

# **Public Comment File**

**To Accompany the U.S. Energy Information Administration (EIA)**

**Supporting Statement for Survey Clearance:**

**Electric Power & Renewable Electricity Surveys**

**OMB Number 1905-0129**

**This document is divided into three sections:**

- **Section A – Alphabetical list of organizations that submitted comments in response to the 60-day Federal Register Notice published on May 19, 2016.....Page 2**
- **Section B – The comments grouped by subject-matter, the commenter(s), and EIA’s responses.....Page 3**
- **Section C – A snapshot of the original letters from the commenters .....Page 37**

## Section A

### Alphabetical List of Organizations that Submitted Comments in Response to the 60-day Federal Register Notice Published on May 19, 2016

<b>Abbr.</b>	<b>Organization</b>	<b>Signer(s)</b>	<b>Date Rec'd</b>
AEC	American Electric Cooperative Inc	Mr. Chris McGeeney	7/13/2016
APPA	American Public Power Assn	Mr. Paul Zummo	7/15/2016
BPA	Bonneville Power Administration	Mr. Michael Gregory	7/18/2016
BEA	Bureau of Economic Analysis	Dr. Dennis Fixler	6/27/2016
Butler	Butler Public Power District	Mr. John Schmid	7/18/2016
CAISO	California ISO Corp	Mr. Andrew Ulmer	7/18/2016
Calpine	Calpine Corp	Ms. Sarah Novosel	7/18/2016
Formosa	CFB Power Plant of Formosa Plastics	Mr. Sam Lin	7/13/2016
Cornhusker	Cornhusker Public Power District	Mr. Clay Gibbs	6/29/2016
Dawson	Dawson Public Power	Ms. Gwen Kautz	7/18/2016
EEI	Edison Electric Institute	Mr. Henri Bartholomot and Mr. Stephen Fraunheim	7/18/2016
ElectriCities	ElectriCities of North Carolina	Ms. Wendy deMontbrun	6/29/2016
Elkhorn	Elkhorn Rural Public Power District	Mr. Thomas Rudloff	7/6/2016
Empire	Empire District Electric Co	Mr. Jared Wicklund	7/18/2016
ESA	Energy Storage Association	Mr. Jason Burwen	8/3/2016
FirstEnergy	FirstEnergy Corp.	Mr. William Shonk	7/13/2016
Grand Canyon	Grand Canyon State Electric Coop Assn	Mr. John Wallace	7/18/2016
IAEA	International Atomic Energy Agency	Mr. Jiri Mandula,	7/18/2016
Indicated ISOs	Indicated ISOs (Joint Comments of ISO New England; New York ISO; Electric Reliability Council of Texas, Midcontinent ISO; and Southwest Power Pool	Mr. Nathan Bigbee ERCOT, Ms. Margaret Caley, ISO-NE, Mr. Robert Fernandez, NYISO, Mr. Matt Morais, SPP Ms. Erin Murphy, MISO, Mr. Carl Patka, NYISO, Mr. Raymond Stalter, NYISO, Mr. Paul Suskie, SPP, and Mr. James Sweeney, NYISO	7/18/2016
KBR	KBR Rural Public Power District	Mr. Robert Beatty	7/18/2016
LBL	Lawrence Berkeley National Lab	Mr. Joseph Eto and Ms. Kristina LaCommare	7/14/2016
LADWP	Los Angeles Dept of Water and Power	Mr. Louis Ting	7/15/2016
Luminant	Luminant Power	Mr. David Duncan	7/18/2016
Midwest	Midwest Electric Coop Corp	Mr. Larry Umberger	7/5/2016
NRECA	National Rural Electric Coop Assn	Mr. James Spiers	7/15/2016
Nebraska Chamber	Nebraska Chamber of Commerce & Industry	Mr. Jamie Karl	7/1/2016
Nebraska Energy	Nebraska Energy Office	Mr. David Bracht	7/18/2016
Nebraska Power	Nebraska Power Assn.	Ms. Shelley Sahling-Zart	7/17/2016
NREA	Nebraska Rural Electric Assn.	Ms. Kristin Gottschalk and Mr. Chet McWhorter (contributor)	7/5/2016
North Central	North Central Public Power District	Mr. Keith Harvey	6/28/2016
PJM	PJM Interconnection, L.L.C.	Mr. Craig Glazer	7/18/2016
Puerto Rico	Puerto Rico Institute of Statistics	Dr. Mario Santiago	7/18/2016
Pulama Lanai	Pulama Lanai	Mr. John Stubbart	5/19/2016
SEIA	Solar Energy Industries Assn.	Mr. Justin Baca	7/18/2016
SCE	Southern California Edison Co.	Ms. Napa Tayavibul	7/18/2016
Southwest	Southwest Public Power District	Mr. Curtis Kayton	7/5/2016
Twin Valleys	Twin Valleys Public Power District	Mr. James Dietz	7/1/2016
Wheat Belt	Wheat Belt Public Power	Mr. Timothy Lindahl	6/28/2016

## Section B

### Comments grouped by subject-matter, the commenter(s), and EIA's responses

#### Comments Pertaining to Multiple Surveys

**Comment:** Several respondents indicated concerns with EIA's internet data collection system:

- Formosa Plastics has commented that alternative technologies would allow the reporting process to be more automated thus reducing reporting burden and keying errors. Formosa is also concerned that the Java plug-in technology currently required by the internet data collection system may create a cybersecurity risk.
- SEIA suggests EIA implement a bulk data upload capability in lieu of the manual data entry now required of respondents. SEIA also suggests that "a more efficient solution [to collecting solar PV data] would be to gain direct access to a representative sample of monitoring systems for customer-sited PV systems in each state."
- LADWP is concerned that EIA software has compatibility issues with Java updates. It notes that updating Java locks out the application and creates data entry problems and threatens compliance with reporting deadlines. It is also concerned about "potential cybersecurity issues" associated with Java.
- LADWP also comments that "The EIA forms are meant to gather information without creating unnecessary burden to respondents, however the forms are getting longer and more burdensome."
- Empire comments that the EIA-860 data collection system is "cumbersome and time consuming" to use. SCE had similar comments.
- SCE also commented that PDF's created by EIA's internet data collection system, which allows the user to retain a hardcopy of its data submission, "[do] not accurately capture the information within the EIA system and some of the fields/lines do not match the data reflected within EIA's system."

**EIA Response:** EIA is currently updating the internet data collection system to end the need for Java plug-ins. This will eliminate the cybersecurity issue that some respondents note and should also ease or eliminate Java compatibility issues. The work is scheduled to be completed by the end of the year.

EIA agrees that direct data upload capability should be made generally available as well as the direct machine-to-machine data collection implemented in the EIA-930 survey. EIA also believes that in general the functionality and "user experience" of the system should be improved. EIA has started a multi-year program to update or replace legacy systems. This program will eventually include the electricity and solar renewable surveys, but the schedule for this work is not set.

EIA will contact SCE concerning the problems with PDF reports and attempt to resolve them.

The data collection surveys have grown longer because the electric power industry has changed and become more complex. EIA can either ignore these changes, in which case the data collections will become increasingly incomplete and irrelevant, or change with the times which often means asking for additional information. The agency is cognizant of the need to minimize respondent burden and it aims to request only information with sufficient value to justify the burden. EIA also seeks in each clearance to identify items that can be deleted or simplified and has done so in this clearance; for example, by removing a question on dispersed generating capacity, ending the monthly collection of data on smart meter installations, and requiring units in test status to report generation only if the units are actually selling power. EIA has also rejected several requests to expand surveys and increase burden, such as requests to collect detailed information on tariffs from all utilities and more data on distribution system reliability, and to add questions to the EIA-861S.

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**Comment:** “The Bureau of Economic Analysis (BEA) strongly supports the continued collection of data by the Energy Information Administration (EIA) for the Electric Power Surveys. The data collected on these forms are crucial to key components of BEA’s economic statistics.”

**Commenter(s):** BEA

**EIA Response:** EIA is appreciative of BEA’s long-standing support of the electric data program.

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**Comment:** According to SEIA:

In comments on previous triennial electricity form reviews, some stakeholders cited concerns about EIA collecting and publishing information that, in the commenters’ views, created security concerns. SEIA not only disagrees with this notion of more transparent grid data presenting a security hazard, SEIA believes the lack of this more complete data is a barrier to a more secure, reliable, and resilient grid.

Comments in previous reviews contend that collection and publishing of details on grid physical characteristics and operations could give information to people with malicious intents. While publication would make data more widely available, that data would not make it easier to target the grid but data availability would make it easier for innovators to offer solutions to improve the grid. The reason is that all the information necessary to cause damage to the grid is readily available to anyone who spends an hour driving around to look for and follow wires. However, much more detailed and difficult-to-obtain information is necessary to understand how to provide optimized grid enhancements.

SEIA believes public access to grid information is in the public interest and that EIA is both well-placed to facilitate access to such information and has a mandate to facilitate that access.

**Commenter(s):** SEIA

**EIA Response:** EIA is appreciative of SEIA’s support for the public release of electric power data.

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### **Comments Pertaining to the Collection of Data on Virtual Net Metering**

**Background:** Several comments were received pertaining to the collection of a new data category, information on virtual net metering (VNM). VNM is a billing arrangement that allows multiple energy customers to receive net metering credit from a shared onsite or remote renewable energy system as if it was located behind the customer's own meter. It provides a means for customers who might not otherwise be able to benefit from net metering, such as residents in apartment buildings, to make use of net metered billing for renewable energy. Sixteen states allow utilities to offer VNM arrangements, including such large states as California and New York. Several respondents with VNM agreements have asked EIA where on the form to report them.

The VNM data would be collected on three surveys, the annual and monthly utility surveys (respectively EIA-861 and EIA-861M, and the EIA-860 capacity survey). Specifically:

- The utility surveys will capture data for 1) VNM capacity under 1 MW and 2) VNM capacity equal to or greater than 1 MW. The data is collected as the total capacity falling within each category, not for individual generators. Other related information will be collected, such as the number of customers enrolled in VNM programs. (EIA-861, Schedule 7, Part A; and EIA-861M, Schedule 3, Part A).
- The capacity of individual generators with a capacity of 1 MW or greater associated with VNM arrangements will be collected on the EIA-860 (Schedule 3 Part B, lines 33a and 33b).

The combination of these data collections will allow EIA to account for VNM capacity in a manner that will avoid double-counting of the capacity reported on the two surveys.

**Comments:** Three comments were received pertaining to EIA's proposal to collect VNM data on the EIA-860 capacity survey:

- LADWP comments that "It is misleading to say that collecting information on whether a facility has net metering or virtual net metering will help enhance the estimation of total distributed solar generation. Since net-metered solar is consumed on site, some of the solar produced is not captured, depending on the metering. Solar generation is the same whether the energy is produced from a wholesale project or a project made for on-site consumption. Providing this information would be tedious to collect."
- NRECA "is also concerned that the term 'virtual net metering' (VNM) ... could lack clarity for some of our members. In addition, in some cases the owner of the generator is not the administrator of a VNM program, which might necessitate additional coordination and possibly add additional burden hours." NRECA also "urges EIA to add the term 'community solar' as an example in the survey form" of VNM, and to provide training to respondents on this topic.
- EEI states that "Reporting of this information should be the responsibility of the solar owner or operator, not the utility to which the solar generator is interconnected."

With respect to the EIA-861 annual utility survey and the EIA-861M monthly utility survey, several parties submitted concerns relating to clarification of the definition of VNM capacity and customers, community solar, and the delineation of virtual net metered generators above and below 1 MW:

- Calpine “urges EIA to impose the reporting obligation for net metering information on the utility distribution company and not on retail marketers. Because net metering agreements are typically between the utility distribution company and the net metering customer, a retail marketer may not be aware of the net metering arrangement and will not have access to the information requested.”
- According to EEI “EIA should first propose for public comment a more refined question that distinguishes between net metering, virtual net metering, and community/ shared solar programs. The current proposal treats these as the same when they are not. And there are so many variations of these programs that seeking further industry input before proceeding with this change to the form would help to avoid confusion and would enable more accurate reporting if and when the information requested is available. Further, EIA should specify that the information needs to be provided only if readily available to the utility filing the form. By readily available, we mean not requiring additional research, hardware, software, or programming work to obtain and track the data.”
- NRECA has concerns with the distinction between VNM installed capacity from projects "1 MW and greater" and "less than 1 MW," a distinction that is not made for any other resource in the EIA-861. This presents an additional reporting burden, especially for respondents who have VNM capacity from multiple projects. It could also lead to double counting for customers participating in multiple projects. Moreover, it introduces a generator focused question into a form which generally deals with utility business, finance, and program reporting and is often filled out by non-engineering staff who might be unfamiliar with these technical details. NRECA is also concerned that the term "virtual net metering" could lack clarity for some of their members.

NRECA urges EIA to remove the 1 MW size distinction from the VNM questions. This would bring the treatment of VNM in line with the treatment of other technologies in this section. NRECA also encourages EIA to add the term "community solar" as an example in the survey form and accompanying instructions of what is meant by solar capacity offered through a VNM agreement. In general, since VNM is a new concept for the EIA-861, NRECA encourages EIA to conduct thorough trainings (e.g. webinars) for respondents on this topic.

- APPA notes that “changes to Schedule 7, net metered capacity, will add needed clarity in identifying community solar and other virtual net-metered capacity.”
- First Energy states “As far as the items covering Virtual Net Metering, we would be able to start with the information that is available and will also require a change to the reporting spreadsheet. We probably want to add something on the virtual NM aspect to the interconnection application as well.”
- SCE “requests EIA define virtual net metered capacity and virtual net metered customer counts. Please specify if it includes generating customers and/or virtual customers.”

**Commenter(s):** Calpine, EEI, First Energy, LADWP, NRECA, APPA, and SCE

**EIA Response:** As noted above, VNM is a program where the distribution company bills the customer on a net basis for load and credits for remote and/or shared on-site generation. Generally but not always VNM programs have two primary business partners. One is the solar developer or operator, that sells a fraction (or all) of the system (usually measured in capacity or shares) to the ultimate customer(s) and an electric distribution company that bills the customer(s) for its energy use and provides a credit on the customer's bill for the generation allocated to its share of the resource. In some cases the distribution company serves in both of these roles.

Information on VNM programs is of importance to distribution utilities because of the impact on a utility's finances. Because of this, distribution companies are the only business entities that CAN provide a complete picture of this information related to VNM, and it is an integral part of the "utility business, finance, and program reporting" that is typical for the EIA-861 data collection. This "complete picture" is highlighted in NRECA's comment for the EIA-860 "not all generator owners/operators have information concerning where the generator is part of a virtual net metering agreement." Without VNM data, it will be impossible to "estimate the missing load" i.e. that load that is not being reported because the customer's bill has generation credits netted against the metered usage data and the distribution company is only reporting "net sales" to EIA.

Of additional concern is the fact that other EIA surveys only collect generation data from resources that are 1 MW or larger, therefore it is important to collect VNM program information based on resources that are less than 1 MW and resources that are 1 MW or larger. For resources that are less than 1 MW EIA collects no generation data but estimates the generation from these resources based on capacity. For resources 1 MW or larger, EIA would not want to "double count" this generation by collecting it and also estimating it. Therefore, it is necessary for EIA to request that the VNM information be collected in two subgroups.

EIA does not agree with EEI's suggestion that it conduct additional research and consultations before adding questions on VNM programs. There is already a great diversity in these programs and additional research will simply confirm what we already know and have reflected in the proposed surveys, which is to provide definitions and questions that can encompass programmatic diversity.

As noted above several respondents note the need for clarification of definitions and training. EIA will expand the instructions on (known) VNM and add examples of VNM to the FAQs. We will also provide webinars on the VNM questions. EIA has analysts available to help respondents with their submission.

In respect to other questions noted above:

- LADWP questions the value of the capacity data. It will be used to improve the EIA's recently implemented estimates of small scale solar generation by month and state. More generally, the questions asked on the EIA-860 and EIA-861/861M have been carefully coordinated to ensure that the information collected by the forms allows distributed solar generation to be reported without double-counting and without missing any generation. The identification of generators which have output that are part of a net metering agreement or VNM on the EIA-860 ensures

that generation collected on the EIA-923 and generation estimated by the EIA-861 is not double-counted or omitted. This careful coordination of questions has been done to help reduce double-counting or omissions when estimating total distributed solar generation.

- NRECA suggests adding the term “community solar” as a primary example of a VNM program. EIA declines to do this because community solar is only one of many types of VNM arrangements.
- NRECA also appears to be concerned about the availability of data and related burden for generators with VNM arrangements. If a solar developer enters into an agreement with a customer to provide VNM the developer will know that a VNM agreement exists and most likely negotiated it with the distribution company. The information on the amount of capacity dedicated to a VNM program should be readily available.
- NRECA objects to the request for capacity data broken down by categories of under 1 MW and 1 MW or greater. For several years EIA has collected data on distributed generating capacity distinguished by capacity size category without any apparent difficulty by respondents.
- NRECA objects to adding questions related to generating capacity to the utility surveys. These surveys have actually collected data on distributed generation capacity for years.
- In respect to EEI’s comment on whether the generator or utility should report information on VNM programs, under EIA’s construct it is the responsibility of both because information from both parties is required to avoid double-counting capacity of 1 MW or greater.
- Calpine asks EIA not to impose on retail power marketers the responsibility for reporting VNM program information. EIA anticipates that normally only the distribution company would respond.

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### **Form EIA-63B, Annual Photovoltaic Cell/Module Shipments Report**

**Comment:** EIA is proposing to change the reporting frequency of the EIA-63B from annual to monthly. The agency should consider doing this only “with a drastically scaled down form and only for respondents with very large volume.” EIA should also recognize that “three individual manufacturers will make up the vast majority of the domestic production. If you intend to provide confidentiality, that sample size is not sufficient to do so, thus, the collection of this data would be largely without purpose since it would not be published.”

**Commenter(s):** SEIA

**EIA Response:** EIA’s intent is that only large volume companies will be required to respond monthly. The instructions and form will be clarified so only companies that comprise the largest shippers and represent approximately 90% of the prior year’s reported total shipping volume in peak kilowatts will be designated monthly respondents.

In respect to the data that can be published without exposing business sensitive information, EIA agrees that the consolidation in the solar industry may limit the level of detail EIA can publish monthly, such as

state-level data. However, we expect, at a minimum, to be able to publish national totals and trends. When data from the smaller annual respondents has been collected it will then be possible to present more detail without exposing business sensitive information.

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**Comment:** EIA should “only survey the first point of shipment in the U.S. (e.g. point of manufacture in the U.S. or point of import into the U.S. Do not survey wholesale distributors that are not the first point of shipment in the U.S. as this will [create data duplication problems and increase respondent burden].”

EIA should ask the U.S. International Trade Commission to collect data on “capacity units.” The data could then be passed on to EIA, eliminating the need for EIA to collect data on imports measured in capacity.

**Commenter(s):** SEIA

**EIA Response:** EIA considers all solar data significant and believes that adopting the practice of surveying only the first point of shipment in the U.S. (e.g. point of manufacture in the U.S. or point of import into the U.S.) and not including wholesale distributors that are not the first point of shipment will limit the data. The EIA-63B has separate questions for shipments of imports, shipments from U.S. manufacturing, and shipments from wholesalers to clearly distinguish among them. Eliminating any of these categories of respondents may limit the data EIA can report given the business sensitivity of the data in an increasingly consolidated industry.

EIA cannot require the U.S. International Trade Commission to add capacity units to its data collection.

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**Comment:** EIA should not ask for current and planned production capacity “from importers who are not the manufacturers of the imported goods since they may not have visibility into the capacities and plans of their suppliers.”

**Commenter(s):** SEIA

**EIA Response:** EIA’s intent is to request production capacity only for U.S. manufacturers. The instructions will be clarified on this point.

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**Comment:** “Consider eliminating this form entirely. Data hasn’t been published for years. It isn’t well-structured for covering the current state of the solar industry supply chain. It isn’t clear what the purpose of the data collection is. EIA does no similar equipment supply chain collection for any other energy source; data requested in form 63B would be analogous to collecting data on boiler, turbine and generator shipments for thermal generators, something EIA does not do. The private market research sector may be better equipped to track the rapidly changing solar supply chain.”

**Commenter(s):** SEIA

**EIA Response:** The purpose of the survey is to collect, and make available to the public, verified information on activity in the solar photovoltaic (PV) business that is otherwise unavailable to the public

or only available as estimates that must be purchased from commercial information providers. Because of the growing importance of solar PV generation, we are proposing to make this data available monthly. Note that even the data that cannot be published in EIA's reports because of business confidentiality is used internally by EIA and by academic researchers (through data sharing agreements) to monitor and study the industry.

EIA collects detailed information on the characteristics of thermal generation equipment, including boilers and environmental controls, on the EIA-860 survey. This data is collected from the equipment end user rather than the manufacturer because the end users are relatively large businesses or public entities, with the total number of surveyed entities measured in the thousands. An end user data collection is not practical for solar PV because the end users are measured in the hundreds of thousands and many end users are small businesses or residences.

SEIA is correct that there was a lengthy gap in the publication of the data, due in part to the EIA's need to replace the publication system. Also, EIA has had to more carefully screen publication tables to ensure that, as the industry consolidates into fewer and larger players, the tables do not reveal business sensitive data. EIA is now returning to a normal publication schedule. We published the 2013 data year in February of 2016, the 2014 data in July 2016, and plan to publish the 2015 data in September of 2016.

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**Comment:** SEIA proposes dropping the EIA-63B survey in lieu of creating a machine-readable data base for all "[solar] modules and inverters commercially available in the United States," including specification sheets and bills of materials.

**Commenter(s):** SEIA

**EIA Response:** EIA lacks the resources and expertise to create and verify an equipment database of this nature.

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#### **Form EIA-411, Coordinated Bulk Power Supply and Demand Program Report**

**Comment:** Regarding EIA's proposal to add state and county to the terminal name on Lines 5 and 6 of Schedule 6 Part B, Characteristics of Projected Transmission Line Additions, this data "provides details about electricity infrastructure that should not be made available to the public, lest bad actors intent on harming the system take advantage of it." The state and county should be treated as confidential.

**Commenter(s):** EEI

**EIA Response:** The state and county is being added to the survey as a convenience to data users, and in particular allows terminals with similar names within a state to be distinguished.

The planning and siting of transmission lines is a public process in which the precise locations not only of terminal points but exact route is made available. The EIA-411 reveals less information than is readily

available through an Internet search. As examples, see the information on planned transmission projects in MISO, including detailed route maps, in the D1 appendices at <https://goo.gl/kbT6XR>.

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**Form EIA-860, Annual Electric Generator Report**

**(General Comments)**

**Comment:** EIA estimates the reporting burden of the EIA-860 to be 9.26 hours per respondent. Empire reports that its response time is 26 hours. EIA should update the annual estimated number of burden hours by assuming that every respondent needs 26 hours to complete the survey.

**Commenter(s):** Empire

**EIA Response:** The EIA-860 burden estimate has been revised, based on new information, to 9.40 hours per survey form. The estimate EIA provides is an average reporting burden. Individual reporting burdens may vary significantly from respondent to respondent. For instance, the average number of facilities reported by a respondent in 2015 was 2.15; in 2015 Empire reported five facilities. The larger than average number of facilities may have contributed to the time required for Empire to complete its filing.

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**Comment:** Two commenters suggested fundamental changes to the structure of the survey:

- Empire states that “Form EIA-860 is structured in a format in which the responses for all generating facilities are provided in a single form. For companies with multiple generating facilities, this format is both cumbersome and time consuming.” EIA should separate submissions by facility on the EIA-860; that is, one form for each plant.
- SEIA suggests creating a new form that would collect data for solar PV plants. This form could be much simpler and shorter than the current EIA-860 form that collects many data elements inapplicable to solar PV generators.

**Commenter(s):** Empire and SEIA

**EIA Response:** EIA appreciates the recommendation to separate the submissions on the EIA-860 into separate submissions by facility and create a solar PV form. These proposed changes in the logistics of how data is submitted is effectively a request to redesign the data collection systems used for collecting survey information. EIA will take these recommendations into account when the existing survey systems are upgraded or replaced.

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**Comment:** SEIA states that EIA should “publish all non-confidential form data fields monthly rather than just the small subset of fields that is currently published monthly” and “should not withhold publishing data of data on generators smaller than 1 MWac.”

**Commenter(s):** SEIA

**EIA Response:** EIA does not withhold publishing data on generators smaller than 1 MW. Data on generators smaller than 1 MW is collected only when those generators are part of a plant with a total capacity of at least 1 MW. When the data is collected it is released to the public.

Monthly and annual data are released to the public as soon as the data have passed quality reviews.

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**Comment:** EIA should extend coverage to Puerto Rico for the EIA-860.

**Commenter(s):** Instituto de Estadísticas de Puerto Rico

**EIA Response:** EIA concurs with the recommendation and will add Puerto Rico to both the EIA-860 and the EIA-860M.

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### **EIA-860 Energy Storage Comments**

**Comment:** In response to EIA’s proposal to add Question 15 to Schedule 2, Power Plant Data, which asks if the facility has energy storage capabilities, there were comments seeking clarification.

- Luminant recommends clarifying the instructions to eliminate emergency battery rooms used for safe shutdown.
- LADWP comments that the question is ambiguous about whether the new proposal “asks for reporting on (1) a facility that has an integrated ES system or (2) an ES system by itself.”

**EIA Response:** EIA has clarified the instructions to state that auxiliary equipment such as emergency battery rooms should not be reported.

Whether an energy storage installation should be considered integrated with a generating plant depends on the specific commercial and operational situation of each installation. For example, a battery system installed at a solar farm to store generation during the day so it can be sent to customers in the evening would be an integrated system. A flywheel storage installation intended for frequency regulation that has been located for convenience at the site of coal plant, perhaps because land was available, might not be considered integrated. The determination is up to the respondent.

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**Comment:** EIA is proposing to add Questions 16a – 16d to Schedule 2, Power Plant Data, dealing with natural gas pipeline connections and on-site gas storage. The questions contain the phrase “For plants that receive natural gas only.” This phrase creates uncertainty about which plants should provide a response.

**Commenter(s):** Empire

**EIA Response:** The instructions and form have been revised to clarify that all power plants with natural gas pipeline connections or on-site natural gas storage should answer the questions if they do or could use natural gas to generate electricity.

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**Comment:** It will be very burdensome to carry out EIA’s proposal to add Questions 34-38 to Schedule 3B, Generator Information, requiring information for charge rate and maximum discharge rate for energy storage. Only nameplate capacity information should be collected.

**Commenter(s):** LADWP

**EIA Response:** A report prepared by Sandia National Laboratories (Sandia) for EIA concluded that many of the parameters relevant to energy storage are not currently captured by the EIA-860. The report points out that with the increasing presence of energy storage systems in the United States, it is necessary to collect adequate data on these systems. The Sandia report specifically identifies charge rates and discharge rates as high priority for collection.

EIA chose not to include every recommendation from the Sandia report, but in the case of charge rates and discharge rates, EIA believes the benefit will outweigh the burden. This is in part because these data elements are critical measures of the capability of the storage system and should be readily available to the operator.

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**Comment:** Energy storage data “should only be required for Battery Energy Storage Systems due to the complexity of calculating the capacity for non-battery energy storage systems. For example, the capacity of Thermal Energy Storage Systems is difficult to quantify as it changes with operation, ambient temperature and humidity.”

**Commenter(s):** LADWP

**EIA Response:** The proposed form and instructions already clarify that the energy storage questions in Schedule 3, Part B, lines 34 through 40 do not need to be reported by thermal storage systems or pumped storage systems. However other energy storage devices such as batteries, flywheels, and compressed air systems do need to be reported.

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**Comment:** “Utility–Scale [Energy Storage] needs to be more specifically defined based on interconnection type and size.”

**Commenter(s):** LADWP

**EIA Response:** EIA does not include interconnection type or size in the definition of a generator, either in conventional or energy storage applications. The metric for size is nameplate capacity and the reporting threshold is set at the plant level. To clarify the reporting criteria, EIA amplified the instructions to confirm that energy storage devices that provide electric power are considered generators. However, the EIA-860 does provide exceptions for generating units that exclusively provide auxiliary or temporary service.

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**Comment:** “Requesting [Energy Storage] facility information for facilities under ten megawatts will be burdensome for LADWP and is not available during the normal course of business.”

**Commenter(s):** LADWP

**EIA Response:** The increasing participation of energy storage systems means that collecting adequate data about these systems is required to accurately and comprehensively describe the U.S. power system. Over 50% of the energy storage applications that currently report data to EIA are under 10 MW. Leaving out these smaller systems would create a major gap in EIA's data on electricity storage.

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**Comment:** Regarding EIA's proposal to add Questions 34-38 to Schedule 3B, Generator Information, requiring information for charge rate and maximum discharge rate for energy storage, the question should be reworded to clarify that it is asking what applications the device served during the reporting year rather than what the original intent of the device was. Additionally, the descriptions of three applications should be edited and two other applications should be added.

**Commenter(s):** ESA

**EIA Response:** EIA concurs with ESA's recommendations and has incorporated the adjustments.

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**Comment:** SEIA supports EIA's plans to collect more data on energy storage systems.

**Commenter(s):** SEIA

**EIA Response:** EIA appreciates SEIA's support for this data collection initiative.

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**Comment:** "EEI assumes that the focus of [the new energy storage question in EIA-860] is to collect information on utility-scale battery storage, but if EIA has other storage in mind as well, please clarify."

**Commenter(s):** EEI

**EIA Response:** The instructions for Schedule 2, Question 15 of the EIA-860 direct the respondent to report whether the facility can store excess electric generation. This question has no exclusions for generator size, technology, or application. The instructions for Schedule 3 of the EIA-860 do allow exemptions for auxiliary or temporary applications.

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#### **EIA-860, Reference Unit Power**

**Comment:** In response to EIA's proposal to add Question 22 on Schedule 3B, Generator Information, regarding Reference Unit Power (RUP), both net and gross versions of this value should be collected.

**Commenter(s):** IAEA

**EIA Response:** The intent of this question was to collect a single standard value that would be available to respondents in the normal course of business. IAEA's comments highlight that a standard measurement of RUP may not be available, a concern further confirmed by EIA through a consultation

with the technical industry group, the Institute of Nuclear Plant Operators (INPO). Accordingly, the proposed new question is being removed.

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**Comment:** EIA's proposal to include Reference Unit Power is "not relevant to solar but please ensure data entry is streamlined so as not to present irrelevant questions to solar respondents."

**Commenter(s):** SEIA

**EIA Response:** As noted immediately above, EIA will remove the proposed question.

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### **EIA-860, Environmental Equipment**

**Comment:** With respect to Question 3 of Schedule 6B, Boiler Information, Air Emission Standards and Control Strategies, spray dryer technology should be added and perhaps some co-benefit control strategies such as selective catalytic reduction and flue gas desulfurization to Table 12 (list of SO<sub>2</sub> compliance strategies).

**Commenter(s):** APPA

**EIA Response:** Following a discussion with APPA staff, EIA has clarified the description of code IF, "Use flue gas desulfurization unit or other SO<sub>2</sub> control process (specify the specific type of equipment in Schedule 6A)," to emphasize that the type of equipment must be listed in Schedule 6A. The equipment list in Schedule 6A includes spray dryer technologies, selective catalytic reduction, and other flue gas desulfurization systems that also control mercury.

A related review of the SO<sub>2</sub> control strategy list highlighted that several historical codes are no longer relevant. These historical codes have been removed to simplify the list.

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**Comment:** EIA proposed the addition of the actual or expected retirement date for environmental control equipment to Schedule 6A, Boiler Information, Plant Configuration and Equipment Information.

- Calpine comments that environmental equipment does not have a retirement date unless the plant is being retired or existing equipment is upgraded.
- Calpine comments that environmental equipment retirement dates should not need to be reported for equipment associated with natural gas generators.
- LADWP stated that requiring reporting of planned retirement dates of environmental equipment will be difficult because the retirement date is influenced by how the system is operated over time.
- EEI commented that it would be burdensome to report planned and actual retirement dates of individual pieces of environmental equipment. EEI comments that the term "environmental

equipment” is extremely broad and could have different meanings to different companies. EEI also comments that confusion could arise for equipment that is retired in place.

**Commenter(s):** Calpine, LADWP, and EEI

**EIA Responses:** The EIA-860 instructions and form already specify that “If the expected retirement date is unknown, leave blank.” Thus respondents do not have to report a planned retirement date if one does not exist.

For the past 3 years, EIA has collected the status of environmental equipment which designates whether the equipment is retired or not. The survey is simply being modified to incorporate the date these retirements took place or may take place. This information is needed to help correlate changes in emissions to when equipment shut down, and is also relevant to projecting future industry investment requirements and retirement decisions.

With respect to facilities with natural gas generators, these facilities have reported environmental equipment data, along with retirement status, for many years. The only change that is being proposed is to indicate the dates of these retirements if they are known.

With respect to EEI’s concerns about what equipment is encompassed by the term “environmental equipment,” it is the equipment listed in Table 7 of the instructions. This is the only equipment that can be included in the survey response.

LADWP appears to be concerned that the request for retirement dates applies to components of environmental control systems, such as the catalysts used in some nitrogen oxides control equipment. The retirement date is requested only for the complete systems listed in Table 7. As noted immediately above, the data collection system only allows the user to enter data for the systems listed in the table.

Equipment is often retired in place. Sometimes entire generating units are retired in place. This term should be clear to respondents.

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### **EIA-860 Solar Data**

**Comment:** It will create a reporting burden if EIA adds Question 30 to Schedule 3B, Generator Information, to collect azimuth and tilt angle for solar applications. LADWP also notes that azimuth and tilt may vary within a large solar farm.

**Commenter(s):** NRECA and LADWP

**EIA Response:** EIA’s collection of data on power plants originated in the late 1970s when the predominant generating technologies were thermal electric, hydroelectric, internal combustion, and combustion turbine systems. We are gradually updating our collection to capture information of comparable detail and value for solar and wind plants, and energy storage, due to their large scale introduction into the generating fleet.

Azimuth and tilt angle are necessary to understand the performance potential of existing and planned solar installations, and to project future solar generation. To put it differently, if solar power had been a

major generating technology in the late 1970s, EIA would have begun collecting azimuth and tilt angle at that time.

The information should not be burdensome to provide since azimuth and tilt angle are basic design parameters. Also note that the questions are only applicable to fixed tilt installations, not all solar PV installations.

EIA's current estimation of distributed solar generation in the United States relies on azimuth angles collected by the state of California. Adding these questions to the EIA-860 will expand and standardize the collection of solar orientations to other states as well.

With respect to facilities with multiple tilt and azimuth values, EIA has clarified the instructions to state that representative angles can be reported.

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**Comment:** Ask PV generators to report the capacity-weighted average azimuth on the EIA-860.

**Commenter(s):** SEIA

**EIA Response:** Calculating a capacity-weighted average azimuth would be burdensome for respondents. As noted immediately above, facilities with multiple tilt and azimuth values should report a representative value.

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**Form EIA-860M, "Monthly Update to the Annual Electric Generator Report"**

**Comment:** SEIA states that EIA should "remove 860m reporting requirements for plants with short lead times such as solar plants smaller than 5 megawatts-AC."

**Commenter(s):** SEIA

**EIA Response:** The EIA-860M is used to maintain accurate data on when new power plants will enter service. Many of the new plants entering service are small solar plants. Removing these plants from the data collection would make it impossible for EIA to provide the public with a current inventory of operating power plants in the United States.

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**Form EIA-861S, "Electric Power Industry Report (Short Form)"**

**Comment:** Expand Schedule 4, Part A, Sales to Ultimate Customers on the EIA-861S to include the revenue, MWh sales, and customer count data by customer sector as it is currently collected on Schedule 4, Part A, of the long form. EIA can then eliminate altogether the requirement for short form respondents to periodically fill out the long form.

**Commenter(s):** Electricities and APPA

**EIA Response:** Adding the proposed questions to the EIA-861S adds significant burden to the form versus asking for the data once every 8 years. The EIA-861S was created to lessen burden to these respondents who had difficulty separating their data into business sectors and needed a significant amount of EIA quality control help to produce acceptable data. Adding the suggested questions would largely defeat the purpose of the survey.

Adding the suggested data would not eliminate the need to periodically collect the long form data from EIA-861S respondents. Schedules that appear in the long form were excluded from the EIA-861S based on historical experience showing that these respondents have minimal relevant information. (For example, EIA-861S respondents rarely operate demand response programs.) Nonetheless it is necessary to reconfirm that this assumption still holds and in order to do that we need these respondents to periodically complete the full set of schedules on the long form.

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**Form EIA-861, “Electric Power Industry Report**

**Comment:** EIA should collect additional data on distribution system reliability, including the MAIFI value (Momentary Average Interruption Frequency Index) and more SIADI and SAIFI subgroups.

**Commenter(s):** LBNL

**EIA Response:** EIA appreciates LBNL’s continued interest in collecting more information on distribution system reliability. However, based on EIA’s experience with the collection of distribution system reliability data over the past three years, it is likely that adding these additional measures will require significant effort by EIA to explain the request to respondents and to verify the data. EIA does not believe that these proposed data elements add sufficient value to justify the additional burden on respondents and EIA.

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**Comment:** Completing the EIA-861 has proved to be “very burdensome” for Third Party Operators (TPOs) of solar energy systems.

**Commenter(s):** SEIA

**EIA Response:** A TPO is a business that installs a solar system at a customer’s location, behind the meter, and bills the customer for the generation from or the use of that solar resource. The EIA-861 is significantly less burdensome for TPOs than many other entities. This is because most of the schedules and questions on the survey are unrelated to the TPO business model and therefore are not completed by TPOs.

The information from the TPOs is essential to understanding the impact and growth of small scale (“rooftop”) solar power. There is no other way to collect this data since it is impractical to survey individual homeowners.

**Comment:** Two comments were received on energy sold back to the utility by end-users. This question appears on the monthly survey (EIA-861M, Schedule 3, Part A, Net Metering Programs) and the annual survey (EIA-861, Schedule 7 Part A).

- SCE asks for guidance on how to report if the information is unavailable.
- First Energy notes that electricity “sold back to the utility only occurs annually when we true-up for any energy not used up during the prior 12-month period [for which the starting point varies by state and customer],” and that consequently they cannot produce data “on a calendar year basis, only on a 12-month basis ending at the time of the true up.”

**Commenter(s):** First Energy and SCE

**EIA Response:** Energy sold back to the utility has been on the survey for years and is not a new proposal. A response is required only if the distribution company has the data available. Data for the most recent 12-month period is acceptable.

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**Comment:** EIA is proposing to add the collection of data on electricity storage capacity for net metered and virtual net metered installations. This question appears on the monthly survey (EIA-861M, Schedule 3, Part A, Net Metering Programs) and the annual survey (EIA-861, Schedule 7 Part A). First Energy notes that “Storage capacity is something we would be able to provide going forward. However, historical information is not easily obtainable.” In order to collect the information going forward, First Energy will need to “make changes to the interconnection application making the information regarding storage system mandatory with specific questions.” In some states, First Energy will “need to run the changes past their respective commission staff.”

**Commenter(s):** First Energy

**EIA Response:** EIA understands that the information may not be available if state commission staff need to approve changes to the interconnection agreement in order to add storage. EIA will make this element optional for the current clearance. This will allow respondents time to clear changes to interconnection agreements with their respective state commissions

EIA never intended to collect this data for prior periods.

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**Comment:** “APPA generally supports the revisions to the EIA-861. The new ‘behind the meter’ option will be beneficial to the industry in more accurately gauging the growth in this type of generation.”

**Commenter(s):** APPA

**EIA Response:** EIA appreciates APPA’s understanding of the importance of these emerging issues within the electric power industries.

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**Comment:** Completion of the annual form as reported by one company “requires more along the lines of 24-32 hours to complete, while another company estimates this burden to be approximately 150 hours.”

**Commenter(s):** EEI

**EIA Response:** EIA’s estimated burden for the existing form is 10.97 hours and 12.75 hours for the modified form. This estimate is an average. Burden can vary significantly from one respondent to another; for example, some respondents only complete a subset of schedules based on their business activities. The company reporting to EEI that it takes 150 hours to complete the survey has burden that seems very high. EIA invites this company to contact EIA for assistance in completing the form and we may be able to reduce their burden.

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**Comment:** We support the removal of dispersed generation data from Schedule 7, Part B.

**Commenter(s):** EEI

**EIA Response:** EIA appreciates EEI’s support of this change.

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**Comment:** Data should be released to the public as soon as it is received by EIA.

**Commenter(s):** SEIA

**EIA Response:** SEIA is proposing that EIA release data that has not undergone any quality reviews. This procedure will result in the release of erroneous information. The release of data with errors will waste the time of users who have to sort out the good data from the bad, and potentially cause embarrassment and burden for respondents who, for example, may be asked by regulators to explain anomalous values.

EIA recognizes the value of expediting data release. We already have a preliminary release but it is timed to occur when most of the data has been received and passed quality checks.

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**Comment:** SEIA suggests that EIA collect and make available to the public “machine-readable data on the characteristics of every electricity transmission and distribution conductor, substation and transformer in the United States. While utilities themselves may not have all this data right now, they should strive to obtain and organize this data.” The data would be collected through the EIA-861 or on a new form.

**Commenter(s):** SEIA

**EIA Response:** This proposal would vastly exceed the resources available to EIA. This data would be very difficult and resource-intensive to verify, and it would impose an enormous burden on respondents.

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**Comment:** SEIA proposes that EIA collect from every utility in the United States and its territories in a “machine-readable format the actual rate structure of every tariff available to its customers.” Whenever a tariff is added, removed, or changed an update would be submitted to EIA within 30 days of the event.

**Commenter(s):** SEIA

**EIA Response:** This proposal would vastly exceed the resources available to EIA. This data would be very difficult and resource-intensive to verify, and it would impose an enormous burden on respondents.

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**Comment:** SEIA proposes that distribution companies report customer count, sales, and revenue data by individual tariffs, further divided into each line item within a tariff.

**Commenter(s):** SEIA

**EIA Response:** This proposal would vastly exceed the resources available to EIA. This data would be very difficult and resource-intensive to verify, and it would impose an enormous burden on respondents.

