Grid Security & Modernization Webinar - Evolving Customer Needs and Data





September 25, 2018

ELECTRICITY USAGE DATA: OPPORTUNITIES AND POLICY CONSIDERATIONS



November 2017

About CUB and Consumer Advocates

- Disclaimer
- □ Who is CUB?
 - Non profit consumer advocate
 - Education, outreach and litigation
- Role of Consumer Advocates
 - Rate Cases
 - Rates and bills
 - Utility infrastructure investments



Customer Considerations

Basic Customer Needs

- Explaining the Utility Bill
- Energy Usage
- New Opportunities from Utility Investments
 - Dynamic Pricing
 - Research
 - Energy Efficiency and Demand Response
- Customer Privacy
 - Retail Choice Experience
- Utility Information Technology Systems
 - Who Needs What and When?



Illinois Background

Advanced Metering Infrastructure

- 2009 ComEd AMI and Customer Applications Pilot
- 2012 EIMA AMI Implementation Plans
- Data Discussions:
 - Types of Data Defined (Usage, Power Quality, etc.)
 - Protection of Data
- Public Utilities Act
 - 16-122: Municipal Aggregation Data Sharing
 - 16-108.6: Security of Data from AMI
- Consumer Fraud Act
 - 815 ILCS 505/2FFF: Natural Gas Data



Customer Usage Data

 ICC Docket No. 13-0506, Investigation of Applicability of Sections 16-122 and 16-108.6 of the Public Utilities Act (Jan. 2014)

- Anonymous and Aggregated Data
 - CUB/EDF Anonymous Data Protocol
 - 30 Minute Household at ZIP+4 Level
- Identification of PTR/NEM Customers
- RES Access to Current Customer Data for Non-billing Purposes
- RES Access to Prospective Customer Data



Customer Authorization Language

- ICC Docket No. 15-0073, Investigation into the Customer Authorization Required for Access by Third Parties Other than RES to AMI Interval Meter Data (March 2016)
 - Authorization Language
 - Authorization Format



Open Data Access Framework

- ICC Docket No. 14-0507, CUB/EDF Petition for Proceeding to Adopt the Illinois Open Data Access Framework (July 2017)
 - Purpose
 - Organizing Principles
 - Definitions
 - Types of Data
 - Data Format
 - Method of Delivery
 - Timeliness

Use of Usage Data

New Data for Old Questions

- Energy Usage and Data Set Matching
- Modeling Rate Designs and Price Impacts
- Confirming Intuitions (Price Effects)
- Challenging Intuitions (Economic Actions)

CUB/EDF Big Energy Data Project

- Costs and Benefits of Real Time Pricing (Nov. 2017)
- TOU Design and Impacts
- Weather-normalized RTP
- EVs

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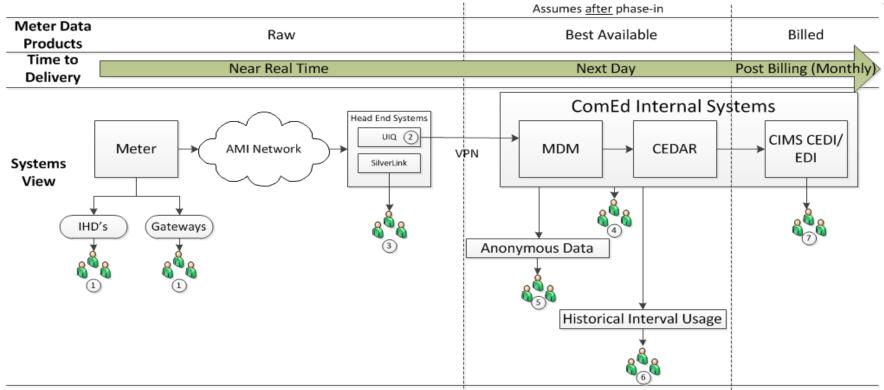


ComEd AMI Data Services

MGA Webinar September 25, 2018

For Discussion Purposes Only

Interval Data Exchanges Diagram



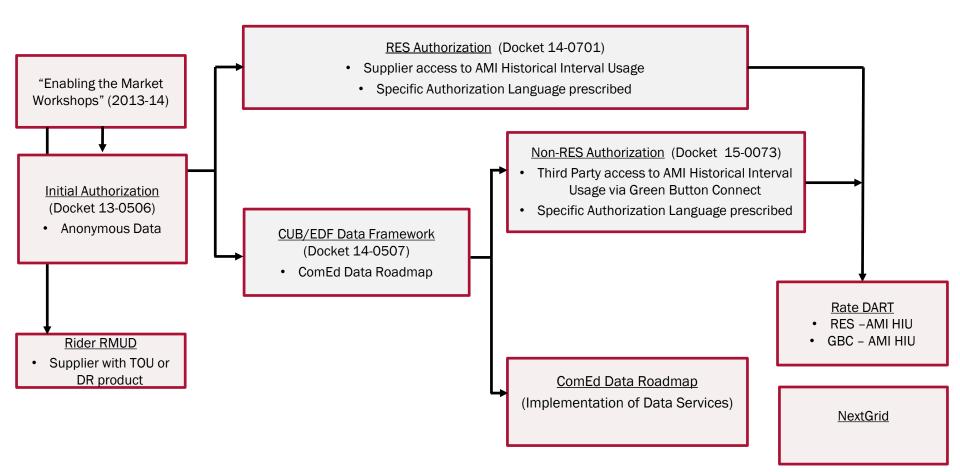
Meter Data Products

ComEd has standard current and evaluating future offerings for the Market. These offerings have been organized into 6 [potential] Data Products. These products are expected to evolve with market innovation and regulatory advancements.

	Product	Description	Interval	Timeliness	History
1.0	Summary Billing	Usage that was used to bill the Customer by ComEd. Summarized at a monthly level.	Month	24 Hours after Billing	Up to 24 Months
2.0	Raw Interval Usage	Usage off the meter that is not validated for measurement errors or gaps filled.	Configurable to Real Time	Near Real Time of Energy Flow	None
3.0	Best Available Interval Usage	Usage that has been partially validated for spikes and gaps filled when possible. Potential for gaps to be filled over outages if flags are not communicated properly.	30 Min or as programed by meter for billing	Next day	Up to 24 Months
4.0	Interval Billed Usage	Usage that has been fully validated by ComEd for Billing purposes. Quality of usage has been checked and Gaps filled for purposes of producing the ComEd bill.	60 Min	24 Hours after Billing	Up to 24 Months
5.0	Anonymous Usage Data	Anonymous data sourced from 3.0 or 4.0 above that follow the 15/15 rule described in the customer data privacy docket.	30 Min or as programed by meter for billing	Next day	Up to 24 Months
6.0	Other Meter Data	Non-Usage data that is captured by the meter - including, but not limited to, Voltage, Alarms, and Alerts.	TBD	TBD	TBD

Data Sharing Progression

To date, the Illinois Commerce Commission has addressed data sharing of AMI usage data.



Questions & Answers



Upcoming Webinars

October 17-18, 2018 – In –person Meeting in St. Louis, Missouri

For more information, and to register, please visit www.midwesterngovernors.org/GSM-phase-ii.

