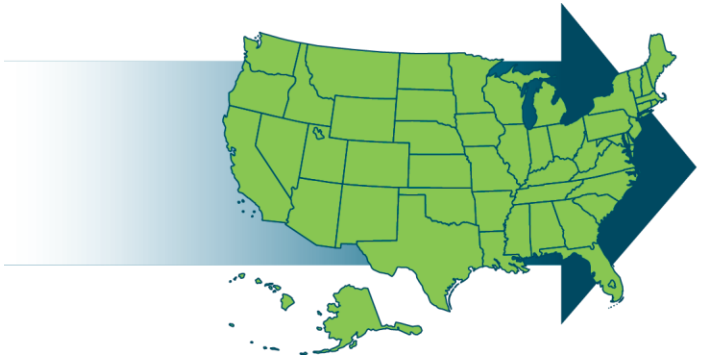

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A Utility Regulator's Guide to Data Access for Commercial Building Energy Performance Benchmarking

Presentation to the EEB Hub Data Access Working Group

February 8, 2013

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SEE Action Overview

- A state and local effort facilitated by the federal government that helps states, utilities, and other local stakeholders take energy efficiency to scale and achieve all cost-effective energy efficiency by 2020.

Participants in developing this guide:

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- David Westman, Consolidated Edison
- Alex Churchill, Duke Energy
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- Anna Rosen, Duke Energy
- Ted Thomas, Duke Energy
- Aryeh Fishman, Edison Electric Institute
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- Jennifer Easler, Iowa Office of Consumer Advocate
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- John Sibley, Southface Energy Institute
- Brenna Walraven, USAA Real Estate Company

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Building Owners Use Energy Data to Improve Energy Efficiency

Among facility managers who have used ENERGY STAR for benchmarking:

70%
Have used ENERGY STAR to guide energy efficiency upgrade plans

67%
have used ENERGY STAR to justify an energy efficiency project

Source: Survey of hundreds of facility managers. Audin, Lindsay. "Finding Your Best Energy Opportunity." Building Operating Management. December, 2011.

Utility programs promoting benchmarking can drive similar results:

62%
said that benchmarking their building's performance strongly influenced them to take energy management actions

84%
of those who benchmarked made energy efficiency retrofits or operational improvements to their buildings

California Statewide Benchmarking Process Evaluation, NMR Group, Inc. April, 2012.

Information about building energy performance can drive improved efficiency. This is a key motivator for building energy data access.

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Purpose of Guide

- Describe the **value of data access** to support **benchmarking** as an energy management best practice;
- Identify **key barriers and challenges** related to utility provision of energy data to commercial customers;
- Enable **utility regulators** to take a more active role in **enhancing data access**; and
- Clarify key **decision points** and offer **recommendations** for utility regulators.

Guide is **NOT YET FINAL**, will be published in March

The Importance of Data Access for Energy Management

- Key drivers of increased data access:
  - Private sector is using benchmarking and energy management strategies that rely on data about building energy use
  - State and local voluntary benchmarking initiatives are being used to drive interest in energy efficiency and identify opportunities
  - Utility efficiency programs incorporating benchmarking & energy management rely on data available to building owners
  - State and local benchmarking & disclosure legislation
- Benefits:
  - Energy usage data is the foundation of energy management strategies
  - Building owners and managers use data to pursue energy savings in commercial building
  - Lead to improved utility customer satisfaction

Benchmarking is a critical activity for driving broad reductions in commercial building energy use – but successful benchmarking is dependent upon having access to data.

Data Access Challenges for Commercial Customers

- Difficulty accessing complete energy usage data
  - Most pronounced for multi-tenant buildings where individual tenants are billed directly by utility
- Wide variations in how customers gain access to their energy data
  - Customer self-service (e.g., on-demand data) vs. need for utility involvement
- Differences in the format of the data provided by utilities
  - Can require manual re-entry of data into benchmarking tools

Options for Enhanced Data Access

- Three primary solutions currently used to enhance access
  - Utility aggregation of whole-building data
  - Portfolio Manager Data Exchange
  - Green Button
- Considerations for regulators
  - These solutions should be seen as complementary, and are not mutually-exclusive
  - No “one-size-fits-all” solution
  - Portfolio Manager data exchange of direct relevance for jurisdictions that require use of Portfolio Manager
  - All solutions will require infrastructure development

Implementing Data Access Solutions: Recommendations for Regulators

Key Considerations	Recommendations
Number of customers benchmarking can increase dramatically when barriers are reduced	Consider system maintenance and long-term scalability as more customers begin benchmarking
Data access functionality must be integrated with existing utility data systems	Consider data access solutions in the context of other large-scale IT infrastructure upgrades (e.g., AMI deployment)
Not all utilities will be able to easily map meter locations to building addresses; may require additional effort, assistance from building owner	Consider meter-to-building mapping as part of AMI/Smart Grid efforts; this can streamline benchmarking and improve EE program targeting
Need to coordinate efforts of single-fuel utilities to ensure customers have access to complete energy data	Consider encouraging or requiring coordination between single-fuel utilities to improve customer experience
Customers must understand their role in the benchmarking process	Plan and budget for customer education on the benchmarking process

Ensuring Customer Data Privacy: Recommendations for Regulators

Key Considerations

Multi-tenant facilities can present a significant hurdle to benchmarking activity

Provision of aggregated, anonymous whole-building data to the building owner/manager may be a possible solution

There continue to be legal uncertainties regarding the provision of aggregated, whole-building data without explicit tenant authorization

Recommendations

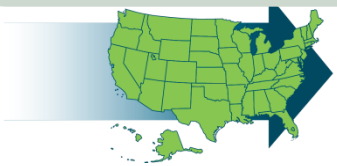
Confirm common understanding of privacy rules among all relevant stakeholders, in light of existing statutes, regulations, policies, etc.

Provide clear, affirmative guidance to utilities regarding:

- Use of electronic authorizations for data release
- Use of lease provisions as data release authorizations
- Threshold number of tenants for which utility can provide aggregated whole-building data without authorization
- Legal protection to utilities if data are mis-used by 3rd parties in the future

Options for Cost Recovery: Recommendations for Regulators

Key Considerations	Recommendations
Limiting functionality due to first-cost concerns may hamper user experience in the future Utility costs for implementing data access solutions vary widely Reported cost of PM Data Exchange implementation vary depending on details	Consider ongoing (lifetime) costs and benefits, in addition to the initial cost
	To the extent possible, provide clear and timely guidance to utilities regarding costs that can be recovered
Cost recovery approaches may include: • Recovery in efficiency program costs • Recovery through base rates • Fee-for-service Free-to-use models can encourage benchmarking across more buildings, driving additional savings	Choose a cost recovery mechanism that provides stability and encourages participation
May be possible to provide cost recovery through other approved projects (e.g., AMI/Smart Grid efforts)	Incorporate data access solution costs in large-scale IT infrastructure upgrades when an opportunity exists (e.g., AMI)



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Questions?

The Regulator's Guide will be published in March

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