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**Comment:** The inclusion of irrigation activities in the industrial sector elevates the average industrial price of electricity (i.e., industrial revenues divided by industrial sales) in some agricultural states by as much as 20-30 percent in comparison to what it would be if irrigation customers were excluded from the industrial sector.

Commenters also note that until 2003 EIA directed respondents to report agricultural sales in the “Other” category. Because the “other” category is no longer a response option another reporting approach is needed to distinguish agricultural from other power sales.

Commenters suggest EIA should modify the collection of data on the survey to either:

- Provide a reporting category for seasonal agriculture; or
- Provide a check box that respondents would use to indicate that agricultural sales are included in the industrial sector. The respondent would also provide the percentage of industrial sales and revenue attributable to agriculture.

These changes would then flow through to the reporting of the data by EIA; that is, reports and public data files would be modified to show industrial data with and without seasonal agriculture.

**Commenter(s):**

- Cornhusker PPD
- Elkhorn PPD
- Grand Canyon State Electric Cooperative Association
- Midwest Electric Cooperative Corporation
- Nebraska Chamber of Commerce

- Nebraska State Energy Office (NSEO)
- Nebraska Power Association
- Nebraska Rural Electric Association (NREA)
- NRECA
- North Central Public Power District (PPD)
- Southwest Public Power District (SWPPD)
- Twin Valleys PPD
- Wheat Belt PPD.

Of the 13 commenters, 11 are from Nebraska, one is from Arizona, and NRECA is a national trade association for electric power cooperatives.

**EIA Response:** The commenters raise three issues: how EIA categorized agriculture prior to 2003, the impact on reported average rates of including agriculture in the industrial sector, and how EIA should report industrial and agricultural data going forward. Each of these issues is discussed below.

*Categorization of Agriculture by EIA Prior to 2003:* Commenters are incorrect that prior EIA practice had been to direct respondents to report agricultural sales in the “other” category. EIA determines sector designations based on the North American Industry Classification System (NAICS) codes, which clearly identify agriculture as an industry. Prior to the implementation of NAICS codes, Standard Industrial Classification (SIC) codes were used, which also identified agriculture as an industry.

Based on the NAICS and SIC codes, EIA currently directs respondents to report agricultural sales in the industrial sector. This is a long-standing practice. For example, the 1992 issue of the EIA publication *Electric Sales and Revenue* states on page 2 and in the Glossary that “The industrial sector includes manufacturing, construction, mining, agriculture, fishing, and forestry establishments – SIC codes 1 through 39.” The 2000 issue of the same publication states that:

The industrial sector includes manufacturing, construction, mining, agriculture, fishing, and forestry establishments (NAICS codes 11 through 3399).” (<http://goo.gl/zlwNjZ>, page 1 and repeated on page 282).

The publication also states, on the same pages, that “The ‘other’ sector includes public street and highway lighting, railroads and railways, municipalities, divisions or agencies of State and Federal Governments under special contracts or agreements, and other utility departments, as defined by the pertinent regulatory agency and/or electric utility.” Agriculture is not included.

Beginning with the collection and publication of 2003 data, the “other” category was removed. While the primary reason for this change was to create a new “transportation” sector, another objective was to eliminate the reporting of data in the wrong sector. For example, prior to 2003 some Nebraska utilities reported their irrigation data to EIA incorrectly in the “other” sector. As explained in the 2003 *Electric Power Annual*:

Beginning in 2003 the Other Sector was eliminated. Data previously assigned to the Other Sector have been reclassified as follows: Lighting for public buildings, streets, and highways, interdepartmental sales, and other sales to public authorities are now included in the Commercial Sector; agricultural and irrigation sales where separately identified are now included in the Industrial Sector; and a new sector, Transportation, now includes electrified rail and various urban transit systems (such as automated guideway, trolley, and cable) where the principal propulsive energy source is electricity. Comparisons of data across years should include consideration of these reclassification changes (<http://goo.gl/UZWcoS>, page 5, footnote 14).

*Effect of Categorization of Agricultural Sales on Reported Industrial Average Prices:* EIA has no data on the portion of a utility's industrial sales that are attributable to agriculture generally or irrigation in particular. Three commenters addressed this issue using information reported to the Rural Utility Service (RUS) on its Form 7. (For information on Form 7 see <http://goo.gl/dmDT56>.) These comments are discussed below. In brief, the information presented is unrepresentative of the state and cannot be verified because identifying information is not provided.

(1) NRECA states that in 2014 "the reported (1) EIA industrial rate for electric cooperatives and PPDs [in Nebraska] is 31.5 percent higher on EIA Form-861 than RUS Form 7." EIA requested the underlying data and received a spreadsheet described as including EIA data and RUS Form 7 data. The spreadsheet shows that the 31.5 percent difference in Nebraska is based on the data for two unidentified utilities. EIA's data collection for 2014 includes 82 utilities in Nebraska. NRECA's calculation is therefore unrepresentative of the state and cannot be verified because of the lack of identifying information.

(2) NREA states in its comments:

Looking at Nebraska specifically, in 2014 reported irrigation pricing was 16.38 cents per kilowatt hour on average, while traditional industrial pricing was only 6.67 cents per kilowatt hour. When seasonal agricultural (primarily irrigation) numbers are removed from the EIA reported industrial pricing, the resulting price differential is greater than 30 percent.

EIA received from NREA a hardcopy of the file used to produce these results. The file is difficult to interpret:

- It appears to include about 30 utilities but none are identified. As noted above in 2014 some 82 Nebraska utilities reported to EIA.
- In two cases average industrial rates are shown with no sales or revenue data.

As in the case of the NRECA comments, the average price differences presented by NREA are based on incomplete data that cannot be verified.

(3) In its comments the SWPPD states that its calculations reveal "an approximately 42% overstatement [in 2015] of SWPPD's industrial rate rather than reporting [industrial and irrigation data] separately." This percent difference is calculated correctly for the data SWPPD presents. However, SWPPD accounts for only about one percent of industrial load in Nebraska. SWPPD cannot be taken to be representative of the state.

*Future Presentation of Nebraska and Agricultural Data by EIA:* EIA does not accept the suggestions to create new agricultural sector data collections. It is likely that the vast majority of utilities in the U.S. have some agricultural load, and in many or most cases that load will have a seasonal component. EIA does not believe that all survey respondents should incur increased burden to accommodate a concern that appears to be almost entirely limited to certain respondents and associations in Nebraska. There would also be significant burden on EIA associated with the effort to modify data collection and reporting systems.

The idea of making the reporting of seasonal agricultural sales optional adds more problems. If the data collection was optional it would be impossible to determine if the data reported was representative of a jurisdiction; optional reporting would confuse respondents; and optional reporting would create the same or more burden on EIA than if the data collection was mandatory.

EIA has discussed the reporting of industrial sales and revenues with representatives from the NSEO, the NREA, and utilities in Nebraska on several occasions in the last few years. To try to address this concern:

- EIA published a Today in Energy article to explain to the public the issues of concern to the Nebraska officials (<http://goo.gl/oOOq6H>).
- EIA notes on the Nebraska state page on the EIA web site that “Farm irrigation is electricity-intensive and seasonal; it entails high costs for electricity that increase the average reported cost of electricity for Nebraska’s industrial sector.” (<http://www.eia.gov/state/?sid=NE>
- The EIA’s state page for Nebraska includes links to the NSEO and NREA web sites. Neither of these web site appears to include on the home page information on the industrial rate issue. This is unfortunate because the NSEO and NREA are actually in a better position to explain agricultural and irrigation rates in Nebraska than EIA, because they appear to have access to RUS Form 7 data that is unavailable to EIA.

In its discussions with Nebraska officials, EIA recommended that utilities with irrigation load that currently file only the annual EIA-861 survey ask to be added to the monthly data collection (EIA-861M). This would highlight seasonal variations in their industrial average prices. However, no annual filers have made this request.

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**Form EIA-861M, “Monthly Electric Utility Sales and Revenue Report with State Distributions (formerly EIA-826)**

**Comment:** SCE notes that “EIA proposed to add a new part, Schedule 3, Part A, Net Metering Programs, which will collect data regarding net metering programs, including ...storage capacity....SCE requests EIA specify if this additional data includes battery storage for [net metering] customers only.”

**Commenter(s):** SCE

**EIA Response:** The battery storage information requested for Schedule 3, Part A, is for net metering customers only.

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**Comment:** Calpine notes that the EIA-861M (which is simply a new number for the long-standing monthly survey, the EIA-826) will "collect monthly information from a sample of electric utilities, energy service providers, and distribution companies that sell or deliver electric power to end users. Data collected on this form includes sales and revenue for all end-use sectors (residential, commercial, industrial, and transportation)." Calpine asks EIA to better define these terms.

It also asks "EIA to make this a new class of respondents," apparently referring to "Behind the Meter Classification," on both the monthly form and the annual EIA-861.

**Commenter(s):** Calpine

**EIA Response:** EIA definitions previously included only on the survey frequently asked questions (FAQ) materials will also be incorporated into the survey instructions. The monthly and annual surveys both include a new respondent type, "behind the meter."

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**Comment:** We support EIA's proposal to drop Schedule 3, Part C, the monthly collection of data on installations of advanced metering.

**Commenter(s):** EEI

**EIA Response:** EIA appreciates EEI's support of this change. EIA has reviewed the addition of advanced meters annually and concluded that monthly reporting is no longer providing significant information because the rate of addition of advanced meters has slowed to the point that annual information is all that is needed. EIA is also trying to balance the addition of new and important information on the form with removal of any less significant information to minimize the additional burden to the industry.

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**Comment:** Regarding the addition of Schedule 3, Part B, Non-Net Metered Distributed Generation, many utilities do not collect such data. This can also create an extra burden and the possibility of needing to change interconnection agreements.

**Commenter(s):** EEI

**EIA Response:** Utilities have provided this information on the EIA-861 previously. EIA understands that storage may not be available from the interconnection agreement without state commission approval and so EIA is recommending that it be optional for a 3-year period to help effect this change.

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**Comment:** Completion of the monthly form as reported by one company requires more along the lines of 24-32 hours to complete, about the same as the annual form (while EIA's estimated burden for the existing form is 1.37 hours per month and 2.04 hours per month for the modified form.)

**Commenter(s):** EEI

**EIA Response:** The EIA-861M is a subset of schedules from the EIA-861. A subset of schedules should be able to be completed in less time than the complete form. EIA invites this company (who is not identified by EEI) to contact EIA for assistance in completing the form and we may be able to assist them to reduce their burden.

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**Comment:** Regarding the addition of Schedule 3, Part B, Non-Net Metered Distributed Generation, NRECA suggests that EIA drop the proposed sector breakout for this data and just collect a total.

**Commenter(s):** NRECA

**EIA Response:** Historically, end users of electricity tended to not have their own generators and therefore understanding their energy use on the national basis was much simpler. One of the most important considerations for the future of the electric industry is the implementation of small-scale generation and its impact on the industry. EIA has previously been criticized for not having this information available. EIA believes that it is absolutely necessary to collect this information. Currently EIA provides an estimate of small scale solar generation based on estimates of capacity. For non-net metered generators this information is currently only updated once a year from the annual form and is not by sector. This proposal would provide the data monthly and improve EIA's recently implemented monthly estimates of small scale solar generation by state and sector.

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**Comment:** We support the addition of Schedule 3, Part B, Non-Net Metered Distributed Generation for distribution utilities.

**Commenter(s):** SEIA

**EIA Response:** EIA appreciates SEIA support for this data collection.

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**Comment:** Question 7 on the EIA-861, Schedule 2, Part A is duplicative to the EPAct policies in Federal regulations that require publicly traded utilities to purchase Alternative Fuel Light Duty Vehicles utilized so utilities operating 1% of their fleet as Alternative Fuel units and utilities with 100% of their fleet as Alternative Fuel units report the same answers.

**Commenter(s):** SCE

**EIA Response:** This question is not duplicative to the EPAct policies in federal regulations because there are exceptions and waivers to the regulatory compliance. In addition, answers collected under Question 7 assist EIA in maintaining the respondent list for the EIA-886 "Annual Survey of Alternative Fuel Vehicles."

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## Form EIA-923, Power Plant Operations Report

**Comment:** Several companies and organizations expressed concern that the proposed change to collect cooling system information on a monthly basis, rather than collecting all 12 months annually, would increase the reporting burden and require companies to upgrade information technology systems to meet the proposed monthly reporting requirement.

**Commenter(s):** NRECA, EEI, and Luminant

**EIA Response:** EIA made this proposal to decrease respondent burden. The concept was that it would be easier for our respondents to report the most recent data 12 times a year, rather than reconstructing 12 months of data once a year. However, the comments persuasively argue that the proposal would not reduce burden and might have the opposite effect. Accordingly, EIA will not collect cooling system information on a monthly basis, as proposed, but will continue to collect twelve months of cooling system information annually as is currently required.

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**Comment:** EIA has proposed making coal and petroleum stocks at power plants public information. Currently this data is protected as business sensitive information. EEI and Empire object to this proposal:

- EEI argues that stocks are commercially sensitive and public release would create a “competitive disadvantage to reporting entities that are negotiating new fuel agreements.”
- EEI also states that “public disclosure of the [stocks] data may pose a security issue, by spotlighting large stockpiles as attractive targets of sabotage.”
- Empire suggests releasing the stocks data 12 weeks after the end of the reporting month. It believes that by this time the data would no longer be commercially sensitive.

**Commenter(s):** EEI and Empire

**EIA Response:** The coal and petroleum stocks data collected by this survey is due to EIA a month after the end of the reporting month, and is published about three weeks later; that is, it is published a total of about seven weeks after the end of the reporting month. By this point in time the stocks data has minimal commercial significance. However, the data will still have value to public and private decision makers if there has been a disruption in the supply of coal or natural gas. (Natural gas is relevant because when it is in short supply, the amount of backup fuel oil at power plants is important). In these situations, the lack of reliable and current stocks information impedes government officials concerned about the reliability of power supply, and can encourage market overreactions and price swings. Providing stocks information by plant will provide part of the information government and business needs to respond appropriately to supply disruptions.

EIA data is not needed to identify power plants that under normal conditions have large fuel stocks. Stock levels are generally a direct function of the capacity and operating profile of a plant, and these factors are public information.

**Comment:** EIA should not collect operating data from power plants that have generators operating in a test status.

**Commenter(s):** EEI

**EIA Response:** This is not a new requirement. EIA has for many years collected operating data from power plants that are in a test status. The proposal is to reduce respondent burden by stipulating that these data should only be reported if the facility is receiving revenue from the electricity generation produced while in test status. This qualifying condition will limit the number of power plants that have to report operating data while in test status and also allow better coordination of operating status between the EIA-860 and EIA-923.

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**Comment:** Extend the collection of EIA-923 data to power plants located in Puerto Rico.

**Commenter(s):** Instituto de Estadísticas de Puerto Rico

**EIA Response:** EIA agrees with this suggestion.

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**Comment:** EEI recommends that EIA modify the current requirement to specify state/country of origin, the MSHA ID, Mine Name, Mine Type, and Mine County on Schedule 2 of the EIA-923, by allowing filers the option to report the mine “load out” point instead.

**Commenter(s):** EEI

**EIA Response:** The methodology to report at the coal mine “load-out” point is already accounted for in the current methodology to report quantity / costs of coal receipts at the power plant. Specifically, a power plant that utilizes a load-out point to receive coal has the ability to specify the coal supplier under the title of “various” and then must specify the state or states where the coal originates (and also the county or counties of origination if possible). Under this methodology of reporting “various,” a power plant does not have to specify the remaining mine detail fields. Also note that some loadouts have MSHA ID numbers.

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**Comment:** EIA proposes to collect natural gas volume purchases and associated cost information for the individual pipelines connected to power plants rather than collect this volume and cost information by supplier/contract. As stated in the Federal Register notice:

Currently this information is collected by supplier and individual contract. EIA proposes to collect receipts data by pipeline for all individual pipelines servicing a plant. In the case of Part A, respondents would break down their costs into total delivered costs excluding fixed charges, and pipeline capacity reservation and other fixed charges. The object of this change is to collect more useful information and to reduce the reporting burden.

Calpine asks several questions about this change. Each question and response follows.

**Calpine Question (1):** If a power plant utilizes lateral pipeline facilities to connect the plant to a pipeline system, “should the lateral facility be named and reported separately in the report, or should only the pipeline system that connects to the Calpine power plant (via the non-pipeline-owned lateral) be reported?”

**EIA Response:** The lateral pipeline facility should not be named and reported separately. The natural gas volume purchases and associated cost information should be based on delivery from the main pipeline(s). This clarification will be added to the EIA-923 instructions.

**Calpine Question (2):** If a company owns a portfolio of generating facilities that are served by the same pipeline(s), “determining the fixed cost associated with the transportation service for a single power plant may not be possible, as those costs may be associated with a pipeline transportation contract that serves multiple plants in the portfolio. Additionally, if a company owns a portfolio of power plants, and gas supply for the plants is being provided from a supply pool, costs associated with the pooling service, including imbalance charges, are not readily assignable to an individual plant.”

**EIA Response:** In these cases, the company should allocate costs based on the percentage of volume being delivered to each specific plant. This clarification will be added to the EIA-923 instructions.

**Calpine Question (3):** If a company has “multiple contracts with the same pipeline to deliver natural gas to a power plant, including contracts for firm and interruptible transportation service...how should this be reported?”

**EIA Response:** With this proposed change, EIA will no longer be asking for natural gas supply contracts by type of transportation service. All contracts from the same pipeline should be aggregated if possible. This clarification will be added to the EIA-923 instructions.

**Calpine Question (4):** If a charge for gas delivered to a power plant “include[s] an imbalance charge incurred with the pipeline -- how should this be reflected?”

**EIA Response:** Imbalance charges should be allocated back to the month(s) they apply. This allocation should be based on the quantity of natural gas consumed at each power plant so that the imbalance charges can be apportioned to the power plants that took more or less gas than is normal during specific months if possible. In many cases, this will cause data submitted in previous months to be altered to account for the allocation of imbalance charges. This clarification will be added to the EIA-923 instructions.

**Calpine Question (5):** If a power plant has contracted with a third-party seller (not the pipeline) for the seller to provide gas directly to the plant (i.e., this seller arranges all pipeline services and is responsible for all costs for the fuel to be delivered to the plant) how is this contract reported since the power plant may not have the information to provide a breakout of costs?

**EIA Response:** In this case, the total delivered cost of the natural gas purchased should be provided, and the capacity reservation/other fixed charges, if not available from the supplier, may be left blank. This clarification will be added to the EIA-923 survey form instructions.

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**Comment:** The burden estimate for the EIA-923 of 2.41 hours is underestimated. “Our time studies show that the burden is closer to 12 hours for each power plant.” Empire recommends that EIA assume 12 hours of burden for every respondent.

**Commenter(s):** Empire

**EIA Response:** EIA held a conference call with Empire on August 3, 2016 to discuss Empire’s burden estimates. We learned that the burden estimate is not for the monthly survey, but only for certain schedules some monthly respondents complete once a year. These are Schedules 6, 7, and 8, covering, respectively, non-utility source and disposition of electricity, revenue from sales for resale, and the operation of environmental control and cooling water systems.

Not all respondents complete all three schedules. In particular, most respondents – including smaller plants and plants that do not use combustible fuels – do not complete Schedule 8. Schedule 8 accounts for most of the questions among these three schedules.

EIA’s burden estimate for monthly respondents completing the annual schedules is 4.4 hours. The EIA estimate is an average for all respondents. The burden will be higher for Empire in part because it has five plants compared to the respondent average of about two plants. It will also be higher because as the operator of fossil-fueled plants Empire must complete Schedule 8. Additionally, one of the five facilities Empire reports for, Riverton power plant, is co-owned with another company. This increases the reporting burden as Empire must coordinate data collection and reporting with the other company.

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### **Form EIA-930, Balancing Authority Operations Report**

**Comment:** We support EIA’s proposal to change the reporting time from 60 minutes after the end of the hour to 30 minutes after the end of the hour.

- PJM has already made the change.
- Bonneville already has this practice in place.
- Indicated ISOs state they can accommodate this change.
- AECI can make the change but “EIA should expect a higher frequency of missing or bad data.”

**Commenter(s):** PJM, Bonneville, Indicated ISOs, and AECI

**EIA Response:** The responses are consistent with EIA’s observation that most respondents are already submitting data within 30 minutes after the end of the hour. While we appreciate AECI’s concern over data quality, our experience to date is that significant data errors occur when there is a major breakdown in the respondent’s reporting system. A 30-minute change in the delivery time will not impact the frequency of these events.

**Comment:** EIA should not change the delivery time from 60 minutes after the end of the hour to 30 minutes after the end of the hour.

- APPA believes the change is unnecessary, that “EIA has no mandate to engage in real-time reporting,” nor is it “necessary within the context of this data set.” Therefore any increase in burden to make this change is unjustified.
- EEI states that the proposed change would give respondents “little room for error,” not accommodate unplanned moves to backup control centers in the event of an emergency, could reduce the accuracy of data reported to EIA, and has not been justified by EIA. EEI notes that one of its members cannot provide a full response until 29 minutes after the hour.

**Commenter(s):** APPA and EEI

**EIA Response:** EIA’s basis for the change is that it is consistent with observed responses actually received. Faster data receipt would also be useful during a power system emergency impacting one or more Balancing Authorities (BA). We do not anticipate that data quality will be degraded for the reasons discussed immediately above. If a BA was forced to switch to a backup control center (a very rare event) or was late for other reasons there is no penalty incurred.

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**Comment:** EIA’s proposal for BAs to provide sub-regional demand within a month of the operating day if the data is calculated in the normal course of business, can be accommodated, but with clarifications.

- PJM requests clarification that this requirement can be met through its current load zones. It also notes that the sub-BA data may not exactly match the initially reported data for the entire BA.
- Bonneville notes that this requirement is not applicable to its BA.
- The Indicated ISOs state that the requested data is calculated in the normal course of business, but are concerned that they have enough time to implement a reporting process. They also note that the sub-BA data may not exactly match the initially reported data for an entire BA.
- MISO seeks clarification that it will be acceptable to report sub-BA data using its 10 Local Resource Zones (LRZ) rather than its 37 Local Balancing Authorities (LBA), due to tariff-related confidentiality issues involving the latter.
- APPA states that sub-regional reporting “should be predicated on whether there is a publicly posted set of data for historical Balancing Authorities” that are now encompassed by RTOs and ISOs. It also states that there is no “compelling business case to post delivery point level data.”

**Commenter(s):** PJM, Bonneville, Indicated ISOs, MISO, and APPA

**EIA Response:** PJM can use its current load zones to meet the reporting requirement. Bonneville is correct that sub-BA reporting will not apply to its BA. Reporting of sub-BA data will not be required until July 1, 2018, which should provide ample time for the impacted BAs to make any necessary system changes. MISO can report using its LRZs. EIA is aware that data reported a month after the operating day may not exactly match the data initially reported for the entire BA. Reported data often changes,

usually with a gain in precision, over time. Any discrepancy will not degrade the value of providing more granular data on load trends in the United States.

In response to the comments from APPA, whether or not an RTO/ISO has posted records of load for former BAs now encompassed by the existing single BA is irrelevant to the proposed data collection. EIA is not requiring or even expecting that sub-regional reporting will be at the level of former BAs, since those boundaries may have little or no relevance to current operations. As noted above, PJM plans to report using its current load zone structure, and MISO explicitly does not want to report for its LBAs and will instead use its LRZ regions.

EIA is not requesting reporting at the delivery point level. As stated in the proposed instructions the reporting is to be for “local balancing authorities, areas, zones, operating companies, etc.” within the boundaries of the reporting entity, not for a single delivery point or pricing node. The choice of the reporting sub-region is up to the reporting entity.

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**Comment:** EEI is opposed to the proposal for reporting of sub-BA load data a month after the end of the operating day. EEI states that many members do not have sub-BA data or would not be able to provide the data within the one-month window. EEI also notes that the term “sub-regional” is unclear, and that reporting more granular data would increase its concerns over the commercial sensitivity of the data. It asks that if this change is adopted by EIA the definition of sub-regional should be more specific, the request should be kept to a “reasonable minimum,” EIA should require that the “data need be reported only if readily available,” and should treat the data as confidential.

**Commenter(s):** EEI

**EIA Response:** Entities that do not have the sub-regional data or do not have it within the one-month window have no obligation to report to EIA. They also have no obligation to create new internal data collection and accounting systems to gather the sub-regional data. As the proposed instructions state, sub-regional reporting is to be made only if the sub-regional data is “calculate[d] in the normal course of business.”

As noted above, the choice of a sub-region is up to the reporting entity, within the general guidelines in the instructions that reporting is to be for “local balancing authorities, areas, zones, operating companies, etc.”

The data should not be treated as confidential. The data will be up to a month old by the time it is provided to EIA and reported to the public. In the highly dynamic electric power market, in which variations in demand and prices are primarily driven by unpredictable short-term events (such as heat waves, power plant outages, or changes in the price of natural gas) or more predictable long-term trends (such as seasonal changes in the weather), month old data is not commercially sensitive. In any event, the sub-regional demand data is not inherently proprietary or business sensitive. For example, several BAs, such as ERCOT (<http://goo.gl/NHb4lw>), PJM (<https://goo.gl/cPINSm>), and MISO (<https://goo.gl/2iTiBh>) already report sub-regional demand in real time or on a next-day basis without any reported commercial impacts.

**Comment:** EIA’s proposal for BAs to provide net generation by energy source can be accommodated, but with clarifications.

- PJM notes that it has this data and can make it available to EIA. It raises three points for recognition in the instructions: 1) the reported fuels may be estimated for units burning multiple fuels; 2) the reported fuels may be estimated for units that can switch from one fuel to another (“dual-fuel” units); and 3) PJM will not have information on certain generators that operate “behind the meter” and appear to PJM as a change in load rather than a change in generation (an example would be some industrial combined heat and power units).
- Indicated ISOs raise the following issues: 1) a dual-fuel reporting category may be needed to accommodate some reporters; 2) in certain cases when there is only one or a small number of generators in a reporting category, confidentiality requirements in tariffs may require reporting the fuel in the “other” category; 3) because of different data sources, there may not be an exact balance among reported demand, generation by energy source, and interchange.
- MISO has two of the same concerns as Indicated ISOs: 1) special reporting may be required for dual-fuel units, and 2) in certain cases when there is only one or a small number of generators in a reporting category (specifically solar in MISO’s case), confidentiality requirements may require reporting the fuel in the “other” category. MISO otherwise does not oppose the reporting of net generation by fuel.
- AECI notes that it “will have to write new processes to separate generation into the specific fuel types outlined in the proposal.” It estimates that to accommodate this change and the proposal to report 30 minutes after the hour will require approximately 100 person hours of effort.
- CAISO states it will require until May 2017 to report generation by fuel type. It also requests clarification that energy sources other than those specified in EIA’s instructions (coal, natural gas, nuclear, petroleum, hydroelectric, solar and wind) should be placed in the “other” category.
- Bonneville states it will be ready to provide the data in 2017.

**Commenter(s):** PJM, Indicated ISOs, MISO, AECI, CAISO, and Bonneville

**EIA Response:**

- EIA recognizes that some data may be estimated, particularly in the case of multiple fuel or dual-fuel generators.
- EIA recognizes the difference in data sources for reporting total net generation and net generation by energy source and that the values may not match exactly, in part because of possible definitional differences relating to behind-the-meter generation. EIA will also edit the instructions to clarify that actual demand, total net generation (not net generation by energy source), and interchange are expected to balance.
- EIA will edit the instructions to clarify that dual fuel generators can be reported based on the actual fuel used every hour if known, otherwise they should be categorized according to their primary fuel type. This method aligns with the practice of several BAs that already publish generation by energy source data.

- EIA recognizes that generation data may not be available from behind-the-meter generators. These make up a small portion of total power generation in the United States and therefore do not detract from the value of the information. For example, in 2014 all industrial and commercial generators in the United States – not just those that operate behind the meter -- accounted for only 3.8 percent of total generation. (Source: EIA, *Monthly Energy Review*, July 2016, Table 7.1)
- In cases where tariffs or other agreements require generation from one or a small number of generating units to be masked, the data can be reported in the “other” category. The instructions will be edited to include this point.
- The estimated one-time burden of 100 hours (2.5 person-weeks) to allow reporting of generation by energy source (and to provide for reporting 30 minutes after the hour) is reasonable given the value of the data. Total burden for the EIA-930 remains very low because the data collection is fully automated for respondents and EIA.
- The reporting requirement for generation by energy source will not go into effect until July 1, 2018, well past the date of May 2017 requested by CAISO.

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**Comment:** EEI and APPA are opposed to the proposal for BAs to provide net generation by energy source. EEI raises several concerns:

- Some utilities do not have the information or the technology necessary to collect the data.
- “BAs with purchase power agreements” may not know the energy source of the power from other utilities.
- It may be difficult to identify the energy source for units that can burn more than one fuel.
- Complying with this requirement will take “substantial time, effort, and resources” and require at least a 12-month lead time.
- The data should not be required until the next day demand file is provided and EIA should provide a “7-day update mechanism.”

APPA states that the collection of generation by energy source “seems to be an unnecessary burden to respondents as it is not clear that such data are collected on an hourly basis by BAs.” It also notes that some power plants consist of multiple generating units each of which may use a different fuel, and also asks whether the requirement applies to “industrial and customer-sited generation.”

**Commenter(s):** EEI and APPA

**Response:** As a general matter, no BA has stated that it cannot provide net generation by energy source. All commenting BAs have said that they can provide the data.

In response to the other points:

- EEI states that some utilities (by which we assume it means utilities that also serve as BAs) do not and cannot collect the information. We have received no comments from BAs that confirm this assertion. Also note that of the 66 BAs:
  - 10 are generation only BAs; that is, their business is solely to operate a power plant. They will know their fuel use in the normal course of business.
  - 2 BAs have minimal and intermittent generation from a handful of small generating units. They should also be able to provide net generation by energy source data for this small number of units.
  - 7 BAs are RTOs, all of which have provided comments stating that they can meet the requirement.

This leaves the remaining 47 BAs, two of which (Bonneville and AECI) provided comments that they can meet the requirement. In summary, the available information does not support the assertion that BAs will be unable to meet the requirement.

- EEI states that “BAs with purchased power agreements” may not know the energy source for the power. This statement conflates commercial and operational data. BAs do not hold purchase power contracts. They receive operating data directly from generators pursuant to their balancing function. The fact that the power is produced under any particular commercial arrangement does not change this operational practice.
- EEI and APPA are both concerned about reporting generation for units that can burn more than one fuel. As noted above, we will clarify the reporting requirement as it relates to dual-fuel generators. We will also modify the instructions to state that in the case of a generating unit burning multiple fuels simultaneously, the BA can report the predominant fuel if a precise breakout is not readily available.
- With respect to time required to comply, BAs will have until July 1, 2018. Measuring from January 1, 2017, this is 18 months compared to the 12 months suggested by EEI.
- EEI appears to be asking that net generation should be reported at the same time as the updated load information; that is, in the “daily file” provided to EIA the morning after the operating day. This is what the proposed instruction already requires.
- With respect to EEI’s suggestion that the survey should include a mechanism to update net generation by energy source 7 days after the fact, EIA believes this would increase the complexity of reporting with no appreciable improvement in quality. BAs already have the option of providing updated files for any data element at their discretion.
- With respect to APPA’s concern about power plants that contain multiple generating units using different fuels, the balancing function and associated data collection by BAs is performed in terms of individual generators, not for a power plant as a whole. With respect to reporting for customers with industrial or other forms of on-site generation, as discussed above EIA recognizes that BAs may not have data for behind-the-meter generators.

**Comment:** “LADWP is concerned that the proposed changes in the EIA-930 request data that constitutes proprietary information. For example, standard fuel type categories for *real time data on an hourly basis* is market-sensitive and could create unfair market advantage, because this level of data can be utilized to infer what market demand will be in the next hour.” [Emphasis added].

**Commenter(s):** LADWP

**EIA Response:** LADWP’s concern is focused on the collection and publication *in real time* of net generation information. However, EIA will not be collecting or publishing real-time net generation in any form. The net generation by energy source data will be collected the day after the operating day. This is how net generation without the energy source breakout is currently collected by the survey.

In any event, the net generation data is not inherently proprietary or business sensitive. For example, several BAs, such as PJM (<http://goo.gl/IpIxMr>), MISO (<https://goo.gl/jfWB46>), and SPP (<https://goo.gl/vZf2xE>), already report generation by energy source *in real time* without any reported commercial impacts.

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#### **Other Comments and EIA’s Response**

- CAISO asks for sufficient time to make necessary system changes to comply with proposed changes to the survey. Counting from January 1, 2017, 18 months will be available.
- CAISO requests sample files that reflect the proposed changes and confirmation that current file structures can accommodate the new data. In response, note that the proposed instructions include the file format, but in addition we can work with any of the BAs to provide sample files if that would be helpful. We can also confirm that existing file structures can be adapted to include the proposed new data.
- EIA is proposing to end the two day hold-back of data for certain small BAs. APPA argues that these small BAs are still at commercial risk from the release of the data and the hold-back should be continued. It also argues that there is no compelling reason to release the data for these BAs in near real time.

In response, EIA notes that there is no evidence we are aware of to indicate that the release of real-time information, either by EIA or, often in more detail and greater, by other entities, has created any commercial or security concerns. Eliminating the two-day hold-back will simplify EIA’s data processing and will be a convenience to data users.

## Section C

### A Snapshot of the Original Letters from the Commenters

July 18, 2016

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SUBMITTED VIA EMAIL

## Re: Electricity and Solar PV Survey Forms Re-Clearance

The Solar Energy Industries Association® (SEIA®) is the voice of the solar energy industry in the U.S. SEIA works with its member companies to champion the use of clean, affordable solar in America by expanding markets, removing market barriers, strengthening the industry and educating the public on the benefits of solar energy.

SEIA and the solar industry have an interest in the Energy Information Administration's (EIA) coverage of both renewables and electricity markets on several levels.

- 1) Many SEIA member companies are mandatory respondents on several forms up for reclearance (63b, 826, 860, 861 and 923). SEIA is interested in streamlining these forms to reduce reporting burden, reducing errors and improving data quality.
- 2) Accurate, detailed and timely data improve market transparency and help markets function more efficiently. EIA can play an important role in fostering this market transparency.
- 3) EIA's data plays an important role in informing policymakers and regulators. Historically, out-of-date and low-quality information from EIA on solar technology has proven to be a barrier to efficient and sound policy decisions. (To its credit, EIA has an enormous task to accomplish with its limited budget and it has been making some progress in improving its coverage.)

This letter offers SEIA's recommendations that aim to

- 1) Improve EIA's coverage of solar,
- 2) Mitigate reporting burden on respondents, and
- 3) Improve EIA's coverage of other data important to efficient market and policy development.

Given the many advances in database management and data transfer since much all nearly all of EIA’s survey instruments were created, it should be possible to achieve all of these goals simultaneously. Indeed, EIA’s success with form 930 is a prime example what can be done. EIA can even build on architectures already created under the Green Button Initiative and XBRL reporting at the SEC.

In addition to responding to the proposed changes described at the link below, this letter offers additional recommendations for improving EIA’s coverage.

[http://www.eia.gov/survey/changes/electricity/solar/proposed\\_solar-elect\\_formschanges.pdf](http://www.eia.gov/survey/changes/electricity/solar/proposed_solar-elect_formschanges.pdf)

SEIA looks forward to working with EIA to ensure policymakers and the public have access to quality, detailed, accurate and timely information necessary to create healthy energy markets.

## Contents

Form EIA-63B: Annual Photovoltaic Cell/Module Shipments Report.....	39
EIA’s Proposed Changes and SEIA’s Recommendations:.....	39
Other SEIA Suggestions Regarding this Form: .....	40
EIA-826: Monthly survey of retail sales and other utility and power marketer data.....	42
EIA’s Proposed Changes and SEIA’s Recommendations for Form 826:.....	42
Other SEIA Suggestions Regarding Form 826: .....	43
EIA-861: Long-form version of the annual survey of retail sales and other utility and power marketer data.....	44
EIA’s Proposed Changes and SEIA’s Recommendations:.....	44
Other SEIA Suggestions Regarding this Form: .....	44
EIA-861S: Short-form version of the annual survey of retail sales and other utility data.....	46
EIA’s Proposed Changes and SEIA’s Recommendations:.....	46
Other SEIA Suggestions Regarding this Form: .....	46
EIA-860: Annual inventory of electric power generators .....	47
EIA’s Proposed Changes and SEIA’s Recommendations:.....	47
Other SEIA Suggestions Regarding this Form: .....	47
EIA-923: Monthly and annual survey of power plant operations .....	48
EIA’s Proposed Changes and SEIA’s Recommendations:.....	49
Other SEIA Suggestions Regarding this Form: .....	49
EIA-930: Hourly and daily survey of balancing authority operations.....	51
EIA’s Proposed Changes and SEIA’s Recommendations:.....	51
Additional Suggestions for Improving Electricity Market Coverage:.....	52
Machine-Readable Tariff Reporting.....	52
Pass-Through of Generator Interconnection Data .....	54
Machine-Readable Information on Transmission and Distribution Grid Characteristics .....	55

Data Publishing and Accessibility.....	56
Comments on Grid Security and Sensitive Utility Business Information.....	56
Summary of Recommendations for Improving Solar Electricity Market Coverage.....	56

## Form EIA-63B: Annual Photovoltaic Cell/Module Shipments Report

Link to current form documentation: <http://www.eia.gov/survey/#eia-63b>

**EIA description:** Collects information on shipments of photovoltaic modules/cells.

**Relevancy to the Solar Energy Industry:** Only companies engaged in the solar energy value chain respond to this form. We have had concerns with both reporting burden, and validity and practicality of questions on this form in the past.

### EIA’s Proposed Changes and SEIA’s Recommendations:

EIA Description of Proposed Changes	SEIA Recommendation
Change the reporting period to monthly.	<p>Only consider doing this with a drastically scaled down form and only for respondents with very large volume.</p> <p>Also note that three individual manufacturers will make up that vast majority of the domestic production. If you intend to provide confidentiality, that sample size is not sufficient to do so, thus, the collection of this data would be largely without purpose since it would not be published. However, it may be ok to expose individual manufacturer’s volumes given that the manufacturers in question are publicly traded companies and their volumes may be reported in SEC filings anyway.</p>
Reduce the monthly frame to include only ‘large’ producers with the intent of capturing at least 90% of peak kilowatts shipped.	Any monthly data collection should be dramatically streamlined to reduce reporting burden. SEIA would be happy to assist in the development of such a streamlined form.

Survey the entire frame of all known US producers annually with a short version of the form.	<p>Only survey the first point of shipment in the U.S. (e.g. point of manufacture in the U.S. or point of import into the U.S.). Do not survey wholesale distributors that are not the first point of shipment in the U.S. as this will create duplicate data quality problems and greatly increase the overall industry reporting burden. Further, the value of the data would be unclear.</p> <p>To the extent you do survey import volumes, please harmonize data collection with the U.S. International Trade Commission's data collection. Ideally, ask the USITC to add capacity units to its data collection and pass through that data to EIA instead of surveying importers directly via form 63b.</p>
Ask for current and planned production capacity	This should not include importers who are not the manufacturers of the imported goods since they may not have visibility into the capacities and plans of their suppliers.
On Schedule 6B, delete shipments by sector and end use questions.	SEIA supports this change.
On Schedule 4B, delete 'Energy Conversion Efficiency'	SEIA supports this change.
Delete questions for 'System'.	SEIA supports this change.

### Other SEIA Suggestions Regarding this Form:

Consider eliminating this form entirely. Data hasn't been published in years. It isn't structured well for covering the current state of the solar industry supply chain. It isn't clear what the purpose of the data collection is. EIA does no similar equipment supply chain data collection for any other energy source; data requested in form 63B would be analogous to collecting data on boiler, turbine and generator shipments for thermal generators, something EIA does not do. The private market research sector may be better equipped to track the rapidly changing solar supply chain.

A separate option would be to completely reinvent this form into something more useful. Drop data collection efforts for shipments and instead begin collecting machine-readable module and inverter spec sheets and bills of materials for all modules and inverters commercially available in the U.S. The idea here would be to replace the database previously maintained by the California Energy Commission (the Eligible Equipment List) which acted as a de facto national equipment performance database. If this is of interest to the EIA, SEIA would be happy to help develop and streamline such a plan.



## EIA-

### 826: Monthly survey of retail sales and other utility and power marketer data

Link to current form documentation: <http://www.eia.gov/survey/#eia-826>

**EIA description:** Collects information from utilities and nonutility companies that sell or deliver electric power to end users, including electric utilities, energy service providers, and distribution companies. Data collected include retail sales and revenue for all end-use sectors (residential, commercial, industrial and transportation).

**Relevancy to the Solar Energy Industry:** This form is a source of valuable electricity market data and is important to help EIA, policymakers and other EIA users understand electric utilities generally and the solar energy market through the reporting on net metered solar capacity.

Separately, in 2015, EIA began requiring third-party owners (TPO) of customer-sited solar energy systems to submit certain schedules of this form. While SEIA appreciates EIA’s efforts improve its coverage of solar energy, this shoehorning of solar TPO providers into this form designed for distribution utilities has proven to be very burdensome. While solar TPO providers are smaller than other utilities that respond to this form, they have the highest reporting burden due to their geographic scope reporting for multiple states. To put a number on this, amongst respondents to form 826 for September 2015, TPO respondents submitted an average of one form for every 2,500 customers compared to an average of one form for every 242,000 customers for other respondents... nearly two orders of magnitude higher reporting burden per customer than those for whom form 826 was initially designed and approved. Moreover, unlike the distribution utilities this form was originally designed for, TPO providers do not have regulatory authority to recover reporting costs by raising rates on existing customers.

### EIA’s Proposed Changes and SEIA’s Recommendations for Form 826:

#### EIA Description of Proposed Changes

Add distributed capacity to this monthly collection. Collection of this data will improve EIA’s ability to make monthly estimates of generation from distributed capacity.

#### SEIA Recommendation

SEIA supports this change for distribution utilities as a second-best approach if it is unable to adopt the recommendation described in “*Pass-Through of Generator Interconnection Data*” later in this document. Distribution utilities should report capacity in MWac, capacity in MWdc and number of systems by sector for *all* systems interconnected with their systems. Sectors should be divided as shown below.

