/export data to determine whether to re-approve applications to export electricity, furnish decision makers with accurate information on which to base trade policy, and to verify that the holders of Presidential Permits and Export Authorizations have complied with the terms and conditions of their permit or authorization order. DOE-OE will also use the data to ensure that exports of electric energy do not impair the sufficiency of electric power supply within the United States or impede the coordinated use of the U.S. power supply network.

State government regulators and analysts use these data for assessing electricity input and output that impact regional- and state-level market conditions. They also use these data to determine energy and environmental policies and for other uses. In the absence of the centralized and public data collection by EIA, each state on an international border would have to undertake its own data collection effort, in many cases requesting duplicative information from firms within the electric power industry that support operations of international border transmission lines. This data collection has been designed to ensure consistent data at minimum cost to the public and respondents. In addition to government and power industry customers, these data will become the core information source for other private sector and academic analyses of the electric power industry and the associated trade across international borders.

In summary, examples of activities where these data covering international electricity trade and electrical systems are used include:

- Monitoring the compliance of permit and authorization holders
- Monitoring the electric power industry, its sectors, and reliance on international trade
- Analyzing the adequacy of short- and long-term electricity supply
- Verifying information provided to State and other Federal agencies in other forums
- Monitoring open transmission line access at the international border
- Evaluating transmission line constraints and system reliability
- Forecasting short- and long-term electricity supply and demand
- Evaluating the need for additional electric generating and transmission capacity
- Monitoring and analyzing the economic and operational impacts of industry restructuring
- Monitoring sales and prices of electricity for use by Public Utility Commissions when reviewing rate cases
- Answering queries from the Congress, other Federal and State agencies, the electric power industry, and the general public.

Other data users include electricity-related trade associations; regional transmission operators; electric utility companies; nonutility electric companies; energy service providers; wholesale electricity traders; electrical equipment companies; numerous local, State, and Federal government agencies; environmental associations; consumer groups; financial analysts; and the news media.

# 2.2. Overview of Data Collections

The information to be collected will provide verification of terms for each permit category and cover these major activities:

- 1. Oversight of electricity reliability (i.e., electricity flows at the border actual, and implemented interchange, power flows, source and sink balancing authority area)
- 2. Electricity sales (i.e., energy payments, energy revenues, and exchange imports and exports).

# 2.3. Individual Form Data Uses

The Form EIA-111 data will be collected, reviewed, tabulated and used to provide statistics on U.S. electricity imports and exports. The data will appear in several EIA publications that are available from EIA's website. The most prominent are:

- Annual Energy Outlook <a href="http://www.eia.gov/forecasts/aeo/er/">http://www.eia.gov/forecasts/aeo/er/</a>
- <u>Electric Power Annual</u> <a href="http://www.eia.gov/electricity/annual/">http://www.eia.gov/electricity/annual/</a>
- Annual Energy Review <a href="http://www.eia.gov/totalenergy/data/annual/">http://www.eia.gov/totalenergy/data/annual/</a>

The data will also be used in other EIA products such as the State Energy Data System and for EIA forecast models.

# 3. Use of Technology

# General

All EIA Electric Power and Renewable Electricity Program surveys use Internet-based data collection systems as the primary means of data collection. The majority of routine contact with respondents (e.g., notification that a survey has opened for a collection cycle) is performed using email.

Internet data collection will continue to be the primary collection mode for the Electric Power and Renewable Electricity surveys. The Internet-based system allows respondents to enter their data directly into the EIA survey database, which reduces the time needed for data collection and processing. The system also identifies data that fail edits prior to submission, which allows respondents to make necessary corrections or explain unusual events impacting the reported data prior to submission. This data editing process reduces respondent burden by reducing the number of times a respondent must resubmit forms prior to acceptance by EIA. It also improves the timeliness of reporting the information to the public. The only equipment and software the respondent requires is a connection to the Internet and a standard industry web browser.

# Use of Pick-Lists

Pick-lists are a means of limiting a respondent's answers to a question to a finite set of acceptable choices. The objectives are to reduce respondent burden and to improve data quality, while reducing the time and effort needed by EIA to edit a response.

Pick-lists<sup>1</sup> are used in software-enabled web forms and XML editors to:

<sup>&</sup>lt;sup>1</sup> Pick-lists are sometimes referred to as "drop-down" lists because of the typical appearance of the list in a software application.

