Illinois Smart Grid: Outreach Efforts in Low-Income Communities
What is CUB?

- Fights rate hikes
- Protects consumer interests
- Analyzes utility bills
- Advocates for energy efficiency

CUB Outreach Services:

- Utility Bill Clinics
- Speaking Engagements
- Fairs/Tabling Events
- Energy Efficiency Seminars

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Welcome to Illinois!

- 2014: 12.88 million people
  - 5th most populous state
  - 17th median income ($54K)
- Illinois LIHEAP
  - 102 counties
  - 35 LAAs
  - PY 15:
    - $154 million federal
    - $77 million state
    - 334,000 households
    - Including 56,000 on PIPP
      - “Percentage of Income Payment Plan”
Smart Grid & Smart Meters

• What is the Smart Grid?
  • Update to our aging power grid through ComEd and Ameren Illinois
  • Also known as AMI: Advanced Metering Infrastructure
  • Work to be completed by 2018
  • Fewer power outages and less waiting for service restoration
  • Reducing wasted costs (line loss)

• What is a Smart Meter?
  • Digital meter
  • No more estimated bills
  • Real-time information on power use
  • New options for electricity rates
## Smart Grid Increases Customer Choices

<table>
<thead>
<tr>
<th>PLAN</th>
<th>WHAT IT DOES</th>
<th>RISK/REWARD</th>
<th>OPPORTUNITIES TO SAVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional</td>
<td>Charges you set rate that never changes, other than a slight summer increase.</td>
<td>No risk, but no reward.</td>
<td>You are stuck on a bloated rate that offers no flexibility to take advantage of lower market power prices.</td>
</tr>
<tr>
<td>Electricity Rates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak-Time Rebate</td>
<td>Rewards you with a bill credit if you put off heavy electricity usage during certain, “peak” times of the day.</td>
<td>No risk, low/high reward.</td>
<td>Your rates never get higher, and smart actions at home reward you with a bill credit.</td>
</tr>
<tr>
<td>Real-Time Pricing</td>
<td>Charges you electricity rates that change hourly.</td>
<td>Some risk, high reward.</td>
<td>You pay much lower power rates during hours when demand is low.</td>
</tr>
<tr>
<td>Time of Use Rate</td>
<td>You pay set rates of electricity for set periods of the day.</td>
<td>Less risk, high reward.</td>
<td>Similar to real-time pricing, you benefit if you can postpone heavy power usage until periods of the day when your rates are lower.</td>
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CUB Outreach Efforts on the Smart Grid

Smart Grid Event

• Any area that has received a new meter or will be receiving a new meter in 2015-2016

• CUB held over 420 events in 2014

• CUB reached over 19,000 people in Smart Grid territory in 2014
Common Concerns & Barriers in Low-Income Communities

• Will this increase my bill or help me save money?
• Will the Smart Meters allow utility companies to quickly disconnect service due to non-payment?
• Low trust of utility companies
• Indifference
• Installation Access/Meter Refusals
Messaging that works

• While funds for energy assistance programs remain uncertain, energy efficiency continues to be the best way to save money and energy on your bills.
  – Introduce free EE programs or low-cost EE tips
• Energy efficiency and smart grid technology is designed to give you more power over your power.
• Eliminates estimated bills and wait times calling your utility company to report an outage.
• Fewer and shorter power outages.
• Rules around service disconnection will not change, utility companies must appropriately notify customers before disconnection.
CUB Energy Saver

Save Money. Earn Rewards.
Take the Pledge

Free! Get started

- Install CFLs
- Turn Off Coffee Maker After Brewing
- Clean Your Dryer’s Lint Filter
- Use an Advanced Power Strip

Pledge to save up to $250 annually by using less energy.
Measuring Savings and Earning Rewards

WAYS TO SAVE

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Category</th>
<th>Cost</th>
<th>Savings</th>
<th>Payback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install CFLs</td>
<td>Appliance</td>
<td>$12.00</td>
<td>$44.74/yr</td>
<td>3 months</td>
</tr>
<tr>
<td>Install a Kitchen Sink Aerator</td>
<td>Water Heating</td>
<td>$4.00</td>
<td>$12.73/yr</td>
<td>4 months</td>
</tr>
<tr>
<td>Use a Low-Flow Showerhead</td>
<td>Water Heating</td>
<td>$30.00</td>
<td>$64.67/yr</td>
<td>6 months</td>
</tr>
<tr>
<td>Use a Drying Rack</td>
<td>Other Appliances</td>
<td>59%</td>
<td>16%</td>
<td>13%</td>
</tr>
<tr>
<td>Reduce Your Shower Time</td>
<td>7.056 kWh</td>
<td>5.9%</td>
<td></td>
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</tbody>
</table>
Questions?

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Smart Grid In New Hampshire

- NHEC deployment done, ready to start rolling out Smart applications
- **Outage Management**: storms are frequent, data from smart grid will enable better decision making and better outage reporting and ultimately allow utilities to build out better data driven systems (OMS, Workforce Management, GIS, Reporting...) The goal is to reduce major storm outages from 7 days to 4.
- General concerns and benefits in NH