	Net Metered	Non-NetMetered, Customer-Sited	Other
Residential			

## EIA-

	Commercial			
	Industrial			
	Wholesale			
	This is important to capture capacity beyond net metered systems.			
Modify the reporting thresholds and other requirements in these surveys to avoid double counting of distributed generating capacity.	This should be addressed by flagging systems submitting form 860 to eliminate duplication rather than making reporting on form 826 less comprehensive.			

### Other SEIA Suggestions Regarding Form 826:

See *Machine-Readable Tariff Reporting* below for suggestions on how to drastically improve EIA’s coverage of electricity pricing, sales and revenue.

SEIA supports the goals behind EIA’s collection of data from third-party owners (TPOs) of behind-the-meter solar capacity, however there is a much less burdensome way of collecting this data that will likely reduce error reporting. Right now respondents must manually enter data into EIA’s web interface for each state in which they operate. This is a time consuming process with many opportunities for typos and other transcription errors.

EIA should consider a different strategy for tracking distributed solar, rather than having solar TPO providers complete this form. If TPO providers must continue to complete this form, provide a bulk data upload facility to upload data for every territory served at once rather than having to manually enter data for dozens of territories, which is both burdensome and prone to error. Alternately, EIA should allow respondents to simply email or upload a standard format Excel or CSV file; SEIA would even be willing to act as an aggregator of this information to reduce burden on both respondents and EIA staff. See *Pass-Through of Generator Interconnection Data* for suggestions on how to improve coverage of customer-sited solar capacity and generation.

Further, SEIA recognizes that part of the motivation to collect solar TPO data on these forms is to improve EIA’s understanding of customer-sited solar generation. SEIA appreciates EIA’s efforts to fill this gap in EIA’s coverage but believes that a more efficient solution would be to gain direct data access to a representative sample of monitoring systems for customer-sited PV systems in each state. This could reduce the reporting burden compared to current data collection on form 826, reduce data entry errors and provide much, much more detailed information to EIA (including hourly or sub-hourly generation and even information on power quality on the local distribution grid).

## EIA-

### 861: Long-form version of the annual survey of retail sales and other utility and power marketer data.

Link to current form documentation: <http://www.eia.gov/survey/#eia-861>

**EIA description:** Collects information on the status of a sample of electric power industry participants involved in the generation, transmission, and distribution of electric energy in the United States, and its territories.

**Relevancy to the Solar Energy Industry:** This form is a source of valuable electricity market data and is important to help EIA, policymakers and other EIA users understand electric utilities generally and the solar energy market through the reporting on net metered solar capacity.

Separately, in 2015, EIA began requiring third-party owners (TPO) of customer-sited solar energy systems to submit certain schedules of this form. While SEIA appreciates EIA's efforts improve its coverage of solar energy, this shoehorning of solar TPO providers into this form designed for distribution utilities has proven to be very burdensome. While solar TPO providers are smaller than most utilities that respond to this form, they have the highest reporting burden due to their geographic scope.

#### EIA's Proposed Changes and SEIA's Recommendations:

EIA Description of Proposed Changes	SEIA Recommendation
Modify the reporting thresholds and other requirements in these surveys to avoid double counting of distributed generating capacity.	More details are needed to understand what this means.
Collect the capacity of small-scale storage associated with net metered and non-net metered capacity. We are receiving requests to collect this data.	
Collect the capacity of small-scale storage associated with net metered and non-net metered capacity. We are receiving requests to collect this data.	

#### Other SEIA Suggestions Regarding this Form:

A major limitation in the value of this form is the lengthy delay between when data is submitted and when EIA publishes data. SEIA suggests that EIA publish *preliminary* data from every utility as it is submitted rather than waiting for a full final release to release data.

## EIA-

SEIA believes that EIA should dramatically increase the detail of data collection and publication on characteristics of both transmission and distribution infrastructures either as part of form 861 or via a new form. The ideal would be full public access to machine-readable data on the characteristics of every electricity transmission and distribution conductor, substation and transformer in the United States. While utilities themselves may not have all this data right now, they should strive to obtain and organize this data.

See *Machine-Readable Tariff Reporting* below for suggestions on how to drastically improve EIA's coverage of electricity pricing, sales and revenue.

## EIA-

### 861S: Short-form version of the annual survey of retail sales and other utility data

Link to current form documentation: <http://www.eia.gov/survey/#eia-861s>

**EIA description:** Collects data from approximately 1,100 respondents that will no longer report on the Form EIA-861. The Form EIA-861S will collect a limited amount of sales, revenue, and customer count data and, for certain respondents, data on time-based rate customers and advanced meter reading.

**Relevancy to the Solar Energy Industry:**

Not of great importance to the solar energy industry.

#### EIA's Proposed Changes and SEIA's Recommendations:

EIA Description of Proposed Changes	SEIA Recommendation
About 1,100 utilities (out of 3,300 utilities in the U.S.) currently report on the short form. These small utilities are currently required to complete the long form every fifth year to provide updated information for the statistical estimation of uncollected data. The proposal is to extend the time for when the long form needs to be completed to seven or ten years. EIA statisticians are completing a study of this proposal. The work to date indicates that the reporting interval can be extended to seven years and possibly 10 years.	

#### Other SEIA Suggestions Regarding this Form:

SEIA believes that EIA should dramatically increase the detail of data collection and publication on characteristics of both transmission and distribution infrastructures either as part of form 861 or via a new form. The ideal would be full public access to machine-readable data on the characteristics of every electricity transmission and distribution conductor, substation and transformer in the United States. While utilities themselves may not have all this data right now, they should strive to obtain and organize this data. If EIA cannot move to full disaggregation of this data it should at least require reporting aggregated at the substation or distribution planning area level.

See *Machine-Readable Tariff Reporting* below for suggestions on how to drastically improve EIA's coverage of electricity pricing, sales and revenue.

## 860: Annual inventory of electric power generators

Link to current form documentation: <http://www.eia.gov/survey/#eia-860>

**EIA description:** Collects data on the status of existing electric generating plants and associated equipment in the United States, and those scheduled for initial commercial operation within 10 years of the filing of this report.

**Relevancy to the Solar Energy Industry:** Solar photovoltaic (PV) power plants make up the plurality responses to this form but the bulk of this form is questions irrelevant to PV power plants. Moreover, it does not collect some important information about PV power plants.

### EIA's Proposed Changes and SEIA's Recommendations:

EIA Description of Proposed Changes	SEIA Recommendation
Modify the reporting thresholds and other requirements in these surveys to avoid double counting of distributed generating capacity.	See "Other SEIA Suggestions Regarding this Form" below.
Collect additional information on utility-scale electricity storage (primarily batteries). EIA is working with Sandia National Laboratory on the selection and definition of data collection elements.	SEIA supports this and will comment on details once they are available.
Collect the "Reference Unit Power" value for each nuclear generator as of December 31 of the data collection year. EIA is requested to provide this information to the International Atomic Energy Agency.	Not relevant to solar but please ensure data entry is streamlined so as not to present irrelevant questions to solar respondents.

### Other SEIA Suggestions Regarding this Form:

Ask PV generators to report the capacity-weighted average azimuth.

Publish all non-confidential form data fields monthly rather than just the small subset of fields that is currently published monthly. Some fields are currently only released in the final 860 annual release months or even a year after a data on a plant is submitted. There is value in making all those fields available as soon as possible even if marked as preliminary. EIA's new monthly preliminary generator file is a good step in the right direction but needs to include all data fields to reach its full potential. Also do not withhold publishing of data on generators smaller than 1 MWac.

PV power plants have quickly become the single largest portion of the form 860 response base yet they are shoehorned into a form that was primarily designed for other types of generators. The existing form contains many pages of irrelevant questions for PV respondents making it difficult and burdensome to

respond. Moreover, EIA must process this high volume of data in the construct of a form that was did not originally envision this volume of data. For these reasons SEIA suggests moving all reporting requirements for PV generators larger than 1 megawatt-AC ( $MW_{ac}$ , based sum of AC inverter ratings), or smaller PV generators that would otherwise be required to file form 860, to a new form (860PV) that is tailored for efficient and accurate data entry for PV power plants. Doing this would both reduce reporting burden on respondents and reduce the data cleaning efforts for EIA. Such form should only ask for information relevant to PV power plants. Suggested data fields are below. (SEIA would be happy to help administer this.)

**Suggested fields for streamlined separate form for PV plants larger than 1 MW<sub>ac</sub>:**

1. EIA plant ID
2. EIA generator ID
3. Plant Name
4. Plant address (full street address) and exact latitude and longitude
5. Online date
6. Configuration of each array
  - a. Nameplate capacity in:
    - i. kW<sub>dc</sub> (sum of standard test condition, STC, ratings of all modules)
    - ii. kW<sub>ac</sub> (sum of AC output rating of all inverters)
  - b. Mounting (fixed, single-axis tracking or dual-axis tracking) c.
  - Tilt
  - d. Azimuth
7. Interconnecting utility
8. Plant sector (residential, commercial, industrial, IPP, etc.)
9. Plant status
10. Expected online date
11. Expected offline date
12. Offline date
13. Plant investment tax credit basis under section 48 of the internal revenue code. (This information could also be obtained from or verified by the Internal Revenue Service.)

Remove 860m reporting requirements for plants with short lead times such as solar plants smaller than 5 megawatts-AC (based on system's AC capacity).

## 923: Monthly and annual survey of power plant operations

Link to current form documentation: <http://www.eia.gov/survey/#eia-923>

**EIA description:** Collects information from regulated and unregulated electric power plants in the United States. Data collected include electric power generation, energy source consumption, end of reporting period fossil fuel stocks, as well as the quality and cost of fossil fuel receipts. Data are published for use by public and private analysts.

**Relevancy to the Solar Energy Industry:** The owners/operators of many solar power plants submit this data. Some plant owners own many plants and the reporting burden is meaningful. Some plant owners

are not primarily in the energy generation business and find this reporting a burdensome distraction from their core business.

### EIA’s Proposed Changes and SEIA’s Recommendations:

EIA Description of Proposed Changes	SEIA Recommendation
<p>Collect additional information on utility-scale electricity storage (primarily batteries). EIA is working with Sandia National Laboratory on the selection and definition of data collection elements.</p>	<p>SEIA supports this change.</p>
<p>The survey currently collects 12 months of cooling water operating data once a year (Schedule 8D). The proposed change is to collect the data each month rather than annually. The change is expected to be burden neutral or reduce burden as the provision of the data will become routine.</p>	<p>SEIA supports this change as it would allow more up-to-date information on operational challenges associated with cooling water and therefore give service providers (such as solar energy providers) the opportunity to offer solutions.</p>
<p>Remove confidentiality restriction for coal and petroleum stocks held at power plants and related facilities. Stocks data would be released (as is other plant-specific data, such as generation) about seven weeks after the end of the reporting month. Stocks data does not have competitive value by that time.</p>	
<p>Natural gas receipts would no longer be reported by individual contract. Receipts data would be aggregated by pipeline and, for each pipeline, into categories such as firm and interruptible supply. The cost of purchases would be aggregated by the same categories. The object is to collect more useful information and to reduce the reporting burden.</p>	

### Other SEIA Suggestions Regarding this Form:

EIA should eliminate the questions regarding electricity generation for all generators (solar and nonsolar) and instead require balancing authorities to report this information through automated data transfer as discussed in the EIA’s Proposed Changes and SEIA’s Recommendations:. This would reduce errors and would greatly increase the resolution of reporting, thus providing a richer dataset. If such a change were made, plants that have no fuel-related data to report (for example, pure photovoltaic or wind plants) should be exempt from reporting under form 923 because such reporting would be entirely

redundant. Such an exemption would drastically reduce reporting burden for hundreds of plants that are not primarily in the utility business by allowing automated data transfer from the balancing authorities that have this data anyway.

## 930: Hourly and daily survey of balancing authority operations

Link to current form documentation: <http://www.eia.gov/survey/#eia-930>

**EIA description:** Balancing Authorities (BAs) provide basic hourly operating data (system demand, generation, and interchange) on either an hourly (demand) or daily (all) basis.

**Relevancy to the Solar Energy Industry:** Access to detailed, consistent, comprehensive and timely information about grid operations will help solution providers such as solar energy providers identify opportunities to offer services to the grid. It will help companies and researchers understand how to most efficiently integrate clean technologies into the grid. Moreover, this form offers the potential to reduce the overall reporting burden in the electric sector by asking BAs to pass through generation information that they already from individual power plants to EIA instead of having hundreds of individual plants report independently.

### EIA's Proposed Changes and SEIA's Recommendations:

EIA Description of Proposed Changes	SEIA Recommendation
Drop limited withholding of small BA data There is no indication to date that the data being reported on this survey is commercially sensitive.	SEIA supports this proposed change as it will improve transparency into grid operations that will allow innovators to offer more services to improve grid operation and integrate additional renewable generation.
Reduce period for reporting demand on sameday file from 1 hour to 30 minutes This change would be consistent with the observed reporting capabilities of respondents.	SEIA is indifferent on the requirement to make BAs report data faster.  However, SEIA would recommend increasing the current 1-hour temporal resolution to a higher resolution of 15 minutes to improve transparency into grid operations that will allow innovators to offer more services to improve grid operation and integrate additional renewable generation.
Require Balancing Authorities with very large geographic footprints to report at a sub BA level. This would apply to: MISO, SWPP, PJM, CISO, ERCOT.	SEIA supports this proposed change and would further suggest that EIA add the collection of the locational marginal prices (LMPs) associated with the sub BA areas in relevant markets. The ISO's have this data and the centralized collection of it in a single, consistent format would allow for more uniform analysis of electricity markets.

Report net generation by standard fuel type categories (daily reporting of data for each hour.)  
Object is to provide current information on the rapidly evolving generation mix.

SEIA supports this but would take it further. The BA's should be aware of the generation of every single wholesale power plant. To that end it would make sense to have the BA's report subhourly generation for every individual plant *and*, for those plants covered by such reporting with no fuel reporting requirements (wind and solar), remove any reporting requirements under from 923 since that reporting would be redundant.

Hourly or even sub-hourly generation with separate reporting of curtailment data for each individual plant should be made available publicly. If there is concern about competitive sensitivity regarding the timing of the release of such information, it could be released on no more than a 2-week delay.

## Additional Suggestions for Improving Electricity Market Coverage:

SEIA has several additional suggestions to improve transparency in electricity markets to better inform policymakers, ratepayer advocates, and to foster additional competition and innovation.

### Machine-Readable Tariff Reporting

There is a major gap in EIA's coverage of electricity markets that has a dramatic impact on how the Administration and all consumers of EIA's data and analysis understand the consumption of electricity.

That gap is the lack of retail electric tariff information. Currently, EIA collects data on sales (megawatthours), number of customers and revenues (\$) from utilities on both forms 826 and 861. EIA and many users of EIA information routinely divide revenue by sales and represent the result as the retail price of electricity. However this is more accurately understood as average utility revenue per megawatt-hour and it is not a good proxy for price because it does not represent the price signals sent to electric customers through real tariff structures.

SEIA recommends that EIA either add to an existing form or create a new form a requirement that every utility in the U.S. and its territories report in a machine-readable format the actual rate structure of every tariff available to its customers. Every time a tariff is updated, a new tariff is created or a tariff is removed, the utility should report the relevant change within 30 days. The U.S. Department of Energy has funded the National Renewable Energy Laboratory (NREL) to create a database structure for storing exactly this type of data (the Utility Rate Database or URDB) and this would be relatively easy for EIA to adopt. EIA's involvement is necessary because it has proven very impractical for NREL to keep the URDB up-to-date because it can only send researchers to dig through utility web-sites and search through scanned PDFs on utility commission web sites. However, it would be simple for utilities to report this information to EIA on an ongoing basis as they all have this information and they would only need to report when there is a change and the reporting burden for individual utilities would be extremely low. It would be entirely practical for EIA to implement this new reporting in this form update cycle.

Building off of the idea of reporting of individual rate structures, EIA should improve its collection of customer count, sales and revenue data by reporting those three figures by tariff rather than just by customer class as EIA currently does. Further, EIA should collect revenue data within each tariff by tariff line-item. For example, it should separately collect revenue data on volumetric charges (\$/kWh), fixed charges (\$/customer/month), demand charges (\$/peak kW), etc. This sort of data reporting would

provide far more insight into the way rate structures influence electricity consumption. SEIA would see this as valuable but also recognizes that this sort of improvement would be more easily put in place after the successful implementation of tariff structure reporting. However, it would seem reasonable to collect this information on the 861 form filed at the end of 2017.

### Pass-Through of Generator Interconnection Data

Transmission and distribution system operators must necessarily collect reliable information on all generators interconnecting with their systems. Distribution utilities already summarize this sort of data on net metered PV systems for EIA on a monthly (form 826) or annual basis (form 861). A far more useful form of reporting of this data would be a straight pass through of system level data for every PV system they interconnect. If utilities are allowed to submit this data via direct access API, Excel file or CSV file, a change such as this could actually reduce their reporting burden compared to the status quo which requires them to summarize all this data into summary statistics and then manually enter these summary statistics via EIA's web form.

1. Plant address (full street address) and exact latitude and longitude  
(This would allow EIA to identify likely overlap with data received via form 860. If there are concerns about privacy, the EIA could take the approach already in use in many states by withholding the street address but reporting the zip code of each plant. Further, full street address information would allow EIA to coordinate with the Internal Revenue Service to obtain the investment tax credit basis as a proxy for plant cost for nearly every system.)
2. Configuration of each array
  - a. Nameplate capacity in:
    - i. kWdc (sum of standard test condition, STC, ratings of all modules)
    - ii. kWac (sum of AC output rating of all inverters)
  - b. Mounting (fixed, single-axis tracking or dual-axis tracking)
  - c. Tilt
  - d. Azimuth
3. Interconnecting utility
4. Plant sector (residential, commercial, industrial, IPP, etc.)
5. Plant status
6. Dates
  - a. Interconnection application Date
  - b. Date of submission of permission to operate request
  - c. Interconnection/online date
  - d. Offline date

Several states have already taken steps like this as summarized below. EIA has the ability to create a unified national format that would remove burden from state agencies and present an opportunity to further reduce utility reporting burden to the extent EIA reporting allows them to eliminate current state reporting and eliminate for state reporting where it does not yet exist.

#### States already reporting system-level data for customer-sited PV systems:

- California: The California Public Utilities Commission provides system-level data for the states three investor-owned utilities at <https://www.californiasolarstatistics.ca.gov>
- Arizona: The Arizona Corporation Commission makes system-level data for all the utilities available at <http://arizonagoessolar.org/About.aspx>

- Massachusetts: The Massachusetts Clean Energy Center (MassCEC) provides data at <http://www.masscec.com/content/commonwealth-solar-installers-costs-etc>
- New Jersey: The Board of Public Utilities provides data at <http://www.njcleanenergy.com/renewable-energy/project-activity-reports/installation><http://www.njcleanenergy.com/renewable-energy/project-activity-reports/installation-summary-technology/installation-summary-technologysummary-technology/installation-summary-technology>
- New York: Data for systems funding by the New York State Energy Research and Development Authority are provided at <https://data.ny.gov/Energy-Environment/Statewide-200kW-or-Less><https://data.ny.gov/Energy-Environment/Statewide-200kW-or-Less-Residential-Non-Residential/3x8r-34rs>
- Various other states make the same sort of data available to those who ask even if they haven't yet started posting it regularly.

There is a strong body of evidence from states showing system-level data reporting to be both a useful pursuit and a practical policy to implement.

In addition to these transparency efforts undertaken by state regulators. All PV systems must obtain building permits to be built. Building permits have long been a matter of public record and show the full street address of every system installed. The limitation of building permits as a data source is that permitting agencies are highly disaggregated, many do not yet report online (though many do) and the data they collect on the electrical characteristics is inconsistent. Because of the longstanding precedent of building permits as public record and the inherent visibility (visible from above and often visible from the street) the expectation of privacy should be considered low. Two examples of places to obtain building permit data online are <http://www.civicdata.com/organization> and <http://dsnet.co.clark.nv.us/dsreports/bldgpermits.asp>.

#### Machine-Readable Information on Transmission and Distribution Grid Characteristics

SEIA's member companies and have developed many technologies that are capable of providing many grid services that can improve power quality, reliability and resiliency. However, deployment of such technologies is slow because areas of the grid with the greatest need are not easy to identify. Transmission and distribution utilities hold a monopoly on the most detailed information on the characteristics of the grid, information which could allow third-party providers to provide optimized solutions for the benefit of electricity customers. While even many utilities do not have a complete picture of their own grid assets, SEIA believes it is in the national interest to strive to develop an open, machine readable map of the U.S. electric grid. Not only would access to this information allow for deeper innovation in the power sector, it would be of great use to the development of a plan for a strategic transformer reserve, a plan which the Department of Energy has been directed to develop over the next year by Public Law No. 114-94. SEIA recommends that EIA begin the process of developing such a resource as soon as possible.

## Data Publishing and Accessibility

SEIA suggests that EIA begin to release data as it is collected rather than releasing it in bulk monthly or annually. Electric Power Monthly and Electric Power Annual could still provide opportunities for EIA to summarize activities over certain time periods and serve as targets for data to be *finalized*. However, SEIA believes it would make sense to publish preliminary data as soon as it is received with the data marked as “preliminary”.

SEIA suggests that EIA make available for bulk download (as CSV, XML and/or JSON files, and via EIA’s API) all non-confidential fields from every form.

## Comments on Grid Security and Sensitive Utility Business Information

A secure and reliable grid is critical to the safety and wellbeing of Americans and is central to our economic health.

In comments on previous triennial electricity form reviews, some stakeholders cited concerns about EIA collecting and publishing information that, in the commenters’ views, created security concerns. SEIA not only disagrees with this notion of more transparent grid data presenting a security hazard, SEIA believes the lack of this more complete data is a barrier to a more secure, reliable and resilient grid.

Comments in previous reviews contend that collection and publishing of details on grid physical characteristics and operations could give information to people with malicious intents. While, publication would make data more widely available, that data would not make it easier to target the grid but data availability would make it easier for innovators to offer solutions to improve the grid. The reason is that all the information necessary to cause damage to the grid is readily available to anyone who spends an hour driving around to look for and follow wires. However, much more detailed and difficult-to-obtain information is necessary to understand how to provide optimized grid enhancements.

SEIA believes public access to grid information is in the public interest and that EIA is both well-placed to facilitate access to such information and has a mandate to facilitate that access.

## Summary of Recommendations for Improving Solar Electricity Market Coverage

Below is a summary of SEIA’s recommendations for improving EIA’s coverage of solar energy’s role in electricity markets. It is SEIA’s strong belief that the recommendations below are the best path for (1) reducing reporting burden, (2) reducing EIA administrative burden, (3) reducing reporting errors, and (4) dramatically improving the usefulness of the data collected. To be clear, the summary of recommendations below is the best approach but SEIA also offers secondary recommendations in the comments earlier in this document along with the details behind this summary.

- 1) Move reporting requirements for PV plants larger than 1 MWac from form 860 to a new, dedicated and streamlined form for large PV plants.

- 2) Instead of requiring distribution utilities to summarize the number and capacity of net metered PV systems in their territory, require these utilities to report system-level data on every PV system they interconnect.
- 3) Change the reporting requirements for third-party owners of behind-the-meter PV systems allow bulk data uploads. Do not require continued submission of data through the current online form for form 826. Consider asking for access to a sample of monitoring systems in lieu of reporting under form 826.
- 4) Remove PV reporting requirements under form 923 and instead ask balancing authorities to report hourly (or sub-hourly) generation and curtailment data for every individual plant (solar plants and other power plants) within their territory. Make this hourly data available public within two weeks of the reporting period in question.
- 5) Accelerate publication velocity. With the exception of form 930, which has very fast turnaround on publishing data collected, all of data collected by EIA could be released much faster. Reporting data earlier, even if it is preliminary, would greatly improve the usefulness of the data. Every non-confidential data filed from every form should be posted via EIA's API as soon as possible with a tag indicating whether the data is preliminary or final.

SEIA looks forward to working with EIA and other stakeholders to further refine and streamline the collection of solar energy data and improve electricity market transparency to foster competition and innovation to the benefit of all Americans. As noted in these comments, there are many opportunities to improve data collection through streamlined form design and data collection (both bulk data collection and automated data transfer). The strategies outlined in these comments would both reduce reporting error but also reduce reporting burden on respondents while having the potential to provide more detailed and useful information.

Thank you for your consideration of these comments.

Respectfully submitted,

*/s/ Justin Baca*

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Edison Electric  
INSTITUTE

*Power by Association™*

July 18, 2016

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Submitted by e-mail to [Electricity2017@eia.gov](mailto:Electricity2017@eia.gov)

Re: EIA electricity survey forms – 2017 triennial review –  
Comments requested at 81 Fed. Reg. 31623 (May 19, 2016)

Dear Ms. Peterson:

The Edison Electric Institute (EEI) is filing these comments in response to the above-referenced *Federal Register* notice. In the notice, the U.S. Energy Information Administration (EIA) has proposed to ask the Office of Management and Budget (OMB) to renew authorization of EIA's existing electricity survey forms EIA-63B, 411, 826, 860, 860M, 861, 861S, 861M, 923, and 930 for another three years with changes. EIA has invited comments on whether the forms are necessary for proper performance of EIA's functions, the accuracy of EIA's estimates of the reporting burden the forms impose, ways to enhance the information collected, and ways to minimize the burden of the information collection.

#### EEI Has a Direct Interest in This Proceeding

EEI appreciates the opportunity to provide feedback in response to the EIA notice. EEI is the association of U.S. shareholder-owned electric companies, international affiliates, and industry associates. Our members represent approximately 70% of the U.S. electric power industry. They are among the primary respondents to the EIA electricity survey forms, which request large volumes of information about company facilities, operations, staffing, fuels, and finances. Therefore, EEI and our members have a direct interest in this proceeding.

The information requested in the EIA electricity survey forms is quite burdensome for companies and other entities to collect, compile, verify, and submit, and the proposed changes to the forms will compound this burden. Furthermore, some of the information requested in the forms is commercially sensitive, and some of the information can raise security concerns. EEI's goal in submitting these

comments is to assist EIA in undertaking a careful review of the forms and proposed changes in order to reduce the reporting burden and to ensure confidential handling of information that is commercially sensitive or raises security concerns.

### Overall Comments

#### 1. Burden

EI is concerned that the changes EIA is proposing to the electricity survey forms will create significant additional work for companies filing the forms. For example, EIA is proposing to change EIA-923 Schedule 8D from an annual report to a monthly report, EIA-930 from reporting within an hour of the hour to reporting within 30 minutes of the hour, and EIA-930 to include new hourly reports for net generation and sub-regional actual demand. As EI will discuss in more detail below, these changes raise concerns not only about the increase in burden, but also the fundamental need for and usefulness of the additional information.

Though EIA has proposed a couple of changes that will help to reduce the burden somewhat elsewhere in the forms, those changes are not enough to offset the increased burden of the other changes. EI encourages EIA to take a hard look at the need for the data throughout the electricity survey forms, with an eye to culling unnecessary or marginally necessary information and thus to substantially reduce the overall burden of submitting these survey forms.

#### 2. Confidentiality

EI is concerned that some of the information contained in the electricity survey forms is sensitive, either from a commercial or a security perspective, but is not being given confidentiality protection by EIA. As we will discuss in more detail below, some of the information can put electric utilities and other participants in competitive electricity markets at a competitive disadvantage by divulging information about facility performance, characteristics, and operations, allowing competitors to take advantage of the information to gain an improper advantage and skewing operation of the markets. Some of the information provides details about electricity infrastructure that should not be made available to the public, lest bad actors intent on harming the system take advantage of it.

In the Fixing America's Surface Transportation (FAST) Act last fall, Congress gave the U.S. Department of Energy and Federal Energy Regulatory Commission (FERC) additional authority to protect critical electric infrastructure information (CEII), and FERC is now undertaking a rulemaking to identify and to protect the information. See 81 Fed. Reg. 43557 (July 5, 2016). EIA has traditionally been sparing in protecting sensitive information contained in the EIA electricity survey forms, and over time has tended to view more of the information as public and less as confidential. EI encourages EIA to reconsider that approach, and to take a fresh look at data whose release in discrete form may harm electricity infrastructure or the utilities that own and operate it. As discussed further below, EI especially encourages EIA not to begin broadly releasing information that EIA has treated as confidential in the past, especially without providing protections such as aggregating the information, releasing it only on a need-to-know basis, and using non-disclosure agreements.

#### 3. Effective Date

EEI requests that EIA provide adequate time between adopting any changes that elicit additional information in the electricity survey forms and the deadline for utilities to begin providing that information. As EEI has noted in past rounds of EIA's triennial reviews of the forms, companies filing the forms need at least six months to a year to modify their internal business practices, information collection and compilation software, and staff training to implement changes to the forms. When financial information is involved, the Dodd-Frank Act dictates extra care in compiling and reporting the information, and this can require additional time.

To give a sense of the difficulty involved, if any substantive information-technology (IT) changes are required as a result of EIA revisions, such changes typically have to be:

- (i) submitted to a company's IT Department for a proposed work order with estimated cost;
- (ii) reviewed and approved by upper management for both the business unit involved and IT for budgeting purposes, which can take a couple of months;
- (iii) put into the IT queue, which is typically booked out 1 year at a time for new or major projects; and
- (iv) undertaken in the following calendar year, with time needed for IT to complete the work, depending on IT's workload and the complexity of the work order.

Despite EEI having raised such concerns in the past, EIA has adopted changes to the form with as little as no time between announcing the final changes and when they have taken effect, putting filers in a real bind. EEI strongly encourages EIA not to impose such unreasonable turn-around times on filers, both as a way to reduce the burden imposed and to reduce the likelihood of errors as filers scramble to meet unreasonable deadlines. The renewed forms should not take effect until at least six to twelve months after the revised forms have been approved by OMB and are publicly available, and EEI encourages EIA to commit to such a schedule as EIA issues its next "stage 2" Paperwork Reduction Act notice on the way to OMB later this year.

### Form-by-Form Comments

In Attachment A to these comments, EEI has summarized the changes that EIA is proposing to make in the electricity survey forms. Rather than repeat the changes here, EEI will refer to them briefly as relevant to our comments.

1. Form EIA-63B, "Photovoltaic Module Shipments Report"

- No comments.

2. Form EIA-411, "Coordinated Bulk Power Supply Program Report"

- Proposed change: In Schedule 6, Part B, EIA is proposing to collect Terminal Location (From) and Terminal Location (To) for state and county in addition to the name of the terminal.

EEI response: While this level of data is already supplied to the NERC Regional Entities, it is not publicly available. If this level of information regarding the United States power grid is to be included in the EIA form, confidential treatment is requested. This information provides details about electricity infrastructure that should not be made available to the public, lest bad actors

intent on harming the system take advantage of it. EEI encourages EIA to reconsider the need for this information.

3. EIA-860, “Annual Electric Generator Report”

- Proposed change: In Schedule 2, EIA is proposing to collect additional information on utility-scale electricity storage.

EEI response: EEI assumes that the focus of this change is to collect information on utility-scale battery storage. But if EIA has other storage in mind as well, please clarify.

- Proposed change: In Schedule 6, Part A, Boiler Information, Question 2, EIA is proposing to collect actual and planned retirement dates of environmental equipment at electrical power plants.

EEI response: The term “environmental equipment” is extremely broad and could have different meanings to different companies. Also, confusion could arise for equipment that is retired in place, such as a precipitator retired but with all the plumbing remaining in place. In addition to the potential confusion of the question, it would be burdensome to report the actual and planned retirement dates of individual pieces of equipment at generating plants. EEI encourages EIA to reconsider the need for this type and level of information.

4. EIA-860M, “Monthly Electric Generator Report” (monthly update form)

- Proposed change: In Schedule 2, Updates to Proposed New Generators, EIA proposes to add Questions 3a through 3d about newly operational solar generators that are part of net metering or virtual net metering agreements, in particular asking how much direct current (DC) capacity in megawatts is part of the agreement for each new solar generator.

EEI response: Reporting of this information should be the responsibility of the solar owner or operator, not the utility to which the solar generator is interconnected.

5. EIA-861, “Annual Electric Power Industry Report”

- General comment about the form: Instruction Number 3 appears to contain a typographical error. EIA has confirmed that it wants capacity for PV solar to be reported in MW in AC. However, the instructions still read, “Capacity for PV solar should be reported in MW in DC.”
- Proposed change: In Schedule 7, Part A, Net Metering Programs, EIA proposes to add a question asking for the virtual net-metered capacity and customer counts.

EEI response: Many utilities do not have storage installation data for net metering customers or a “virtual” net metering program in place at this time. Therefore, these utilities would not be able to report this information.

- Proposed change: In Schedule 7B, Distributed and Dispersed Generation, EIA proposes to eliminate all questions regarding dispersed generation.

EI response: EI supports the proposed deletion. The effort to determine the amount of dispersed generation is both time-consuming and conceptually confusing.

- EIA estimated burden: Existing form, 10.97 hours; Modified form, 12.75 hours.

EI response: One company reports that the annual form requires more along the lines of 24-32 hours to complete, while another company estimates this burden to be approximately 150 hours.

#### 6. EIA Form 861M, "Monthly Electric Power Industry Report"

- Proposed change: In Schedule 3, Part A, Net Metering Programs, EIA proposes to add questions asking for virtual net-metered capacity and customer counts and capacity of small-scale storage associated with the capacity.

EI response: Many utilities do not collect information on energy sold back to the utility or storage capacity, and have no virtual meters. If the information is even available, to respond to this question, utilities would have to develop and implement a new banner report to measure and collect total excess energy delivered back to the grid, a substantial undertaking. EI encourages EIA not to make the change.

If notwithstanding these concerns, EIA is inclined to adopt the change, EIA should first propose for public comment a more refined question that distinguishes between net metering, virtual net metering, and community/ shared solar programs. The current proposal treats these as the same when they are not. And there are so many variations of these programs that seeking further industry input before proceeding with this change to the form would help to avoid confusion and would enable more accurate reporting if and when the information requested is available. Further, EIA should specify that the information needs to be provided only if readily available to the utility filing the form. By readily available, we mean not requiring additional research, hardware, software, or programming work to obtain and track the data.

- Proposed change: In Schedule 3, Part B, Non-Net Metered Distributed Generation (DG), EIA proposes to add a new schedule to collect the number and capacity of non-net-metered distributed generators by technology, sector, and the capacity of small-scale storage associated with the DG.

EI response: Many utilities do not currently collect such data, including storage capacity. Again, if the information is even available, a new banner report would need to be developed and implemented to flag these customers and to get the number and capacity of this subset of DG customers. In addition, companies would need to revise net metering agreements and applications going forward, but even so that would not permit them to collect information on existing storage or new storage without net metering.

- Proposed change: In Schedule 3, Part C, Advanced Metering, EIA proposes to stop collecting data on a monthly basis.

EEI response: EEI supports this as a positive change because customer meter data generally are not available on a monthly basis. Customers are billed on a rolling basis, not all at the beginning or end of each month, and rolling billing provides only rolling data, not monthly data.

- EIA estimated burden: Existing form, 1.37 hours per month; Modified form, 2.04 hours per month.

EEI response: One company reports that the monthly form requires more along the lines of 2432 hours to complete, about the same as the annual form.

#### 7. Form EIA-923, "Power Plant Operations Report"

- Proposed Change: Throughout the form, EIA proposes to collect test energy operating data for plants collecting revenue for the sale of electricity. Specifically, EIA proposes to collect data from plants whose operating status is TS, "operating under test conditions (not in commercial service)," if those plants are in fact collecting revenues from the sale of electricity.

EEI response: EEI members may not have timely access to generation operating data under test conditions. EEI recommends that EIA not collect these data. If nonetheless EIA is inclined to adopt this change, EIA should first propose the specific operating data that the EIA is seeking and should provide an opportunity for industry feedback, to ensure that any requirements adopted are feasible.

- Proposed change: In Schedule 2, Cost and Quality of Fuel Purchases, EIA proposes to collect data on natural gas receipts by pipeline for all individual pipelines servicing a plant.

EEI response: EEI member companies may have difficulty reporting this information because a number of generating stations do not contract directly with an interstate pipeline but instead purchase natural gas via a Local Distribution Company or via a third party that arranges for transportation service on the interstate pipelines. In these cases, the respondent will not know which interstate pipelines may have been involved in delivering fuel. Therefore, EEI recommends that EIA not go through with this proposed change. If EIA does adopt the change, EIA should specify that the information needs to be provided only if readily available to the utility filing the form, and EIA should treat the information as confidential because it is commercially sensitive as to which pipelines are actually servicing a plant. Again, by readily available, we mean not requiring additional research, hardware, software, or programming work to obtain and track the data.

- Proposed change: In Schedule 4, Part A, Fossil Fuel Stocks, EIA proposes to remove the confidentiality protection for data about coal and petroleum stocks held at power plants and to release the data on plant-level fuel stocks seven weeks after the end of the reporting month.

EEI response: EEI believes that the stock data are still commercially sensitive and present security concerns even after seven weeks. EEI encourages EIA to retain EIA's current policy of protecting the information indefinitely. Coal and coal transportation contracts are often multiyear in duration. Thus, disclosure of information about coal stocks even with a seven-week delay would divulge sensitive market data and information about operating conditions. Release

of the data would give a competitive disadvantage to reporting entities that are negotiating new fuel agreements, as it would provide suppliers with competitive information about fuel inventories and procurement practices. This would affect contract negotiations, disadvantage fuel purchasers, and lead to higher prices for customers. New contracts can often take up to six months to negotiate, and during this time under EIA's proposal there would be three releases of the coal and petroleum stock data by EIA to the public. In addition, public disclosure of the data may pose a security issue, by spotlighting large stockpiles as attractive targets of sabotage.

- Proposed Change: In Schedule 8, Part D, Monthly Cooling System Information, EIA proposes to collect data on a monthly rather than an annual basis.

EI response: EI believes cooling system information should continue to be collected annually rather than monthly. EI members generally do not maintain cooling water data in a format that permits the information to be automatically collected. In order to obtain the data, EI members generally have to manually collect the data on a plant-by-plant basis, and sometimes from third party operators. This process is very labor intensive and time consuming. Changing the reporting from yearly to monthly will further expand this burden by a factor of 12, not reduce it or have a neutral impact. EI believes that because the data are monitored over time for analysis purposes rather than reaching conclusions based on a single month, the additional burden on utilities significantly outweighs any potential benefit of having monthly submittals. Further, because bulk chemicals are not necessarily purchased in the month in which they are consumed, the reported monthly chlorine usage would have to be estimated based on the occasional, non-monthly purchases of chlorine and monthly water flow data. Given the sporadic pattern of purchasing bulk chemicals, monthly usage can be estimated more accurately when done over the course of a year rather than requiring filers to develop monthly estimates.

- EI proposed additional change: In Schedule 2, Part C, Item 3, Coal Mine Information, EI recommends that EIA modify the current requirement to specify state/country of origin, the MSHA ID, Mine Name, Mine Type, and Mine County, by allowing filers the option to report the mine "load out" point instead. Some coal procurement contracts with coal vendors do not specify the mine from which the coal will be purchased but instead list the "load out" point where the coal will be loaded into utility transportation vehicles, and multiple mines may feed a single load out point. Having the option to report by "load out" point would simplify reporting in such cases.
- EIA estimated burden: Existing form, 2.3; Modified form, 2.41 hours.

EI response: One company reports that the EIA-923 requires more along the lines of 10 hours to complete, and the EIA-923S requires about 13.5 hours to complete.

#### 8. EIA-930, "Balancing Authority Operations Report"

- Proposed Change: EIA proposes to require respondents to report hourly sub-regional actual demand when these values are produced in the normal course of business within a month of the operating day. EIA staff has indicated that "sub-regional actual demand" means hourly demand produced by any area within a balancing authority (BA) that is not the whole BA, for all BAs not just regional transmission organizations (RTOs) or independent system operators (ISOs).

EI response: Many EI members that maintain Balancing Authority Areas do not have this type of information below the BA level and would not be able to provide this information, particularly within the time frame mentioned in the *Federal Register* notice. Also, the term “sub-regional” is unclear – for example, does it mean regional load pockets, transmission schedule areas, areas defined by commercial markets and trading, or grid transmission sub-areas? Furthermore, EI’s concerns about the commercial sensitivity of the Form 930 data will be heightened by this change. EI encourages EIA not to adopt the change. If EIA does adopt this change, EIA should explain what it means by “sub-regional” with more specificity, should keep the request for subregional detail to a reasonable minimum, should ensure that the data need be reported only if already readily available to a BA, and should treat the information as confidential. Again, by readily available, we mean not requiring additional research, hardware, software, or programming work to obtain and track the data.

- Proposed Change: EIA proposes to require respondents to submit their data within 30 minutes of the end of the data hour, rather than within 60 minutes as currently required.

EI response: This proposed change would give BAs little room for error, and would not accommodate planned or unplanned swaps to contingency sites that could cause delays, when reporting their load data. What is the impact if the data is not reported within 30 minutes? At least one company that is a BA must wait 29 minutes after the end of the hour to ensure a full and complete submittal. Any changes that extend the data required, or any deviations from the normal time taken to process data through the various systems, would quickly place BAs outside of the 30-minute window. EIA has not provided justification for this reporting change. In addition, this reporting change, if implemented, could result in less accurate load data being reported than with the existing 60-minute reporting timeframe. EI encourages EIA not to adopt the change.

- Proposed change: EIA proposes to require respondents to report hourly net generation by standard fuel type categories.

EI response: Reporting accurate hourly net generation by fuel type is problematic on many levels. A number of utilities do not have the technology in place to know in real-time what fuel is being burned at what units and to report that information with any level of accuracy. BAs with purchased power agreements (PPAs) with other utilities may not know from hour-to-hour what fuel type was the basis of the generation behind the PPA during that hour, especially for a system sale where the supplier has a number of different fuels in its generating fleet, and for cogenerators. Units that are able to burn different fuels may burn different fuels day-to-day and even within a clock hour, with environmental and technical constraints that make the fuel type unpredictable, and BAs that have dual-fuel capable units may not have the ability to track when they switch fuels and so would not be able to accurately report which fuel was used each hour. All this would make reporting of fuel use hour-by-hour difficult if even possible.

