

**Forms EIA-861 Annual Electric Power Industry Report
Cognitive Testing Protocol
September 2018**

(This protocol is a guide – the questions presented here won't necessarily be asked exactly as worded in the protocol or in this order. It is important to note that not all questions will be asked in every interview.)

Research Goals:

- To assess Form EIA-861 respondent's abilities to report information related to microgrids.
- To better understand the distribution system information respondents report on Form EIA-861, and how respondents determine that information.
- To determine if respondents are able to report information related to Electric Vehicles (EVs), specifically the charging and pricing offered to customers with EVs.
- To estimate any changes in reporting burden associated with collecting this information and obtain feedback on appropriateness of current reporting burden

Purpose of Interview:

Let me start by telling you a little about what we will be doing today:

- Introduce self and observers.
- The questions are about potential changes to Form EIA-861 The Annual Electric Power Industry Report.
- We are attempting to clear up some data issues and determine what additional information, if any, respondents can report to EIA on this survey.
- There are no right or wrong answers, and if something doesn't make sense to you or you have any questions, please ask.
- Before we start, do you have any questions about this EIA survey?

Part A - Introduction

- Before we start, can you please share with us a little more about yourself and your company?
- Do you currently fill out Form EIA-861?
- How long have you been completing this form?
- Do you complete any other EIA surveys for your company?
- Are you familiar with the instructions for Form EIA-861?
 - How often do you refer to the instructions?
 - How long do you spend reading the instructions?

Part B - Current Burden (2 Hours)

Now let's talk about how much time and effort it takes you to currently complete this form.

- How long does it take you to complete Form EIA-861?

- Can you briefly describe your process for completing the current form?
- Does filling out this form require data or input from anyone else?
- How much time does it take you to gather the information for this report?
- Once you have gathered the information needed, how long does it take you to fill out the report and submit your data to EIA?
- In the past, is this the usual time that it takes your company to report this information?
- Do you track the information you report on Form EIA-861 over the normal course of business or is this information tracked only for responding to this survey?
- Do you have any problems or think there are any confusing questions on Form EIA-861?

Part C - General Questions

Microgrids

- Are you familiar with the term “microgrid”?
 - (If yes) What does that term “microgrid” mean to you in the context of power plant operations?
 - (If yes) Do you have/are you aware of any microgrids on your system?
 - (If yes) Do you track the number of microgrids on your system?
 - (If yes) Do you track the generating capacity (MW) and the size of the microgrid loads?
- If EIA asked you to report additional information related to the number of microgrids on your system and the power generating capacity of those microgrids, how much additional time would it take to report that additional information?
- Can you please describe the process you would go through to gather and report this information on microgrids?
- Can you report this information by individual microgrid?
- Would reporting this additional information on microgrids require your company to modify any of its data systems?
 - (If yes) How much time do you estimate it would take your company to update those systems?
 - (If needed) Is this a one-time activity?

Battery storage

We have a few questions to better understand how customers use battery storage with or without a generator.

- Does your utility company collect information on customers' battery storage as part of your interconnection agreements with customers?
 - (If yes) If a customer has an existing interconnection agreement for a generator and adds battery storage to their system, is the customer required to report it to the utility?
- Do you monitor whether customers have battery storage without another distributed generator, solar energy power source, or otherwise?
 - (If yes) Do you track this information in the normal course of business?
- Could you report information on your customers that have battery storage?

- If EIA asked you to report additional information on your customers with battery storage, how much additional time would it take you annually to complete this survey?
 - (If needed) How difficult would it be to gather this information?
- Would reporting this additional information require your company to update any of its systems?
 - (If yes) How much time do you estimate it would take your company to update those systems?
 - (If needed) Is this a one-time activity?

Electric vehicles

EIA is interested in information respondents have regarding Electric vehicles (EVs), specifically related to the charging and pricing of EVs.

