Open Data Access Framework

Ownership	**Customer is principal owner of retail electric consumption data. The customer has the ability to authorize third parties to access individual customer data, and the customer can revoke that access at the customer's discretion.** **The utility serves as the guardian of retail electric consumption data, and must allow access to third parties where the customer has authorized it.**
Type of Data	**Interval.** Customers should have access to their retail electric consumption data in as short intervals as possible, with 15-minute intervals recommended, but never in intervals greater than 1-hour. This includes power (kW) and energy (kWh) at the designated intervals. **Consumption**. Customers should have access to the monthly aggregate retail electric consumption data used for billing purposes. **Power data**. Any data relating to demand, power quality, availability, voltage, frequency, current, power factor, or other information generated by a meter should be made available to both the customer and the utility. **Pricing.** Customers should have access to any and all price and rate data at the time for which they are being charged that rate. For price and rate data that is known in advance (day-ahead, TOU), price and rate data should be available to a customer for the duration of the price and rate data availability preceding the effective time.
Third Party Access	Third parties are defined as any entity not including the customer or utility that is seeking access to retail electric consumption data. **Customer Authorization.** Customers wishing to provide access to their customer-specific retail electricity consumption data to any third party must affirmatively authorize the third party to gain access. • There should be no distinction drawn between the type of usage data given to third parties with customer authorization now and what usage data will be available following deployment of AMI. Currently authorized third parties should receive interval usage data as it becomes available to customers who have already authorized the same third party access to their usage data. • The authorization process must be simple, practical, and rapid for the customer. • Authorization should be available to customers through the same method as the provision of data where practical (e.g., directly from the meter, through the internet, through mobile devices) using the most convenient method for the customer. Although a customer's non-electronic signature should not be not required to indicate authorization, such a signature is acceptable if the customer and third party determine it is more convenient/appropriate than alternative verbal or electronic methods. A non-electronic signature may be preferred in the case of parties who must attest to the utility having obtained customer authorization on behalf of large groups of

customers.

- For Retail Electric Suppliers (RES), the authorization should last until the customer leaves the service of that RES, unless a customer affirmatively de-authorizes access to data. No distinction should be drawn between those customers who change supply service via municipal aggregation and those who switch due to their individual preference ("organic" customers). Data should be maintained for the entire history of an account.
- For all other third parties, the authorization should last for a term of 24 months, unless a customer affirmatively de-authorizes access to data. Data should be maintained for the entire period of authorization.
- The de-authorization process must similarly be simple, practical, and rapid for the customer.
- Once customer authorization has been given to a third party, the same standards that apply to the access of third parties that have obtained customer authorization should also apply to RES access to such data.
- There is no distinction between data that is used for billing purposes with data that is used for non-billing purposes. The *purpose* of the data (billing vs. non-billing purposes) should be distinct from the *quality* of the data (preliminary vs. bill-quality data). Once a third party obtains a customer's authorization to access that customer's interval data, that third party effectively stands in the shoes of the customer and as such, no additional authorization is needed.
    - For customers who have not yet authorized a third party access to their usage data, authorization must be given that explicitly references "interval usage data" and makes the customer aware that data will be used by the third party to deliver the services being provided but also to develop new services which could be offered to the customer.
    - For customers participating in a municipal aggregation, Retail Electric Suppliers must disclose that access to interval usage data may be used to develop new services beyond what are offered in the aggregation. Authorization for these purposes shall be separately given, as per the Final Order in ICC Docket No. 13-0506, and must be separate from authorization to participate in the aggregation and/or select a new supply service.

Scope of Access. Third parties should be provided access to any and all data (see "Type of Data" and "Forms") when affirmatively authorized by a customer. Where a third party seeks access to customer usage data without customer authorization, the scope of access can be no more limited than allowed by the 15/15 Rule as adopted by the Commission in ICC Docket No. 13-0506. In summary, the 15/15 Rule permits utilities to provide to third parties 12 months of anonymized customer usage data of at least 15 customers within a customer class organized by groups of customers within the same ZIP+4 such that no one customer's usage data comprises more than 15% of the customer group.

Conditions on Access. The utility may institute a process for approval of third parties who wish to obtain access to customer-specific data if such requirements are related to data security, and the ability to receive the transmission of data in an efficient manner.

Format	**Machine-readable.** Customers or affirmatively-authorized third parties should be provided access to their raw retail electricity consumption data in an industry-standard or web-standard machine-readable format (e.g. XML). **Summary.** In order to provide education to customers about consumption behavior and enable opportunities for behavior change, customers should be able to access their retail electricity consumption data in a summary format that is intended to influence specific or general customer behavior (e.g. display of consumption during peak-time events). **Monthly Billing.** Customers should be able to see all the components of their retail electricity consumption data used for billing on their monthly billing statement. This includes consumption aggregated by rate type for customers on dynamic or time-of-use rate plans.
Methods of Delivery	**Directly from the meter.** Usage data should be provided directly from a meter. Any and all data that is generated and transmitted by the meter should be in machine-readable formats. **Directly through the internet.** Usage data should be provided directly through the internet from the utility in machine-readable formats. **Through a Web Portal.** Billing and usage data should be provided in downloadable, comprehensive, and summary forms through web portals operated by utilities or other third-party systems which meet utility security requirements, including utility vendors. **Through mobile applications.** Billing and usage data should be provided. Customers should be able to access timely downloadable, comprehensive, and summary data through mobile applications operated by utilities or other third party systems which meet utility security requirements, including utility vendors. **Bulk Transfers.** For the purposes of efficiency, the utility may maintain a separate process for providing bulk or aggregate customer-specific retail electric consumption data to third parties.
Timeliness	Once recorded, data should be delivered to the customer in a timely fashion as described below. **Real-time.** The utility and third parties shall deliver consumption data to customers in real-time to the extent practical. **1 Hour through Internet/Alternate Communications Network.** To the extent practical, customers and affirmatively-approved third parties should have access to their retail electric consumption data within one hour from the conclusion of an interval period, when accessed directly from the internet or alternate communications network in a machine readable format. **1 Minute directly from the meter.** To the extent practical, customers or affirmatively-approved third parties should have access to their retail electric consumption data within 1 minute when accessed directly from the meter.
Billing-quality Data	Where there is a need for utility meter data management systems and billing

	systems to verify usage data for the purposes of customer billing, such processes should not limit customer access to data available from a meter as soon as it is available. Customers and affirmatively-approved third parties should be able to gain timely access to both preliminary data and billing-quality data. **Preliminary Data.** Data from the meter that has not yet gone through billing system processes for quality assurance. This data may be labeled as "preliminary data." This data must replaced or separately distinguished from billing-quality data once billing-quality data is available. **Billing-quality data.** Data that is sufficient for billing purposes.
Data Security	**Industry-standard protocols.** Data transmission to customers or third parties must be done using industry-standard secure communications and encryption protocols for wireless or network communications (e.g. HTTPS). **Data storage.** Customer-specific data stored by the utility or third parties should secured against unauthorized access using industry-standard cyber security protections. The same data security protections and restrictions on personally identifiable information that apply to the utility shall apply to any third party approved to receive customer-specific data.
Following National Standards	For the **format** and **methods** of provisioning customers with their retail electric consumption data from utility systems, the utility shall follow standards and protocols developed through national, multistakeholder processes. However, a utility shall not be constrained by being the first utility to implement standards developed through such processes.
Customer Charges	Customers and affirmatively-authorized third parties should incur no additional charge for the provision of their retail electric consumption data in a timely, accessible manner to themselves or their third party designee in the manners described herein.