If implemented, this reporting requirement will require substantial effort, time, and resources for BAs to implement, when such reporting is even possible. Due to resource constraints, BAs will require at least a 12-month lead time to prepare for this requirement. Also, these data

should not be required until the after-the-fact demand file is available and should allow a 7-day update mechanism such as the one available for use in reporting BA demand data today.

Conclusion

EEI appreciates the opportunity to provide these comments to EIA. If you or your colleagues need additional information, please contact either of the two of us here at EEI. Thank you.

Respectfully submitted,



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Attachment

cc: Administrator Adam Sieminski, [adam.sieminski@eia.gov](mailto:adam.sieminski@eia.gov)  
Deputy Administrator Howard K. Gruenspecht, [howard.gruenspecht@eia.gov](mailto:howard.gruenspecht@eia.gov)

## Attachment A

### Proposed Changes to the EIA Electric Power Industry Survey Forms

Form EIA-63B Photovoltaic Module Shipments Report			
Survey Schedule	Proposed Survey Deletions	Proposed Survey Additions/Changes	EIA Justification for Proposed Survey Change
Entire Survey		Change reporting frequency from annual to monthly for large producers	Monthly survey frame will include large producers reporting total shipments of at least 100,000 peak kilowatts during previous year.
Schedule 3, Industry Status		Add Part E, Production Capacity for Manufacturing Photovoltaic Modules	Need for data on maximum annual production capacity to manufacture photovoltaic modules in peak kilowatts

Schedule 3	Delete words “system” and “cells” throughout the schedule	Schedule 3 will now only collect data related to “modules”	No justification provided
Schedule 4		Collect the inventory of photovoltaic modules at the beginning of the monthly/annual reporting period instead of collecting the inventory carried forward from the previous year	No justification provided
Schedule 4, Part A	Delete Schedule 4, Part A, Photovoltaic Cell Data which collected cell data pertaining to inventory, shipments and revenue		No justification provided
Schedule 4, Part B	Delete Schedule 4, Part B, question (e), Energy Conversion Efficiency, which collected the percent of power converted per peak kilowatt		No justification provided
Schedule 6, Part B	Delete portion of Schedule 6, Part B, U.S. Shipments, which collected data on photovoltaic module shipments by sector and end use		No justification provided
<b>Survey Reporting Burden Estimate</b>			
Existing Form EIA-63B: <b>5 hours</b>			
Proposed Form EIA-63B: <b>7.4 hours</b>			

<b>EIA-411 Coordinated Bulk Power Supply Program Report</b>			
<b>Survey Schedule</b>	<b>Proposed Survey Deletions</b>	<b>Proposed Survey Additions/Changes</b>	<b>EIA Justification for Proposed Survey Change</b>
Schedule 3, Parts A and B	Delete line numbers 2a through 2d on Schedule 3, Part A, Projected Demand and Capacity—Summer as well as		No justification provided
<b>EIA-411 Coordinated Bulk Power Supply Program Report</b>			
<b>Survey Schedule</b>	<b>Proposed Survey Deletions</b>	<b>Proposed Survey Additions/Changes</b>	<b>EIA Justification for Proposed Survey Change</b>
	line numbers 2a through 2d on Schedule 3, Part B, Projected Demand and Capacity-- Winter		

Schedule 3, Parts A and B	Delete line 4 in Part A and B that collects information on Demand Response		No justification provided
Schedule 3, Parts A and B	Delete line number 7 in Part A and B that collects information on the peak hour demand plus available reserves.		No justification provided
Schedule 3, Parts A and B	Delete line numbers 10a through 10c and 11a through 11c that collect information on capacity transfers relating to imports and exports		No justification provided
Schedule 3, Parts A and B	Delete line number 16 from Parts A and B that collects information on Target Reserve Margin		Significant differences between operational reserve margins and planned reserve margins has rendered this historical information less meaningful than originally intended
Schedule 6, Part B		The instructions for Line 5, Terminal Location (From) and Line 6, Terminal Location (To) will now ask for state and county in addition to the name of the terminal	More standard way of reporting locations
<b>Survey Reporting Burden Estimate</b>			
Existing Form EIA-411: <b>122 hours (annual total)</b>			
Proposed Form EIA-411: <b>122 hours (annual total)</b>			

<b>EIA-860 Annual Electric Generator Report</b>			
Survey Schedule	Proposed Survey Deletions	Proposed Survey Additions/Changes	EIA Justification for Proposed Survey Change
Schedule 2, Power Plant Data		Collect additional information on utility-scale electricity storage	Rapid growth in the number and capacity of energy storage applications along with their operational characteristics is an important consideration for collecting information
Schedule 2, Power Plant Data		Adding questions pertaining to the deliveries of natural gas such as name of local distribution company, name of pipeline owner, and adding questions on onsite storage of natural gas and	Increasing reliance on natural gas as an energy source for electricity requires a better understanding of how natural gas is distributed to and

		capability to store as LNG—if applicable to generating facility	stored at electric generation facilities
Schedule 3, Part B		Add question to collect the Reference	Requested by the
<b>EIA-860 Annual Electric Generator Report</b>			
<b>Survey Schedule</b>	<b>Proposed Survey Deletions</b>	<b>Proposed Survey Additions/Changes</b>	<b>EIA Justification for Proposed Survey Change</b>
		Unit Power (RUP) value for each nuclear generator	International Atomic Energy Agency (IAEA) and to improve the accuracy of EIA's estimates of RUP
Schedule 3, Part B, Generator Information	Delete question 23 that asks for the minimum amount of time needed to bring a generator from non-spinning reserve status to full load		Unduly burdensome to survey respondents and EIA staff
Schedule 3, Part B	Delete question 29 which asks for FAA Obstacle Number assigned to the turbines		Too burdensome to collect
Schedule 3, Part B		Add questions to collect data on fixed azimuth angles and fixed tilt angles for solar generators having fixed tilt or single-axis technologies	Will allow for better understanding of hourly timing of electric supply
Schedule 3, Part B		Add questions of all solar facilities if they have net metering or virtual net metering agreements in place with their solar generation. Will also ask capacity values associated with these agreements	Will enhance EIA's estimation of total distributed solar generation in the U.S.
Schedule 6, Part B, Boiler Information—Air Emission Standards and Control Technologies		Standardize reporting by having plants between 10 MW and 100 MW report their applicable sulfur dioxide (SO <sub>2</sub> ) regulations and their existing and proposed strategies for meeting these regulations. This is in addition to the current question asking for nitrogen oxides and mercury regulations and proposed strategies for meeting those regulations	Data collection expansion will enhance EIA's estimation of SO <sub>2</sub> emissions from power plants

Schedule 6, Part A, Boiler Information		Collect the actual and planned retirement dates of environmental equipment at power plants	Allow EIA to provide a more comprehensive inventory of environmental equipment
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**Survey Reporting Burden Estimate**

Existing Form EIA-860 Annual: **9.29 hours**

Proposed Form EIA-860 Annual: **9.26 hours**

**EIA-860 Monthly Electric Generator Report**

Survey Schedule	Proposed Survey Deletions	Proposed Survey Additions/Changes	EIA Justification for Proposed Survey Change
Schedule 2, Updates to Proposed New Generators		Adding new questions asking if output from solar generators is part of a net metering agreement or <b>Virtual</b> net metering agreement and how much DC capacity is part of the agreement. <b>NOTE: virtual net metering arrangements allow multiple energy customers to receive net metering</b>	Would enhance EIA's estimation of distributed solar in the U.S.

**EIA-860 Monthly Electric Generator Report**

Survey Schedule	Proposed Survey Deletions	Proposed Survey Additions/Changes	EIA Justification for Proposed Survey Change
		<b>credit from a shared onsite or remote renewable energy system</b>	

**Survey Reporting Burden Estimate**

Existing Form EIA-860 Monthly: **0.30 hours**

Proposed Form EIA-860 Monthly: **0.31 hours**

**EIA-861 Annual Electric Power Industry Report**

Survey Schedule	Proposed Survey Deletions	Proposed Survey Additions/Changes	EIA Justification for Proposed Survey Change
Schedule 7, Part A, Net Metering Programs		Adding question asking for the capacity of small-scale storage associated with net metered distributed capacity	EIA has received a number of requests to collect these data
Schedule 7, Part A, Net Metering Programs		Add question asking for the virtual net-metered capacity and virtual net-metered customer counts of net metering programs.	EIA needs to expand the net metering data collection to include virtual net metered to accurately account for this generation

Schedule 7B, Distributed and Dispersed Generation	Eliminate all questions in schedule 7B regarding dispersed generation		The amount of dispersed generation capacity reported is small and the ability of utilities to accurately report this information is unclear
<b>Survey Reporting Burden Estimate</b>			
Existing Form EIA-861 Annual: <b>10.97 hours</b>			
Proposed Form EIA-861 Annual: <b>12.75 hours</b>			

<b>EIA-861S, Annual Electric Power Industry Report (Short Form)</b>			
<b>Survey Schedule</b>	<b>Proposed Survey Deletions</b>	<b>Proposed Survey Additions/Changes</b>	<b>EIA Justification for Proposed Survey Change</b>
Entire Survey		Proposal to extend the time interval in which small utilities must complete the EIA-861 (long form) from 5 years to 8 years	Statistical analysis suggests that extending the reporting interval without adversely affecting the statistical estimation of uncollected data

<b>EIA-861M, Monthly Electric Power Industry Report</b>			
<b>Note: Replaces Form EIA-826, Monthly Electric Sales and Revenue with State Distributions Report</b>			
<b>Survey Schedule</b>	<b>Proposed Survey Deletions</b>	<b>Proposed Survey Additions/Changes</b>	<b>EIA Justification for Proposed Survey Change</b>
Schedule 3, Part A, Net Metering Programs		A new part is being added to Schedule 3 which will collect data on net metering programs, including capacity, installations, customers, storage capacity, and	The need to expand net-metering data collection activities to accurately account for this information

<b>EIA-861M, Monthly Electric Power Industry Report</b>			
<b>Note: Replaces Form EIA-826, Monthly Electric Sales and Revenue with State Distributions Report</b>			
<b>Survey Schedule</b>	<b>Proposed Survey Deletions</b>	<b>Proposed Survey Additions/Changes</b>	<b>EIA Justification for Proposed Survey Change</b>
		if available, energy sold back to utility. Data to be reported by state, balancing authority, customer class, and technology	
Schedule 3, Part A, Net Metering Programs		Add question asking for the virtual net-metered capacity and virtual net-metered customer counts of net metering programs.	EIA needs to expand the net metering data collection to include virtual net metered to accurately account for this generation

Schedule 3, Part B, Non-Net-Metered Distributed Generators		New schedule to collect the number and capacity of non-net-metered distributed generators by technology and sector	To improve EIA's ability to make monthly estimates from solar PV generation
Schedule 3, Part A, Net Metering Programs and Schedule 3, Part B, Non-Net-Metered Distributed Generators		Adding question asking for the capacity of small-scale storage associated with net metered and non-net metered distributed capacity	EIA has received a number of requests to collect these data
Schedule 3, Part C Advanced Metering	Data relating to advanced metering will no longer be collected on a monthly basis		Data not changing as rapidly as before so no need to collect data on a monthly basis but will continue to be collected annually
<b>Survey Reporting Burden Estimate</b>			
Existing Form EIA-826 Monthly: <b>1.37 hours (per month)</b>			
Proposed Form EIA-861 Monthly: <b>2.04 hours (per month)</b>			

<b>Form EIA-923 Power Plant Operations Report</b>			
<b>Survey Schedule</b>	<b>Proposed Survey Deletions</b>	<b>Proposed Survey Additions/Changes</b>	<b>EIA Justification for Proposed Survey Change</b>
Schedule 2, Cost and Quality of Fuel Purchases—Plant Level, Part A, Contract Information, Purchases and Costs		Change the way natural gas receipts are collected by proposing to collect receipts by pipeline for all individual pipelines servicing a plant. For Part A, respondents would break down their costs into total delivered costs excluding fixed charges, and pipeline capacity reservation and other fixed charges	Collect more useful information and reduce reporting burden
<b>Form EIA-923 Power Plant Operations Report</b>			
<b>Survey Schedule</b>	<b>Proposed Survey Deletions</b>	<b>Proposed Survey Additions/Changes</b>	<b>EIA Justification for Proposed Survey Change</b>
Schedule 4, Part A, Fossil Fuel Stocks at the End of the Reporting Period for Coal and Petroleum products		Proposal to remove data protection for coal and petroleum stocks held at power plants and related facilities. Plant-level stocks data would be released (as is other plant-specific data, such as generation) about	EIA claims the withholding of data for seven weeks would limit any competitive harm from releasing the data. Also, the data would provide more detailed market information to policy-makers and industry analysts

		seven weeks after the end of the reporting period.	
Schedule 4, Part A, Fossil Fuel Stocks at the End of the Reporting Period for Coal and Petroleum Products		Institute the same reporting thresholds as on Schedule 2, Costs and Quality of Fuel Purchases—Plant Level	Will make fuel receipts data and stock data consistent and number of plants reporting on Schedule 4, Part A will be reduced. Quality of fuel stocks data will also increase.
Schedule 8, Part D, Monthly Cooling System Information		Proposal to collect the cooling system information data monthly rather than on an annual basis. Presently, the survey collects twelve months of data once a year. EIA does not expect change to affect reporting burden.	No justification provided
Entire Survey		EIA plans to reduce monthly sample from 2,108 respondents to 1,323 via a more efficient model-based cutoff design. Also reduce number of supplemental respondents from 1,632 to 1,056.	Reduce reporting burden without adversely affecting quality of data and estimation process
Entire Survey		Proposal to collect data from plants whose operating status is “operating under test conditions” if those plants are collecting revenues from the sale of electricity	Change will allow EIA to obtain more complete data on U.S. generation and sales
<b>Survey Reporting Burden Estimate</b>			
Existing Form EIA-923 Monthly and Annual: <b>2.3 hours</b>			
Proposed Form EIA-923 Monthly and Annual: <b>2.41 hours</b>			

<b>EIA-930 Balancing Authority Operations Report</b>			
<b>Survey Schedule</b>	<b>Proposed Survey Deletions</b>	<b>Proposed Survey Additions/Changes</b>	<b>EIA Justification for Proposed Survey Change</b>

Entire Survey		EIA proposes to change the amount of time within which the respondents must report. Currently respondents must submit their data within 60 minutes of the end of the hour. Proposal would shorten reporting time to within 30 minutes of the	No justification provided except that EIA claims the change would be consistent with the observed reporting capabilities of the respondents
		end of the data hour.	
Entire Survey		Require respondents to report hourly sub-regional actual demand when these values are produced in the normal course of business within a month of the operating day	No justification provided
Entire Survey		Require respondents to report hourly net generation by standard fuel type categories	No justification provided
Entire Survey	<b>NOTE: EIA requests comments on whether it should continue its current policy of limited withholding of small Balancing Authority data for two days</b>		
<b>Survey Reporting Burden Estimate</b>			
Existing Form EIA-930: <b>48 hours (annual total)</b>			
Proposed Form EIA-930: <b>60 hours (annual total)</b>			

July 06, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
Energy Information Administration  
EI-23 Forrestal Bldg  
1000 Independence Ave SW  
Washington, DC 20585

RE: Comments Regarding Form EIA-861 "Annual Electric Power Industry Report"

Dear Ms. Peterson:

These comments on behalf of KBR Rural Public Power District are submitted pursuant to the U.S. Energy Information Administration's request for comments on Form EIA-861, as published in the Federal Register on May 19, 2016.

KBR Rural Public Power District is a rural electric public power district based in Ainsworth, Ne. KBR Rural Public Power District serves approximately 4796 customers with over 2600 miles of line in Brown, Cherry, Keya Paha and Rock Counties in North Central Nebraska. A majority of the load is agricultural in nature and is dominated by irrigation services. KBR RPPD commends the EIA on the significant work it does to collect and publish a massive amount of energy data. We recognize the magnitude of the undertaking.

KBR RPPD, however, would like to note an issue with the data collected on Form EIA-861 that distorts the reported industrial pricing in agricultural-rich states with seasonal irrigation. This is particularly problematic with the industrial pricing data for Nebraska.

The Form EIA-861 currently requires that all agricultural activities, including irrigation, are incorporated in the Industrial Sector reporting on the annual Form EIA-861. Because irrigation is often seasonal and associated with high demand charges, EIA-reported average industrial pricing for agricultural-rich states with large amounts of seasonal irrigation are elevated.

Nebraska ranks among the lowest states in average retail price of electricity for the residential and commercial sectors, but among the highest 20 states in the industrial sector.

The Data published by EIA for average retail price of electricity is utilized by many businesses in making state-to-state utility rate and cost comparisons. This significantly hampers Nebraska and other agricultural-rich state's economic development efforts to recruit and retain large industrial companies. This is because the reported average retail price is much higher than what these customers would actually pay.

On May 12, 2014, EIA staff published an article in *Energy Today* on the EIA website entitled: “Many industrial electricity customers are farmers.” In the article, EIA staff M. Tyson Brown and Marc Harnish acknowledge the challenges of agricultural-rich states and the impact that high cost irrigation has on industrial pricing. The article notes that Nebraska has the third-highest number of industrial electricity customer in the United States primarily due to the inclusion of irrigation customers in Industrial Sector reporting.

Nebraska has the largest amount of irrigated agricultural land in the United States. A substantial percentage of the irrigation pumping systems to support crop growth are powered by electricity. For many NREA members, irrigation accounts for more than 50 percent of their load. These electric loads are highly seasonal, typically coming into play in late June, July and August. The author of the EIA article notes that “irrigation load from farm irrigation systems can be costly to serve, because of the high cost of connecting these dispersed systems to the electric grid and the high cost of having enough capacity available to meet seasonal irrigation load.” This statement clearly demonstrates how the load and cost characteristics of irrigation customers differ substantially from typical industrial customers and why irrigation should not be included with industrial customers. It is helpful that EIA recognizes the impact of irrigation on the industrial data. It would be more helpful to take the next step and address the discrepancy.

Prior to 2003, the EIA Form-861 included instructions for reporting irrigation load pricing into a generic “Other” category. When the “Other” category was removed, Nebraska, along with other agricultural-rich states, saw a dramatic increase in the number of industrial customers recorded. Nebraska went from being 19th in total number of Industrial customers to being third in the nation, surpassed only by Texas and California. This change also led to significant increases in EIA reported industrial average pricing for agriculture-rich states. EIA’s publications do not clearly identify irrigation as a determinant in the calculation of the industrial price. As a result, agricultural-rich states with significant seasonal irrigation appear to be costlier for traditional industrial sector businesses.

Looking at Nebraska specifically, in 2014 reported irrigation pricing was 16.38 cents per kilowatt hour on average, while traditional industrial pricing was only 6.67 cents per kilowatt hour. When seasonal agricultural (primarily irrigation) numbers are removed from the EIA reported industrial pricing, the resulting price differential is greater than 30 percent. For Kansas the number is more than 12 percent and in Colorado and Texas the differential is more than 10 percent.

Because we believe that the inclusion of electricity sales for irrigation has a harmful effect on the reported industrial price of electricity, **the best solution would be for EIA to create a new reporting sector for Seasonal Agriculture.** This will result in a more accurate EIA measurement of industrial pricing across all states and will illustrate the true costs associated with seasonal agriculture in states with large seasonal agricultural loads. The end result is more reliable and accurate data.

While not as efficient as creating a new reporting sector, as a second best option, we recommend the addition of a check box to EIA Form-861 to designate whether irrigation (seasonal agriculture) sales are included in the Industrial Sector reporting, and if so, what percentages of those industrial sales and revenues are from these activities. **This option is useful only if EIA includes this information in the annual publication of data.** A mock-up of this proposal is attached.

KBR RPPD is concerned that the current treatment of irrigation sales inaccurately reports industrial pricing in Nebraska and other agricultural-rich states resulting in assumptions that can preclude economic development in these states. Several Nebraska utility representatives, including a delegation from NREA and the Nebraska Energy Office have met with EIA staff over the past couple of years to discuss this matter. We greatly appreciate the attention staff has given the issue and hope that we can continue the discussion to achieve a solution that will result in the most accurate EIA data.

Respectfully submitted,

Robert Beatty  
CEO/General Manager  
KBR Rural Public Power District

DRAFT

# STATE OF NEBRASKA



**Pete Ricketts**  
Governor

July 18, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
Energy Information Administration  
EI-23 Forrestal Bldg.  
1000 Independence Ave SW  
Washington, DC 20585

**RE: Comments Regarding Form EIA-861 "Annual Electric Power Industry Report"**

Dear Ms. Peterson:

These comments made on behalf of the Nebraska Energy Office are submitted pursuant to the U.S. Energy Information Administration's request for comments on Form EIA-861, as published in the Federal Register on May 19, 2016.

The Nebraska Energy Office is a state agency responsible for collecting and analyzing data relating to present and future energy demands; assessing trends in the availability, consumption and development of all forms of energy; as well as the promotion of Nebraska's energy resources. In recent years, our agency has contacted the Energy Information Administration because of our concern that the data collected on Form EIA-861 distorts the reported industrial pricing in agriculture-based states with large amounts of seasonal irrigation. Since Nebraska leads the nation in irrigated acres, this has a significant impact on the industrial pricing data reported by EIA for our state.

Nebraska's ranking of average retail prices for electricity in the industrial sector is overstated as a direct result of how seasonal irrigation is reported by the Energy Information Administration. The Form EIA-861 currently requires that all agricultural activities, including irrigation, are incorporated in the Industrial Sector. The inclusion of irrigation activities in the industrial sector elevates the reported industrial pricing in agricultural-rich states with seasonal irrigation by as much as 20-30 percent in comparison to other states. Irrigation is highly seasonal, and occurs primarily during the summer months. In fact, groups representing rural electric users analyzed information reported on the EIA-861 and the RUS Form 7 and concluded that including irrigation in the Industrial Price results in a 31.5% price differential. (We understand details of this analysis is included in comments provided by the National Rural Electric Cooperative Association.)

Nebraska ranks among the lowest states in average retail price of electricity for the residential and commercial sectors, but among the highest 20 states in the industrial sector. This distorted ranking discourages companies and site selection professionals from considering Nebraska when deciding the location of new industrial facilities and impairs economic development efforts to grow Nebraska.

**NEBRASKA ENERGY OFFICE**  
**David L. Bracht** Director  
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Lincoln, Nebraska 68509-5085  
Phone 402-471-2867  
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energy@nebraska.gov  
www.neo.ne.gov

The Energy Information Administration acknowledged the challenges of agricultural-rich states and the impact that high cost irrigation has on industrial pricing in a May 12, 2014 article in *Energy Today* on the EIA website entitled: "Many Industrial Electricity Customers are Farmers." The article notes that Nebraska has the third-highest number of industrial electricity customers in the United States primarily due to the inclusion of irrigation customers in Industrial Sector reporting. This is not realistic in a state with only 1.8 million in population.

In the article, EIA staff M. Tyson Brown and Marc Harnish note that "irrigation load from farm irrigation systems can be costly to serve, because of the high cost of connecting these dispersed systems to the electric grid and the high cost of having enough capacity available to meet seasonal irrigation load." This statement demonstrates the load and cost characteristics of irrigation customers differ substantially from typical industrial customers and why irrigation should not be included in Industrial Sector reporting. It is helpful that EIA recognizes the impact of irrigation on the industrial data. It would be more helpful to take the next step and address the discrepancy.

As you have heard from the public power industry in Nebraska, as well as the Nebraska Chamber of Commerce, the best solution to the problem created by the inclusion of agricultural activities in the industrial sector would be for EIA to create a new reporting sector for "Seasonal Agriculture." This will result in a more accurate EIA measurement of industrial pricing for comparison across all states and will illustrate the true costs associated with seasonal agriculture in states with large seasonal agricultural loads. The end result would be more reliable and accurate data.

The power industry in Nebraska tells us another option would be the addition of a check box to EIA Form-861 to designate whether irrigation (seasonal agriculture) sales are included in the Industrial Sector reporting, and if so, what percentages of those industrial sales and revenues are from those activities. While Nebraska's industrial ranking would continue to be distorted under this alternative, it would highlight that fact to potential users of the information. This information could be used on the Nebraska Energy Office website to provide a more detailed understanding of energy use in Nebraska.

As the state's central repository for the collection of data on energy, the Nebraska Energy Office is responsible for providing the most accurate information to our citizens and potential businesses. By changing the form as suggested above, a more accurate collection of data pricing in agricultural states will be achieved. If EIA has concerns over this alternative, I offer to discuss appropriate and workable solutions to eliminate the disproportionate adverse effects the current Form EIA-861 has on agricultural states like Nebraska.

Thank you for your attention to this important issue.

Sincerely,



David L. Bracht  
Director  
Nebraska Energy Office

From: Jason Burwen [mailto:j.burwen@energystorage.org]  
Sent: Wednesday, August 03, 2016 4:42 PM To:  
Mey, Alexander <Alexander.Mey@eia.gov>  
Cc: McGrath, Glenn <Glenn.McGrath@eia.gov>  
Subject: RE: EIA-860 Comments and Discussion

Hi Alex—

Sorry for the delay. On Question 40, I would reword to time bound, since storage functionality could change over time:

Which applications has this energy storage device provided in the past year or will it provide in the coming year (select all that apply)?

And the categories I'd suggest would be:

- Arbitrage
- System Peak Capacity
- Frequency Response/Frequency Regulation/Load Following
- Ramping/Spinning Reserves
- Co-located Renewable Firming
- Storing Excess Wind and Solar Generation
- Transmission Upgrade Deferral or Avoidance/Transmission Congestion Relief
- Distribution Upgrade Deferral or Avoidance
- Voltage Support/Power Quality
- Blackstart/Backup Power
- End-User Load Management

Hope that helps!

Cheers,

Jason

--

Jason Burwen

Policy & Advocacy Director // Energy Storage Association



June 29, 2016

Ms. Rebecca Peterson  
U.S. Energy Information Administration  
U.S. Department of Energy  
Forrestal Building, Mail Stop EI-23  
1000 Independence Avenue, SW.  
Washington, DC 20585

Submitted by email to [Electricity2017@eia.gov](mailto:Electricity2017@eia.gov)

Dear Ms. Peterson,

**RE: EIA Proposed Agency Information Collection Extension with Changes**

Please consider these comments from Electricities of North Carolina (Electricities) in response to the proposed agency information collection extension with changes, published in Vol. 81, No. 97 of the *Federal Register*, on May 19, 2016. Comments are being provided regarding the proposed changes to Form EIA-861S.

Electricities is the service organization that provides customer service, safety training, economic development, emergency and technical assistance, communications, government affairs and legal services to public power communities in North Carolina, South Carolina and Virginia. More than 70 North Carolina public power communities, predominantly municipally owned and operated electric systems, serve more than 1.2 million residential, commercial and industrial customers in North Carolina. Electricities also provides management services to the state's two municipal Power Agencies: North Carolina Municipal Power Agency Number 1 (NCMPA1) and North Carolina Eastern Municipal Power Agency (NCEMPA). NCMPA1 consists of 19 cities and towns in the western part of North Carolina and NCEMPA consists of 32 cities and towns in eastern North Carolina.

**Proposed changes to Form EIA-861S:**

In its information collection request, the Energy Information Administration (EIA) has proposed changes on how data is collected via the survey Form EIA-861S. "EIA plans to extend the time interval in which small utilities on the EIA-861S (short form) must complete the EIA-861 (long form) from 5 years to 8 years. EIA has conducted a statistical analysis of this proposal and the results indicate that the reporting interval can be extended to 8 years without adversely affecting the statistical estimation of uncollected data, *i.e.*, sector level (residential, commercial, industrial, and transportation) sales, revenue, and customer count by state. The change will also reduce burden on smaller utilities." The EIA has proposed no other changes to the EIA-861S form.



As an alternative, ElectriCities suggests (1) expanding Schedule 4, Part A, Sales to Ultimate Customers, on the short form survey to include the revenue, MWh sales and customer count data by customer sector as it is currently collected on Schedule 4, Part A, of the long form and then (2) eliminating altogether the requirement for short form respondents to periodically fill out the long form unless they become large enough to qualify to complete the more detailed version of the survey.

**Relevance to municipal utilities:**

Based on data reported in 2011 (the last time that all cities filed a long form survey), about 50% of all survey respondents reported sales of 100,000 MWh or less which would have made them eligible to become short form respondents. Of those meeting the size requirement for the short form survey, 80% were municipal utilities. In addition, about 68% of all municipal respondents met the size requirement for the short form survey. Assuming these proportions have not changed substantially since that time, these statistics indicate that decisions related to the short form survey are of particular relevance to the municipal utility industry. In North Carolina, for the 2015 reporting year, 34 out of 66 (or 52%) ElectriCities municipal members completed the short form survey.

**Value of schedule 4 data by customer sector:**

Data by customer sector is utilized by ElectriCities for analysis purposes such as the following: individual utility performance metrics, regional comparisons, benchmarking against other similar sized utilities and reporting to bond rating agencies. In addition, before the short form version of the survey came into existence, the State of North Carolina set a requirement that North Carolina utilities use customer count data for use in Renewable Energy Portfolio Standards (REPS) compliance calculations under N.C. General Statute § 62-133.8. Since the EIA data was universally available and consistent, the N.C. Utilities Commission ruled that it was a reliable source of data for the Power Agencies to use.

The data by customer sector associated with the short form respondents that is no longer being collected today is now being estimated by the EIA, by state, as an aggregate adjustment (and not by individual utility) in order to make it possible to develop comparable revenue, customer count, MWh sales totals and average rate totals by state. Although the EIA recognizes the value of this information at the state level, the data for each individual city is not provided which has eliminated a universal and consistent source of data for short form utilities and regional areas within states.

**Accuracy of customer sector data:**

For very small utilities, the loss or gain of one major commercial or industrial customer can swing their customer sector statistics significantly. The longer the short form period lasts, the more inaccurate the last available data published by the EIA will be over time for the short form utilities. Users who want to analyze short form utilities or aggregate their data regionally within a state can't do it as accurately without the availability of individual utility data. It would be more accurate to have the cities provide the information themselves and have this reported for all individual utilities as opposed to relying on stale data that was published a number of years ago or forgoing the analysis altogether since the current data is not available. It would also be most accurate to utilize customer sector data reported directly by the short form utilities as opposed to estimating only a state level adjustment using regression analysis.

**Benefits of eliminating long form surveys for small respondents:**

Other than the customer sector data suggested above, it is questionable that there is much value to be gained from having small utility respondents answer the additional detailed questions on the existing long form survey even on a periodic basis. Based on data reported in 2011, although approximately 50% of all survey respondents were small enough to be short form respondents, this group comprised only about 1% of all the reported MWh sales and served only about 2% of all customers. Small respondents are less likely to be industry leaders when it comes to new technology, innovative rate designs and other programs. They also have small numbers of staff and are more limited in their ability to invest in new technology unless replacements are required. If there are other questions that become important enough over time to be asked of small respondents on an annual basis, they could be added to the short form when needed and at the level of detail needed from that group.

**Data collection process:**

Maintaining the short form so that it includes all the data of significant value on an annual basis ensures that the respondents have methodologies and systems in place to collect this data. If substantially more data is requested after a long period, the respondent may not be able to readily supply accurate data. The longer the short form period lasts, there will be a significant learning curve each time the long form is required, especially as changes are made to the long form over time that the short form respondents have not been involved in. Turnover of utility staff may also complicate the process. A greater amount of support from the EIA staff will likely be required to answer questions in the year that the long form is required. If a short form utility grows to a size where they become required to fill out the long form, they can then institute the procedures necessary to answer those questions on an ongoing basis. If it is a periodic request with the space of many years between submissions, it is unlikely that procedures will be implemented to routinely track the most accurate information.

**Cost burden to respondents:**

Most utilities have internal reporting systems that break down their information by customer sector and maintain those reports on an ongoing basis for their own performance analysis and, prior to the introduction of the short form survey, smaller utilities were already reporting this data directly to the EIA on an annual basis. In addition, although the EIA is no longer collecting the Schedule 4, Part A, data annually by customer sector, ElectricCities must continue to collect this detailed data from our members in order to complete the annual REPS reporting to the N.C. Utilities Commission on behalf of the Power Agencies and to utilize it for our other reporting purposes. It should require minimal effort for a utility to add this detail to the survey on an annual basis going forward. These smaller utilities would also avoid the extra effort and confusion that would likely arise when switching to the long form survey in the required year.

**Cost burden on EIA:**

ElectricCities appreciates that the introduction of the short form survey was intended to reduce the cost to the EIA of administering this survey program. Under this alternative proposal, once the short form were revised to reflect the additional twelve data values collected from each short form respondent, this information would be entered directly by the utility staff respondent into the EIA's electronic survey form. This alternative proposal would eliminate the need for the EIA to perform regression analysis each year in order to produce estimated data that is meant to be representative

of the aggregate of short form utilities in each state. It would also eliminate any extra administration that would be needed by the EIA to support the long form survey process in years when the short form respondents were required to complete the long form.

**Conclusion:**

Thank you for the opportunity to submit comments in this matter. Electricities of North Carolina is very appreciative of the industry data that is available from the EIA and is interested in preserving data that is valuable to the municipal utility industry while streamlining the survey process. If you have any questions regarding these comments, please do not hesitate to contact me at (919) 7606268 or [wdemontbrun@electricities.org](mailto:wdemontbrun@electricities.org).

Sincerely,



Wendy deMontbrun  
Senior Rate Analyst, NCMPA1  
Electricities of North Carolina, Inc.



**James P. Dietz**

PO Box 160

**TWIN VALLEYS**  
PUBLIC POWER DISTRICT

*General Manager*

308-697-3315 1145 Nasby Street website:  
Nebraska 69022

[www.twinvalleysppd.com](http://www.twinvalleysppd.com) Cambridge,

July 1, 2016

Rebecca Peterson  
U. S. Department of Energy  
Energy Information Administration  
Mail Stop EI-23 Forrestal Building  
1000 Independence Ave SW  
Washington, DC 20585

Subject: Comments Regarding Form EIA-861 “Annual Electric Power Industry Report”

Dear Ms. Peterson:

These comments are on behalf of Twin Valleys Public District (Twin Valleys). Twin Valleys is an electric distributor in a very rural six county area in southwest Nebraska. The 1958 sq. mi. service area is larger than the State of Rhode Island. Twin Valleys serves a total of 6420 customers over 2482 miles of line. Included in the 6420 customers are 10 small communities that Twin Valleys serves at retail, however, Twin Valleys primarily serves rural areas.

Twin Valleys is very appreciative the EIA is allowing comments on Form EIA-861. Twin Valleys also appreciates the data EIA collects and reports on as Twin Valleys is a user of that data. It is a very valuable service. Twin Valleys is also interested in EIA's data collection, and especially the way agriculture, and specifically irrigation is currently included in the Industrial classification.

It might help to explain that Twin Valleys has no industrial customers if industrial customers would be defined as manufacturers. The only true factory Twin Valleys serves at retail is a precision machine shop type factory with four employees. This factory uses more energy for heating and cooling than it does for manufacturing.

The large rural area served by Twin Valleys is used either for production of crops or it is pasture land. In southwest Nebraska, irrigation is needed to grow most of the crops. In Twin Valleys' service area, the majority of pumping is electric powered with motors as large as 200 horsepower. It requires much infrastructure to serve these large loads that are dispersed throughout the service area. For example, the 200 horsepower irrigation pumps require a 225kVA transformer bank which is only provided for that customer and no one else. This transformer bank has losses every day of the year, but the pumping only occurs for about 3

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months of the year. In addition, irrigation is required during the peak usage period of other local customers and the peak for the regional transmission grid. To help control this peak demand, Twin Valleys, working with our power supplier, operates a very successful load control program for irrigation control. When load control is applied, Twin Valleys' load must be above a certain threshold and our power suppliers' load must be above a certain threshold. A consultant has reviewed this coordinated load control system and called it "world class".

The characteristics in the paragraph above increase the cost to serve irrigation dramatically compared to most industrial customers and the irrigation distorts the true industrial rate. Since Nebraska has more irrigated acres than any other state, we are concerned including irrigation in the EIA Industrial classification may be used by companies considering locating to, or expanding in Nebraska. We need to diversify our economy so we are less dependent on one industry – agriculture. In addition, since all electricity in Nebraska is provided by non-profit public power systems, we are constantly being compared to other states where most of the electricity is provided by private, for-profit companies. We believe a change in irrigation classification can make comparisons between states more meaningful.

Please consider creating a new reporting sector titled **Seasonal Agriculture**. This will provide much better data to compare states. Thank you for considering this request.

Sincerely,

James P. Dietz, P. E.



**David P. Duncan**  
Director, Environmental Regulatory and  
Strategy  
David.Duncan@luminant.com

**Luminant Power**  
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Dallas, TX 75201

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July 18, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
Energy Information Administration  
EI-23 Forrestal Bldg.  
1000 Independence Ave. SW  
Washington, DC 20585

Submitted by email to [Electricity2017@eia.gov](mailto:Electricity2017@eia.gov)

RE: EIA Proposed Agency Information Collection Extension with Changes - Forms 860 and 923

Dear Ms. Peterson:

Luminant<sup>1</sup> submits these comments in response to the proposed agency information collection extension with changes, published in 81 Fed. Reg. 31623 on May 19, 2016. Specifically, these comments concern Form 860, "Annual Electric Generator Report," and Form 923, "Power Plant Operations Report."

### **Form 860**

EIA proposed to add question 15 to Schedule 2, Power Plant Data, which asks if the facility has energy storage capabilities. Many plants have emergency battery rooms for safe shutdown of a unit. In the instructions for question 15, please add a clarifying sentence that the types of batteries described above should not be considered as energy storage.

### **Form 923**

On Schedule 8, Part D, Monthly Cooling System Information, EIA proposes to change the collection of this data to a monthly basis. This change will increase the reporting burden. It would take almost the same amount of time to collect, format and submit the data each month as it would to compile 12-months of data, format and submit once early in the next year. On 81 Fed. Reg. 31628, EIA mentions "a more efficient model-based cutoff design" to significantly reduce the number of monthly respondents; however, no information about this model is provided upon which to comment. Since EIA plans to implement these changes for 2017, a

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<sup>1</sup> As used herein, "Luminant" refers collectively to Luminant Generation Company LLC, Oak Grove Management Company LLC, Sandow Power Company LLC, Big Brown Power Company LLC, DeCordova Power Company LLC, La Frontera Holdings, LLC, Tradinghouse Power Company LLC, and Valley NG Power Company LLC.

respondent would need to know several months before January 2017 if they will be required to submit monthly so that procedural changes in collection, recordation and reporting can be made. Luminant opposes to the onerous submittal of cooling system information on a monthly basis.

Luminant appreciates the opportunity to comment on these proposed changes to the EIA the electricity data collection forms and procedures.

Sincerely,

A handwritten signature in blue ink that reads "David P. Duncan". The signature is written in a cursive style with a large, prominent "D" at the beginning.

David P. Duncan  
Director, Environmental Regulatory and Strategy



Lawrence Berkeley National Laboratory  
One Cyclotron Road, MS 90R4000  
Berkeley, CA 94720-8136

July 14, 2016

Dear Ms. Peterson,

Lawrence Berkeley National Laboratory (LBNL) has had the opportunity to review the current version of the proposed changes to EIA Form 861 section on Schedule 3, Parts B and C titled *Distribution System Reliability Data*. Below are two suggestions we offer for consideration in the next update to this form:

- Add **“MAIFI Value for the Year”** under both parts B (IEEE 1366 Standard as MAIFI<sub>E</sub>) and C (non-IEEE method as MAIFI). Collecting the frequency of shorter term interruptions will serve to significantly improve the understanding of reliability and the priorities that need to be made to in developing policies that help shape the state of the current U.S. electric power system. Specifically, as smart technologies are increasingly being deployed in distribution electric systems in part as avoided sustained interruptions, this metric is an important proxy of the evolving reliability of the utility’s electric power system.
- Add two questions entitled **“SAIDI Value: Including and Excluding Major Events minus loss of supply”** and **“SAIFI Value: Including and Excluding Major Events minus loss of supply”** in part C, non-IEEE 1366 method section. Inclusion of this missing piece of information is needed to understand the share of reliability due to loss of supply for reporting entities in this section.

Additionally, we have provided comments to excerpted snapshots from Parts B and C on the following page for ease of understanding the above suggestions. We feel both suggested changes will go a long way in improving the amount of reliability information currently available in the U.S. and allow for more sound and educated decisions concerning policy related to electricity reliability.

Please let us know if you have any questions regarding any of the above suggestions and we’d be happy to discuss them further with you. We are grateful this information is now available for the broad range of reporting entities and believe this is a major step toward assessing electricity reliability more broadly in the U.S. Thanks so much for all your efforts.

Sincerely,

A handwritten signature in black ink, appearing to read "Joe Eto".

A handwritten signature in black ink, appearing to read "Kristina S. LaCommare".

Joseph H. Eto and Kristina S. LaCommare  
Lawrence Berkeley National Laboratory  
Email: [JHEto@lbl.gov](mailto:JHEto@lbl.gov)

Tel: 510.486.7264

**FORM EIA-861**  
**ANNUAL ELECTRIC POWER INDUSTRY REPORT**

OMB No. 1905-0219  
Approval Expires: XX/XX/XXXX  
Burden Hours: 12.75

Entity Name: **ABC Company**  
Entity ID: **00000** Data Year: **2016**

**Part B: SAIDI and SAIFI in accordance with IEEE 1366-2003 standard or IEEE 1366-2012 standard**

State

	Including Major Event Days	Excluding Major Event Days
3 SAIDI Value for the Year		
4 SAIDI Value: Including and Excluding Major Event Days minus loss of supply (see instructions)		
5 SAIFI Value for the Year		
6 SAIFI Value: Including and Excluding Major Event Days minus loss of supply (see instructions)		
7 Total number of customers used in these calculations		
8 What is the highest voltage that you consider part of the distribution system, as opposed to the supply system?		kV
9 Is information about customer outages recorded automatically?		Yes [ ] No [ ]

**Thank you for completing this Part. Skip Part C and go directly to Schedule 4 Part A.**

Add new question: "Do you calculate MAIFI<sub>E</sub> or MAIFI as defined in IEEE 1366-2012?"

Add question: "MAIFI<sub>E</sub> Value for the Year."

Add question: "MAIFI Value for the Year."