- Avoid typographical errors, such as mistyping the abbreviation for a state or month;
- Assure consistent responses to questions asking standard information, such as entering a state as text or a number;
- Assure consistent responses to questions asking for technical information when there are multiple ways of referring to the same concept (e.g., "short term" and "spot" fuel supply contracts).

When the pick-list requests a choice of technical information, the list typically includes an "Other" choice. In some cases the "Other" choice is accompanied by a request for the respondent to provide additional information in a comment area in the survey. The "Other" choice acts as a mechanism to ensure that the form is capable of collecting all possible categories when a pick-list is variable.

There are three types of pick-lists that may be used in software-enabled web forms and XML editors:

- Static pick-lists include information that does not change, such as a list of months.
- Variable pick-lists include choices that may be changed by EIA depending on the period of time covered by the survey or another circumstance.
  - O **Time Dependent**: In the case of the proposed EIA-111 survey, data are collected for each month of the year on a quarterly basis. Therefore, for the first quarter 2013 data collection the pick-list of months (such as in Schedule 2.A.) would be limited to January, February, and March. In the second quarter of 2013 the pick-list would be limited to April, May, and June; and so on.
  - O **Circumstance Dependent**: The EIA-111 will include a pick-list of balancing authorities (such as in Imports schedule). Due to consolidation, the number of balancing authorities is expected to shrink in the next few years. Therefore the pick-list of balancing authorities included in a survey for first quarter 2014 might be shorter than the list for first quarter 2013 (i.e., edited by EIA, as a routine maintenance function, in the software application).
- Dynamic pick-lists include a list of choices that varies depending on the respondent's
  answer to another question. For instance, assume a survey asks a utility to list all the
  adjacent states with which the utility has direct transmission connections:
  - O If the utility had given its location in a prior question as Maine, the pick-list of adjacent states would be limited to one choice, New Hampshire, the only state adjacent to Maine.
  - On the other hand, if the utility had given its location as Kansas, the pick-list would include all the states adjacent to Kansas (Nebraska, Missouri, Oklahoma, and Colorado).

In neither case would the respondent have to go through a list of 50 states and the District of Columbia to find the only possible choices.

A dynamic pick-list is analogous to another standard technique in software-enabled surveys, the skip pattern, also used to avoid spurious responses and to reduce respondent burden. As currently configured the EIA-111 does not include dynamic pick-lists, but this feature may be added to assist respondent data entry as part of routine software maintenance and upgrades.

# 4. Technical Considerations to Reduce Duplication

Every effort has been made to ensure that data are not collected by more than one Federal government agency. As far as we know, no other organization collects cross-border power transactions and reliability information for the United States.

EIA evaluated all known sources of publicly available data relating to the cross-border electricity trade and operations of the electric power industry. EIA found no other source as comprehensive, timely, or detailed to replace the proposed data collection. EIA determined that other sources cannot replace or even approximate the information proposed for collection here because of differences in classification, inconsistency, incompleteness of data, unavailability of data, or lack of universal coverage. These efforts taken together capture the entire U.S. electric power industry and keep the burden on industry to a minimum.

# 5. Efforts to Identify Duplication and Analysis of Similar Existing Information

EIA evaluated all known sources of publicly available data relating to the cross-border electricity trade and operations of electric power industry and found no other source as comprehensive, timely, or detailed, to replace this proposed data collections survey. EIA 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. These efforts taken together capture the entire electric power industry and keep the burden on industry to a minimum.

#### 6. Burden Reduction for Small Businesses and Small Entities

EIA is mindful of the need to minimize burden on small business and to the extent possible, designs its data surveys so that small operations are not unduly affected. EIA has determined that most businesses that engage in electricity transmission are not small businesses; however, a marketer could operate on a much smaller scale than other entities. The use of electronic data collection, including features such as pick-lists (see 3. above) is also intended to reduce the response burdens for small business.

# 7. Consequences of Less-Frequent Reporting

Eliminating EIA's ability to collect monthly electric power import and export data on a quarterly basis would undermine its ability to advise and inform Congress, State and local governments, private industry, and various offices of the Federal government. Less frequent reporting would also place a larger burden on State governments to collect and process their own data in addition to trying to obtain similar information from other States for comparison and monitoring purposes. Conversely, less frequent reporting would also place a larger burden on the EIA-111 respondents who would need to provide their information to more than one data collection agency.

# 8. Special Circumstances

There are not any special circumstances for the quarterly electricity imports and exports report data collection.

