Partnering with your Utility to Get Whole-Building Data in Multi-Tenant Buildings

Moderator: Kevin Bush, HUD
Panelists: Brian Bieler, REACH CDC
Michael Bodaken, National Housing Trust
Kevin Bricknell, ComEd
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Michael Bodaken
National Housing Trust
About the National Housing Trust

NHT protects and improves existing affordable rental homes so that low income individuals and families can live in quality neighborhoods with access to opportunities.
NHT/Enterprise is committed to increasing the energy efficiency of our existing and future properties

- Mountain View Tower—114 unit senior affordable housing owned by National Housing Trust/Enterprise

- **Efficiency improvements:** energy-efficient boiler for the central heating system, ENERGY STAR qualified residential light fixtures and appliances

- **Energy savings:**
  - Envelope: 25% more efficient
  - Interior Lighting: 30% more efficient
  - Exterior Lighting: 50% more efficient

Figure 1: Mountain View’s green roof with vegetation and useable terrace space for residents.
Access to whole-building energy usage data in affordable multifamily housing is critical for good property management

- Perform detailed analysis of properties to prioritize energy and water efficiency upgrades.
- Assist residents in saving on their utility bills
- More accurately determine utility allowances
- Consider portfolio-wide opportunities
- Verify the results of upgrades
- Provide an underwriting basis for expected utility cost reduction achieved through energy efficiency and renewable energy programs
NHT and partners will target up to 12 states to deeply engage with utilities to advance efficiency programs for affordable multifamily.

**Objectives:**

1. Build an effective national network among efficiency and affordable housing champions

2. Facilitate stakeholder engagement to increase utility funding for affordable multifamily housing

3. Expand and improve utility efficiency programs to benefit low-income

4. Engage building owners to grow demand for enhanced utility programs

**Target states:**

- California
- New York
- Illinois
- Maryland
- Michigan
- Minnesota
- Pennsylvania
- Missouri
- Rhode Island
Access to energy usage data in affordable multifamily housing is critical for good utility program design

- Identify properties that benefit from energy efficiency upgrades
- Providing guidance for energy efficiency program development
- Prioritizing program resources to target the most energy inefficient buildings
- Verifying results of energy upgrades
Access to aggregate whole-building energy data provides useful information to owners and protects tenants’ privacy.

- Obtaining and managing tenants’ authorization is impractical for both owners and the utilities.
  - High turn-over rate, requiring new authorization
  - Tenants wary of providing access to their utility account information

- Access to aggregate whole-building data addresses utilities’ and consumer rights advocates’ concerns about compromising resident privacy.
NASUCA and NARUC support the use of aggregated data that protects consumer privacy.

- **National Association of Regulatory Commissioners (NARUC) resolution, adopted July 2011**
  - NARUC supports taking reasonable measures to facilitate convenient, electronic access to utility energy usage data including *aggregated* data that does not reveal customer-specific data to the extent provided for under State law and regulations.

- **National Association of State Utility Consumer Advocates (NASUCA) resolution, adopted November 2013**
  - NASUCA supports access to whole-building energy consumption data as long as, “all feasible measures to ensure the privacy of individual tenant data, including anonymized *aggregation* of the energy consumption data for any specific building, are adopted...”
Local jurisdictions and states have developed aggregation policies to make data accessible and protect tenant privacy.

- **Washington, D.C.**
  - Pepco provides aggregate whole-building electricity information for residential buildings with 5 or more units, without requiring releases from tenants.

- **Oklahoma’s Electric Usage Data Protection Act, 2011**
  - Allows aggregate usage data to be disclosed without customer consent for purposes such as:
    - promoting energy assistance
    - conservation
    - environmental advocacy
    - research
    - measuring company performance
For more information:

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ComEd:

- 3.8 Million Electric Customers in Chicago/Northern IL
- 350,000 Business Customers

Energy Data Services:

- Energy Insights Online (EIO) - Web Based Energy Consumption Tracking
- Energy Usage Data System (EUDS)
- Enterprise Service Bus (ESB)
What is **Smart Ideas for Your Business?**

- Provides incentives for energy efficiency upgrades and equipment
- Part of Illinois energy legislation passed in 2007
- Program implemented by ComEd, Ameren Illinois and the Illinois Department of Commerce and Economic Opportunity
- Now in sixth year of program
- Ratepayer funded program

**Smart Ideas Energy Efficiency Goals (MWh)**
Smart Ideas Helps You Become More Energy Efficient

- Smart Ideas Opportunity Assessments
- Standard and Custom incentives
- New Construction
- Small Business Energy Savings
- Data Center
- Business Instant Lighting Discounts (BILD)
- Commercial Building Optimization
  - Retro-commissioning
  - Monitoring Based Retro-commissioning
- Industrial Systems Optimization
  - Compressed Air
  - Process Cooling
  - Refrigeration
Energy Usage Data System (EUDS)

✓ Enter your Portfolio of Commercial Buildings

✓ Automated End to End Data Retrieval and Reporting

✓ Export Usage Data for input into Portfolio Manager

✓ Secure System and Data Transmission
Functionality Overview

✓ One Time and Recurring Data Requests
✓ Tenant Verification
✓ Whole Building Data Usage Totals per Month (kWh)
✓ Automatically submit energy usage data to Portfolio Manager (ABS)
## Add Building:

