# Part B Collection of Information Employing Statistical Methods

## **B.1. Respondent Universe**

The potential respondent universe for this collection is based on the number of known electricity providers as determined by Form EIA-861 to be 3,261. The distribution of electricity providers according to EIA is as follows: Publicly-owned utilities – 2,006, Investor-owned utilities – 200, Cooperatives – 875, Federal power agencies – 9, Power Marketers – 171. These electricity providers serve a total of 143,494,481 customers, either full-service or delivery-only. DOE will seek responses from the entire respondent universe. DOE is not utilizing sampling since the data collected is likely to vary within a state and DOE wishes to provide data without aggregation.

## **B.2. Statistical Methodology**

Because of the nature of this project, no statistical inferences will be drawn from the data. Rather, the responses are ranked according to DOE-developed ranking criteria based on industry best practices (see Supporting Statement A, Appendix 1). For individual data access categories such as time period, mode of delivery, frequency of data, or access to data, each response is compared to the criteria and assigned a tier status. For example, if the utility responds that it only delivers energy data by mail, that utility would be assigned tier 3 status (Standard Access) for this category, as indicated in Appendix 1. The region corresponding to the utility's service area would be colored on the map to reflect the tier status. For the "Standard Access" tier, the service area is colored light gray.

For the policy cases, i.e., Benchmarking and Demand Response/Energy Efficiency, responses to each of the individual data access categories (time period, mode of delivery, etc.) are compared to the ranking criteria. Based on these comparisons, the utility is assigned a tier status for each policy case. Appendix 1 illustrates the criteria necessary to achieve each of the tiers. Utilities must provide all services designated by an "X" in the table to reach each tier. For example, in order to achieve Tier 1 status for commercial benchmarking, a utility must provide energy data that is available online in easily downloadable and machine-readable format, in aggregate for all meters in a building, provides downloadable access to the last 13 months of data and allows the customer to authorize third-party access to the data. If the utility meets these criteria, its service area is coded dark blue to reflect a superior level of data access. The result is displayed on a map so all visitors can easily locate their electricity provider based on its service area. The information gathered by this collection will not be used to make assumptions about the sample.

DOE consulted with ACEEE, EPA, EIA, Edison Electric Institute, National Association of Regulatory Utility Commissioners, National Association of State Utility Consumer Advocates, Critical Consumer Issues Forum, National Rural Electric Cooperative Association, Institute for Electric Efficiency and Tendril as well as various private organizations to design the questionnaire device and website. We have invited electricity providers and visitors to the website to provide feedback on the information displayed in the map in order to maximize accuracy and verify results.

# **B.3. Methods to Maximize Response Rates**

During the first 6 months of the collection, DOE received responses from 796 of 2,962 electric utility contacts representing 26.87% of the respondent universe. Though this is below our ultimate goal of 100%

<sup>&</sup>lt;sup>1</sup> http://38.96.246.204/cneaf/electricity/page/eia861.html

response rate, we have determined that some of the contact information for the utilities was either absent or inaccurate. We were able to gather contact information for some of those utilities and send follow-up requests for their participation.

DOE expects electricity providers to understand and appreciate the value of informing consumers of their degree of access to their electricity usage data. We acknowledge there continues to be potential for a non-response bias during the early stage of this collection. This may occur due to varying levels of enthusiasm among electricity providers to share their information. For example, providers who offer superior levels of access to customer data and who allow for third party data sharing are more likely to quickly respond. Non-respondents will be contacted by email and telephone to find out if there was some technical issue preventing an electronic response.

### **B.4. Tests of Procedures**

DOE worked with a survey professional to develop appropriate wording of the questions. Two potential utility respondents reviewed or tested the draft questionnaire. The test consisted of emailing the draft questionnaire to the volunteer test subjects and gathering feedback by email and telephone. The test was designed to ascertain language improvements, troubleshooting opportunities, time and cost burden, and overall improvements to the questionnaire. Feedback was largely positive with minimal suggestions to change order or wording of questions. Respondents requested that we include a short description of the goals of the questionnaire. Changes were made at all stages of testing to incorporate feedback.

DOE worked closely with NREL to develop the website and test it for proper functionality and accurate reporting of the data.