**FORM EIA-861**  
**ANNUAL ELECTRIC POWER INDUSTRY REPORT**

OMB No. 1905-0219  
Approval Expires: XX/XX/XXXX  
Burden Hours: 12.75

Entity Name: **ABC Company**  
Entity ID: **00000** Data Year: **2016**

**Part C: SAIDI and SAIFI calculated by other methods**

State

	Including major events	Excluding major events
10 SAIDI Value for the Year		
11 SAIFI Value for the Year		
12 Total number of customers used in these calculations		
13 Do you include inactive accounts?		Yes [ ] No [ ]
14 How do you define momentary interruptions? (such as, less than 1 min, equal to or less than 5 min, or some other way)		Less Than 1 min OR Less Than or Equal to 5 minutes [ ] Other [ ]
15 What is the highest voltage that you consider part of the distribution system, as opposed to the supply system?		kV
16 Is information about customer outages recorded automatically?		Yes [ ] No [ ]

Add a new question to collect information on SAIDI value minus loss of supply. This is comparable to question 4 in Part B.

Add a new question to collect information on SAIFI value minus loss of supply. This is comparable to question 6 in Part B.

Add a new question to collect ask: "Do you calculate MAIFI?"

Add new question: "MAIFI Value for the Year."

June 27, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
U.S. Energy Information Administration, Mail Stop EI-23  
Forrestal Building  
1000 Independence Avenue, SW  
Washington, DC 20585

RE: *Federal Register* notice of May 19, 2016, for the Energy Information Administration's Electric Power Surveys (Forms EIA-63B, EIA-411, EIA-826, EIA-860, EIA-860M, EIA-861, EIA-861S, EIA-861M, EIA-923, EIA-930) (OMB Number: 1905-0129)

Dear Ms. Peterson:

The Bureau of Economic Analysis (BEA) strongly supports the continued collection of data by the Energy Information Administration (EIA) for the Electric Power Surveys. The data collected on these forms are crucial to key components of BEA's economic statistics.

BEA uses data from several Electric Power Survey forms to prepare the gross domestic product (GDP), the industry accounts, and the GDP by state estimates. Data from the following surveys are used:

- EIA-826 forms are used to prepare estimates of electricity services in the personal consumption expenditures component of GDP and to estimate quarterly and annual industry gross output.
- EIA-826 (to be replaced by EIA-861M) and EIA-861 are used to prepare quarterly, annual, and benchmark industry estimates of gross output, intermediate inputs, revenue growth, and final demand.
- EIA-923 data are used to prepare estimates of the inventories of utilities in the change in private inventories component of GDP and to estimate the dollar value of purchased fuels for electric utilities.
- EIA-860 and EIA-860M are used to prepare annual estimates of capital charges in the gross operating component of GDP by state.

A list of specific items used is described in the attachment below.

BEA has reviewed the proposed changes for the EIA surveys and has determined that they will not impact our use of the data. Please keep BEA informed concerning any further modifications to these forms. We are particularly interested in any modifications proposed during the forms' approval process that would substantially affect our use of these data. For additional information, please contact Tiffany Burrell, Source Data Coordinator, on 301-278-9618 or by e-mail at [Tiffany.Burrell@bea.gov](mailto:Tiffany.Burrell@bea.gov). Should you need assistance in justifying these forms to the Office of Management and Budget, please do not hesitate to contact BEA.

Sincerely,

A handwritten signature in blue ink that reads "Dennis J. Fixler". The signature is written in a cursive style with a large initial "D".

Dennis J. Fixler  
Chief Economist

Attachment

## Attachment

### Direct Use of EIA Forms 923 and 826 in Preparation of BEA's National Income and Product Accounts (NIPA)

Items	Uses	NIPA Estimate
Data balance and stocks at the end of the reporting period	Used to estimate the inventories of utilities	Change in private inventories
Residential kilowatt hours (Price and Usage), U.S. total	Used to estimate electricity consumed by households	Personal consumption expenditures for electricity

### Direct Use of EIA Forms 860 and 860M in Preparation of BEA's Regional Accounts

Items	Uses	Regional Account Estimate
Generating capacity by company and state	Used to apportion the capital charges data that are reported by company to the states where each company operates. Capital charges is a large portion of gross operating surplus	Capital charges component of gross operating surplus

### Direct Use of EIA Forms 826 and 861 in Preparation of BEA's Industry Accounts

Industry	Uses	Industry Account Estimate
NAICS 2211 "Electric power transmission, generation, and distribution"	Primary measure of electric utility growth. Used to create company level database and time series for electric utilities by ownership and revenue type; final electricity demand in the Input/ Output table	Benchmark, quarterly, and annual estimate: gross output, intermediate inputs, revenue growth and final demand

### Direct Use of EIA Forms 923 in Preparation of BEA's Industry Accounts

Industry	Uses	Industry Account Estimate
NAICS 2211 "Electric power transmission, generation, and distribution"	Used to estimate dollar value of purchased fuels for electricity generation utilities	Benchmark intermediate input estimates, "Purchased fuels"

**From:** [Clay Gibbs](#)  
**To:** [Electricity2017](#)  
**Subject:** EIA-861 Form  
**Date:** Wednesday, June 29, 2016 11:42:30 AM

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Ms. Rebecca Peterson  
U.S. Department of Energy  
Energy Information Administration

RE: Comments Regarding Form EIA-861 "Annual Electric Power Industry Report"

Dear Ms. Peterson:

I wanted to take a moment to thank you for all that you do for the U.S. Department of Energy, and also to seek your consideration on changing how irrigation sales are recorded on the EIA-861 Form. It is my understanding that you have had a number of discussions regarding this issue so I won't take up your time revisiting it.

I simply want to share with you that changes to the form and reporting process would be greatly appreciated. Nebraska, especially Columbus Nebraska, is very blessed to have a number of industrial based businesses that provide a tremendous value to our community. Many of them have shared with us over the years that they are here because of our competitive rates. This story is common throughout the State and it would be very unfortunate to miss out on future opportunities because of the current reporting process.

Sincerely,

Clay Gibbs  
CEO/GM

**Cornhusker Public Power District**

Office: 402-564-2821  
clayg@cppd.us



**Craig A. Glazer**

Vice President – Federal Government Policy

PJM Washington Office

(202) 423-4743 FAX (202) 393-7741 e-mail: [craig.glazer@pjm.com](mailto:craig.glazer@pjm.com)

July 18, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
U.S. Energy Information Administration  
Mail Stop EI-23  
1000 Independence Avenue, S.W.  
Washington, D.C. 20585

RE: PJM Interconnection, LLC Comments on Proposed Revisions to Form EIA-930  
Balancing Authority Operations Report

Dear Ms. Peterson:

PJM Interconnection, L.L.C. (“PJM”) is pleased to provide these comments in response to EIA’s proposed Rule to make certain discrete modifications to the information to be submitted by Balancing Authorities to EIA through Form EIA-930.

At the outset, PJM wishes to inform EIA that it can provide the requested data through the proposed modifications to Form EIA-930 within the time frame contemplated by the proposal. Although PJM seeks clarification of certain points of the proposed Rule as detailed below, PJM already provides the requested information to its stakeholders and the public in the routine course of its business and does not anticipate any difficulty implementing EIA’s proposal. In fact, PJM believes that subject to a reasonable implementation schedule, comparable data should be made public on a commensurate basis by Balancing Authorities across the nation.

PJM believes that to the extent some Balancing Authorities are unable to comply with EIA’s proposal due to implementation challenges, EIA should propose a process for proxy data to be provided by such entities for a short interim transition period, along with a schedule for compliance so the reported data can be comparable among Balancing Authorities at a future specified date.

With these thoughts in mind, PJM provides the following responses to the EIA inquiry:

***Proposed Change #1 — Change the amount of time within which the respondents must report. Currently respondents must submit their data within 60 minutes of the end of the data hour. This change would be consistent with the observed reporting capabilities of the respondents.***

*PJM Response:* This change can be accommodated. PJM has completed the necessary changes to ensure reporting on this shorter time interval.

***Proposed Change #2 — Require respondents to report hourly sub-regional actual demand when these values are produced in the normal course of business within a month of the operating day.***

*PJM Response:* PJM seeks clarification that the term “sub-regional” may be met by PJM’s current reporting protocol, which compiles and reports this data by PJM load zone. The PJM load zones generally correspond to traditional utility boundaries and have been an accepted demarcation in the PJM Tariff and Operating Agreement since their inception.

Moreover, PJM notes that the current hourly load data provided to EIA in the “hourly file” is actual telemetered data, while the hourly load data provided to EIA in the “daily file” two days after the applicable operating day is revenue quality data that will often differ from the data in the hourly file.

***Proposed Change #3 — Require respondents to report hourly net generation by standard fuel type categories.***

*PJM Response:* PJM currently posts this data on its website and can provide it to EIA based on hourly telemetered data, subject to the clarifications provided below. Specifically, PJM provides clarification as to how it reports on its website fuel burnt from “dual fuel units” as compared to “multiple fuel units”.

First, PJM notes that for multiple fuel units (those units that are required to operate using different fuels at the same time, such as a unit that utilizes natural gas, fuel oil and diesel), it may not be possible to know exactly which fuel is being burned in a given hour as there is no required reporting of this information to the RTO. Accordingly, PJM proposes that the Final Rule recognize this and allow the reporting entity to simply note that the reported fuel burned may vary from the actual “in the field” fuel burned as a result of the fact that multiple fuel units may operate in real-time by utilizing two or more fuel types.

Second, PJM can report this data for dual fuel units (those units that operate using one type of fuel or another) because when such a unit operates pursuant to a cost schedule, PJM knows which fuel type it utilizes. Further, when such a unit operates pursuant to a price schedule, PJM will assume it is on the unit’s primary fuel type, unless otherwise indicated. PJM uses this convention in its public reporting on its website and would utilize this same reporting convention when providing data pursuant to revised Form EIA-930.

Last, PJM requests that the Final Rule reflect that fuels may be burned by “behind the meter generation” that appears to the RTO as simply a load reduction or demand response in most instances. For this category of generation resources, the RTO would not

be able to indicate the specific fuel being utilized in a given hour. PJM asks that the Final Rule allow the reporting Balancing Authority to be deemed compliant by noting this fact.

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PJM has appreciated the collaborative working relationship that has characterized EIA’s approach to development and implementation of Form EIA-930. PJM files these comments in furtherance of that relationship and supports EIA’s overall approach to

providing that information nationwide in a form which is ultimately comparable between Balancing Authorities.

Should EIA seek more information on the attached, please contact the undersigned.

Very truly yours,



---

Craig Glazer

Vice President-Federal Government Policy  
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July 5, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
Energy Information Administration  
[Electricity2017@eia.gov](mailto:Electricity2017@eia.gov)  
EI-23 Forrestal Bldg  
1000 Independence Ave SW  
Washington, DC 20585

RE: Comments Regarding Form EIA-861 "Annual Electric Power Industry Report"

Dear Ms. Peterson:

These comments on behalf of the Nebraska Rural Electric Association (NREA) are submitted pursuant to the U.S. Energy Information Administration's request for comments on Form EIA-861, as published in the Federal Register on May 19, 2016.

The NREA is a statewide association representing 34 rural electric providers, both rural public power districts and electric cooperatives. NREA members serve a majority of the land area of the state with more than 265,000 meters served over more than 95,000 miles of distribution line. A majority of the load is agricultural in nature and is dominated by irrigation services. The NREA commends the EIA on the significant work it does to collect and publish a massive amount of energy data. We recognize the magnitude of the undertaking.

The NREA, however, would like to note an issue with the data collected on Form EIA-861 that distorts the reported industrial pricing in agricultural-rich states with seasonal irrigation. This is particularly problematic with the industrial pricing data for Nebraska.

The Form EIA-861 currently requires that all agricultural activities, including irrigation, are incorporated in the Industrial Sector reporting on the annual Form EIA-861. Because irrigation is often seasonal and associated with high demand charges, EIA-reported average industrial pricing for agricultural-rich states with large amounts of seasonal irrigation are elevated.

Nebraska ranks among the lowest states in average retail price of electricity for the residential and commercial sectors, but among the highest 20 states in the industrial sector.

The data published by EIA for average retail price of electricity is utilized by many businesses in making state-to-state utility rate and cost comparisons. This significantly hampers Nebraska and other agricultural-rich states' economic development efforts to recruit and retain large industrial companies. This is because the reported average retail price is much higher than what these customers would actually pay.

On May 12, 2014, EIA staff published an article in *Energy Today* on the EIA website entitled: "Many industrial electricity customers are farmers." In the article, EIA staff M. Tyson Brown and Marc Harnish acknowledge the challenges of agricultural-rich states and the impact that high cost irrigation has on industrial pricing. The article notes that Nebraska has the third-highest number of industrial electricity customers in the United States primarily due to the inclusion of irrigation customers in Industrial Sector reporting.

Nebraska has the largest amount of irrigated agricultural land in the United States. A substantial percentage of the irrigation pumping systems supporting crop growth are powered by electricity. For many NREA members, irrigation accounts for more than 50 percent of their load. These electric loads are highly seasonal, typically coming into play in late June, July and August. The author of the EIA article notes that "irrigation load from farm irrigation systems can be costly to serve, because of the high cost of connecting these dispersed systems to the electric grid and the high cost of having enough capacity available to meet seasonal irrigation load." This statement clearly demonstrates how the load and cost characteristics of irrigation customers differ substantially from typical industrial customers and why irrigation should not be included with industrial customers. It is helpful that EIA recognizes the impact of irrigation on the industrial data. It would be more helpful to take the next step and address the discrepancy.

Prior to 2003, the EIA Form-861 included instructions for reporting irrigation load pricing into a generic "Other" category. When the "Other" category was removed, Nebraska, along with other agricultural-rich states, saw a dramatic increase in the number of industrial customers recorded. Nebraska went from being 19th in total number of industrial customers to being third in the nation, surpassed only by Texas and California. This change also led to significant increases in EIA reported industrial average pricing for agriculture-rich states. EIA's publications do not clearly identify irrigation as a determinant in the calculation of the industrial price. As a result, agricultural-rich states with significant seasonal irrigation appear to be costlier for traditional industrial sector businesses.

Looking at Nebraska specifically, in 2014, reported irrigation pricing was 16.38 cents per kilowatt hour on average, while traditional industrial pricing was only 6.67 cents per kilowatt hour. When seasonal agricultural (primarily irrigation) numbers are removed from the EIA reported industrial pricing, the resulting price differential is greater than 30 percent. For Kansas the number is more than 12 percent, and in Colorado and Texas the differential is more than 10 percent.

Because we believe that the inclusion of electricity sales for irrigation has a harmful effect on the reported industrial price of electricity, **the best solution would be for EIA to create a new reporting sector for Seasonal Agriculture.** This will result in a more accurate EIA measurement of industrial pricing across all states and will illustrate the true costs associated with seasonal agriculture in states with large seasonal agricultural loads. The end result is more reliable and accurate data.

While not as efficient as creating a new reporting sector, as a second best option, we recommend the addition of a check box to EIA Form-861 to designate whether irrigation (seasonal agriculture) sales are included in the Industrial Sector reporting, and if so, what percentages of those industrial sales and revenues are from these activities. **This option is useful only if EIA includes this information in the annual publication of data.** A mock-up of this proposal is attached.

The NREA is concerned that the current treatment of irrigation sales inaccurately reports industrial pricing in Nebraska and other agricultural-rich states resulting in assumptions that can preclude economic development in these states. Several Nebraska utility representatives, including a delegation from NREA and the Nebraska Energy Office have met with EIA staff over the past couple of years to discuss this matter. We greatly appreciate the attention staff has given the issue and hope that we can continue the discussion to achieve a solution that will result in the most accurate EIA data.

Respectfully submitted,



Kristen Gottschalk  
Government Relations Director  
On Behalf of the Nebraska Rural Electric Association

Enclosure



**From:** [Gregory,Michael A \(CONTR\) - TOI-DITT-2](#)  
**To:** [Electricity2017](#)  
**Cc:** [Peterson, Rebecca](#); [Kitali,Salah H \(BPA\) - TOI-DITT-2](#); [Idowu,Ayodele O \(BPA\) - TOOC-DITT-2](#)  
**Subject:** Bonneville Power Administration's (BPA) Comments to the EIA-930 Survey  
**Date:** Monday, July 18, 2016 7:41:55 PM  
**Importance:** High

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**RE: BONNEVILLE POWER ADMINISTRATION'S (BPA) COMMENTS TO THE EIA-930 SURVEY**

Dear Ms. Peterson:

Bonneville Power Administration (BPA) appreciates this opportunity to provide feedback on the US Department of Energy (DOE) Energy Information Administration's (EIA) request for comments on proposed changes to the OMB No. 1905-0129, Information Collection Request: Form EIA-930, "Balancing Authority Operations Report."

A collaborative team from BPA's Transmission System Operations and Transmission Commercial System Management has reviewed your survey and provides this input:

(4a) Proposed Changes: EIA proposes to:

- Change the amount of time within which the respondents must report. Currently respondents must submit their data within 60 minutes of the end of the data hour. The proposal is to change that to within 30 minutes of the end of the data hour. This change would be consistent with the observed reporting capabilities of the respondents.

***BPA comment: This is already a current BPA practice.***

- Require respondents to report hourly sub-regional actual demand when these values are produced in the normal course of business within a month of the operating day.

***BPA comment: BPA understands that "sub-regional values" are only BPA values. With this in mind, this is already a current BPA practice.***

- Require respondents to report hourly net generation by standard fuel type categories.

***BPA comment: BPA is not currently submitting hourly net-generation data via fuel-types at this time; however, BPA plans to address this item prior to when the data is needed (2017).***

Also, EIA requests comments on whether it should continue its current policy of limited withholding of small Balancing Authority data for two days.

***BPA comment: Since BPA is not a "small Balancing Authority," this does not apply to BPA.***

If you have questions, please contact the BPA Transmission System Operations Internal Manager, Salah Kitale, at [shkitale@bpa.gov](mailto:shkitale@bpa.gov).

Sincerely,

Mike Gregory

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**Mike Gregory**



***FirSTek DOS ConSulTing***

Operations Analyst III

Transmission System Operations — TOI

Bonneville Power Administration

Office: (360) 418-2394

Cell: (503) 941-8295

[magregory@bpa.gov](mailto:magregory@bpa.gov)

**From:** [Keith Harvey](#)  
**To:** [Electricity2017](#)  
**Subject:** Comments on Form EIA-861  
**Date:** Tuesday, June 28, 2016 12:10:29 PM

---

Hello Ms. Peterson-

I would like to add my comment to the Form EIA-861 as pertains to Schedule 4, PART –A. Sales to Ultimate Customers. Full Service – Energy and Delivery Service (Bundled):

I represent North Central Public Power District #13698 and am the contact for this survey. On the aforementioned Schedule 4, Part A for 2015 under Column C Industrial the entire 38,128 Megawatthours reported are a result of irrigation loads. We have no industrial loads and with this one reporting 15.482 Cents/Kwh will probably never have any industrial loads looking at North Central. Irrigation loads which are seasonal and come with high demands for short periods of time are very expensive to serve due to the infrastructure required to support them. And this is only for a month or two out of the entire year. In 2015 for North Central PPD irrigation was 43.5% of our annual revenues; 26.3% of our kWh sold; and was 19.5 percent of our connected meters. A double whammy occurs when all of the irrigation in Nebraska is assimilated into the industrial sector for the state and makes Nebraska look very unfriendly to industrial customers based on industrial rates that are skewed badly by non-industrial customers (irrigation). I implore you to please do something to make this calculation representative of true industrial loads and allow us to report irrigation as “Seasonal” or “Other” or something that does not have such huge economic development implications for small systems such as North Central nor for the entire State of Nebraska. Thank you for your consideration in this matter.

Keith E. Harvey  
General Manager  
North Central PPD  
1409 Main Street, Box 90  
Creighton, NE 68729-0090  
1-402-358-5112



July 18, 2016

**VIA E-MAIL**

Ms. Rebecca Peterson  
U.S. Department of Energy  
U.S. Energy Information Administration  
Mail Stop EI-23  
1000 Independence Ave., SW  
Washington, DC 20585

**Re: Comments on Proposed Revisions to Form EIA-930, Balancing Authority Operations Report**

Dear Ms. Peterson:

ISO New England Inc. (“ISO-NE”), the New York Independent System Operator (“NYISO”), the Electric Reliability Council of Texas (“ERCOT”), Midcontinent Independent System Operator, Inc. (“MISO”), and Southwest Power Pool, Inc. (“SPP” and, together with ISO-NE, NYISO, ERCOT, and MISO the “Indicated ISOs”) respectfully submit these joint comments in response to the notice issued in the Federal Register on May 19, 2016. The notice stated that, pursuant to the Paperwork Reduction Act of 1995 and with the approval of the Office of Management and Budget, the Energy Information Administration (“EIA”) intends to extend certain EIA forms, including Form EIA-930, Balancing Authority Operations Report, for three years, with changes. The notice also stated that EIA expects the changes to be effective beginning in January 2017. Because the proposed changes may require the Indicated ISOs to make significant modifications to their software, the Indicated ISOs may not be able to meet EIA’s implementation timeline. The Indicated ISOs request that EIA provide flexibility and extensions of time as needed for balancing authorities to be able to implement the proposed changes, and where necessary, to obtain regulatory approval of budget items needed to implement the proposed changes.

The current Form EIA-930 collects hourly electric power operating data from balancing authorities in the contiguous United States. The data include: hourly demand, hourly next-day demand forecast, hourly net generation, and hourly actual interchange with each interconnected balancing authority. In addition to requesting an extension of the currently approved collection, EIA proposes to make changes to Form EIA930. Below are each of the proposed changes, followed by the Indicated ISOs’ comments on each of them, as well as an additional comment on language included in the proposed EIA-930 Instructions.

- 1. Change the amount of time within which the respondents must report. Currently respondents must submit their data within 60 minutes of the end of the data hour. The proposal is to change that to within 30 minutes of the end of the data hour. This change would be consistent with the observed reporting capabilities of the respondents.**

The Indicated ISOs are able to produce the required data within 30 minutes of the end of the data hour.

**2. Require respondents to report hourly sub-regional actual demand when these values are produced in the normal course of business within a month of the operating day.**

The proposed EIA-930 Instructions state that “[r]espondents [who] calculate in the normal course of business within a month of the operating day hourly actual demand values for sub-regions (local balancing authorities, areas, zones, operating companies, etc.) within the tie line boundaries of their system are required to report these values.” The Indicated ISOs calculate these values in the normal course of business. For example, ISO-NE, NYISO and SPP calculate these values by load zones,<sup>1</sup> ERCOT calculates these values by weather zones, and MISO reports this data on a Local Balancing Authority basis, all which roll up to MISO’s Local Resource Zones.<sup>2</sup> However, the proposed change would require architectural and publishing modifications at each of the Indicated ISOs. Upon reaching the trigger (*i.e.*, when all of the settlements are complete for a prior month), software would need to run to summarize the data and route it to the external storage location (*e.g.* ISO-NE’s PUBDBP), which needs to be architected to receive the data). Web services and accompanying documentation would also need to be written. Thus, the Indicated ISOs may not be able to meet EIA’s implementation timeline and respectfully request that EIA provide flexibility and extensions of time as needed for balancing authorities to be able to implement the proposed changes.

In addition, while the hourly system demand data that the Indicated ISOs currently provide is based on real-time telemetered load, the sub-regional actual demand data that would be provided under the proposed change would be based on revenue quality metering. Real-time telemetered load data accounts for settlement-only generators (*i.e.* generators without telemetry that the ISO does not dispatch) on the demand side. This means that, if a settlement-only generator is generating more power, then there is a decrease in telemetered load, and if a settlement-only generator is generating less power, then there is an increase in telemetered load. On the other hand, revenue quality metering accounts for settlement-only generators on the supply side. Therefore, the data provided under the proposed change will not match the data that is currently provided. The software modifications needed to provide subregional actual demand data without taking settlement-only generators into account on the supply side (so that the data matches the hourly system demand data) would be time consuming and expensive, and, even if those changes were made, the hourly system data currently provided and the sub-regional actual demand data would still not match because real-time telemetered load and revenue quality metering provide data of different quality.

**3. Require respondents to report hourly net generation by standard fuel type categories.**

The list of fuel type categories included in the proposed EIA-930 Instructions contains the following categories: coal fired generators, natural gas-fired generators, nuclear, petroleum products, hydro and

<sup>1</sup>

The eight currently-defined load zones in ISO-NE are: Maine, New Hampshire, Vermont, Connecticut, Rhode Island, Western/Central Massachusetts, Northeast Massachusetts and Boston, and Southeast Massachusetts. The eleven currently-defined load zones in NYISO are: (A) West, (B) Genesee, (C) Central, (D) North, (E) Mohawk Valley, (F) Capital, (G) Hudson valley, (H) Millwood, (I) Dunwoodie, (J) New York City, and (K) Long Island.

2

Concurrently with the comments of the Indicated ISOs, MISO separately has filed comments explaining that EIA's proposed reporting requirement by LBA would violate the MISO Tariff, on file with the Federal Energy Regulatory Commission.

pumped storage, solar, wind, and all other types. The Indicated ISOs respectfully suggest that an additional category for dual-fuel generators be added. Some of the Indicated ISOs do not know which fuel is being used at what time for each of those units, and, as such, having a category for dual-fuel generators is appropriate. In addition, when there is only one unit or a small number of units in a category, the Indicated ISOs will have to include those units in the "all other types" category in order to comply with confidentiality requirements under their Tariffs.

In addition, under the current version of Form EIA-930, the Indicated ISOs provide, in near-real-time, the total telemetered generation in their footprints. The data requested under this proposed change, however, would reflect generation from the Indicated ISOs' dispatch software. Thus, the data that EIA currently receives (and will continue to receive) may not match the summation of the data it receives under the proposed change. In addition, as is the case with the data that is already being provided, there might be a definitional issue with MW-hours generated by units that the Indicated ISOs do not dispatch (*i.e.*, settlement-only generators and behind the meter generators).

Finally, the proposed EIA-930 Instructions state that the energy values reported (actual demand, net generation by fuel type and total net metered tie line flow) are expected to balance hourly. This expectation cannot be met by using the Indicated ISOs' current processes. Specifically, actual demand is calculated using a sum of all the net telemetered output of generators plus the sum of the tie lines. Net generation by fuel type is currently calculated as the fuel-type-aggregated dispatch of the units, which is close, but not exact, to actual demand. As a result, actual demand, net generation by fuel type, and total net metered tie line flow will not match if the current processes are used. Changing these processes so that the three energy values reported balance hourly would require additional time and expense.

**4. EIA also requests comments on whether it should continue its current policy of limited withholding of small balancing authority data for two days.**

The Indicated ISOs have no comment on this policy.

**5. Additional Comment on Language Included in Proposed EIA-930 Instructions**

While EIA's request for comments is focused on the four issues included above, the Indicated ISOs respectfully submit the following additional comment on language that appears in the proposed EIA-930 Instructions.

The proposed EIA-930 Instructions state that "[r]eported net metered tie line flow with each directly, physically connected balancing authority is expected to match that reported by the

corresponding balancing authority.” The current requirement is that the values be verified, but there is no requirement that the values match, and some of the Indicated ISOs cannot currently comply with the expectation that the values match in the timeframe allowed for EIA-930 posting. For example, ISO-NE compares actual interchange with neighboring control areas but does not change the values to match those of the neighboring control areas. The final actual interchange values are confirmed after-the-fact using revenue quality metering in order to account for inadvertent interchange, as part of a monthly North American Electric Reliability Corporation (“NERC”) process. This process is not completed during the next operating day. Rather, the process is completed 15 days after the end of each month (after NYISO provides its values to ISO-NE). Significant process changes and software modifications would be needed to make the values match, requiring substantial additional time and expense.

In conclusion, the Indicated ISOs respectfully request that EIA consider its comments on the proposed changes to Form EIA-930, provide balancing authorities flexibility and additional time as necessary to implement any system changes needed to report requested data, and otherwise modify the data requested and timeframes as discussed herein.

Respectfully submitted,

/s/ Margoth Caley

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/s/ Nathan Bigbee

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Ms. Rebecca Peterson

July 18, 2016

Page 5 of 4

/s/ Carl F. Patka

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/s/ Matt Morais

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June 30, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
Energy Information Administration  
EI-23 Forrestal Bldg.  
1000 Independence Ave SW  
Washington, DC 20585

**RE: Comments Regarding Form EIA-861 “Annual Electric Power Industry Report”**

Dear Ms. Peterson:

These comments on behalf of the Nebraska Chamber of Commerce & Industry are submitted pursuant to the U.S. Energy Information Administration’s request for comments on Form EIA-861, as published in the Federal Register on May 19, 2016.

The Nebraska Chamber is a statewide business association representing nearly 1,700 businesses, trade associations and local chambers throughout Nebraska. It has been brought to our attention that the data collected on Form EIA-861 distorts the reported industrial pricing in agriculture-based states with large amounts of seasonal irrigation. This is particularly problematic with the industrial pricing data for Nebraska, which leads the nation in irrigated acres.

The Form EIA-861 currently requires that all agricultural activities, including irrigation, are incorporated in the Industrial Sector reporting on the annual Form EIA-861. Nebraska serves a substantial percentage of the irrigation pumping with electric motors. A significant amount of electric infrastructure (wires, substations and generation) has been built to serve this large load, but the actual delivery of electricity occurs in a relatively limited portion of the year. Consequently, unlike a typical industrial customer which may operate 24 hours/day, most days of the year, the irrigation load occurs during a relatively limited time. The fixed costs to serve the irrigation load are recovered over far fewer hours of consumption than a typical industrial customer – thereby increasing the per-unit cost. Because Nebraska has so many electrically powered irrigation wells, the inclusion of this non-tradition “industrial” use has significantly distorted the EIA published average cost of electricity for an industrial customer in Nebraska.

While Nebraska is considered one of the more affordable states for the average retail price of electricity for the residential and commercial sectors, but it ranks among the highest 20 states for industrial revenue per kWh. Experts in the state’s electricity sector tell us that the inclusion of electricity sales for irrigation has a misleading effect on the reported industrial price of electricity – and that the best solution would be for EIA to create a new reporting sector for Seasonal Agriculture. This will result in a more accurate EIA measurement of industrial pricing across all states and will illustrate the true costs associated with seasonal agriculture in states with large seasonal agricultural loads. The end result would be more reliable and accurate data.

A second option, we are told, would be the addition of a check box to EIA Form-861 to designate whether irrigation (seasonal agriculture) sales are included in the Industrial Sector reporting, and if so, what percentages of those industrial sales and revenues are from these activities.

Because the data published by EIA for average retail price of electricity is utilized by our members to make cost comparisons, we would appreciate if EIA could reform its methods of data collection to provide our business community a more accurate reading of industrial rates.

Thank you for your attention to this important issue.

Regards,



Jamie Karl  
Vice President-Public Affairs & Policy  
Nebraska Chamber of Commerce & Industry



June 27, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
Energy Information Administration  
EI-23 Forrestal Bldg  
1000 Independence Ave SW  
Washington, DC 20585

RE: Comments Regarding Form EIA-861 "Annual Electric Power Industry Report"

Dear Ms. Peterson:

These comments on behalf of the Nebraska Rural Electric Association (NREA) are submitted pursuant to the U.S. Energy Information Administration's request for comments on Form EIA-861, as published in the Federal Register on May 19, 2016.

Dawson Public Power District is a Nebraska rural electric utility system that serves south central Nebraska along the Platte River Valley. Organized in 1937, Dawson PPD is one of the larger rural systems in Nebraska and provides service to more than 23,000 electric meters and maintains over 5,800 miles of power lines. Our irrigation revenue is just over 1/3 of our revenue totals. We have approximately 6,000 irrigation services.

The NREA is a statewide association representing 34 rural electric providers, both rural public power districts and electric cooperatives. NREA members serve a majority of the land area of the state with more than 265,000 meters served over more than 95,000 miles of distribution line. A majority of the load is agricultural in nature and is dominated by irrigation services. The NREA commends the EIA on the significant work it does to collect and publish a massive amount of energy data. We recognize the magnitude of the undertaking.

The NREA, however, would like to note an issue with the data collected on Form EIA-861 that distorts the reported industrial pricing in agricultural-rich states with seasonal irrigation. This is particularly problematic with the industrial pricing data for Nebraska.

The Form EIA-861 currently requires that all agricultural activities, including irrigation, are incorporated in the Industrial Sector reporting on the annual Form EIA-861. Because irrigation is often seasonal and associated with high demand charges, EIA-reported average industrial pricing for agricultural-rich states with large amounts of seasonal irrigation are elevated.

Nebraska ranks among the lowest states in average retail price of electricity for the residential and commercial sectors, but among the highest 20 states in the industrial sector.

The Data published by EIA for average retail price of electricity is utilized by many businesses in making state-to-state utility rate and cost comparisons. This significantly hampers Nebraska and other agricultural-rich state's economic development efforts to recruit and retain large industrial companies. This is because the reported average retail price is much higher than what these customers would actually pay.

On May 12, 2014, EIA staff published an article in *Energy Today* on the EIA website entitled: "Many industrial electricity customers are farmers." In the article, EIA staff M. Tyson Brown and Marc Harnish acknowledge the challenges of agricultural-rich states and the impact that high cost irrigation has on industrial pricing. The article notes that Nebraska has the third-highest number of industrial electricity customer in the United States primarily due to the inclusion of irrigation customers in Industrial Sector reporting.

Nebraska has the largest amount of irrigated agricultural land in the United States. A substantial percentage of the irrigation pumping systems to support crop growth are powered by electricity. For many NREA members, irrigation accounts for more than 50 percent of their load. These electric loads are highly seasonal, typically coming into play in late June, July and August. The author of the EIA article notes that "irrigation load from farm irrigation systems can be costly to serve, because of the high cost of connecting these dispersed systems to the electric grid and the high cost of having enough capacity available to meet seasonal irrigation load." This statement clearly demonstrates how the load and cost characteristics of irrigation customers differ substantially from typical industrial customers and why irrigation should not be included with industrial customers. It is helpful that EIA recognizes the impact of irrigation on the industrial data. It would be more helpful to take the next step and address the discrepancy.

Prior to 2003, the EIA Form-861 included instructions for reporting irrigation load pricing into a generic "Other" category. When the "Other" category was removed, Nebraska, along with other agricultural-rich states, saw a dramatic increase in the number of industrial customers recorded. Nebraska went from being 19th in total number of Industrial customers to being third in the nation, surpassed only by Texas and California. This change also led to significant increases in EIA reported industrial average pricing for agriculture-rich states. EIA's publications do not clearly identify irrigation as a determinant in the calculation of the industrial price. As a result, agricultural-rich states with significant seasonal irrigation appear to be costlier for traditional industrial sector businesses.

Looking at Nebraska specifically, in 2014 reported irrigation pricing was 16.38 cents per kilowatt hour on average, while traditional industrial pricing was only 6.67 cents per kilowatt hour. When seasonal agricultural (primarily irrigation) numbers are removed from the EIA reported industrial pricing, the resulting price differential is greater than 30 percent. For Kansas the number is more than 12 percent and in Colorado and Texas the differential is more than 10 percent.

Because we believe that the inclusion of electricity sales for irrigation has a harmful effect on the reported industrial price of electricity, **the best solution would be for EIA to create a new reporting sector for Seasonal Agriculture.** This will result in a more accurate EIA measurement of industrial pricing across all states and will illustrate the true costs associated with seasonal agriculture in states with large seasonal agricultural loads. The end result is more reliable and accurate data.

While not as efficient as creating a new reporting sector, as a second best option, we recommend the addition of a check box to EIA Form-861 to designate whether irrigation (seasonal agriculture) sales are included in the Industrial Sector reporting, and if so, what percentages of those industrial sales and revenues are from these activities. **This option is useful only if EIA includes this information in the annual publication of data.** A mock-up of this proposal is attached.

The NREA is concerned that the current treatment of irrigation sales inaccurately reports industrial pricing in Nebraska and other agricultural-rich states resulting in assumptions that can preclude economic development in these states. Several Nebraska utility representatives, including a delegation from NREA and the Nebraska Energy Office have met with EIA staff over the past couple of years to discuss this matter. We greatly appreciate the attention staff has given the issue and hope that we can continue the discussion to achieve a solution that will result in the most accurate EIA data.

Respectfully submitted,



Gwen Kautz  
General Manager  
Dawson Public Power District

...submitted on behalf of Nebraska Rural Electric Association AND Dawson Public Power District

# Southwest Public Power District

Phone 308-285-3295  
FAX 308-285-3811

Box 289 221 N. Main  
Palisade, NE 69040

www.swppd.com



June 27, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
Energy Information Administration  
EI-23 Forrestal Bldg  
1000 Independence Ave SW  
Washington, DC 20585

RE: Comments Regarding Form EIA-861 "Annual Electric Power Industry Report"

Dear Ms. Peterson:

I am submitting this letter in response to a request for comments to EIA-861 form reporting as published in the Federal Register on May 19, 2016. Southwest Public Power District is a not-for-profit rural electric member system of the Nebraska Rural Electric Association located in Palisade, Nebraska.

Southwest Public Power District (SWPPD) would like to note an issue with the data collected on Form EIA-861 that distorts the reported industrial pricing in agricultural-rich states with seasonal irrigation. This is problematic with industrial pricing data for Nebraska's industrial rates.

I will include information specific to SWPPD for illustration, all figures are actual numbers from 2015 our annual Form 7 report:

**Irrigation:**

KWH = 72,495,000  
Revenues = \$9,278,168  
Cost/KWH = .128

**Industrial:**

KWH = 35,352,353  
Revenues = 2,167,345  
Cost/KWH = .061

*Providing powerful solutions for changing times*

**Industrial (per instructions)**

KWH = 116,678,046

Revenues = 12,314,466

Cost/KWH = .106

Comparing the combined rates divided by total KWH'S, reveals an approximate 42% overstatement of SWPPD'S Industrial rate rather than reporting separately.

First of all, Irrigation is served primarily from Distribution facilities or regular plant built and maintained to serve all consumers. At SWPPD, Industrial customers are served from dedicated Sub-Transmission Line, and Substation facilities. Carrying charges for those facilities are calculated differently than for regular distribution plant to recover the cost of taxes, O & M, depreciation, and interest, and therefore have different rates than regular Irrigation customers served with Distribution facilities. Combining them into one class is not fair, nor is it reflective of the price of electricity which is the overall endeavor of the EIA-861 report. Another unintended consequence of lumping the classes together results in an artificially inflated number of industrial customers because of the differences in Load Factor, Voltage, and Character of service. For example, SWPPD serves a little over 6100 total meters and 2 of which are considered "Industrial." Both SWPPD'S Industrial customers have loads that are easily twenty and thirty times higher than the normal irrigation motor served by the District.

Another point as noted in the form letter was that Nebraska's rates are quoted among the lowest in the nation with regard to all classes other than industrial, which are among the highest. This could be interpreted by prospective business and industry that Industrial customers subsidize the rates of other's in the state which puts Nebraska in an un-fair competitive position when comparing to other states. Electric rates in Nebraska are required by state statute to be fair, equitable, and non-discriminatory.

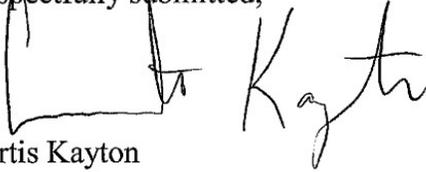
Because we believe that the inclusion of electricity sales for irrigation has a harmful effect on the reported industrial price of electricity, **the best solution would be for EIA to create a new reporting sector for Seasonal Agriculture.** This will result in a more accurate EIA measurement of industrial pricing across all states and will illustrate the true costs associated with seasonal agriculture in states with large seasonal agricultural loads. The end result is more reliable and accurate data.

I would also suggest Nebraska is not the only state that might share in this opinion as many other states serve various amounts of agriculture loads.

Several Nebraska utility representatives, including a delegation from NREA and the Nebraska Energy Office have met with EIA staff over the past couple of years to discuss this matter. We

greatly appreciate the attention staff has given the issue and hope that we can continue the discussion to achieve a solution that will result in the most accurate EIA data.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Curtis Kayton". The signature is written in a cursive style with a large, prominent "K" and "y".

Curtis Kayton  
General Manager

**From:** [Sam \(Yutsai\) Lin/FTCFSE](#)  
**To:** [Electricity2017](#)  
**Cc:** [John Chung Huei Hsu/FTUTSF](#); [Kirk Zhang/FTCFSE](#)  
**Subject:** RE: 60 Day Federal Register Notice  
**Date:** Wednesday, July 13, 2016 2:23:10 PM

---

Dear Mrs. Peterson,

I am an engineering staff in CFB Power Plant of Formosa Plastics who is responsible for reporting to EIA. I am writing the comment on behalf of CFB Power Plant (ID: 56708). CFB operates two steam turbine generators which service internal customers as well as external ones. I would like to take this opportunity to respond to the inquiry upon the change to EIA data collection.

While we have no comments on the proposal to changes of the forms as we believe that we can adopt to change without problems, but I would like to comment on the burdens of manpower, and possible changes:

Currently there are two ways to submit reports: by mail or by Java Plugin program of web browsers. We are in favor of Java Plugin programs as it saves time and relieves some of the burdens of manpower compared to the paper reporting. However, there are some inconveniences to be considered:

1. As browsers are moving away from Java Plugins, the compatibility becomes issues for new computers.
2. The program itself is not as user friendly as it could be, more time is needed for the key in process.
3. In 2013, Department of Homeland Security warned of using Java Plugins as unsafe and advised companies not to use it, I wonder if the issue has been addressed?

While the proposal did reflect the some possible burden changes for all, I take that the means of collecting data will still be the same – by postal mail and by Java Plugin program. I would hope that there will be some changes to further relieve the burdens for us if the following changes can be made:

1. Using current HTML5 technology instead of Java Plugins program might be able to address the above issues.
2. Further, using “web service” technology that will allow the reporting entities to automate the reporting process that can possibly further

reduce reporting entity burden, in our case, by 80% and reduce most key errors.