# 9. Summary of Consultations outside the Agency

Consultations were conducted using a Federal Register notice (Vol. 80. No. 23) published on February 4, 2015. Copies of the notice were emailed to potential respondents, industry associations, and environmental and consumer groups for comment. This supporting statement will be made available on the EIA website, along with drafts of the proposed new form and instructions. A summary of the comments received, along with the EIA responses provided are in Appendix A below.

# 10. Remuneration

No payments or gifts are made to the respondents of the survey.

# 11. Disclosure of Information

The information reported on Form EIA-111 will be considered public information and may be publicly released in identifiable form.

# 12. Justification for Questions of a Sensitive Nature

There are no questions of a sensitive nature.

# 13. Estimates of Respondent Burden (Hours and Cost)

The number of respondents for the EIA-111 can fluctuate at any given time due to changes in the number of entities engaged in import or export transactions. The overall annual burden for this package is estimated to be 1056 burden hours (Table 1). The burden estimate includes time

gathering and maintaining the data needed, and completing and reviewing the collection of information.

Table 1. Electric Power Burden Information for OMB Number 1905-0208

Form EIA-111, "Quarterly Electricity Imports and Exports Report"							
Number of Respondents Per Quarter	Burden Hours per Response	Number of Responses per Year per Entity	Annual Number of Responses	Annual Burden Hours			
176	1.5	4	704	1056			

The total annual cost of the surveys is estimated to be \$76,000 (burden hours times \$71.97 per hour). An average cost per hour of \$71.97 is used because that is the average loaded (salary plus benefits) cost for an EIA employee. The reporting burden on individual respondents may be significant higher or lower than the average. EIA assumes that the survey respondent workforce completing surveys is comparable with the EIA workforce.

# 14. Estimates of Cost Burden to Respondents

There are no additional capital and start-up cost components or operations and maintenance associated with this data collection effort that is being funded by EIA. The information is maintained in the normal course of business. Therefore, other than the cost of burden hours, there are no additional costs for generating, maintaining, and providing the information. EIA's expectation is that the use of internet-based data collection, including features such as pick-lists (see 3. above) will help minimize the burden on respondents. In addition, by improving data quality these features will reduce the need for respondents to spend time resolving data errors with EIA.

# 15. Estimates of Annual Cost to the Government

The annual cost is estimated at \$120,910 in FY 2015. This cost estimate includes personnel, maintenance, collection, and processing by EIA. Regulatory analysis and support are outside the scope of this survey.

The estimate of \$120,910 is 80% of one full time equivalent (FTE) EIA employee.<sup>2</sup> The 80% assumption is based on experience with other EIA electricity surveys, the anticipated frame size of about 176 respondents, and the frequency of data collection. The estimate also reflects the expected benefits from the use of internet-based data collection,; including features such as picklists (see 3. above). The internet-based collection systems have, in EIA's experience, improved the speed and quality of data submissions and reduced the number of personnel needed to operate a survey.

# 16. Changes in Burden to Respondents

The total annual burden for the proposed Form EIA-111 is 1056 hours (OMB Number 1905-0208). The proposed burden per response is 1.5 hours, which is the same as the current EIA-111 survey. The EIA-111 clearance anticipates about 176 respondents based on experience with the current survey collection. This is compared to 158 respondents for the current survey.

The increase in the respondent frame is primarily due to the proposed addition of a new schedule to collect metered flow on transfer facilities.

Changes to the respondent frame occur for criteria-based and for company-specific reasons. Examples of criteria-based reasons include the issuance or retirement of presidential permits and export authorizations. Examples of company-specific reasons include restructurings that either consolidate respondents or separate them. Companies may create subsidiaries that manage the operation of different presidential permits or export authorizations. Alternatively, they may bring these subsidiaries back into a single reporting entity. EIA encourages companies to align their reporting procedures with their company structures to facilitate the least burdensome and most accurate submittal of data.

The EIA-111 requires the following entities to respond: (1) entities importing power into the U.S., (2) entities exporting power out of the U.S., (3) U.S. Border Balancing Authorities that are directly interconnected with foreign electricity systems, and (4) Presidential Permit holders that own or operate international electricity transmission lines.

# 17. Data Collection and Publication

The data collected on this form will be released in EIA reports and they will be made available on the EIA website.

# 18. Display of Expiration Date and OMB Number

The OMB number (OMB Number 1905-0208) and expiration date will be displayed on the form.

<sup>&</sup>lt;sup>2</sup> The current estimate of the hourly rate for an EIA employee is \$71.97/hour. Assuming 2,100 hours per year the annual cost is \$151,137, of which 80% is \$120,910.