**Add New Building (Primary Address)**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Name</td>
<td>20 S Clark</td>
<td>No special characters other than [-'] are allowed and the building name cannot start with special characters.</td>
</tr>
<tr>
<td>Street Number</td>
<td>20</td>
<td>Street number can have numbers separated by (-). E.g., 13, 134-235</td>
</tr>
<tr>
<td>Street Name</td>
<td>Clark</td>
<td>No special characters other than [-'] are allowed and the street name cannot start with these special characters.</td>
</tr>
<tr>
<td>Street Direction</td>
<td>South</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>Illinois</td>
<td></td>
</tr>
<tr>
<td>City</td>
<td>Chicago</td>
<td></td>
</tr>
<tr>
<td>Zip</td>
<td>60606</td>
<td>Zip code should be in 5 digits. E.g., 50571</td>
</tr>
</tbody>
</table>
Add Request:

Building Name: 20 S Clark

Starting Date: 01 Jan 2010

Ending Date: 31 Dec 2010

Request for: Monthly

Place Request: Now

Submit | Cancel
## Verify Tenants:

### Tenant Verification

<table>
<thead>
<tr>
<th>Status</th>
<th>Tenant Name</th>
<th>Tenant Address</th>
<th>Confirm/Deny</th>
<th>Category</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACCOUNTANTS INTERNATIONAL</td>
<td>20 S CLARK, UNIT 24WB, CHICAGO</td>
<td>Confirm</td>
<td>Uncategorized</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AFFILIATED NETWORK SERVICES</td>
<td>20 S CLARK, UNIT 1850, CHICAGO</td>
<td>Deny</td>
<td>Uncategorized</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AGORA INS NETWKS SOLUTIONS</td>
<td>20 S CLARK, UNIT 800, CHICAGO</td>
<td>Confirm</td>
<td>Uncategorized</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AUDREY GAYNOR &amp; ASSOC</td>
<td>20 S CLARK, UNIT 1620, CHICAGO</td>
<td>Deny</td>
<td>Uncategorized</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BELONGIA SHAPIRO &amp; FRANKLIN</td>
<td>20 S CLARK, UNIT 3E, CHICAGO</td>
<td>Confirm</td>
<td>Uncategorized</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BRANDWEIN &amp; SMOLIN</td>
<td>20 S CLARK, UNIT 410, CHICAGO</td>
<td>Deny</td>
<td>Uncategorized</td>
<td></td>
</tr>
</tbody>
</table>

- Active Tenant  - Inactive Tenant

Please verify all the records in all the pages

[Confirm All] [Submit Tenant List]
Data Returned
-- Submit to ENERGY STAR

<table>
<thead>
<tr>
<th>Month Year</th>
<th>Total Monthly Usage (kWh)</th>
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</thead>
<tbody>
<tr>
<td>Jan 2010</td>
<td>1,082,966</td>
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<tr>
<td>Feb 2010</td>
<td>961,654</td>
</tr>
<tr>
<td>Mar 2010</td>
<td>657,748</td>
</tr>
<tr>
<td>Apr 2010</td>
<td>498,732</td>
</tr>
<tr>
<td>May 2010</td>
<td>557,258</td>
</tr>
<tr>
<td>Jun 2010</td>
<td>590,241</td>
</tr>
<tr>
<td>Jul 2010</td>
<td>652,061</td>
</tr>
<tr>
<td>Aug 2010</td>
<td>639,872</td>
</tr>
<tr>
<td>Sep 2010</td>
<td>710,775</td>
</tr>
<tr>
<td>Oct 2010</td>
<td>458,091</td>
</tr>
<tr>
<td>Nov 2010</td>
<td>678,545</td>
</tr>
<tr>
<td>Dec 2010</td>
<td>1,085,638</td>
</tr>
<tr>
<td>Total</td>
<td>8,573,581</td>
</tr>
</tbody>
</table>
Before (Manual Process)
• Cost to Customer
• Cycle Time 10-12 Days
• Labor Intensive
• Limited Number of Requests
• Data Provided Quarterly and/or Annually
• Customer contacts ComEd to obtain data

After (Automated Process)
• No Cost to Customer
• Cycle Time 1-2 Days
• Completely Automated
• Unlimited Number of Requests
• Monthly Data
• Customer empowered to obtain data whenever needed
Support for Energy Usage Data System:

- Technical Support
- Admin Support
- Online Mailbox
- Online Training
  - Job Aids
  - Webinars
- LCS Account Managers
- Ongoing joint training workshops supporting City of Chicago Benchmarking Ordinance
Questions?

Smart Ideas Program questions …

New Number! (855) 433-2700

✓ www.ComEd.com/bizincentives
  • Program information
  • Application forms

Energy Data Services…

✓ www.ComEd.com/EnergyUsageData
  • Enrollment information
  • Training materials
Thank You!

Kevin Bricknell, EDS Program Manager
(630) 437-3118

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