Sincerely yours,

Sam Lin  
Engineering Staff  
CFB Power Plant of Formosa Plastics



---

**From:** John Chung Huei Hsu/FTUTSF  
**Sent:** Tuesday, July 12, 2016 8:15 AM  
**To:** Kirk Zhang/FTCFSF; Sam (Yutsai) Lin/FTCFSF  
**Cc:** Charlie Chen/FTUTSF  
**Subject:** RE: 60 Day Federal Register Notice  
**Importance:** High

Dear Kirk/Sam,

What is the status of this survey? Please complete it at your earliest convenience, Due is July 18, 2016.

Thanks  
John Hsu

---

**From:** John Chung Huei Hsu/FTUTSF  
**Sent:** Friday, May 27, 2016 3:00 PM  
**To:** Kirk Zhang/FTCFSF; Sam (Yutsai) Lin/FTCFSF  
**Cc:** Charlie Chen/FTUTSF  
**Subject:** FW: 60 Day Federal Register Notice

Kirk/Sam,

Do you have a chance to review and complete this?

John Hsu

---

**From:** John Chung Huei Hsu/FTUTSF  
**Sent:** Thursday, May 19, 2016 5:01 PM  
**To:** Kirk Zhang/FTCFSF; Charlie Chen/FTUTSF; Sam (Yutsai) Lin/FTCFSF  
**Subject:** FW: 60 Day Federal Register Notice

Kirk/Sam,

Please read email below and complete the survey as requested before due date July 18, 2016.

John Hsu

---

**From:** [jdb@eiasascomp.eia.doe.gov](mailto:jdb@eiasascomp.eia.doe.gov) [<mailto:jdb@eiasascomp.eia.doe.gov>] **On Behalf Of** [electricity2017@eia.gov](mailto:electricity2017@eia.gov)

**Sent:** Thursday, May 19, 2016 2:05 PM

**To:** John Chung Huei Hsu/FTUTSF

**Subject:** 60 Day Federal Register Notice

The U. S. Energy Information Administration (EIA) is proposing changes to its electricity and solar photovoltaic data collection in 2017. These changes involve the following surveys:

- **Form EIA-63B, Annual Photovoltaic Cell/Module Shipments Report**
- **Form EIA-411, Coordinated Bulk Power Supply Program Report**
- **Form EIA-826, Monthly Electric Utility Sales and Revenue Report with State Distributions (discontinued form to be replaced by Form EIA-861M)**
- **Form EIA-860, Annual Electric Generator Report**
- **Form EIA-860M, Monthly Update to the Annual Electric Generator Report**
- **Form EIA-861, Annual Electric Power Industry Report**
- **Form EIA-861S, Annual Electric Power Industry Report (Short Form)**
- **Form EIA-861M, Monthly Electric Power Industry Report (replaces Form EIA-826)**
- **Form EIA-923, Power Plant Operations Report**
- **Form EIA-930, Hourly and Daily Balancing Authority Operations Report**

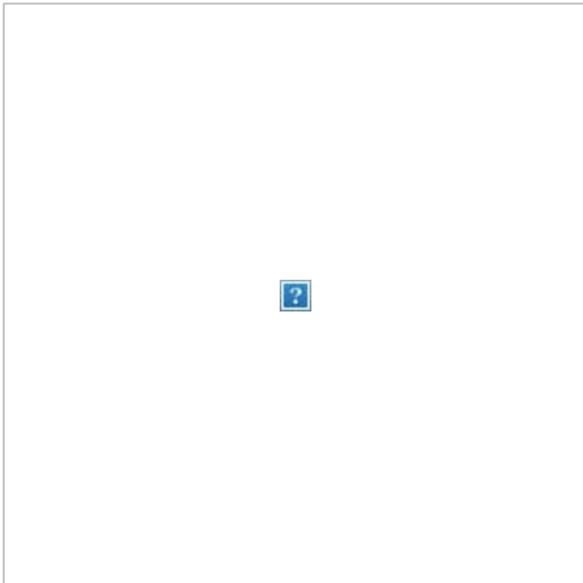
Some of the proposed changes are:

- Discontinue the monthly Form EIA-826 and replace it with the monthly Form EIA-861M
- Reduce some monthly frames to only include large entities with the intent of capturing the large majority of the data and lessening the respondent and federal staff burden
- Collect the capacity of small-scale storage associated with net-metered and non-net-metered distributed capacity; collect additional information on utility-scale electricity storage (primarily batteries)
- Discontinue the collection of historical information associated with demand, capacity, transactions, and reserve margins
- Remove a number of questions that have been unduly burdensome for our respondents to answer
- Eliminate questions regarding dispersed generation
- Remove the confidentiality protection for coal and petroleum stocks held at power plants and related facilities
- Change the way natural gas receipts are collected, i.e. by pipeline rather than by supplier and individual contract
- Change the time within which hourly system demand data must be reported, i.e. from within 60 minutes to within 30 minutes.

For details, please refer to the May 19, 2016 Federal Register Notice (FRN) regarding these proposals ([http://www.eia.gov/survey/frn/electricity/electricity2017\\_05192016.pdf](http://www.eia.gov/survey/frn/electricity/electricity2017_05192016.pdf)). Copies of the survey forms with their proposed changes may be accessed on EIA's 2017 Survey Forms Clearance Webpage (<http://www.eia.gov/survey/changes/electricity/solar/>). The FRN will announce that a comment period has begun and that **comments must be received on or before July 18, 2016.**

Send comments to Rebecca Peterson and, to ensure receipt by the due date, email is recommended ([Electricity2017@eia.gov](mailto:Electricity2017@eia.gov)). Comments may also be submitted via postal mail to U.S. Department of Energy, U.S. Energy Information Administration, Mail Stop EI-23, 1000 Independence Avenue, SW, Washington, DC 20585, Attention: Rebecca Peterson. If you anticipate difficulty in submitting your comments by the due date, contact Ms. Peterson as soon as possible. Requests for additional information should be directed to her at the email address given above. Alternatively, she can be reached at (202) 586-4509.

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--- NOTICE ---

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June 28, 2016

# Wheat Belt PPD

11306 RD 32 • P O Box 177

Sidney, NE 69162

Ms. Rebecca Peterson  
U.S. Department of Energy  
Energy Information Administration  
EI-23 Forrestal Bldg  
1000 Independence Ave SW  
Washington, DC 20585

RE: Comments Regarding Form EIA-861 "Annual Electric Power Industry Report"

Dear Ms. Peterson:

These comments, on behalf of the Wheat Belt Public Power District, are submitted pursuant to the U.S. Energy Information Administration's request for comments on Form EIA-861, as published in the Federal Register on May 19, 2016.

Wheat Belt Public Power District is a rural electric distribution utility serving 3600 square miles of a very rural part of our country. Wheat Belt PPD serves 5,087 consumer accounts, with 1,002 of those classified as seasonal irrigation accounts. Wheat Belt PPD commends the EIA on the significant work it does to collect and publish a massive amount of energy data. We appreciate the time, effort, and final results that you produce and utilize those to help better serve our customer owners.

Wheat Belt PPD, with other Nebraska utilities, would like to note an issue with the data collected on Form EIA-861 that distorts the reported industrial pricing in agricultural-rich states with seasonal irrigation. This is particularly problematic with the industrial pricing data for Nebraska.

The Form EIA-861 currently requires that all agricultural activities, including irrigation, are incorporated in the Industrial Sector reporting on the annual Form EIA-861. Because irrigation is often seasonal and associated with high demand charges, EIA-reported average industrial pricing for agricultural-rich states with large amounts of seasonal irrigation are elevated.



Nebraska ranks among the lowest states in average retail price of electricity for the residential and commercial sectors, but among the highest 20 states in the industrial sector.

The Data published by EIA for average retail price of electricity is utilized by many businesses in making state-to-state utility rate and cost comparisons. This significantly hampers Nebraska and other agricultural-rich state's economic development efforts to recruit and retain large industrial companies. This is because the reported average retail price is much higher than what these customers would actually pay.

On May 12, 2014, EIA staff published an article in *Energy Today* on the EIA website entitled: "Many industrial electricity customers are farmers." In the article, EIA staff M. Tyson Brown and Marc Harnish acknowledge the challenges of agricultural-rich states and the impact that high cost irrigation has on industrial pricing. The article notes that Nebraska has the third-highest number of industrial electricity customers in the United States primarily due to the inclusion of irrigation customers in Industrial Sector reporting.

Nebraska has the largest amount of irrigated agricultural land in the United States. A substantial percentage of the irrigation pumping systems to support crop growth are powered by electricity. For Wheat Belt PPD, irrigation accounts for more than 30 percent of our load. These electric loads are highly seasonal, typically coming into play in late June, July, and August. The author of the EIA article notes that "irrigation load from farm irrigation systems can be costly to serve, because of the high cost of connecting these dispersed systems to the electric grid and the high cost of having enough capacity available to meet seasonal irrigation load." This statement clearly demonstrates how the load and cost characteristics of irrigation customers differ substantially from typical industrial customers and why irrigation should not be included with industrial customers. It is helpful that EIA recognizes the impact of irrigation on the industrial data. It would be more helpful to take the next step and address the discrepancy.

Prior to 2003, the EIA Form-861 included instructions for reporting irrigation load pricing into a generic "Other" category. When the "Other" category was removed, Nebraska, along with other agricultural-rich states, saw a dramatic increase in the number of industrial customers recorded. Nebraska went from

being 19th in total number of Industrial customers to being third in the nation, surpassed only by Texas and California. This change also led to significant increases in EIA reported industrial average pricing for agriculture-rich states. EIA's publications do not clearly identify irrigation as a determinant in the calculation of the industrial price. As a result, agricultural-rich states with significant seasonal irrigation appear to be costlier for traditional industrial sector businesses.

Looking at Nebraska specifically, in 2014 reported irrigation pricing was 16.38 cents per kilowatt hour on average, while traditional industrial pricing was only 6.67 cents per kilowatt hour. When seasonal agricultural (primarily irrigation) numbers are removed from the EIA reported industrial pricing, the resulting price differential is greater than 30 percent. For Kansas the number is more than 12 percent and in Colorado and Texas the differential is more than 10 percent.

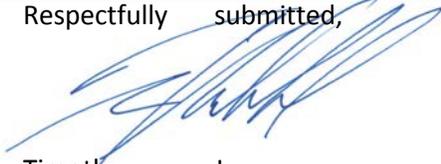
Because we believe that the inclusion of electricity sales for irrigation has a harmful effect on the reported industrial price of electricity, **the best solution would be for EIA to create a new reporting sector for Seasonal Agriculture.** This will result in a more accurate EIA measurement of industrial pricing across all states and will illustrate the true costs associated with seasonal agriculture in states with large seasonal agricultural loads. The end result is more reliable and accurate data.

While not as efficient as creating a new reporting sector, as a second best option, we recommend the addition of a check box to EIA Form-861 to designate whether irrigation (seasonal agriculture) sales are included in the Industrial Sector reporting, and if so, what percentages of those industrial sales and revenues are from these activities. **This option is useful only if EIA includes this information in the annual publication of data.** A mock-up of this proposal is attached.

Wheat Belt PPD is concerned that the current treatment of irrigation sales inaccurately reports industrial pricing in Nebraska and other agricultural-rich states resulting in assumptions that can preclude economic development in these states. Several

Nebraska utility representatives, including a delegation from Nebraska Rural Electric Association and the Nebraska Energy Office have met with EIA staff over the past couple of years to discuss this matter. We greatly appreciate the attention staff has given the issue and hope that we can continue the discussion to achieve a solution that will result in the most accurate EIA data.

Respectfully submitted,



Timothy J.

On Behalf of the Wheat Belt Public Power District

**From:** [J.Mandula@iaea.org](mailto:J.Mandula@iaea.org)  
**To:** [Electricity2017](#)  
**Subject:** Comments to EIA-860 survey  
**Date:** Monday, July 18, 2016 4:46:35 AM

---

I have a comment to the proposed change of EIA 860 survey.

For Schedule 3, Part B (Generator Information – operable generators) there is a requirement 22: **“What is the reference unit power”**.

As an instruction there is a text: “Enter the reference unit power as defined by Institute of Nuclear Power Operators.”

I would like to point out that INPO in its Data Element Manual (INPO-04-004) does not determine if net or gross power should be reported for the Reference Unit Power (RUP): *“Either net or gross energy may be used; however, consistency must be maintained for all energy terms. ..”*

When EIA 860 survey asks for RUP with a reference to INPO it will make RUP very unspecific and easily misunderstood and misused.

The International Atomic Energy Agency is getting information from the EIA survey and RUP is one of a key parameters for Nuclear Power Plants. We need clearly specified net and gross reference power for all power reactor units.

For this reason you would be very helpful if EIA-960 survey is more specific and requests **both NET and GROSS reference power** with a reference to INPO definition (see below).

Best regards,

Jiri Mandula

### **Jirí Mandula**

Nuclear Power Engineering Section | Division of Nuclear Power | Department of Nuclear Energy |  
International Atomic Energy Agency | Vienna International Centre, PO Box 100, 1400 Vienna, Austria |  
Email: [j.mandula@iaea.org](mailto:j.mandula@iaea.org) | T: (+43-1) 2600-22788 | M: (+43) 699-165-22788 | F: (+43-1) 2600-7 22805 |

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INPO definition of RUP (INPO-04-004):

*“Reference unit power is the maximum power capability of the unit under reference ambient conditions. If a maximum power capability has been determined by formal test, determine the reference unit power by correcting test results to reference ambient conditions. If a formal test has not been performed, base the reference power on design values, adjusted for reference ambient conditions. The reference unit power is expected to remain constant unless design changes that affect the capacity are made to the unit. For example, reference unit power is increased as the result of power uprates and more efficient turbine generators. The reference unit power is multiplied by period hours to calculate the reference energy generation for the period against which losses are calculated.”*

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**From:** [McGeeney, Chris](#)  
**To:** [Electricity2017](#)  
**Subject:** EIA-930 Comments on Proposed Changes  
**Date:** Wednesday, July 13, 2016 9:48:42 AM

---

Miss Peterson,

AECI appreciates the opportunity to provide comments to proposed changes to the Form EIA-930, Hourly and Daily Balancing Authority Operations Report.

In 2014 and 2015, AECI spent hundreds of person hours developing the internal process necessary to comply with the original requirements for the Form EIA -930. During this process, AECI communicated with EIA on multiple occasions to validate data transmittal, correct errors and provide general feedback. Through this collaboration, AECI was sending valid data and had no known data quality issues when EIA released the Beta Version of the Hourly and Daily Balancing Authority Operations Report in September 2015.

In review of the proposed changes for 2017 for EIA-930, AECI would offer the following:

- **Changes to Same Day Demand:** AECI currently provides same day hourly demand at 45 minutes past the hour to insure data quality. Normally, data is populated at 15 minutes past the hour, but processes do fail and having additional time to report Same Day Demand provides for a better quality product. If the EIA moves to requiring Same Day Demand be reported within 30 minutes in lieu of 60 minutes, the EIA should expect a higher frequency of missing or bad data.
- **Fuel Type Modification:** AECI will have to write new processes to separate generation into the specific fuel types outlined in the proposal.

Collectively, AECI would anticipate approximately 100 person hours be spent to comply with the proposed changes to Form EIA-930. AECI would request that the EIA carefully consider the benefits of moving to the proposed changes for Form EIA-930 as compared to the person hours and data quality costs noted above.

Thanks again for the opportunity to comment.



**Erin M. Murphy**

Managing Assistant General Counsel

Direct Dial: 317-249-5495 E-mail: [emurphy@misoenergy.org](mailto:emurphy@misoenergy.org)

July 18, 2016

**VIA E-MAIL**

Ms. Rebecca Peterson  
U.S. Department of Energy  
U.S. Energy Information Administration  
Mail Stop EI-23  
1000 Independence Ave., SW  
Washington, DC 20585

**Re: Midcontinent Independent System Operator, Inc. Comments on Proposed Revisions to Form EIA-930, Balancing Authority Operations Report**

Dear Ms. Peterson:

Pursuant to the notice of the Energy Information Administration (“EIA”) published in the Federal Register on May 19, 2016, the Midcontinent Independent System Operator, Inc. (“MISO”) hereby submits comments in response to the questions contained in the notice. The notice stated that, pursuant to the Paperwork Reduction Act of 1995 and with the approval of the Office of Management and Budget, the EIA intends to extend certain EIA forms, including Form EIA-930, Balancing Authority Operations Report, for three years, with changes. The notice states that EIA expects the changes to be effective beginning in January 2017. As an initial matter, because the proposed changes may affect MISO’s existing waiver with regard to reporting hourly sub-regional actual demand, as well as other data collection and reporting systems, MISO may not be able to meet EIA’s aggressive implementation timeline. MISO requests that EIA provide flexibility and extensions of time as needed for MISO to implement the proposed changes as it has done in the past, and where necessary, to obtain regulatory approvals or budget items needed to implement the proposed changes.

**Background**

Form EIA-930 collects hourly electric power operating data from Balancing Authorities in the contiguous United States. The data include: hourly demand, hourly next-day demand forecast, hourly net generation, and hourly actual interchange with each interconnected Balancing Authority. Back in 2013, when the scope of Form EIA-930 originally was expanded to include Independent System Operators and Regional Transmission Organizations, MISO provided a detailed description of its relationship with its Local Balancing Authorities (“LBAs”), and Local Resource Zones (“LRZs”). That description is included here as Attachment A. Based

Midcontinent Independent

System Operator, Inc.

317.249-5400

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Metairie, LA 70002 [www.misoenergy.org](http://www.misoenergy.org)

1700 Centerview Drive

Little Rock, AR 72211

The U.S. Energy Information Administration July  
18, 2016

on MISO's submission to EIA, EIA granted MISO's request for a reporting exemption. Correspondence between MISO and EIA about this exemption is attached hereto as Attachment B. Since early 2015, MISO has been reporting the Form EIA-930 on behalf of its LBAs, which is rolled into the data MISO reports on a LRZ basis. MISO continues to believe this exemption is wholly appropriate and urges the EIA to allow this exemption to remain in place.

In addition to requesting an extension of the currently approved collection for another three years, EIA proposes to make changes to Form EIA-930. Below are each of the proposed changes, followed by MISO's comments on proposed changes numbered 2 and 3. Please note that MISO also is a signatory to the comments filed by the Indicated ISOs,<sup>1</sup> which reflects MISO's position on all of the proposed Form EIA-930 changes. However, because proposed changes 2 and 3 have specific implications for MISO, we provide the following comments in order to provide the EIA with a complete picture of the challenges associated with the proposal and the potential adverse implications of their implementation. MISO appreciates the opportunity to provide these comments and looks forward to working with the EIA to ensure successful and practical implementation of the proposed revisions.

**EIA Proposal No. 2 - Require respondents to report hourly sub-regional actual demand when these values are produced in the normal course of business within a month of the operating day.**

As briefly described above and more exhaustively in Attachment A, MISO currently reports data on an aggregated LRZ basis. MISO currently has 10 LRZs for which it reports data, and that data constitutes a compilation of data from MISO's 37 LBAs. EIA's proposed revision states that Form EIA-930 would require respondents to report "hourly sub-regional actual demand when these values are produced." MISO can accommodate the production of hourly sub-regional actual data, though it will require some system changes in order to meet this requirement. However, MISO is not in a position to report the data on a LBA basis, as such reporting would violate MISO's Open Access Transmission, Energy and Operating Reserve Markets Tariff ("Tariff") on file with the Federal Energy Regulatory Commission. MISO's Tariff has provisions that require it main commercially-sensitive data received from its market participants – including load and specific generation information - on a confidential basis and not share it in a way that would unduly advantage other market participants. By reporting on the LBA level, as seemingly requested by the EIA, MISO could be exposing several market participants' specific data. Accordingly, the current reporting structure, through a roll-up to the LRZ level, facilitates reporting via Form EIA-930, while also preserving the confidential nature of this commercially-sensitive data. Reporting on any more granular level could result in a violation of MISO's Tariff, as well as the release of market-sensitive information that could be used in an anticompetitive manner.

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<sup>1</sup> ISO New England Inc. ("ISO-NE"), the New York Independent System Operator ("NYISO"), the Electric Reliability Council of Texas ("ERCOT"), Midcontinent Independent System Operator, Inc. ("MISO"), and Southwest Power Pool, Inc. ("SPP").

MISO currently produces on a public basis the data requested by the EIA using the LRZ methodology. Maintaining this reporting methodology going forward not only meets the goals The U.S. Energy Information Administration July 18, 2016  
Page 3

of the EIA by balancing the value of the data with the burden of collecting it, but also maintains the current protections of the MISO Tariff relative to this commercially-sensitive market participant information.

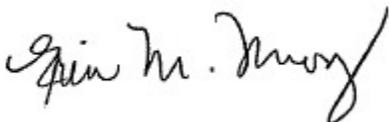
**EIA Proposal No. 3 - Require respondents to report hourly net generation by standard fuel type categories.**

MISO does not oppose this proposed amendment to Form EIA-930, but does have two specific concerns with it. Currently, MISO's State Estimator derives generator values from its DART system, which allows MISO to pull the hourly net generation from that information and separate it by fuel type. Like the confidentiality concerns noted above, MISO currently has just one solar unit on its system, and reporting by fuel type will reveal unit-specific commercially sensitive information. Accordingly, MISO suggests that in order to comply with this proposal, MISO include the solar unit in the "Other" reporting category until such time as additional solar generators are added to the MISO system to sufficiently mask specific plant output.

MISO's second concern with this proposal relates to dual-fuel units and identifying them by standard fuel-type categories. MISO proposes that if the EIA adopts this proposed reporting modification, MISO be permitted to report dual-fuel units using the same methodology it currently uses to report fuel type to the public and to MISO's Independent Market Monitor. This would provide consistent reporting requirements for MISO and not require creation of additional procedures for classification of these dual-fuel units.

MISO appreciates the opportunity to provide feedback to the EIA on its proposed modifications to Form EIA-930. We hope that the EIA will take this feedback into consideration and work with MISO and the other ISOs to address these concerns prior to implementing any changes to the reporting requirements. Please contact me with any questions related to this submission.

Respectfully submitted,



Erin M. Murphy

*Attorney for MISO*

**Attachment A**



E-mail: [cbigelow@misoenergy.org](mailto:cbigelow@misoenergy.org)

**Christina Bigelow**  
Compliance Counsel  
Direct Dial: 317-249-5132

November 6, 2013

Mr. Stan Kaplan  
Mr. William Booth  
U.S. Energy Information Administration  
1000 Independence Ave., SW  
Washington, DC 20585

**VIA EMAIL**

RE: Form EIA-930 Hourly and Daily Balancing Authority Operations Report Revisions

Dear Mssrs. Booth and Kaplan:

On behalf of the Midcontinent Independent System Operator, Inc<sup>23</sup>. (“MISO”), I want to extend our appreciation for your time and consideration of the input of the Independent System Operators and Regional Transmission Organizations (“ISOs/RTOs”) regarding the proposal to collect additional Balancing Authority (“BA”) operations information from all “Balancing Authorities in the contiguous United States and from selected electric utilities in Alaska and Hawaii” (“Form EIA-930”)<sup>2</sup> Please also know that MISO greatly appreciates the opportunity to provide additional information and clarification regarding how the MISO Balancing Authority Area (“BAA”) and associated responsibilities are structured and function within the Eastern Interconnection. MISO looks forward to working with the U.S. Energy Information Administration (“EIA”) to ensure successful, timely implementation of revisions to Form EIA930. To further facilitate your review, MISO is also providing the regulatory history regarding the development and implementation of the MISO BAA.

**BACKGROUND**

When MISO proposed its Ancillary Services Market (“ASM”) in 2007, the Federal Energy Regulatory Commission (“FERC” or “the Commission”) “expressed concern with regard to short-term reliability and how the Midwest ISO would retain independent control of the system despite the ability of the 24 Balancing Authorities to re-dispatch their generation or to

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<sup>2</sup> Formerly the Midwest Independent Transmission System Operator, Inc. (“Midwest ISO”), until its name changed effective April 26, 2013.

<sup>3</sup> See 78 Fed. Reg. 14526. *Midwest Indep. Transmission Sys. Operator, Inc.*, 122 FERC ¶ 61,172 (2008).

reconfigure transmission to resolve constraints.”<sup>3</sup> To address these concerns, “the Commission required the Midwest ISO to establish a dialogue with stakeholders ... for the express purpose of achieving ... **the eventual consolidation of most Balancing Authority functions into the Midwest ISO.**”<sup>4</sup> On May 23, 2008, in Docket No. ER07-1372-008, MISO submitted its amended Balancing Authority Agreement, which transferred key responsibilities from the existing Balancing Authorities to the Midwest ISO, enabling MISO to operate as the sole Balancing Authority in the ASM. The Commission accepted MISO’s Balancing Authority Agreement effective September 9, 2008, subject to required compliance filings that were timely submitted and accepted by the Commission. Accordingly, the initiation of the current MISO BAA structure and function are a direct result of directives by the Commission to address potential reliability concerns associated with MISO’s ASM.

In satisfaction of the Commission’s directives as described above, as a part of the development of the MISO ASM, MISO worked with its members to consolidate the BA responsibility in the MISO region. On April 13, 2007, MISO requested certification as a JointRegistered Balancing Authority pursuant to the Co-Registrant (Type 2) Joint Registration Organization (“JRO”) process detailed in the North American Electric Reliability Corporation (“NERC”) Rules of Procedure. Under the JRO (hereinafter “JRO00001”), MISO and its members co-registered for individual BA requirements and sub-requirements with each member being held accountable for the requirements for which it registered. MISO’s Balancing Authority (“BA”) certification under JRO00001 was granted on April 16, 2008, and operation of the MISO BAA under JRO00001 began with the start of the ASM on January 6, 2009. The CoRegistrant, Type 2 JRO process, was replaced with the Coordinated Functional Registration (“CFR”) process approved by FERC on June 10, 2010, which is set forth in Section 508 of the NERC Rules of Procedure. Under both the former Type 2 JRO and the CFR, the MISO BA and Local Balancing Authorities (“LBAs”) divided responsibility for the specific BA requirements and sub-requirements applicable to the MISO BAA. This division of responsibility was assumed by the MISO and the LBAs in the Amended Balancing Authority Agreement,<sup>5</sup> which was approved by FERC as Rate Schedule 03 to the Midwest ISO ASM Tariff on July 21, 2008.<sup>6</sup>

Through JRO00001 and the Midwest ISO Amended Balancing Authority Agreement, one BAA was created for the Midwest ISO ASM footprint – namely the MISO BAA.<sup>7</sup> Even more specifically, however, JRO00001 eliminated the multiple local BAAs within the MISO footprint. Accordingly, because the only BAA created in JRO00001 was the MISO BAA, the registration

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<sup>4</sup> See *Midwest Indep. Transmission Sys. Operator, Inc.*, 107 FERC ¶ 61,191, at P 124 (2004) (Emphasis Added.).

<sup>5</sup> See “Agreement between Midwest ISO and Midwest ISO Balancing Authorities Relating to Implementation of TEMT,” as amended on March 14, 2008, filed as “First Revised Rate Schedule FERC No. 3” to the Midwest ISO ASM Tariff.

<sup>6</sup> *Order Conditionally Accepting Amended Balancing Authority Agreement and Requiring Compliance Filing*, 124 FERC ¶61,074 (2008); with acceptance of amendments to the Amended Balancing Authority Agreement in accordance with the Compliance Filing on December 4, 2008.

<sup>7</sup> See ASM Order, 122 FERC ¶ 61,172; Order Approving ASM Start Up, 125 FERC ¶ 61,318; Midwest Independent Transmission System Operator, Inc., 125 FERC ¶ 61,322 (2008) (“Order on Compliance Filing”).

of LBAs for specific requirements and sub-requirements occurred solely to facilitate the overall BA function as it pertains to the MISO BAA and did not create multiple BAs. It is notable that the term “LBA” or “Local Balancing Authority Areas” are not defined or contemplated by NERC within either its Glossary of Terms Used in in NERC Reliability Standards or its Visual Representations of BAs and BAAs.<sup>8</sup> Accordingly, while Section 1.364 of the Midwest ISO ASM Tariff defines LBAs as:

“An operational entity or a Joint Registration Organization which is (i) responsible for compliance to NERC for the subset of NERC Balancing Authority Reliability Standards defined in the Balancing Authority Agreement ***for their local area within the Midwest ISO Balancing Authority Area***, (ii) a Party to Balancing Authority Agreement, excluding the Midwest ISO, and (iii) shown in Appendix A to the Balancing Authority Agreement.”<sup>9</sup>

That term exists solely within the MISO Tariff and was not intended to imply that these entities are BAs in a broader context.

In summary, prior to registration under JRO00001, the MISO region was composed of several localized BAAs. However, pursuant to the Balancing Authority Agreement and JRO00001, the current BA registration for MISO creates one MISO BAA for the entire MISO ASM footprint. The limited subset of requirements assigned to LBAs within the Balancing Authority Agreement and JRO00001 are solely to facilitate the structure and operation of the MISO BAA by MISO as the BA. Both the Commission and NERC have previously recognized the MISO BAA as the sole BAA for the MISO region as described above and within other dockets.<sup>10</sup>

## **DISCUSSION**

As set forth in the Federal Register notice regarding EIA Form-930, the purpose of the survey is to provide basic operating statistics for the nation's electric power systems on a current basis.<sup>11</sup> Specifically, the “EIA would make available a comprehensive set of the current day's system demand data on an hourly basis and the prior day's basic hourly electric system operating data on a daily basis.”<sup>11</sup> Further, the Federal Register notice indicates that:

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<sup>8</sup> See NERC Glossary of Terms Used in in NERC Reliability Standards, Updated October 30, 2013 and NERC Regions and Balancing Authorities Diagram dated July 25, 2012. The Diagram is attached hereto as Attachment A. MISO respectfully notes that Attachment A identifies on MISO as a BA and does not identify any of the entities that participate in JRO00001 as BAs.

<sup>9</sup> See MISO ASM Tariff at Section 1.364.

<sup>10</sup> See filings and issuances of NERC and the Commission, respectively, in Docket No. RD10-4-000. <sup>11</sup> See 78 Fed. Reg. 14526.

<sup>11</sup> *Id.*

“ [t]he burden of providing these data is extremely low relative to their value, particularly since the information requested is already collected by or known to the proposed respondents in the course of their normal operations...”

and

“[t]he proposed survey is specifically designed to minimize burden on electric system operators. The surveyed data is typically produced in the normal course of business by Balancing Authority energy management systems.”

Finally, the Federal Register notice describes that this data will be collected from “Balancing Authorities in the contiguous United States and from selected electric utilities in Alaska and Hawaii.”<sup>12</sup>

MISO respectfully notes that a Balancing Authority is currently defined in the NERC Glossary of Terms Used in in NERC Reliability Standards as:

“The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.”

In accordance with JRO00001, MISO is assigned responsibility for compliance with all applicable requirements of NERC Reliability Standards BAL-001, BAL-002, and BAL-003 and is further wholly responsible for the majority of applicable requirements set forth in NERC Reliability Standard BAL-005 (with the exception of those associated with metering), which Reliability Standards comprise the majority of real-time balancing activities performed for and within the MISO BAA. MISO is further wholly responsible for the majority of NERC Reliability Standards obligations governing Emergency Operations, Interconnection-wide Operations, Transmission Operations, and Interchange Scheduling Operations. MISO performs these obligations for its BAA, which is defined by NERC as:

“The collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains loadresource balance within this area.”

Because JRO00001 creates only one BAA for the entire MISO footprint (MISO BAA) and assigns responsibility for the MISO BAA to MISO as the Balancing Authority, data associated with the aforementioned NERC Reliability Standards is routinely produced in the normal course of business by MISO systems for the MISO BAA as a whole. This data is then used by MISO Real-Time Operating Personnel in ensuring the balancing and reliable operation

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<sup>12</sup> See 78 Fed. Reg. 14526.

of the entire MISO BAA. Data routinely produced in the normal course of business by MISO systems for use by MISO as the BA for the reliable operation of the MISO BAA as a whole includes Net Actual Interchange, Hourly Demand, Next Day Demand Forecasts, and Net Generation. Hence, as MISO is the BA for the sole BAA in the MISO footprint (MISO BAA) and entities identified as LBAs for the purposes of MISO's Tariff have no associated, NERC-recognized LBA Areas for which to produce and provide data, it is appropriate that:

1. MISO be recognized as the sole respondent to Form EIA-930 for the MISO BAA;
2. The MISO BAA be recognized as the only BAA within the MISO footprint; and
3. Data is provided as it is produced and utilized in the real-time operating environment for the MISO BAA.

MISO acknowledges the EIA's concerns with the size of the MISO BAA and the potential that important trends could be obscured if data is reported at the MISO BAA level. However, as described above, reporting of data at the MISO BAA level is the only method of reporting that would respect the currently-approved structure and function of the MISO BAA, which structure and function does not differ from other large BAAs. Further, MISO notes that, although it has chosen an alternate registration strategy from other ISO/RTOs, it is similarly situated to other ISOs/ RTOs that are currently anticipated to respond to EIA Form-930 at the BAA level. More specifically, the NERC Balancing Authorities Diagram provided as Attachment A to this letter depicts MISO (whole) as a Balancing Authority. In the same way, other ISOs/RTOs are depicted as Balancing Authorities at the ISO/RTO footprint level. As an example, MISO refers the EIA to the depiction of New York ISO ("NYISO"), PJM Interconnection, L.L.C. ("PJM"), ISO-New England ("ISONE"), etc. within the NERC Balancing Authorities Diagram (Attachment A to this letter). To ensure that the data being provided in response to the Form EIA-930 is uniform across all respondent BAs, the MISO BAA should report data at the same level as similarly situated large BAAs such as the ISOs/RTOs provided above.

Further, MISO notes that it has investigated the potential to report data on a zonal level within the MISO BAA in response to EIA Form-930 and has identified significant data and systems concerns that would prohibit it from timely providing its data at a zonal granularity in response to EIA Form-930. First, MISO identified that, at present, only a limited amount of the data required for response to Form EIA-930 is calculated at a zonal level and that such calculation occurs after-the fact. In particular, data that is provided for the MISO BAA on a zonal level is currently completed only for select next-day data, requires significant recalculation, and would not be feasible to produce during the real-time operating day. MISO respectfully notes that the "zonal" data that is currently produced is produced utilizing: (1) the data initially produced and utilized to operate the MISO BAA and (2) loosely defined regions within the MISO BAA that have no direct correlation or significance to MISO's real-time operations. Because EIA Form-930 is specifically requiring real-time operating data and characteristics, data that has been re-calculated and re-characterized, such as would be the case

with any zonal data provided by MISO may obscure rather than facilitate the identification of operating trends.

While it would be *possible* for MISO to provide zonal data for certain next-day data, it is not feasible for current operating day data nor is it feasible utilizing MISO's current processes and systems, which primarily produce and utilize data for the entire MISO BAA. MISO notes that significant resources would be required to revise its systems, processes, and data reporting mechanisms to routinely, reliably produce accurate zonal data. This type of resource commitment is contradictory to the descriptions provided in the Federal Register notice describing EIA Form-930, which description clearly indicates that intent to "... to minimize burden on electric system operators" and use "information ... already collected by or known to the proposed respondents in the course of their normal operations..."<sup>13</sup>

Finally, MISO respectfully submits that, because there are regular changes in the population and configuration of BAs, all stakeholders, including the EIA, would expend significantly less costs and resources in implementation and maintenance of data collection efforts if such efforts leveraged tools and data streams already in place within each BAA. Leveraging existing tools and data streams in the provision of data in response to Form EIA-930 would facilitate EIA's implementation of Form EIA-930 while ensuring that data provided in response to Form EIA-930 maintains integrity as BA footprints change. Accordingly, MISO respectfully suggests that Form EIA-930 should utilize data that is readily available from BAs for their associated BAAs (regardless of whether that data is provided at the BAA level) in this initial implementation and, after experience is gained with such data, consider revisions to the provision of such data as necessary to enhance the value of such data to the wider audience referenced in the Federal Register notice.<sup>14</sup> Nonetheless, should MISO be required to provide reengineered zonal data, all process and system enhancements necessary to produce and provide such data could not be achieved by the identified March 1, 2014 deadline due to resource constraints associated with the integration of the MISO Southern region as well as other key MISO initiatives.

## **CONCLUSION**

In conclusion, MISO respectfully requests that the EIA join the Commission and NERC in recognizing that the MISO BAA is the only BAA within the MISO footprint and that MISO is the recognized BA for the MISO BAA. Such recognition would:

1. Appropriately assign responsibility for responding to EIA Form-930 to MISO as the BA for the MISO BAA.
2. Result in the data provided in response to EIA Form-930 to be the operating data actually utilized to "integrate[s] resource plans ahead of time, maintain[s] load-

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<sup>13</sup> See 78 Fed. Reg. 14526.

<sup>14</sup> See 78 Fed. Reg. 14526.

Mr. Stan Kaplan  
Mr. William Booth  
November 6, 2013  
Page 7

interchange generation balance within [the MISO] Balancing Authority Area, and support[s] Interconnection frequency in real time.”

3. Align data provided in response to EIA Form-930 with that also provided by MISO to NERC and its Regional Entities to ensure continuity of data across all data submissions as well as efficiency and minimal administrative burden.

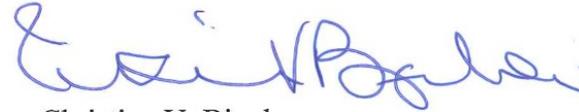
MISO respectfully suggests that this recognition could occur through a variety of methods including retaining the exemption for LBA entities or through clarification of the applicability such as:

“For the contiguous United States: all entities that are listed in NERC’s

Compliance Registry as a Balancing Authority with primary responsibility for an associated Balancing Authority Area must post operating information associated with its Balancing Authority Area required by this survey”

MISO hopes that the analysis set forth above facilitates the EIA’s understanding of the structure and function of the MISO BAA. We welcome any comments or questions that you might have on this letter and look forward to the successful implementation of EIA Form-930.

Warm Regards,



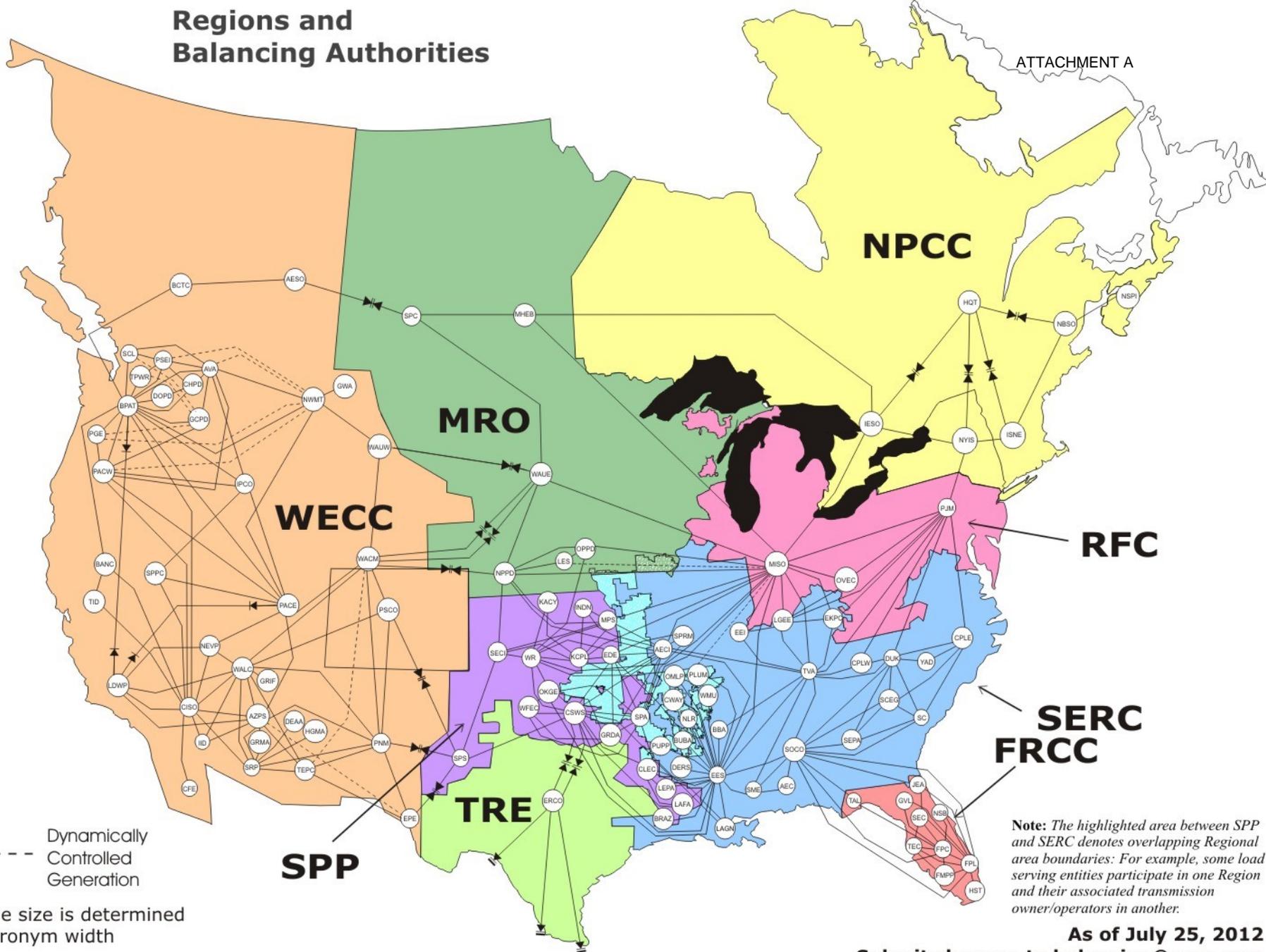
Christina V. Bigelow

# ATTACHMENT A

## NERC BALANCING AUTHORITIES DIAGRAM

# Regions and Balancing Authorities

ATTACHMENT A



Dynamically Controlled Generation

\*Bubble size is determined by acronym width

As of July 25, 2012  
Submit changes to [balancing@nerc.com](mailto:balancing@nerc.com)

## **Attachment B**

---

**From:** Booth, William <William.Booth@eia.gov>  
**Sent:** Friday, December 06, 2013 11:35 AM  
**To:** Christina Bigelow; Kaplan, Stan  
**Subject:** RE: MISO whitepaper regarding the structure and function of its Balancing Authority Area

We got the information we needed and the exemption for MISO local BAs is being retained.