# Appendix A

# Summary of Comments Received in Response to the Federal Register Notice (Vol. 80. No. 23) Published February 4, 2015 (With EIA Responses)

# Introduction

On February 4, 2015, a request for comments from interested persons was solicited in the Federal Register Notice that proposed approval for a three year collection for Form EIA-111, "Quarterly Electricity Imports and Exports Report." The comments received and EIA's responses are summarized below.

# **Table A 1. List of Entities Providing Comments**

# **Name of Respondents**

Avista Corporation Intercom Energy, Inc. New York Independent System Operator (NYISO) Comments provided to EIA are grouped into the following categories:

- Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility
- The accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used
- Ways to enhance the quality, utility, and clarity of the information to be collected
- Ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology

The comments shown below incorporate minor editing for clarity.

Necessity	y of the	proposed	l information	collection

# We found the new form EIA-111 very appropriate for the 2015 survey purposes. **EIA Response:**None

# The accuracy of the agency's burden estimate

# Comments: None

# Ways to enhance the information collection

#### **Comment:**

Comments:

Why is it that the survey asks for the transfer facility for [Implemented Interchange] but only asks for a lump sum for Actuals? After all, Balancing Authorities have at their disposal (for NERC reporting purposes) the metered data for each of the tie lines. You can't necessarily designate the transfer facility for a transaction schedule (as we know with the NY>Ontario interface) but you can get a clear picture of what is actually flowing over each of the tie lines to that Balancing Authority.

# **EIA Response:**

The proposed change to this information collection of adding a new schedule: **Metered Flow on Transfer Facilities** will allow the collection of metered flow data over each tie line.

#### **Comment:**

In section "Exports from the U.S. to Canada or Mexico" your question says: "Did the entity have any IMPORTS this quarter?" .... We believe it should say EXPORTS.

# **EIA Response:**

EIA has made this correction to the web form.

# **Comment:**

The EIA should allow CSV files, in addition to the XML file format, for upload to the Portal to provide enhanced utility for respondents.

# **EIA Response:**

Currently, the EIA-111 survey can only be submitted via web form. EIA plans in the future to allow respondents to submit the EIA-111 survey electronically using xml and csv file formats.

# **Comment:**

The EIA should allow more than one individual with access to the Portal to enter data for an open campaign to enhance the utility of the submission process.

# **EIA Response:**

Currently, once one individual starts entering data for an open campaign they are the only one that can continue and complete entering data. This is a limitation of the software we are using for the web form. EIA will investigate ways to provide the requested functionality.

# **Comment:**

The EIA should allow individuals within the same organization the ability to view the submission data for that organization within the Portal.

# **EIA Response:**

EIA is working to enhance the reporting capability of its collection web portal to allow multiple contacts within a company to view and print submitted forms.

#### **Comments:**

There should be an option for the user to print a copy of the report which was submitted. The Campaign Member Detail page in the portal should allow the user to view the reports which were previously submitted. Currently, there is no option that I can find, which allows previously submitted reports to be viewed by the user. This becomes troublesome if you haven't taken screen shots of the report as you are entering it prior to submission.

The EIA should configure the reports available within the Portal in a transactional format to increase the usefulness and clarity of the reports. The EIA should allow selection of the reporting period as a report parameter to enhance the usefulness and clarity of the reports. The EIA should allow submissions made in error to be deleted by the respondent to increase the clarity and quality of the reports.

# **EIA Response:**

EIA is working to enhance the reporting capability of its collection web portal to increase the usefulness and clarity of the reports.

# **Ways to minimize burden**

# **Comment:**

There really needs to be some type of mechanism to allow the individual filing the report to edit their data for any given campaign up to the point of the deadline. Having to submit a case and then re-enter all values for the entire quarter is quite time consuming if you simply needed to correct one data entry. Every effort is made to have the data verified but mistakes do occur.

# **EIA Response:**

The ability to save a data entry session and return to it later is a functionality on our list of improvements.

# **Comment:**

The emails and phone calls from EIA regarding the upcoming deadlines are time consuming. Each time we receive a phone call, we have to go back and double check that the report was in fact submitted. This takes unnecessary time. I guess I could liken it to filing your taxes, you as the individual are aware of the deadline and the assumption should be made that you will adhere to it without the reminders....or the reminders of the upcoming deadline after you have already submitted the campaign in question.

# **EIA Response:**

EIA will review its communications procedures.