#### **B.5. Consultation**

EIA: Broene, Thomas (EIA) Pick, Kenneth (EIA) O'Neill, Grace (EIA) Lu, Ruey-Pyng (EIA) Miller, Renee (EIA) Jennings, Alethea (EIA)	Phone: 202-586-5774 202-568-9938 202-586-6485 202-586-5985 202-586-6070 202-586-5879
NREL: Debbie Brodt-Giles (NREL) Ryan McKeel (NREL)	303-275-4440 303-275-3819
DOE: Michael Li Carla Frisch Jamie Vernon (ORISE)	202-287-5718 202-586-6178 202-586-9883

For additional information concerning this information collection, please contact Carla Frisch at <u>Carla.Frisch@hq.doe.gov</u> or at 202-586-6178.

Appendix 1. Criteria for Categorizing Utilities into Tiers Based on Policy Cases

Residential	Policy Cases							
	Option	В	enchmarkir	ıg	Demand Response			
		Tier 3	Tier 2	Tier 1	Tier 3	Tier 2	Tier 1	
		Standard Access	More Access	Most Access	Standard Access	More Access	Most Access	
Delivery of data	Mail	At least			At least			
	Online in easily downloadable and machine-readable formats including Energy Service Provider Interface (ESPI)	one of these.	At least one of these.	X	one of these.	At least one of these.	At least one of these.	
	Online as PDF, directly visible on a web page, or similar forms							
	In-home through a home area network, dedicated device, or mobile app						X*	
Time-period (any combination of delivery modes that satisfy these requirements)	Last month	At least one of these	X	X	At least one of these.	X	X	
	Last 13 months		X	X		X	X	

	Since last bill						X		
	Last 24 months			X					
Frequency of data	Less than 15-minute increments with reporting delay	At least one of	At least one of	one of	At least one of		At least one of		
	Less than 15-minute increments without reporting delay.	these. the	these.	these.	these.	these.	these.		these.
	15-minute increments								
	Hourly								
	Daily							X	
	Monthly					X		X	
	Less frequently than monthly								
Access to data	Customer	At least	X	X	At least	X	X		
	Available to authorized third party with fee	these.  At least one of these.	these.		one of these.	At least one of			
	Available to authorized third party without fee		these.	X		these.	X		
	Third-party access via separate account			X			X		

Consumption Data (kWh)				X			X	
Demand Data (kW)							X	
Commercial	Policy Cases							
	Option	В	enchmarkir	ng	Der	nand Respo	nse	
		Tier 3	Tier 2	Tier 1	Tier 3	Tier 2	Tier 1	
		Standard Access	More Access	Most Access	Standard Access	More Access	Most Access	
Delivery of data	Mail	At least			At least			
	Online in easily downloadable and machine-readable formats including Energy Service Provider Interface (ESPI)	one of these.	At least one of these.	X	one of these.	At least one of these.	X	
	Online as PDF, directly visible on a web page, or similar forms							
	In-building through a building area network, dedicated device, or mobile app							
Time-period (any combination of delivery modes	Last month	At least one of	X		At least one of	X	X	

that satisfy these requirements)		these.			these.		
	Last 13 months		X	X		X	X
	Since last bill						X
	Last 24 months			X			
Frequency of data (any combination of delivery modes that satisfy these requirements)	Less than 15-minute increments with reporting delay	At least one of these.	At least one of these.	At least one of these.	At least one of these.		At least one of these.
	Less than 15-minute increments without reporting delay.						
	15-minute increments						
	Hourly						X
	Daily					X	X
	Monthly			X		X	X
	Less frequently than monthly						
Access to data	Customer	At least	X	X	At least	X	X
	Available to authorized third party with	one of	At least	At least	one of	At least	At least

	fee  Available to authorized third party without fee	these.	one of these.	one of these.	these.	one of these.	one of these.
	Third-party access via separate account			X			X
Consumption Data (kWh)		X	X	X	X	X	X
Demand Data (kW)					X	X	X
Aggregated data from multiple tenants				X			X

<sup>\*</sup>indicates requirement is for "delivery of data" criteria only (not for policy case of Demand Response/Energy Efficiency)