---

**From:** Christina Bigelow [<mailto:CBigelow@misoenergy.org>]  
**Sent:** Friday, December 06, 2013 11:05 AM  
**To:** Kaplan, Stan; Booth, William  
**Subject:** RE: MISO whitepaper regarding the structure and function of its Balancing Authority Area

Hi Stan and Bill.

I hope that you had a nice Thanksgiving holiday last week. I just wanted to take a moment and check in with you to see if you needed any more information or had any questions regarding the below whitepaper.

Please don't hesitate to contact me if you need anything.

Warm Regards,  
CVB

**Christina V. Bigelow | Compliance Counsel**

MISO | Compliance Services Department

P.O. Box 4202 | Carmel, Indiana 46082-4202

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**From:** Christina Bigelow  
**Sent:** Wednesday, November 06, 2013 11:00 AM  
**To:** 'Stan.Kaplan@eia.gov'; [william.booth@eia.gov](mailto:william.booth@eia.gov)  
**Cc:** Kurt W. Bilas; Morais, Matt ([Matthew.Morais@ercot.com](mailto:Matthew.Morais@ercot.com))  
**Subject:** MISO whitepaper regarding the structure and function of its Balancing Authority Area

Dear Mssrs. Kaplan and Booth,

As discussed last week, please find attached to this email MISO's whitepaper providing additional detail regarding the structure and function of the MISO Balancing Authority Area ("BAA"). MISO greatly appreciates the opportunity to

provide this additional information to the EIA and we look forward to working with the EIA to ensure the efficient, effective implementation of Form EIA-930. Should you have any questions or comments regarding this whitepaper,

1

please do not hesitate to contact me at the contact information provided below or Kurt Bilas at 202-637-0109. Also, if there are any additional steps that we need to take to ensure that this information is placed into the official record for Form EIA-930, please advise us and we will be happy to perform any additional required actions.

Thank you again for your time and consideration of this information.

Warm Regards, Christina

**Christina V. Bigelow | Compliance Counsel**

MISO | Compliance Services Department

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NYSE CPN

# CALPINE CORPORATION

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July 18, 2016

## *Via Electronic Submission*

Ms. Rebecca Peterson  
U.S. Energy Information Administration  
U.S. Department of Energy  
Forrestal Building, Mail Stop EI-23  
1000 Independence Ave., SW  
Washington, DC 20585

### **Re: Electricity and Solar (Photovoltaic) Survey Form Changes Proposed for 2017**

Dear Ms. Peterson:

Calpine Corporation (“Calpine”) appreciates the opportunity to provide the U.S. Energy Information Administration (“EIA”) with comments and recommendations in response to EIA’s proposed changes to its electricity and solar (photovoltaic) data collection in 2017. Calpine offers these comments with regard to the proposed changes to the following EIA forms: EIA-860 (environmental), EIA-861 (retail reporting), and EIA-923 Reports (fuel reporting).

Calpine is a Delaware corporation engaged, through various subsidiaries, in the development, financing, acquisition, ownership, and operation of independent power production facilities and the wholesale marketing of electricity in the United States and Canada. Through its various subsidiaries, Calpine has a fleet of 84 power plants in operation or under construction, representing more than 27,000 megawatts (“MW”) of generating capacity. Through wholesale and retail operations, Calpine’s subsidiaries serve customers in 21 states and Canada.

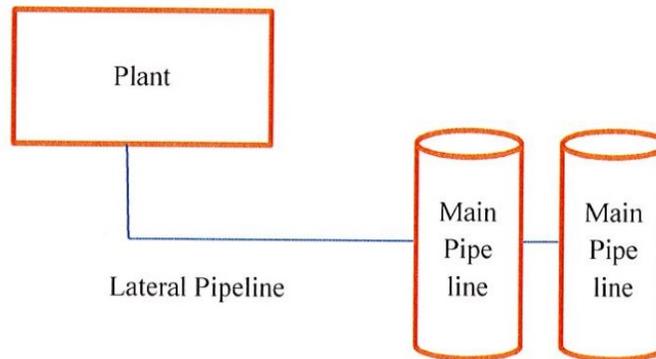
### **Proposed Changes to Fuel Reporting (EIA-923)**

EIA is proposing to change the report submitted by natural gas-fired electric generation facilities regarding natural gas receipts. EIA summarizes the changes as follows:

Natural gas receipts would no longer be reported by individual contract. Receipts data would be aggregated by pipeline and, for each pipeline, into categories such as firm and interruptible supply. The cost of purchases would be aggregated by the same categories.

Calpine poses the following questions regarding this proposed change:

1. Several Calpine power generation facilities utilize lateral pipeline facilities to connect their power plants to a pipeline system (interstate or intrastate). Should the lateral facility be named and reported separately in the report, or should only the pipeline system that connects to the Calpine power plant (via the non-pipeline-owned lateral) be reported?

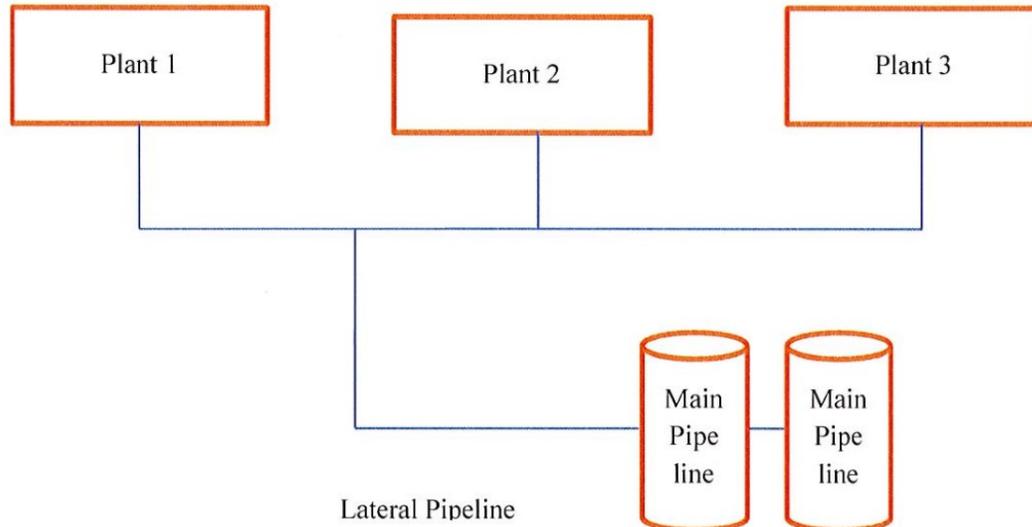


*Non-pipeline owned lateral*

*A third party (not the pipeline) owns the lateral and connects to the main pipeline.*

EIA proposes to collect information for the individual pipelines connected to the plant and to collect data about fixed cost versus variable cost by pipeline rather than by supplier.

2. In some regions of the country, Calpine owns a portfolio of generating facilities in the same geographic region that are served by the same interstate pipeline(s). In this scenario, determining the fixed cost associated with the transportation service provided by the pipeline for a single generating facility may not be possible, as those costs may be associated with a pipeline transportation contract that serves multiple plants in the portfolio. Additionally, if a company owns a portfolio of plants, and gas supply for the plants is being provided from a supply pool, costs associated with the pooling service, including imbalance charges, are not readily assignable to an individual plant for its fuel use.



*Multiple plants connected to a lateral pipeline which is connected to a pipeline system.*

Calpine urges EIA to address these scenarios in its final forms.

3. Additional questions:

In addition to the scenarios described above, Calpine also seeks guidance on how to report data in the following circumstances:

- Multiple contracts with the same pipeline, including contracts for firm and interruptible transportation service, may be used together to deliver gas to a power plant – how should this be reported?
- The charge for gas delivered to a power plant may include an imbalance charge incurred with the pipeline– how should this charge be reflected?

- A power plant may have a contract with a third-party seller (not the pipeline) for the seller to provide gas directly to the power plant. The seller arranges all pipeline services and is responsible for all costs for the fuel to be delivered to the plant.

How would this contract be reported? The power plant may not have the information to provide a breakout of fixed and variable costs.

### **Proposed Changes to Environmental Equipment Retirement (EIA-860)**

EIA proposes to amend this report to collect environmental equipment retirement data.

Typically, environmental equipment does not have a retirement date, unless the plant is being retired or the existing equipment is upgraded. Calpine seeks guidance from EIA on the type of information to be reported. This requirement may be more appropriate for coal generation facilities rather than natural gas generation facilities. At a minimum, this information should not be a mandatory part of the form for natural gas generators.

### **Proposed Changes to Behind the Meter Classification (EIA-861, EIA-861M)**

EIA proposes to “collect monthly information from a sample of electric utilities, energy service providers, and distribution companies that sell or deliver electric power to end users. Data collected on this form includes sales and revenue for all end-use sectors (residential, commercial, industrial, and transportation).”

Calpine urges EIA to make this a new class of respondents and to better define these terms in the final forms.

### **Proposed Changes to Net Metering and Virtual Net Metering (EIA-861, EIA-861M)**

EIA also proposes, on the new Schedule 3, Part A, Net Metering Programs, to “add virtual net metered capacity and customer counts both from resources less than 1 MW and resources 1 MW or greater... In order to accurately account for this generation, EIA needs to expand the net metering data collection to include these situations.”

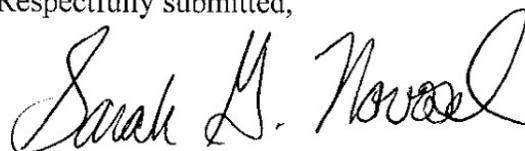
Calpine urges EIA to impose the reporting obligation for net metering information on the utility distribution company and not on retail marketers. Because net metering agreements are typically between the utility distribution company and the net metering customer, a retail marketer may not be aware of the net metering arrangement and will not have access to the information requested.

Ms. Rebecca Peterson  
July 18, 2016  
Page 5

### **Conclusion**

Calpine appreciates the opportunity to submit these comments in order to assist EIA in its review of the forms and proposed changes for 2017. Calpine urges EIA to adopt final revisions to its survey forms consistent with Calpine's comments and recommendations provided herein.

Respectfully submitted,

A handwritten signature in black ink, reading "Sarah G. Novosel". The signature is written in a cursive style with a large, looping initial "S".

Sarah G. Novosel  
Senior Vice President and Managing Counsel

Elkhorn Rural  
*Public Power District*

P.O. BOX 310  
PHONE (402) 675-2185

**BATTLE CREEK, NEBRASKA 68715**

July 1, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
Energy Information Administration  
EI-23 Forrestal Bldg  
1000 Independence Ave SW  
Washington, DC 20585

RE: Comments Regarding Form EIA-861 "Annual Electric Power Industry Report"

Dear Ms. Peterson:

These comments on behalf of the Elkhorn Rural Public Power District (ERPPD) and Nebraska Rural Electric Association (NREA) are submitted pursuant to the U.S. Energy Information Administration's request for comments on Form EIA-861, as published in the Federal Register on May 19, 2016.

ERPPD is a NREA member in the rural area of Northeast Nebraska that serves 9,475 meters over more than 2,856 miles of line. ERPPD along with the NREA commends the EIA on the significant work it does to collect and publish a massive amount of energy data. We recognize the magnitude of the undertaking.

ERPPD and the NREA, however, would like to note an issue with the data collected on Form EIA-861 that distorts the reported industrial pricing in agricultural-rich states with seasonal irrigation. This is particularly problematic with the industrial pricing data for Nebraska, and specifically ERPPD.

The Form EIA-861 currently requires that all agricultural activities, including irrigation, are incorporated in the Industrial Sector reporting on the annual Form EIA-861. Because irrigation is often seasonal and associated with high demand charges and low load factors, EIA-reported average industrial pricing for agricultural-rich states with large amounts of seasonal irrigation are elevated.

Nebraska has the largest amount of irrigated agricultural land in the United States, and that is reflected in ERPPD numbers as well. A substantial percentage of the irrigation pumping systems to support crop growth are powered by electricity, because it is competitive with other irrigation fueling options in our area. ERPPD irrigation services number 2,083 or 22% of the total meters served. Irrigation accounted for 35% of ERPPD's revenues in 2015. These electric loads are highly seasonal, typically coming into play in late June, July and August.

At ERPPD, we strive to keep our costs competitive by introducing efficiencies, watching expenses and growing our load appropriately. Attracting business is part of ERPPD's overall strategy. It is hard to look appealing and competitive to businesses that are looking to expand or locate in our area, when they see the EIA report that misrepresents industrial

rates in the state. Looking at Nebraska specifically, in 2014 reported irrigation pricing was 16.38 cents per kilowatt hour on average, while traditional industrial pricing was only 6.67 cents per kilowatt hour. When seasonal agricultural (primarily irrigation) numbers are removed from the EIA reported industrial pricing, the resulting price differential is greater than 30 percent. ERPPD recognizes that this isn't only a local or Nebraska issue – other states are also impacted in a similar way - for Kansas the number is more than 12 percent and in Colorado and Texas the differential is more than 10 percent.

In the May 12, 2014, *Energy Today*, EIA staff published an article entitled: “Many industrial electricity customers are farmers” , EIA staff M. Tyson Brown and Marc Harnish acknowledge the challenges of agricultural-rich states and the impact that high cost irrigation has on industrial pricing. The EIA article notes that “irrigation load from farm irrigation systems can be costly to serve, because of the high cost of connecting these dispersed systems to the electric grid and the high cost of having enough capacity available to meet seasonal irrigation load.” This statement clearly demonstrates how the load and cost characteristics of irrigation customers differ substantially from typical industrial customers and why irrigation should not be included with industrial customers. As you recognize the impact of irrigation on the industrial data, we encourage you to take the next step and address the discrepancy, by creating a new reporting sector for seasonal agriculture.

Prior to 2003, the EIA Form-861 included instructions for reporting irrigation load pricing into a generic “Other” category. When the “Other” category was removed, Nebraska, along with other agricultural-rich states, saw a dramatic increase in the number of industrial customers recorded. Nebraska went from being 19th in total number of Industrial customers to being third in the nation, surpassed only by Texas and California. This change also led to significant increases in EIA reported industrial average pricing for agriculture-rich states. EIA’s publications do not clearly identify irrigation as a determinant in the calculation of the industrial price. As a result, agricultural-rich states with significant seasonal irrigation appear to be costlier for traditional industrial sector businesses.

Because the inclusion of electricity sales for irrigation has a harmful effect on the reported industrial price of electricity, **the best solution would be for EIA to create a new reporting sector for Seasonal Agriculture.** This will result in a more accurate EIA measurement of industrial pricing across all states and will illustrate the true costs associated with seasonal agriculture in states with large seasonal agricultural loads, like Nebraska. The end result is more reliable and accurate data.

We greatly appreciate the attention staff has given the issue and hope that we can continue the discussion to achieve a solution that will result in the most accurate EIA data.

Respectfully submitted,



Thomas E. Rudloff

General Manager

[trudloff@erppd.com](mailto:trudloff@erppd.com)

Cc: Deb Fischer, Senator  
Ben Sasse, Senator  
Jeff Fortenberry, District 1 Representative  
Brad Ashford, District 2 Representative  
Adrian Smith, District 3 Representative  
Governor Pete Ricketts



Timothy Burke, President  
Troy Bredenkamp, First Vice President  
John Hoke, Second Vice President  
Tim Luchsinger, Secretary  
Neal Niedfeldt, Treasurer

Shelley Sahling-Zart, Administrative Coordinator  
1040 O Street, P.O. Box 80869  
Lincoln, NE 68501-0869  
Phone: 402-473-3212  
Fax: 402-475-9759

July 15, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
Energy Information Administration  
EI-23 Forrestal Bldg.  
1000 Independence Ave SW  
Washington, DC 20585

RE: Comments Regarding Form EIA-861 "Annual Electric Power Industry Report"

Dear Ms. Peterson:

These comments on behalf of the Nebraska Power Association (NPA) are submitted pursuant to the U.S. Energy Information Administration's request for comments on Form EIA-861, as published in the Federal Register on May 19, 2016.

The NPA is a statewide association representing all of Nebraska's consumer-owned electric utility systems, including municipalities, public power districts and rural public power districts and cooperatives. There are no private, investor-owned utilities serving customers in Nebraska. The NPA commends the EIA on the significant work it does to collect and publish a massive amount of energy data. We recognize the magnitude of the undertaking.

The NPA, however, would like to note an issue with the data collected on Form EIA-861 that distorts the reported industrial pricing in agricultural-rich states with seasonal irrigation. This is particularly problematic with the industrial pricing data for Nebraska.

The Form EIA-861 currently requires that all agricultural activities, including irrigation, are incorporated in the Industrial Sector reporting on the annual Form EIA-861. Because irrigation is often seasonal and associated with high demand charges, EIA-reported average industrial pricing for agricultural-rich states with large amounts of seasonal irrigation are elevated.

Nebraska ranks among the lowest states in average retail price of electricity for the residential and commercial sectors, but among the highest 20 states in the industrial sector.

Nebraska is an agricultural state with a very large amount of seasonal irrigation. Consequently, this results in the reported EIA "average retail price per kWh" for industrial customers in Nebraska on the high side in comparison to other states by as much as 20-30 percent.

The Data published by EIA for average retail price of electricity is utilized by many businesses in making state-to-state utility rate and cost comparisons. This significantly hampers Nebraska's (and other agricultural-rich states such as Kansas and Texas) economic development efforts to recruit and retain large industrial companies because the reported average retail price appears much higher than what these customers would actually pay.

On May 12, 2014, EIA staff published an article in *Energy Today* on the EIA website entitled: "Many industrial electricity customers are farmers." In the article, EIA staff M. Tyson Brown and Marc Harnish acknowledge the challenges of agricultural-rich states and the impact that high cost irrigation has on industrial pricing. The article notes that Nebraska has the third-highest number of industrial electricity customers in the United States, primarily due to the inclusion of irrigation customers in Industrial Sector reporting. This is not realistic in a state with only 1.8 million in population.

Nebraska has the largest amount of irrigated agricultural land in the United States. A substantial percentage of the irrigation pumping systems supporting crop growth are powered by electricity. These electric loads are highly seasonal, typically coming into play primarily in late June, July and August. The author of the EIA article notes that "irrigation load from farm irrigation systems can be costly to serve, because of the high cost of connecting these dispersed systems to the electric grid and the high cost of having enough capacity available to meet seasonal irrigation load." This statement clearly demonstrates how the load and cost characteristics of irrigation customers differ substantially from typical industrial customers and why irrigation should not be included in Industrial Sector reporting. It is helpful that EIA recognizes the impact of irrigation on the industrial data. It would be more helpful to take the next step and address the discrepancy.

Prior to 2003, the EIA Form-861 included instructions for placing irrigation load into a generic "Other" category. When the "Other" category was removed, Nebraska, along with other agricultural-rich states, saw a dramatic increase in the number of industrial customers recorded. Nebraska went from being nineteenth in total number of Industrial customers to being third in the nation, surpassed only by Texas and California. This reporting change also led to significant increases in EIA reported industrial average price for agriculture-rich states. EIA's publications do not clearly mention irrigation as a determinant in the calculation of the industrial price. As a result, agricultural-rich states with significant seasonal irrigation inaccurately appear to be costlier for typical industrial sector businesses.

In 2014, Nebraska reported irrigation pricing at 16.38 cents per kilowatt hour on average, while traditional industrial rates were only 6.67 cents per kilowatt hour. When seasonal agricultural numbers are removed from reported industrial pricing, the resulting price differential is greater than 30 percent. For Kansas, the number is more than 12 percent and in Colorado and Texas the differential is more than 10 percent. Because we believe that the inclusion of electricity pricing for irrigation has a harmful effect on the reported price of electricity, the best solution would be for EIA to create a new reporting sector for seasonal agriculture. This will result in a more accurate EIA reporting of industrial pricing across all states and will illustrate the true costs associated with seasonal agriculture in agricultural-rich states. The end result is more reliable and accurate data.

In conclusion, the NPA is concerned that the current treatment of irrigation sales inaccurately reports industrial pricing in Nebraska and other agricultural-rich states resulting in assumptions that can preclude economic development in these states. Several Nebraska utility representatives and the Nebraska Energy Office have met with EIA staff over the past couple of years to discuss this matter. We greatly appreciate the attention staff has given the issue and hope that we can continue the discussion to achieve an appropriate workable solution.

Respectfully submitted,



Shelley Sahling-Zart  
On Behalf of the Nebraska Power Association

Instituto de Estadísticas de Puerto Rico  
Estado Libre Asociado de Puerto Rico



Calle Quisqueya #57, 2do piso  
San Juan, PR 00917  
P.O. Box 195484  
San Juan, PR 00919-5484  
Teléfono: (787) 993-3336

July 18, 2016

Adam Sieminski  
Administrator  
Energy Information Administration  
U.S. Department of Energy  
1000 Independence Ave. SW  
Washington, DC 20585

**SUBJECT: EIA-860 ANNUAL ELECTRIC GENERATOR REPORT (Participation of Puerto Rico) EIA-923 POWER PLANT OPERATIONS REPORT (Participation of Puerto Rico)**

Dear Mr. Sieminski:

Currently, Puerto Rico participates in the EIA's Monthly Electric Utility Sales and Revenue Report (EIA-826) and the Energy Information Administration's Annual Electric Power Industry Report (EIA-861). This allows the EIA to collect monthly information from electric utilities, energy service providers, and distribution companies, and to publish detailed annual data on Puerto Rico's electricity market on its website.

In an effort to continue providing the public and private sector with the information needed to monitor and understand the current status, needs, and trends in Puerto Rico's electric power industry, we request the EIA extend coverage to Puerto Rico with regards to the Annual Electric Generator Report (EIA-860) and the Power Plant Operations Report (EIA-923). EIA-860 collects data on the status of existing electric generating plants and associated equipment. EIA-923 collects information from power plants regarding electric power generation, energy source consumption, fossil fuel stocks, and the quality and cost of fossil fuel receipts.

Puerto Rico Act No. 209-2003 as amended, and Executive Order No. 2013-06 of the Governor of Puerto Rico specifically authorizes the Puerto Rico Institute of Statistics to serve as the representative of the Government of the Commonwealth of Puerto Rico to the U.S. Energy Information Administration (EIA). On behalf of the Government of the Commonwealth of Puerto Rico, we request that EIA begin gathering data from Puerto Rico through the EIA's Annual Electric Generator Report (EIA-860) and the Power Plant Operations Report (EIA-923). For further information, we may be reached by phone at (787) 993-3339 or by email at [mario.marazzi@estadisticas.pr](mailto:mario.marazzi@estadisticas.pr).

Mario Marazzi Santiago, Ph.D.  
Executive Director

Sincerely,

- c. Katherine K. Wallman, Chief Statistician, Office of Management and Budget  
Grace Santana Balado, Chief of Staff, Governor of Puerto Rico  
Sr. Juan Eugenio Hernández Mayoral, Executive Director, Puerto Rico Federal Affairs Administration  
Dr. Javier A. Quintana Méndez, Executive Director, Puerto Rico Electric Power Authority  
Lcdo. Agustín Carbó, President, Puerto Rico Energy Commission  
Ing. José G. Maeso González, Director, Puerto Rico Administration of Energy Affairs

**Butler Public Power District**  
**13331 North 4<sup>th</sup> Street**  
**David City, NE 68632-1107**

**Phone: 402/367-3081 -- 800/230-0569 -- Fax: 402/367-6114**

July 11, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
Energy Information Administration  
EI-23 Forrestal Bldg  
1000 Independence Ave SW  
Washington, DC 20585

RE: Comments Regarding Form EIA-861 "Annual Electric Power Industry Report"

Dear Ms. Peterson:

These comments on behalf of the Butler Public Power District (BPPD) are submitted pursuant to the U.S. Energy Information Administration's request for comments on Form EIA-861, as published in the Federal Register on May 19, 2016.

BPPD represents 2 counties in Nebraska, both rural and villages. BPPD services more than 6,200 meters with more than 1,600 miles of distribution line. A majority of the load is agricultural in nature and is dominated by irrigation services. BPPD commends the EIA on the significant work it does to collect and publish a massive amount of energy data. We recognize the magnitude of the undertaking.

BPPD, however, would like to note an issue with the data collected on Form EIA-861 that distorts the reported industrial pricing in agricultural-rich states with seasonal irrigation. This is particularly problematic with the industrial pricing data for Nebraska.

The Form EIA-861 currently requires that all agricultural activities, including irrigation, are incorporated in the Industrial Sector reporting on the annual Form EIA-861. Because irrigation is often seasonal and associated with high demand charges, EIA-reported average industrial pricing for agricultural-rich states with large amounts of seasonal irrigation are elevated.

Nebraska ranks among the lowest states in average retail price of electricity for the residential and commercial sectors, but among the highest 20 states in the industrial sector.

The Data published by EIA for average retail price of electricity is utilized by many businesses in making state-to-state utility rate and cost comparisons. This significantly hampers Nebraska and other agricultural-rich state's economic development efforts to recruit and retain large industrial companies. This is because the reported average retail price is much higher than what these customers would actually pay.

Prior to 2003, the EIA Form-861 included instructions for reporting irrigation load pricing into a generic "Other" category. When the "Other" category was removed, Nebraska, along with other agricultural-rich states, saw a dramatic increase in the number of industrial customers recorded. Nebraska went from being 19th in total number of Industrial customers to being third in the nation, surpassed only by Texas and California. This change also led to significant increases in EIA reported industrial average pricing for agriculture-rich states. EIA's publications do not clearly identify irrigation as a determinant in the calculation of the industrial price. As a result, agricultural-rich states with significant seasonal irrigation appear to be costlier for traditional industrial sector businesses.

Looking at Nebraska specifically, in 2014 reported irrigation pricing was 16.38 cents per kilowatt hour on average, while traditional industrial pricing was only 6.67 cents per kilowatt hour. When seasonal agricultural (primarily irrigation) numbers are removed from the EIA reported industrial pricing, the resulting price differential is greater than 30 percent. For Kansas the number is more than 12 percent and in Colorado and Texas the differential is more than 10 percent.

Because we believe that the inclusion of electricity sales for irrigation has a harmful effect on the reported industrial price of electricity, the best solution would be for EIA to create a new reporting sector for Seasonal Agriculture. This will result in a more accurate EIA measurement of industrial pricing across all states and will illustrate the true costs associated with seasonal agriculture in states with large seasonal agricultural loads. The end result is more reliable and accurate data.

BPPD is concerned that the current treatment of irrigation sales inaccurately reports industrial pricing in Nebraska and other agricultural-rich states resulting in assumptions that can preclude economic development in these states. Several Nebraska utility representatives, including a delegation from NREA and the Nebraska Energy Office have met with EIA staff over the past couple of years to discuss this matter. We greatly appreciate the attention staff has given the issue and hope that we can continue the discussion to achieve a solution that will result in the most accurate EIA data.

Respectfully submitted,

//signed//

John D Schmid, Board President

On Behalf of the Board of Directors of Butler Public Power District

**From:** [Shonk, William B.](#)  
**To:** [Electricity2012](#)  
**Cc:** [Quade, Shannon R](#); [Gruber, Marilyn C](#); [Rommel, Bruce C](#); [Anderson, Kevin J](#); [Chede, Timothy P](#); [Battiston, Patricia A](#)  
**Subject:** RE: 60 Day Federal Register Notice - Comments for proposed EIA-861 (Schedule 7, Part A) and EIA-861M (Schedule 3, Part A)  
**Date:** Wednesday, July 13, 2016 2:31:03 PM  
**Attachments:** [image003.png](#)

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Rebecca

FirstEnergy has the following comments for EIA-861 (Schedule 7, Part A) and EIA-861M (Schedule 3, Part A) from the May 19, 2016 Federal Register Notice:

1. Regarding the new changes to the annual report EIA-861 and EIA-861M the only change we foresee moving forward would be in regards to the Storage Capacity and Virtual Net Metering items.
2. The new data that the DOE are requesting would require data that is beyond the scope of the regions' interconnection processes and would require substantial data collection by others in various parts of the company.
3. Storage capacity is something we would be able to report going forward. However, historical information is not easily obtainable. In order to capture this information moving forward, a change will need to be made to the spreadsheet we use to gather net metering information. We should make changes to the interconnection application making the information regarding the storage system mandatory with specific questions. Depending on the State, we will need to run the changes past their respective commission staff.
4. As far as the items covering Virtual Net Metering, we would be able to start with the information that is available and will also require to a change to the reporting spreadsheet. We probably want to add something on the virtual NM aspect to the interconnection application as well.
5. The energy sold back to the utility only occurs annually when we true-up for any energy not used up during the prior 12 month period. In New Jersey this happens on the anniversary of their completed installation or a different date if the customer chooses to select another date one time. The remaining States true-ups all occur in the same month based on that State's regulations in the April to May timeframe. We would not be able to produce annual answers on a calendar year basis, only on a 12 month basis ending at the time of true-up.

Thank You

William B. Shonk  
FirstEnergy Corporation – Commodity Accounting  
General Office, 6th Floor  
Office 330-384-5472



Entity Name: \_\_\_\_\_  
Entity ID: \_\_\_\_\_ Data Year: 2016

**SCHEDULE 7. PART A. NET METERING PROGRAMS**

Net Metering programs allow customers to sell excess power they generate back to the electrical grid to offset consumption. Provide the information about programs by State, balancing authority, customer class, and technology for all net metering applications.

State		Balancing Authority				TOTAL (e)
		RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	
Photovoltaic	Net Metering Installed Capacity (MW)					0.000
	Net Metering Installations					0
	Storage Capacity (MW)					0.000
	Storage Installations					0
	Virtual NM Installed Capacity (1MW and greater)					0.000
	Virtual NM Customers (1MW and greater)					0
	Virtual NM Installed Capacity (less than 1MW)					0.000
	Virtual NM Customers (less than 1MW)					0
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)					0
Wind	Net Metering Installed Capacity (MW)					0.000
	Net Metering Installations					0
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)					0
Other	Net Metering Installed Capacity (MW)					0.000
	Net Metering Installations					0
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)					0
Total	Net Metering Installed Capacity (MW)	0	0	0	0	0.000
	Net Metering Installations	0	0	0	0	0
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)	0	0	0	0	0

EIA-861M

**SCHEDULE 3. PART A. NET METERING PROGRAMS**

Net Metering programs allow customers to sell excess power they generate back to the electrical grid to offset consumption. Provide the information about programs by State, balancing authority, customer class, and technology for all net metering applications.

State		RESIDENTIAL	COMMERCIAL	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
		(a)	(b)			
Photovoltaic	Installed Net Metering Capacity (MW)					0.000
	Number of Net Metering Installations					0
	Installed Storage Capacity (MW)					0.000
	Number of Storage Installations					0
	Installed Virtual Net Metering Capacity (MW) from generators 1 MW or larger					0.000
	Number of Virtual Net Metering Customers from generators 1 MW or larger					0
	Installed Virtual Net Metering Capacity (MW) from generators less than 1 MW					0.000
	Number of Virtual Net Metering Customers from generators less than 1 MW					0
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)					0
						0
Wind	Installed Net Metering Capacity (MW)					0.000
	Number of Net Metering Installations					0
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)					0
Other	Installed Net Metering Capacity (MW)					0.000
	Number of Net Metering Installations					0
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)					0
Total	Installed Net Metering Capacity (MW)	0	0	0	0	0.000
	Number of Net Metering Installations	0	0	0	0	0
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)	0	0	0	0	0

---

**From:** jdb@eiasascomp.eia.doe.gov [mailto:jdb@eiasascomp.eia.doe.gov] **On Behalf Of** electricity2017@eia.gov  
**Sent:** Thursday, 19 May, 2016 3:27 PM  
**To:** Shonk, William B. <shonkw@firstenergycorp.com>  
**Subject:** 60 Day Federal Register Notice

The U. S. Energy Information Administration (EIA) is proposing changes to its electricity and solar photovoltaic data collection in 2017. These changes involve the following surveys:

- **Form EIA-63B, Annual Photovoltaic Cell/Module Shipments Report**
- **Form EIA-411, Coordinated Bulk Power Supply Program Report**
- **Form EIA-826, Monthly Electric Utility Sales and Revenue Report with State Distributions (discontinued form to be replaced by Form EIA-861M)** • **Form EIA-860, Annual Electric Generator Report**
- **Form EIA-860M, Monthly Update to the Annual Electric Generator Report**
- **Form EIA-861, Annual Electric Power Industry Report**
- **Form EIA-861S, Annual Electric Power Industry Report (Short Form)**
- **Form EIA-861M, Monthly Electric Power Industry Report (replaces Form EIA-826)**
- **Form EIA-923, Power Plant Operations Report**
- **Form EIA-930, Hourly and Daily Balancing Authority Operations Report**

Some of the proposed changes are:

- Discontinue the monthly Form EIA-826 and replace is with the monthly Form EIA-861M
- Reduce some monthly frames to only include large entities with the intent of capturing the large majority of the data and lessening the respondent and federal staff burden
- Collect the capacity of small-scale storage associated with net-metered and non-net-metered distributed capacity; collect additional information on utility-scale electricity storage(primarily batteries)
- Discontinue the collection of historical information associated with demand, capacity, transactions, and reserve margins
- Remove a number of questions that have been unduly burdensome for our respondents to answer • Eliminate questions regarding dispersed generation
- Remove the confidentiality protection for coal and petroleum stocks held at power plants and related facilities
- Change the way natural gas receipts are collected, i.e. by pipeline rather than by supplier and individual contract
- Change the time within which hourly system demand data must be reported, i.e. from within 60 minutes to within 30 minutes.

For details, please refer to the May 19, 2016 Federal Register Notice (FRN) regarding these proposals ([http://www.eia.gov/survey/frn/electricity/electricity2017\\_05192016.pdf](http://www.eia.gov/survey/frn/electricity/electricity2017_05192016.pdf)). Copies of the survey forms with their proposed changes may be accessed on EIA's 2017 Survey Forms Clearance Webpage (<http://www.eia.gov/survey/changes/electricity/solar/>).

The FRN will announce that a comment period has begun and that comments must be received on or before July 18, 2016.

Send comments to Rebecca Peterson and, to ensure receipt by the due date, email is recommended (Electricity2017@eia.gov). Comments may also be submitted via postal mail to U.S. Department of Energy, U.S. Energy Information Administration, Mail Stop EI-23, 1000 Independence Avenue, SW, Washington, DC 20585, Attention: Rebecca Peterson. If you anticipate difficulty in submitting your comments by the due date, contact Ms. Peterson as soon as possible. Requests for additional information should be directed to her at the email address given above. Alternatively, she can be reached at (202) 586-4509.

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--- NOTICE ---

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**Attention: Rebecca Peterson**  
**Energy Information Administration**  
**1000 Independence Ave., SW**  
**Washington, DC 20585**

Via electronic submission through [electricity2017@eia.gov](mailto:electricity2017@eia.gov)

**RE: Federal Register Notice for OMB Review and Comment**

*I. Background and Introduction*

The National Rural Electric Cooperative Association (NRECA) appreciates the opportunity to submit comments to the Energy Information Administration (EIA) based on its proposed changes posted in the Federal Register Notice (FRN) on May 19, 2016.<sup>1</sup>

NRECA is the national service organization for America's Electric Cooperatives. The nation's more than 10,000 not-for-profit electric co-ops constitute a unique sector of the electric utility industry – and face a unique set of challenges. NRECA represents the interests of more than 900 not-for-profit rural electric cooperatives, 1,000 power districts responsible for keeping the lights on for more than 42 million people across 47 states. NRECA has over 830 distribution members, and all but three of over 60 generation and transmission (G&T) members qualify as small businesses according to the U.S. Small Business Administration (SBA).<sup>2</sup>

Electric cooperatives are driven by their purpose to power communities and empower their members to improve their quality of life. Affordable electricity is the lifeblood of the American economy, and for 75 years electric co-ops have been proud to keep the lights on. Because of their critical role in providing affordable, reliable, and universally accessible electric service, electric cooperatives are vital to the economic health of the communities they serve.

Currently, over 800 cooperatives report on the EIA-861: Annual Electric Power Industry Report, more than 1,000 cooperatives report on the EIA-923: Power Plant Operations Report, and over 80 cooperatives report on the EIA-860: Annual Generator Report.<sup>3</sup> EIA's data are instrumental in NRECA's furthering its mission and telling the cooperative story.

*II. Irrigation Pricing Issues in Agriculture-Rich States*

Agriculture is a major component of many states' economies. In the United States, more than 30 million acres of irrigated land generate over \$100 billion in irrigation sales. The 10 states with the highest irrigation sales account for 71 percent of the irrigated acreage in the U.S.,<sup>4</sup> with more than 200 cooperatives serving those states. At present, all agriculture activities, including irrigation, are incorporated in the Industrial Sector of the annual Form EIA-861 and its monthly equivalent.

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<sup>1</sup> [http://www.eia.gov/survey/frn/electricity/electricity2017\\_05192016.pdf](http://www.eia.gov/survey/frn/electricity/electricity2017_05192016.pdf)

<sup>2</sup> A summary of SBA's size Standards by Energy Sector can be found here <https://www.sba.gov/contracting/getting-started/contractor/make-sure-you-meet-sba-size-standards/summary-size-standards-industry-sector>

<sup>3</sup> Information taken from the Electric Power Annual 2014

<sup>4</sup> [https://www.agcensus.usda.gov/Publications/2012/Online\\_Resources/Highlights/Irrigation/Irrigation\\_Highlights.pdf](https://www.agcensus.usda.gov/Publications/2012/Online_Resources/Highlights/Irrigation/Irrigation_Highlights.pdf)

EIA-826. Because irrigation is often seasonal and associated with high demand charges, the EIA-reported industrial rates for these states are elevated. In EIA’s FRN, comments were invited on “ways to enhance utility, and clarity of the information to be collected.” NRECA and its members have identified a critical importance to accurately characterize the industrial competitiveness of rural America.

Irrigation’s seasonality, distinctive load characteristics, and rate structure are inconsistent with characteristics of industrial loads. By including irrigation in its Industrial Sector reporting, as EIA has in 2003,<sup>5</sup> the reported average industrial price in agriculture-rich states is skewed higher, potentially harming economic development prospects for those states, a fact EIA acknowledged in a May 12, 2014 *Today* article.<sup>6</sup>

Due to EIA’s current reporting requirements, data is not available across the total electric utilities that would show the overall upward impact on reported Industrial Sector rates. However, electric cooperative power district (PPD) data reported on EIA Form-861 can be compared with the data reported on Rural Electric Service (RUS) Form 7. Importantly, the RUS Form 7 reports electric co-op irrigation sales and revenue from co-op industrial sales and revenue. Table 1 below illustrates the top irrigation states by acreage in which electric cooperatives provide at least 5 percent of total electricity sales in the state. Comparing reporting from utilities that report on both the Form EIA-861 and the RUS Form 7 confirms that including irrigation does elevate the reported EIA industrial price when compared to the RUS industrial price that excludes irrigation. Nebraska, for example, the reported EIA industrial rate for electric cooperatives and PPDs is 31.5 percent higher on the EIA Form-861 than the RUS Form 7. In addition, states such as Wyoming, South Dakota, and Alabama have less irrigation acreage but a high proportion of co-op sales also show an irrigation impact on the reported industrial price.

**Table 1: Increase in the EIA Reported Industrial Price Due to the Inclusion of Irrigation (Electric Co-ops Only, 2014)**

State	Price Differential
Nebraska	31.5%
Colorado	10.9%
Texas	10.8%
Kansas	12.8%
Arkansas	5.9%
Montana	2.1%

NRECA requests EIA to revise its survey forms to alleviate the impact seasonal agriculture and especially irrigation sales have on the Industrial Sector price. The best remedy for solving this distortion would be the inclusion of additional questions that specifically ask about Industrial Sales and Revenues excluding agricultural activities. This will provide stakeholders with an accurate picture of the pricing of industrial activities by state. NRECA defines ‘seasonal agriculture’ as activities including seasonal irrigation and grain drying where the total electricity use for these agriculture services in the four billing months June 1<sup>st</sup> – September 30<sup>th</sup> is more than the total electricity use for all other industrial activities in the same period.

<sup>5</sup> <https://www.eia.gov/electricity/data/state/>

<sup>6</sup> <http://www.eia.gov/todayinenergy/detail.cfm?id=16231>

electricity use for these agriculture services for the other eight months. Below is a markup of the Form that illustrates the new questions.

 U.S. Energy Information Administration		FORM EIA-861 ANNUAL ELECTRIC POWER INDUSTRY REPORT				OMB No. 1905-0129 Approval Expires: 05/31/2017 Burden Hours: 10.97	
Entity Name: _____ Entity ID: _____						Data Year: 2013	
<b>SCHEDULE 4. PART A. SALES TO ULTIMATE CUSTOMERS. FULL SERVICE – ENERGY AND DELIVERY SERVICE (BUNDLED)</b>							
State	Balancing Authority		RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
Revenue (thousand dollars to the nearest 0.1)			\$	\$	\$	\$	\$0
Megawatt hours (MWh)							0
Number of Customers							0
Are your rates decoupled?			<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
			<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No	
If the answer is YES, is the revenue adjustment automatic or does it require a rate-making proceeding?			<input type="checkbox"/> automatic	<input type="checkbox"/> automatic	<input type="checkbox"/> automatic	<input type="checkbox"/> automatic	
			<input type="checkbox"/> proceeding	<input type="checkbox"/> proceeding	<input type="checkbox"/> proceeding	<input type="checkbox"/> proceeding	
If Industrial Sales and Revenues were reported, do they include seasonal agriculture?					<input type="checkbox"/> Yes		
If the answer is YES, please report the industrial sales that do not include seasonal agriculture.					<input type="checkbox"/> No		
If the answer is YES, please report the industrial revenues that do not include seasonal agriculture.					\$		

NRECA recommends revisions to EIA’s publication of this data to ensure transparency and public access. Specifically NRECA requests that the web file that reports Schedule 4 data include the yes/no question recommended above in the Industrial Sector section. The column also would state that if yes, please report “Adjusted Industrial without Seasonal Agriculture”. These new columns would be to the right of the total. Below is a suggested setup of the new web files with the inclusion of these new question and columns.