- Do your records separately track public charging station consumption and home charging consumption?
- Does your company offer a special rate to residential customers for charging their EVs at home?
- Do your records track revenues/sales for Public Charging and Private Charging stations?
 - (If needed) Do your records track how many customers are engaged in each activity?
 - (If needed) Do you collect this information in your normal course of business?
- If EIA asked you to report sales, revenues, and customers counts information for Public EV Charging stations or Private EV Charging stations that are separately metered or under separate tariff, would you be able to report that information?
 - (If no) What problems would you have in gathering this information?
 - (If yes) Could you describe for me the process to gather and report this information?
 - (If needed) How much time do you estimate it would take to gather and report this information?
 - (If needed) Would reporting this additional information require your company to update any of its systems?
 - (If yes) How much time do you estimate it would take your company to update those systems?
 - (If needed) Is this a one-time activity?

Part D - Schedule-Specific Questions

SCHEDULE 3. PART A. DISTRIBUTION SYSTEM INFORMATION

EIA is also interested in the types of information companies keep on their Distribution Systems. The next few questions are related to this information.

- Do you have any circuits that are able to function separately as an island (disconnected from the grid and provide power independently to a load) operated by you?
 - (If yes) Do you track the number of the circuits that can function as an island?
 - (If yes) Do you track usage from each customer that is serviced from an island circuit system?

- If EIA asked you to report additional information related to the number of customers that can function as an island and the number of circuits that functions as an island, how much additional time would it take to report that additional information?
- Can you please describe the process you would go through to gather and report this additional information?
- Would reporting this additional information require your company to modify any of its data systems?
 - o (If yes) How much time do you estimate it would take your company to update those systems?
 - o (If needed) Is this a one-time activity?

SCHEDULE 3. PARTS B and C. DISTRIBUTION SYSTEM RELIABILITY DATA

EIA is interested in learning how respondents report SAIDI (*system average interruption duration index*) and SAIFI (*system average interruption frequency index*) on Parts B or C of the current EIA-861. The next few questions are related to the reporting of this information.]

- Have you ever heard of the term SAIDI (system average interruption duration index)?
- What does that term mean to you?
- Do you currently report data on SAIDI in Part B or Part C of Schedule 3?
- Do you report that information based on the minutes or hours of the duration?
- o (If yes) How do you calculate the duration of the average interruption?

INTERVIEWER NOTE: SAIDI is the average outage duration for each customer served, and is calculated as:

Sum of all customer interruption durations / total number of customers served

- Have you ever heard of the term SAIFI (system average interruption frequency index)?
 - o What does that term mean to you?
- Do you currently report data on SAIFI in Part B or Part C of Schedule 3?
- (If yes) How do you calculate the average frequency of the interruption?

INTERVIEWER NOTE: **SAIFI** is the average number of interruptions that a customer would experience and is calculated as:

Total number of interruptions / total number of customers served

- Do you report your annual SAIDI and SAIFI indexes to any State Public Utility Commissions?
- - o (If needed) Do you use an IEEE methodology to calculate that information (Institute of Electrical and Electronics Engineers)?
- (If needed) What kinds of information does your company track related to SAIDI, SAIFI, and other reliability metric information you company keeps in its records?
- (If needed) Can you please describe how you currently collect outage information?

- If EIA asked you to report MAIFI (momentary average interruption frequency index) using the same methodology you use to calculate SAIDI and SAIFI, how much time would it take you to gather and report that additional information?
- Can you please describe the process you would go through to gather and report this additional information?
- Would reporting this additional information require your company to modify any of its data systems?
 - o (If yes) How much time do you estimate it would take your company to update those systems?
 - o (If needed) Is this a one-time activity?

SCHEDULE 6. PART B. DEMAND RESPONSE PROGRAMS

- Schedule 6 Part B on Form EIA-861 asks for information about customers participating in Demand Response (DR) Programs.
- Can you explain your process for gathering and reporting that information?
 - o (Note: Form currently asks respondents to report for each customer class (residential, commercial, industrial, and transportation), can you report by state and balancing authority the following annual data about customers participating in your self-administered DR programs?
 - Total number of customers participating
 - Total energy savings (MWh)
 - Total potential peak demand savings (MW)
 - Total actual peak demand savings (MW)
 - Total customer incentive costs (thousands of dollars)
 - All other costs to run demand response programs (thousands of dollars)
- Do your records track information on your customers that participate in electricity wholesale markets separately from your retail customers?
 - o (If no) How do you know which of your customers are participating in wholesale electricity markets?
 - o (If yes) If EIA asked you to separately report (see list above) information about your retail customers participating in DR programs and your wholesale customers participating in DR programs, can you explain for me the process of gathering and reporting that information?
 - (If no) Can you please explain why you would not be able to report this information?
- How much additional time would it take to complete this survey?

