Panel 3: Nexus Between EV’s and Grid Stabilization

Best Practices and Trends in Rate Structuring for accessibility and the promotion of efficiency

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Agenda:

1. Ameren Missouri “Charge Ahead” Program
2. Opportunities for Rate Structuring
3. Illinois Rate & Market Structures
4. How can IL promote efficient deployment of EV’s?
Ameren Missouri “Charge Ahead” Program (Pending)

Three (3) Separate Programs

1) