Data & the Evolving Energy Customer

Kristin Barbato – March 2018
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Customer energy services and markets background in public, private, utility, and academic sectors

- Adjunct Professor – Energy Management for Portfolios
- Former utility executive – Edison Energy, NYPA, Con Edison
- Chief Energy Management Officer of New York City
- Independent consultant – energy markets & services advisory
Customers’ needs are changing

- Traditionally, subject to utility capability, information
- Drivers including technology innovation and customer choice
- Encroachment of new services from non-monopoly providers changing the landscape

*In short, customers demand energy information and the digital world is evolving to meet it.*
New York City’s Energy Data

Largest municipal energy operations in US

- 4000+ municipal facilities
- $800M annual utility bill
- Nearly 10% of total NYC energy consumption
- Varied operations including:
  - Fire houses
  - Police precincts
  - Schools
  - Waste water treatment plants
  - Hospitals
  - Housing
  - Garages
  - Office buildings
Aggregated Customer Data Views

**Trends in energy usage more clearly visible**

- Data aggregated for market level decisions
- Portfolio level management is critical for large entities
- Streamlining programs and solutions for operational trends

*NYPAs Energy Manager – customer usage data*
Customer site data tells a story

What can you do with better information?

- Improved operational efficiency and cost savings
- Relationship between capital investment and preventative maintenance
- Replicability across like operations
- Investor confidence and client engagement
Utility data: commoditized

What happens if utility customer data becomes open?

- Green Button Standard
- Improved models for on-site efficiency
- Pricing projections beyond day-ahead or zones
Data access enables market transformation

**What’s next in customer energy data access?**

- Smart predictive maintenance
- Refined levels of energy consumption and operational decisions
- Links to air and water quality
- Storage and renewables change the instantaneous nature of on-demand resources
- No more last mile requirements?
Thank you!

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