RESIDENTIAL			COMMERCIAL			INDUSTRIAL				TRANSPORTATION			TOTAL			ADJUSTED INDUSTRIAL WITHOUT SEASONAL AGRICULTURE
Revenues	Sales	Customers	Revenues	Sales	Customers	Revenues	Sales	Customers	Seasonal Agriculture Sales Included?	Revenues	Sales	Customers	Revenues	Sales	Customers	Revenues
Thousand Dollars	Megawatthours	Count	Thousand Dollars	Megawatthours	Count	Thousand Dollars	Megawatthours	Count	Y/N	Thousand Dollars	Megawatthours	Count	Thousand Dollars	Megawatthours	Count	Thousand Dollars

We recognize that there may be additional burden based on our recommendations. The following section discusses changes that can help offset any increase in reporting burden.

### III. 2017 Form Clearance Issues

NRECA has reviewed the proposed changes to the various EIA survey forms posted in the FRN. In general, NRECA believes that many of the changes to collect new data regarding natural gas supplies, DSM and energy storage, and virtual net metering will be broadly beneficial.

NRECA also applauds EIA’s efforts to remove unnecessary and burdensome questions from survey forms. Burden is a special concern because almost all NRECA members qualify as small businesses under SEIA definitions, and many have relatively small staffs, with employees often filling multiple roles. Based on this, NRECA has identified some concerns regarding burden and clarity of some proposed changes, identified below, and location below, along with suggested changes for EIA to consider.

#### EIA-860

### ***Schedule 3B: Generator Information – Operable Generators***

NRECA has concerns with questions 30a and 30b requiring specific technical information on a and tilt angle for fixed-tilt solar generators. NRECA is concerned that some co-op respondents might not have this information readily available, and that it could add significant reporting burden time for respondents.

NRECA urges EIA to make these questions optional. By adding “If available” language to the questions, NRECA believes it would not increase burden. This type of formatting can be found in EIA-861 Schedule 7A: Net Metering Programs with respect to energy sold back to the grid.

NRECA is also concerned that the term “virtual net metering” (VNM) in questions 32b, 33a and 33b lack clarity for some of our members. In addition, in some cases the owner of the generator is not the owner of a VNM program, which might necessitate additional coordination and possibly add additional burden to respondents.

NRECA urges EIA to add the term “community solar”<sup>7</sup> as an example in the survey form and accompanying instructions of what is meant by solar capacity offered through a VNM agreement. In general, VNM is a new concept for the EIA-860, NRECA encourages EIA to conduct thorough trainings (e.g. webinars) for respondents on this topic.

### ***EIA-861***

In the FRN, EIA commented that the burden estimate for the Form EIA-861 would increase approximately 16% from the previous version of the form. NRECA’s members who report on this form are primarily cooperatives. Any increase in reporting burden for these respondents is of particular concern because of their limited administrative staff resources.

### ***Schedule 7A: Net Metering Programs***

NRECA has concerns with the distinction between VNM installed capacity from projects “1MW or greater” and “less than 1MW,” a distinction that is not made for any other resource in EIA-861. This distinction adds additional reporting burden, especially for respondents who have VNM capacity from multiple projects. This distinction also lead to double counting for customers participating in multiple projects. Moreover, it introduces a highly focused question into a form which generally deals with utility business, finance and program reporting, which is often filled out by non-engineering staff who might be unfamiliar with these technical details. NRECA is also concerned that the term “virtual net metering” could lack clarity for some of our members.

NRECA urges EIA to remove the 1MW size distinction from the VNM questions. This would be a more consistent treatment of VNM in line with the treatment of other technologies in this section. NRECA also encourages EIA to add the term “community solar” as an example in the survey form and accompanying instructions of what is meant by solar capacity offered through a VNM agreement.

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<sup>7</sup> Defined by NREL as follows: “Community solar, also known as shared solar or solar gardens, is a solar energy deployment model that allows customers to buy or lease part of an offsite shared solar PV system. This arrangement lets customers enjoy advantages of solar energy without having to install a system on their own residential or commercial property.”  
[http://www.nrel.gov/tech\\_deployment/state\\_local\\_governments/community-solar.html](http://www.nrel.gov/tech_deployment/state_local_governments/community-solar.html)

by solar capacity offered through a VNM agreement. In general, since VNM is a new concept for the NRECA encourages EIA to conduct thorough trainings (e.g. webinars) for respondents on this topic.

### ***Schedule 7B: Non Net-Metered Distributed Generators***

NRECA has concerns with the addition of sector-specific reporting for non net-metered distributed generators, rather than simply a total. This presents an additional reporting burden, and could present a problem because different sectors are treated differently across states.

NRECA urges EIA to remove the sector-specific reporting from this section, and maintain the current reporting for capacity.

### ***EIA-923***

### ***Schedule 8D: Cooling System Information***

NRECA has concerns with EIA's proposal to make monthly reporting of cooling system data mandatory rather than continuing to allow an annual reporting of the 12 months on the annual Form EIA-923S. NRECA members have raised concerns that mandatory reporting each month would require them to spend more on system upgrades, cause significant additional burden hours, or both. While NRECA recognizes that many respondents already have the capability in place for reporting on a monthly basis, it would cause additional burden hours to smaller respondents, including NRECA's members.

NRECA urges EIA to continue to allow respondents to report cooling data on an annual basis on Form EIA-923S, rather than making monthly reporting mandatory.

## **IV. Conclusion**

NRECA appreciates the opportunity to submit comments for consideration for EIA's form clearing process. America's electric cooperatives are committed to providing their member-owners with safe, affordable, and reliable electric service. NRECA understands the challenges EIA faces in providing accurate and timely data. We hope that the concerns we raised help support these efforts while recognizing the unique challenges electric cooperatives and other small utilities face. If you have any questions, please do not hesitate to contact us.

Respectfully submitted,



James P. Spiers  
Vice President, Business and Technology Strategies  
National Rural Electric Cooperative Association  
4301 Wilson Boulevard  
Arlington, VA 22203  
(703) 907-5624

## Electricity 2017

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**From:** John Stubbart <jstubbart@pulamalanai.com>  
**Sent:** Thursday, May 19, 2016 10:03 PM  
**To:** Electricity2017  
**Cc:** Arlan Chun; Duke Schaefer  
**Subject:** Form EIA-860M, Monthly Update to the Annual Electric Generator Report  
Utility ID: 55910, Lanai Sustainability Research LLC;

Rebecca Peterson,

In regards to U. S. Energy Information Administration (EIA) is proposing changes to its electricity and solar photovoltaic data collection, my input to the report **Form EIA-860M, Monthly Update to the Annual Electric Generator Report** is that we are a small 1.2 MW solar facility and there is no change on a monthly basis. Our software for our firm does not allow me to access the website to make a report of “no changes” over the past years. I have to send an email to [Nick Arzaga](#) *EIA-860 Analyst* to have him input the report. I seems that systems like ours would be more effective by just doing an annual report as solar does not have the same impact as other power generating systems. Mahalo



**John Stubbart**  
Director of Utilities

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**From:** [Napa Tayavibul](#)  
**To:** [Electricity2017](#)  
**Cc:** [Karen Koyano](#)  
**Subject:** SCE's Comments on EIA Form EIA-860 & EIA-861 re Agency Information Collection  
**Date:** Monday, July 18, 2016 7:05:34 PM

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As published in the Federal Registry, Vol. 81, No. 97, dated May 19, 2016, pages 31623 – 31629, below are SCE's comments to EIA's request for comments to EIA-860, EIA-861 and EIA-861M.

- 1.) **SCE's Comment on Improving Efficiency and Ways to Minimize Burden to EIA-860 Annual Report:** SCE requests EIA provide the functionality for utilities to review and submit the data for the EIA-860 Annual report in an Excel spreadsheet. The current format of EIA-860 is difficult to use, navigate and disseminate information internally for review. Also, when the form is converted into a PDF format, the PDF copy does not accurately capture the information within the EIA system and some of the fields/lines do not match the data reflected within EIA's system.
- 2.) **SCE's Comment on EIA-861 Annual, Schedule 2, Part A, Question 7:** The question is duplicative to the EPA policies in Federal regulations that require publicly traded utilities to purchase Alternative Fuel Light Duty Vehicles or buy credits to meet the compliance requirement. There is no request for the volume of Alternative-Fueled Vehicles utilized so utilities operating 1% of their fleet as Alternative Fuel units and Utilities with 100% of their fleet as Alternative Fuel units report the same answers. The Electric Utilities have initiated a voluntary goal that 5% of annual fleet acquisition spend be on Plug-In Electric vehicles so the industry is driving this initiative on its own with 77 member electric utilities adopting the goal. How does the new legislation that allows for the export of US Oil align with this question's original goals?
- 3.) **EIA-861 Annual, Schedule 7, Part A:** EIA proposes to add a question asking for the virtual net-metered capacity and virtual net-metered customer counts of net metering programs. This question would apply both to resources less than 1 MW and resources in excess of 1 MW.  
**SCE's Comment:** SCE requests EIA define virtual net metered capacity and virtual netmetered customer counts. Please specify if it includes generating customers and/or virtual customers.

- 4.) **EIA-861M, Schedule 3, Part A:** EIA proposed to add a new part, Schedule 3, Part A, Net Metering Programs, which will collect data regarding net-metering programs, including capacity, installations, storage capacity, customers, and, if available, energy sold back to the utility.

**SCE's Comment:** SCE requests EIA specify if this additional data includes battery storage for existing NEM customers only. Also, SCE requests for more guidance on when the information regarding energy sold back to the utility is not available, under what circumstances would the utility be required to provide this information?

- 5.) **EIA-861M, Schedule 3, Part A:** EIA also proposes on the new Schedule 3, Part A, Net Metering Programs, to add virtual net metered capacity and customer counts both from resources less than 1 Megawatt (MW) and resources 1 MW or greater

**SCE's Comment:** SCE requests EIA define virtual net metered capacity and virtual netmetered customer counts. Please specify if it includes generating customers and/or virtual customers.

\*Note: Please include [Karen.Koyano@sce.com](mailto:Karen.Koyano@sce.com) on all communication regarding this issue.

Thank you,

Napa Tayavibul  
Southern California Edison Company  
FERC Tariffs and Compliance  
Telephone: (626) 302-1017

July 18, 2016

Ms. Rebecca Peterson  
U.S. Energy Information Administration  
U.S. Department of Energy  
Forrestal Building, Mail Stop EI-23  
1000 Independence Avenue, S.W.  
Washington, DC 20585

Submitted by email to [Electricity2017@eia.gov](mailto:Electricity2017@eia.gov)

Dear Ms. Peterson:

Subject: Los Angeles Department of Water and Power Comments regarding Energy Information Administration Proposed Agency Information Collection Extension with Changes

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to submit comments regarding Energy Information Administration (EIA) Proposed Agency Information Collection Extension with Changes as published in the Federal Register on May 19, 2016.

## **I. INTRODUCTION**

The City of Los Angeles is a municipal corporation and charter city organized under the provisions of the California Constitution. LADWP is a proprietary department of the City of Los Angeles, pursuant to the Los Angeles City Charter, whose governing structure includes a mayor, a fifteen-member City Council, and a five-member Board of Water and Power Commissioners (Board).

LADWP is the third largest electric utility in the state, one of five California Balancing Authorities, and the nation's largest municipal utility serving a population of over four million people. LADWP is a vertically integrated utility, both owning and operating the majority of its generation, transmission and distribution systems. LADWP has annual sales exceeding 23 million megawatt-hours (MWhs) and has a service territory that covers 465 square miles in the City of Los Angeles and most of the Owens Valley. The transmission system serving the territory totals more than 3,600 miles that transports power from the Pacific Northwest, Utah, Wyoming, Arizona, Nevada, and California to Los Angeles.

LADWP is undertaking a utility-wide transformation and making billions of dollars in investments on behalf of its ratepayers to replace more than 70 percent of the energy resources over the next 25 years that it has relied upon for the last 50 years. This is a result of combined regulatory mandates for increased renewable energy, emissions performance standard on fossil fuel generation, energy efficiency, solar roofs, reduction in greenhouse gas emissions, and the elimination of using once-through cooling for coastal power plants.

## **II. GENERAL COMMENTS REGARDING PROPOSED CHANGES**

LADWP would like to provide five general comments regarding Agency Information Collection:

1. LADWP is concerned that the proposed changes in Form EIA 930 request data that constitutes proprietary information. For example, standard fuel type categories for real time data on an hourly basis is market-sensitive and could create unfair market advantage, because this level of data can be utilized to infer what market demand will be in the next hour.
2. LADWP has a concern with the EIA submission software incompatibility with Java updates. Updating Java locks out the program and creates issues when trying to submit required forms prior to the deadline. LADWP recommends that the EIA address the software compatibility issues to prevent potential cyber-security issues.
3. The proposed changes to EIA forms include requests for additional information regarding Energy Storage (ES). LADWP believes that ES data should only be required for Battery Energy Storage Systems due to the complexity of calculating the capacity for non-battery energy storage systems. For example, the capacity of Thermal Energy Storage Systems is difficult to quantify as it changes with operation, ambient temperature and humidity. Utility-Scale ES needs to be more specifically defined based on interconnection type and size. Additionally, requesting ES facility information for facilities under 10 megawatts will be burdensome for LADWP and is not available during the normal course of business.
4. The proposed changes impose an additional and unnecessary administrative burden to respondents. While we understand the purpose and use of the EIA reports, some of the information requested can create an unnecessary administrative burden and it is our hope that the EIA can help by preparing better instructions for each form as well as provide flexibility when information is submitted. The EIA-proposed changes have included additional data requests which require more information than is collected during the normal course of business, causing production of data just for submission to the forms. The EIA forms are meant to gather information without creating unnecessary burden to respondents, however the forms are getting longer and more burdensome.

5. Finally, LADWP recommends that the EIA make its definitions consistent with other agencies to reduce confusion and streamline reporting. In addition, LADWP requests that EIA provide clarifications regarding certain ambiguous terms and instructions discussed in more detail below.

**a. Comments to EIA-860 Proposed Changes**

- For proposed changes in Schedule 2, it is not clear whether the new proposal asks for reporting on (1) a facility that has an integrated ES system or (2) an ES system by itself. These are two different scenarios which need to be clarified. If (1) is what is meant by the proposal, then the boundaries which define a facility need to be clarified. For example: does a solar facility that has an integrated ES nearby but is metered separately qualify as a facility with ES? Additionally, requiring information for charge rate and maximum discharge rate for energy storage will be very burdensome; only nameplate capacity on the ES system should be requested.
- Proposed changes to Schedule 3, Part B, collection of tilt and azimuth information, will be a burden to the respondents. Fixed tilt or single-axis technologies can have arrays with varying tilt and azimuth within a project due to uneven terrain, structure, or building orientation. This could lead to a lot of confusion for respondents and erroneous assumptions made by the EIA on the hourly timing of electric supply. Therefore, we request that this requirement be removed.
- In proposed changes to Schedule 3, Part B as stated in the Federal Register, EIA states that collecting information on whether a facility has net metering or virtual net meter will help enhance their estimation of total distributed solar generation. It is misleading to say that collecting this information will enhance estimation of total solar generation. Since net-metered solar is consumed on site, some of the solar produced is not captured, depending on the metering. Solar generation is the same whether the energy is produced from a wholesale project or a project made for on-site consumption. Providing this information would be tedious to collect.
- Proposed changes in schedule 6, Part A requiring reporting of planned retirement dates of environmental equipment (namely the SCR and CO catalysts) will be difficult to quantify, since their replacement depends on operation hours, fuel used in operation, maintenance, and exposure to ambient conditions. LADWP suggests that only actual retirement dates be required for submittal of boiler information.

**b. Comments to EIA-861A Proposed Changes**

- LADWP requests that EIA provide clearer definitions for the terms “virtual net-metered capacity” and “virtual net-metered customer counts of net metering programs” in the instructions for this form.

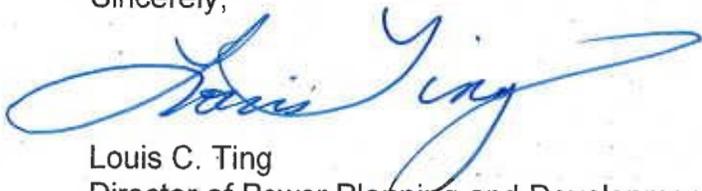
**c. Comments to EIA-930 Proposed Changes**

- LADWP requests the EIA define the term “sub-regional” for the sub-regional action demand requirement.
- Standard fuel type categories for real time data on an hourly basis is market-sensitive and could create unfair market advantage, because this level of data can be utilized to infer what market demand will be in the next hour.
- Finally, to promote consistent reporting across agencies, the EIA definition for Hourly Actual Interchange should match the North American Electric Reliability Corporation’s (NERC) definition. The use of the same term with an inconsistent definition creates confusion.

**III. CONCLUSION**

LADWP appreciates the opportunity to submit comments and thanks staff for their attention to these issues. If you have any questions, please contact Ms. Pjoy Chua of my staff at [pjoy.chua@ladwp.com](mailto:pjoy.chua@ladwp.com) or at (213) 367-1750.

Sincerely,



Louis C. Ting  
Director of Power Planning and Development Division

AP: ra  
Enclosure  
c: Ms. Pjoy T. Chua



July 18, 2016

**VIA ELECTRONIC MAIL**

Ms. Rebecca Peterson  
U.S. Department of Energy  
U.S. Energy Information Administration  
Mail Stop EI-23  
1000 Independence Ave., SW  
Washington, DC 20585  
[Electricity2017@eia.gov](mailto:Electricity2017@eia.gov)

**Re: Proposed Revisions to Form EIA-930, Balancing Authority Operations Report**

Dear Ms. Peterson:

The California Independent System Operator Corporation (CAISO) submits these comments on proposed changes to Form EIA-930 as noticed in the Federal Register on May 19, 2016. In that notice, the U.S. Energy Information Agency (EIA) proposed the following changes to Form EIA-930:

- Change the amount of time within which the respondents must report. Currently respondents must submit their data within 60 minutes of the end of the data hour. The proposal is to change the submission time to within 30 minutes of the end of the data hour. This change would be consistent with the observed reporting capabilities of the respondents.
- Require respondents to report hourly sub-regional actual demand when these values are produced in the normal course of business within a month of the operating day.
- Require respondents to report hourly net generation by standard fuel type categories.

The CAISO requests that EIA make sample data files available that reflect the proposed changes to Form EIA-930 and discuss these files with balancing authorities in advance of any submission of revised Form EIA-930 to the Office of Management and Budget. The CAISO also requests that EIA confirm that existing software mechanisms and file structures currently used by balancing authorities to support EIA's access to data will continue to support any revisions to Form EIA-930.

With respect to the proposed changes to Form EIA-930, the CAISO requests that EIA commits to work with balancing authorities to identify an activation date that takes into account system changes necessary to accommodate data sharing under any revisions

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California Independent System Operator Corporation

to Form EIA-930. For example, in order to make net generation information by fuel types available to EIA under the standard fuel types identified by EIA's draft instructions<sup>1</sup>, the CAISO must make changes to its open access same-time information system as well as the CAISO's upstream systems to source this data. If EIA obtains approval during 2016 to revise Form EIA-930 as proposed, the CAISO believes it can accommodate these system changes by May 2017. Finally, for fuel types not identified by EIA in its draft instructions, the CAISO requests that EIA clarify that balancing authorities should group additional fuel types under the category of all other types (i.e. OTR).

The CAISO looks forward to continuing to work with EIA to support EIA's information collection activities. If you have questions or need additional information please feel free to contact me via telephone at 202.239.3947 or via email at [aulmer@caiso.com](mailto:aulmer@caiso.com).

Respectfully submitted,

**/s/ Andrew Ulmer**

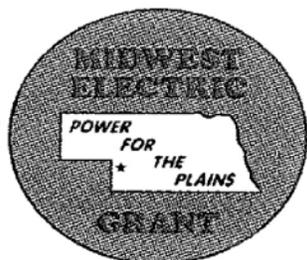
Andrew Ulmer  
Director, Federal Regulatory Affairs

<sup>1</sup> See data format and transmittal instructions for proposed changes to Form EIA-930, page 3 of 4: [http://www.eia.gov/survey/form/eia\\_930/proposed/2017/instructions.pdf](http://www.eia.gov/survey/form/eia_930/proposed/2017/instructions.pdf). EIA identifies the following fuel types: COA – all coal-fired generators; NLG – all natural gas-fired generators; NUC – Nuclear; OIL – All Petroleum Products; WTR – Hydro and pumped storage; SUN – Solar; WND – Wind; OTR – all other types.

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# Midwest Electric Cooperative Corporation



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July 5, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
Energy Information Administration  
EI-23 Forrestal Bldg  
1000 Independence Ave SW  
Washington, DC 20585

RE: Comments Regarding Form EIA-861 "Annual Electric Power Industry Report"

Dear Ms. Peterson:

These comments on behalf of The Midwest Electric Cooperative Corporation (MECC) are submitted pursuant to the U.S. Energy Information Administration's request for comments on Form EIA-861, as published in the Federal Register on May 19, 2016.

MECC is an electric distribution cooperative serving approximately 2600 members with 6500 meters in western Nebraska. We are an agricultural based coop that serves over 205,000 horsepower of irrigation on over 2,000 center pivots. We serve only one industrial pipeline load that has a 2.8 MW demand. Annually, irrigation accounts for approximately 90% of our industrial load. MECC, however, would like to note an issue with the data collected on Form EIA-861 that distorts the reported industrial pricing in agricultural-rich states with seasonal irrigation. This is particularly problematic with the industrial pricing data for Nebraska.

The Form EIA-861 currently requires that all agricultural activities, including irrigation, are incorporated in the Industrial Sector reporting on the annual Form EIA-861. Because irrigation is often seasonal and associated with high demand charges, EIA-reported average industrial pricing for agricultural-rich states with large amounts of seasonal irrigation are elevated. The last two years our irrigation customers averaged about 12 cents per kilowatt hour. Our pipeline (industrial) paid about 8 cents per kWh. Our irrigation customers average 850 hours annually or 10 percent of the year. The industrial pipeline operates over 72% of the year.

Nebraska ranks among the lowest states in average retail price of electricity for the residential and commercial sectors, but among the highest 20 states in the industrial sector.

The Data published by EIA for average retail price of electricity is utilized by many businesses in making state-to-state utility rate and cost comparisons. This significantly hampers Nebraska and other agricultural-rich state's economic development efforts to recruit and retain large industrial companies. This is because the reported average retail price is much higher than what these customers would actually pay. It is helpful that EIA recognizes the impact of irrigation on the industrial data. It would be more helpful to take the next step and address the discrepancy.

Prior to 2003, the EIA Form-861 included instructions for reporting irrigation load pricing into a generic "Other" category. When the "Other" category was removed, Nebraska, along with other agricultural-rich states, saw a dramatic increase in the number of industrial customers recorded. Nebraska went from being 19th in total number of Industrial customers to being third in the nation, surpassed only by Texas and California. This change also led to significant increases in EIA reported industrial average pricing for agriculture-rich states. EIA's publications do not clearly identify irrigation as a determinant in the calculation of the industrial price. As a result, agricultural-rich states with significant seasonal irrigation appear to be costlier for traditional industrial sector businesses.

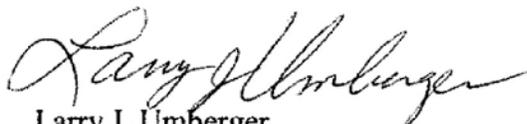
Looking at Nebraska specifically, in 2014 reported irrigation pricing was 16.38 cents per kilowatt hour on average, while traditional industrial pricing was only 6.67 cents per kilowatt hour. When seasonal agricultural (primarily irrigation) numbers are removed from the EIA reported industrial pricing, the resulting price differential is greater than 30 percent. For Kansas the number is more than 12 percent and in Colorado and Texas the differential is more than 10 percent.

Because we believe that the inclusion of electricity sales for irrigation has a harmful effect on the reported industrial price of electricity, **the best solution would be for EIA to create a new reporting sector for Seasonal Agriculture.** This will result in a more accurate EIA measurement of industrial pricing across all states and will illustrate the true costs associated with seasonal agriculture in states with large seasonal agricultural loads. The end result is more reliable and accurate data.

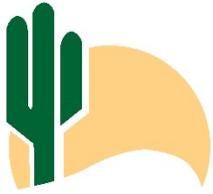
While not as efficient as creating a new reporting sector, as a second best option, we recommend the addition of a check box to EIA Form-861 to designate whether irrigation (seasonal agriculture) sales are included in the Industrial Sector reporting, and if so, what percentages of those industrial sales and revenues are from these activities. **This option is useful only if EIA includes this information in the annual publication of data.** A mock-up of this proposal is attached.

MECC is concerned that the current treatment of irrigation sales inaccurately reports industrial pricing in Nebraska and other agricultural-rich states resulting in assumptions that can preclude economic development in these states. Several Nebraska utility representatives, including a delegation from NREA and the Nebraska Energy Office have met with EIA staff over the past couple of years to discuss this matter. We greatly appreciate the attention staff has given the issue and hope that we can continue the discussion to achieve a solution that will result in the most accurate EIA data.

Respectfully submitted,



Larry J. Umberger  
General Manager



**Grand Canyon State  
Electric Cooperative Association, Inc.**  
Your Touchstone Energy® Cooperatives 

**Attention: Rebecca Peterson  
Energy Information Administration  
1000 Independence Ave., SW  
Washington, DC 20585**

**Via electronic submission through [electricity2017@eia.gov](mailto:electricity2017@eia.gov)**

**RE: Federal Register Notice for OMB Review and Comment**

*I. Background and Introduction*

The Grand Canyon Electric Cooperative Association (GCSECA) appreciates the opportunity to submit comments to the Energy Information Administration (EIA) based on its proposed changes posted in the Federal Register Notice (FRN) on May 19, 2016.<sup>15</sup>

GCSECA is a membership organization consisting of the six electric distribution cooperatives and Arizona Generation and Transmission Cooperatives (AzGT). We also count among our membership one cooperative in California. Our cooperatives serve more than 400,000 consumers of electricity in Arizona. AzGT is the supplier of wholesale energy to our cooperative members who distribute to rural consumers throughout the Southwest. Co-op members depend on AzGT to provide reliable, safe and affordable electricity. Our statewide organization represents the six electric distribution cooperatives providing power to more than 500,000 rural consumers in 12 counties in Arizona.

Electric cooperatives are driven by their purpose to power communities and empower their members to improve their quality of life. Affordable electricity is the lifeblood of the American economy, and for 75 years electric co-ops have been proud to keep the lights on. Because of their critical role in providing affordable, reliable, and universally accessible electric service, electric cooperatives are vital to the economic health of the communities they serve.

Currently, over 800 cooperatives report on the EIA-861: Annual Electric Power Industry Report, more than 40 cooperatives report on the EIA-923: Power Plant Operations report, and over 80 cooperatives report on the EIA-860: Annual Generator Report.<sup>16</sup> EIA's data are instrumental in GCSECA's furthering its mission and telling the cooperative story.

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<sup>15</sup> [http://www.eia.gov/survey/fm/electricity/electricity2017\\_05192016.pdf](http://www.eia.gov/survey/fm/electricity/electricity2017_05192016.pdf)

<sup>16</sup> Information taken from the Electric Power Annual 2014

## II. *Irrigation Pricing Issues in Agriculture-Rich States*

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Agriculture is a major component of many states' economies. In the United States, more than 30 states have irrigation sales. The 10 states with the highest irrigation sales account for 71 percent of the irrigated acres in the U.S.,<sup>17</sup> with more than 200 cooperatives serving those states. At present, all agriculture activities, including irrigation, are incorporated in the Industrial Sector of the annual Form EIA-861 and its monthly equivalent, Form EIA-826. Because irrigation is often seasonal and associated with high demand charges, the EIA-reported average industrial rates for these states are elevated. In EIA's FRN, comments were invited on "ways to enhance the quality, utility, and clarity of the information to be collected." GCSECA and its members have identified a critical issue of importance to accurately characterize the industrial competitiveness of rural America.

Irrigation's seasonality, distinctive load characteristics, and rate structure are inconsistent with typical characteristics of industrial loads. By including irrigation in its Industrial Sector reporting, as EIA has done since 2003,<sup>4</sup> the reported average industrial price in agriculture-rich states is skewed higher, potentially harming economic development prospects for those states, a fact EIA acknowledge in a May 12, 2014 *Today in Energy* article<sup>18</sup>.

Due to EIA's current reporting requirements, data is not available across the total electric utility industry that would show the overall upward impact on reported Industrial Sector rates. However, electric co-op and public power district (PPD) data reported on EIA Form-861 can be compared with the data reported on Rural Utilities Service (RUS) Form 7. Importantly, the RUS Form 7 reports electric coop irrigation sales and revenue separately from co-op industrial sales and revenue.

GCSECA appreciates the opportunity to submit comments for consideration for EIA's form clearance process. America's electric cooperatives are committed to providing their member-owners with safe, affordable, and reliable electric service. GCSECA understands the challenges EIA faces in providing accurate and timely energy data. GCSECA supports National Rural Electric Cooperative Association (NRECA) recommendations and urge you to separate agricultural irrigation from general industrial rates. We hope that the concerns raised help support these efforts while recognizing the unique challenges cooperatives and other small utilities face. If you have any questions, please do not hesitate to contact me.

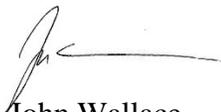
Respectfully submitted,

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<sup>17</sup> [https://www.agcensus.usda.gov/Publications/2012/Online\\_Resources/Highlights/Irrigation/Irrigation\\_Highlights.pdf](https://www.agcensus.usda.gov/Publications/2012/Online_Resources/Highlights/Irrigation/Irrigation_Highlights.pdf)

<sup>4</sup> <https://www.eia.gov/electricity/data/state/>

<sup>18</sup> <http://www.eia.gov/todayinenergy/detail.cfm?id=16231>



John Wallace  
Chief Executive Officer



## THE EMPIRE DISTRICT ELECTRIC COMPANY

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July 18, 2016

**[SENT VIA EMAIL ONLY to [Electricity2017@eia.gov](mailto:Electricity2017@eia.gov)]**

Ms. Rebecca Peterson  
Department of Energy, U.S. Energy Information Administration  
EI-23, Forrestal Building 1000 Independence Avenue SW.  
Washington, DC 20585

Ms. Peterson:

Recently comments, due by July 18, were invited on the Energy Information Administration (“EIA”) intended extension and changes to various EIA forms as published in the Federal Register / Vol. 81, No. 97 / Thursday, May 19, 2016 / Notices. The Empire District Electric Company (“Empire”) presents the following comments on the referenced Forms.

### **1. EIA-860 “Annual Electric Generator Report”**

Comments were invited on the accuracy of the agency’s estimate of the burden of the proposed collection of information.

EIA estimates the reporting burden of Form EIA-860 to be 9.26 hours per respondent. Based on time studies performed by Empire, this reporting burden is underestimated. Much of the data collection required for submission of the EIA-860 is unique only to this government agency or these reports. In other words, this data is not recorded or reported for any other reason other than submission to EIA. Because synergies of data collection for other reasons do not exist, it increases the estimated burden. Empire’s time studies show the response time to be 26 hours. Empire recommends EIA update the annual estimated number of burden hours to 122,200 hours (26 hours per respondent times 4,700 total responses). EIA should also update the annual estimated reporting and recordkeeping cost burden to the respondents to \$8,800,844.00 (122,200 burden hours times \$72.02 per hour).

Comments were invited on ways to enhance the quality, utility, and clarity of the information to be collected.

Form EIA-860, Schedule 2 adds Questions 16a – 16d. Each of these questions indicate the response is “For plants that receive natural gas only.” This is interpreted to exclude any units which are dual fuel units (e.g. Units fired with natural gas or fuel oil). If this is not the intent, additional clarification should be provided.

Comments were invited on 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.

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THE EMPIRE DISTRICT COMPANY • 602 JOPLIN STREET • POST OFFICE BOX 127 • JOPLIN, MISSOURI 64802 • 417-625-5100 • [www.empiredistrict.com](http://www.empiredistrict.com)

## **THE EMPIRE DISTRICT ELECTRIC COMPANY**

Form EIA-860 is structured in a format in which the responses for all generating facilities are provided in a single form. For companies with multiple generating facilities this format is both cumbersome and time consuming. Data sources are collected and sorted by individual facilities. The single form format prevents the ability to effectively conduct error checking until all facilities data input is complete. In addition, to ensure accuracy and consistency, it is standard practice to provide the various plant data collection personnel with the previous year’s response as a reference. Combining facilities into a single form requires personnel to sift through irrelevant information from other facilities when reviewing submissions or requires the responses to be manually separated. EIA should separate submissions by facility as provided in submissions of Form EIA-923 Annual and Form EIA923 Monthly reports.

### **2. EIA-923 “Power Plant Operations Report”**

Comments were invited on whether the proposed collection of information is necessary for the proper performance of the functions of the agency.

Form EIA-923, Schedule 4, EIA proposes to “Remove the data protection for coal and petroleum stocks held at power plants and related facilities. Plant-level stocks data would be publicly released (as is other plant-specific data, such as generation) seven weeks after the end of the reporting month.”

EIA should release plant-level stocks data twelve weeks after the end of the reporting month. Releasing plantlevel stocks data within seven weeks is insufficient time to limit any competitive harm that would result from releasing the data. In addition, public release of the data is not necessary for the proper performance of the functions of the agency. Competitive harm occurs when private companies use plant-level stocks data as a means to subvert their contractual duties by attempting to manage utilities coal inventories. Doing so creates competitive harm by choosing the financial winners and losers. Because plant-level stocks data are closely tied to the seasons of the year, a period of 3 months, or 1 quarter, is needed to ensure sufficient passage of time to prevent this competitive harm. Therefore, Empire recommends coal inventory data be released within 12 weeks after the end of the reporting month.

Comments were invited on the accuracy of the agency's estimate of the burden of the proposed collection of information.

EIA estimates the reporting burden of Form EIA-923 to be 2.41 hours per respondent. Based on time studies performed by Empire, this reporting burden is grossly underestimated. It should be noted that much of the data collection required for submission of the EIA-923 is unique only to this government agency and these reports. In other words, this data is not recorded or reported for any other reason other than submission to EIA. Because synergies of data collection for other reasons do not exist, it increases the estimated burden. Empire's time studies show the response time to be 12 hours for each facility. Empire recommend EIA update the annual estimated number of burden hour to 72,060 hours (12 hours per respondent times 6,005 total annual responses). EIA should also update the annual estimated reporting and recordkeeping cost burden to the respondents to \$5,189,761 (72,060 burden hours times \$72.02 per hour).

Sincerely,

*/s/ Jared Wicklund*

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Jared Wicklund  
Fuel Contracts Manager



**American  
Public Power  
Association**

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Arlington, VA 22202-4801

July 15, 2016

Ms. Rebecca Peterson  
U.S. Department of Energy  
U.S. Energy Information Administration  
Mail Stop EI-23, Forrestal Building  
1000 Independence Avenue SW  
Washington, DC 20585

Submitted by email to [Electricity2017@eia.gov](mailto:Electricity2017@eia.gov)

**RE: Proposed Agency Information Collection Extension with Changes**

Please accept these comments by the American Public Power Association (APPA) in response to Vol. 81, No. 97 of the *Federal Register*, issued on May 19, 2016. The Energy Information Administration (EIA) has asked the Office of Management and Budget (OMB) to renew approval of survey forms EIA-63B, EIA-411, EIA-860, EIA-860M, EIA-861, EIA-861S, EIA-923, EIA930, and to replace EIA-826 with EIA-861M.

APPA represents the interests of the nation's approximately 2,000 nonprofit, publicly owned electric utilities. APPA member systems file many of the forms listed in the *Federal Register* notice. Several larger public power systems must file the monthly EIA-826, "Monthly Electric Utility Sales and Revenue Report with State Distributions." All public power systems file sales and revenue information, either on form EIA-861, "Annual Electric Power Industry Report," or the short form, EIA-861S. Publicly owned utilities that operate generating capacity are required to supply information on EIA-860, "Annual Electric Generator Report," and EIA-923, "Power Plant Operations Report." Additionally, 36 public power systems that serve as Balancing Authorities complete form EIA-930, "Balancing Authority Operations Report."

APPA's comments are directed principally at those forms that most directly impact its members. As such, APPA does not address the changes to forms EIA-63B, EIA-411, or EIA-860M. Additionally, APPA does not offer further comment on EIA-923, as the proposed changes do not constitute a substantial burden to filers.

**EIA-860**

APPA generally supports the revisions to form EIA-860. APPA recommends adding spray dryer technology to table 12 (list of SO<sub>2</sub> compliance strategy). Additionally, it may be beneficial to include a co-benefit control strategies option. Many larger plants have installed Selective Catalytic Reduction (SCR) and Flue Gas Desulfurization (FGD) systems to reduce mercury. Also, plants may install a specialty SCR catalyst, such as a catalyst used to promote mercury removal or a formulation that minimizes SO<sub>3</sub> formation in systems with higher temperatures and sulfur in the fuel.

### **EIA-861**

APPA generally supports the revisions to form EIA-861. The new “behind the meter” option will be beneficial to the industry in more accurately gauging the growth in this type of generation. Additionally, changes to Schedule 7, net metered capacity, will add needed clarity in identifying community solar and other virtual net-metered capacity.

### **EIA-861 S**

EIA has proposed to extend the time interval in which small utilities that currently complete EIA-861S (short form) must complete EIA-861 (long form) from five to eight years. APPA supports the comments filed by ElectriCities of North Carolina which calls for an expanding Schedule 4, part A, Sales to Ultimate Customers, on the short form survey to include revenue, MWh sales, and customer count data by customer sector as is currently collected on the long form. ElectriCities also recommends eliminating the periodic requirement for short form respondents to complete the long form. APPA agrees with both recommendations.

The overwhelming majority of short form respondents are public power utilities. Of the 1,121 short form filers for 2014, 1,041 (93%) were public power utilities. Additionally, these 1,041 represent over half of all public power utilities who completed either the long form or short form. The total number of customers served by these utilities in 2014 was 1,290,018, and they accounted for just over 25 million MWh sales. Though this represents a small portion of overall U.S. load served, this represents 6 percent of all public power customers and 4.4 percent of all MWh sales. This means a significant amount of public power utility residential, commercial, and industrial customers are unaccounted for.

As ElectriCities notes in its comments, this data have been used for a variety of purposes, including Renewable Energy Portfolio Standard (REPS) compliance calculations for the state of North Carolina. Undoubtedly other states use these data for similar purposes. While EIA estimates residential, commercial, and industrial data for these smaller utilities, these estimates may grow more and more inaccurate due to longer reporting intervals. Again, as ElectriCities notes in its comments, the loss of one major commercial or industrial customer has a much greater impact on these systems, and will cause data estimates to become less accurate over time.

APPA echoes ElectriCities concerns that lengthening the reporting interval will make it more difficult for the short form utilities to complete the long form when required to do so. This will increase the learning curve, and add a substantial burden at the time these forms are due. As ElectriCities notes, this will also add to EIA’s burden during those years as EIA staff is required

to respond to more queries from utilities completing these forms for the first time in years, likely by staff who were not employed by the utility the last time the long form was completed.

Most of the data asked for on the long form is not applicable to these smaller utilities. However, customer sector data for revenue, sales, and customer counts are generally available and can more easily be reported by smaller utilities. As ElectriCities observes, these utilities already have systems in place to acquire and report this data, so asking them to report customer sector data would not be a time burden. The other elements of the long form need not be reported by these utilities. Therefore the requirement to complete the long form every five or eight years, unless the utility grows in size to meet the reporting requirement for the long form, should be eliminated, and customer sector data should be added to the short form.

### **EIA-930**

APPA has several concerns with EIA's proposed changes to form EIA-930. EIA proposes to change the reporting timeframe from 60 minutes from the end of the reporting hour to 30 minutes. EIA asserts that this is within the observed reporting capabilities of the respondents. Even if this is technically feasible, APPA questions whether this is necessary. EIA has no mandate to engage in real-time data reporting, nor is near-real time data reporting necessary within the context of this data set. The extra burden to respondents, even it is relatively minimal, is not worth the change to the reporting requirement, which will provide no additional insight into the market.

EIA further proposes to require respondents to report hourly sub-regional actual demand when these values are produced in the normal course of business within a month of the operating day. Sub-regional data reporting should be predicated on whether there is a publicly posted set of data for historical Balancing Authorities (BAs) within Regional Transmission Organizations and/or Independent System Operators. BAs may have nodal/bus level load data that is produced for a variety of reasons: for example, for transmission load management or to bill large industrials served at transmission and to bill public power utilities and rural electric cooperatives. But there does not seem to be a compelling business case to post delivery point level data.

EIA also seeks to require respondents to report hourly net generation by standard fuel type categories. This seems to be an unnecessary burden to respondents as it is not clear that such data are collected on an hourly basis by BAs. Assuming they are, some generators have multiple prime movers at the same station, therefore EIA would need to clarify specifically what data should be reported. EIA also needs to clarify if this would only include utility-scale generation or if it also comprises industrial and customer-sited generation.

Finally, EIA requests comments on whether the agency should continue its policy of limited withholding of small BA data for two days. Even this limited withholding leaves smaller BAs vulnerable to security and market power issues, thus its removal would eliminate this small measure of protection. Once again EIA has not made a compelling business case as to why this data must be reported so close to real-time. If the primary purpose of this survey is to obtain a clearer picture of the flow of energy between BAs and to have a greater awareness of potential issues with congestion, there is no compelling need to release all data to the general public so soon after the completion of the business hour or day. As APPA said in its comments submitted

on January 23, 2014, critical data can be shared with interested parties and other key policy makers, while think tanks, academic institutions, and other analysts can be granted access after some period of time has elapsed. Therefore the limited exemption should remain in force.

### **Conclusion**

APPA appreciates this opportunity to comment on the proposed changes to EIA's forms. EIA provides an essential service to the electric industry and to the general public. APPA and its members rely on EIA data for a number of purposes, and most of the proposed changes will enhance EIA's data collection without increasing participant burden.

Thank you for the opportunity to comment. Should you have any questions concerning these comments, please do not hesitate to contact me. I may be reached at (202) 467-2969 or [pzummo@publicpower.org](mailto:pzummo@publicpower.org).

Respectfully submitted,

/s/ Paul Zummo

Paul Zummo

Manager of Policy Research and Analysis

American Public Power Association

PZ/JA