SCHEDULE 6. PART B. THIRD PARTY AGGREGATOR

- Are you familiar with the term “third party aggregator”?
 - o (If yes) What is does this term mean to you?

- Are any of your demand response programs administered by a third party aggregator? (Note: EIA's definition of third-party aggregator administered is when the third-party entity is directly operating, dispatching, or controlling the demand response resources on your behalf.)
- **(NOTE: If No skip to next section SCHEDULE 6 PART C below)**
 - (If yes) Can you report all of the third-party company/companies that manage some or all of your DR resources?
 - (If yes) Do you currently report the programs they administer for you as part of your response when you submit the EIA-861?
- Do your records have information about your customers that participate in DR programs operated by a third party aggregator?
 - (If yes) Do your records also contain information about retail and wholesale customers participating in DR programs operated by a third party aggregator?
 - (If yes) If EIA asked you to separately report information on your retail customers participating in DR programs operated by a third party aggregator and information about your wholesale market customers participating in DR programs administered by a third party aggregator, can you explain for me the process of gathering and reporting this information?
- How much additional time would it take to report the additional information about third party aggregators?
- Would reporting any of this additional information system require your company to modify any of its data systems?
 - (If yes) How much time do you estimate it would take your company to update those systems?
 - (If needed) Is this a one-time activity?

SCHEDULE 6. PART C. DYNAMIC PRICING PROGRAMS

- For each customer class, can you report the number of customers participating in each type of dynamic pricing program? (Note: the current form only asks respondents to report which programs customers are participating in and does NOT ask how many customers are participating in each program)

SCHEDULE 6. PART D. ADVANCED METERING

- Do your records track the number of customers able to access their daily energy usage?
 - How is this tracked?
 - Web portal?
 - Other electronic means?
 - Electricity bills/invoices?
- (If yes) If EIA asked you to report additional information about customers participating in dynamic pricing programs and customers able to access their daily energy usage information, how much additional time would it take to report that additional information?

- Would reporting this additional information require your company to modify any of its data systems?
 - (If yes) How much time do you estimate it would take your company to update those systems?
 - (If needed) Is this a one-time activity?

SCHEDULE 7. PART A. NET METERING PROGRAMS

- Schedule 7 Part A of the current EIA-861 form ask for information on customers participating net metering programs.
- Can you explain your process for gathering and reporting that data?
- Do your records track information on smart inverters associated with net metering programs?
 - (If yes) Can you report the number of smart inverters associated with net metering installations on your system by state, balancing authority, and customer class?
 - (If yes) Can you report the number of MW of net metered capacity associated with smart inverters on your system by state, balancing authority, and customer class?
- (If yes) If EIA asked you to report this additional information related to net-metering programs, how much additional time would it take to report that additional information?
 - Would reporting this additional information require your company to modify any of its data systems?
 - (If yes) How much time do you estimate it would take your company to update those systems?
 - (If needed) Is this a one-time activity?

SCHEDULE 7. PART B. NON NET-METERED DISTRIBUTED GENERATORS

- Can you report the capacity in both MW and MWh of distributed storage (grid connected/synchronized) by state, balancing authority, and customer class (Residential, Commercial, Industrial, Transportation, and Total)?
- Can you break out the combustion turbine capacity by fuel type (natural gas, diesel, or other)?
- Can you report the number of smart inverters associated with non net-metered distributed generators on your system by state, balancing authority, and customer class?
- Can you report the number of MW of non net-metered distributed generators capacity associated with smart inverters on your system by state, balancing authority, and customer class?
- (If yes) If EIA asked you to report this additional information related to the capacity of non net-metered distributed generators, how much additional time would it take to report that additional information?
- Would reporting this additional information require your company to modify any of its data systems?
 - (If yes) How much time do you estimate it would take your company to update those systems?
 - (If needed) Is this a one-time activity?

Part E- Wrapping Up

- Do you ever receive callbacks from EIA to check the data you reported?
 - (If yes) Approximately how many calls did you receive last year?
- Do you have any problems filling out this form?
- Do you have any suggestions to improve this survey?

Thank you for your time today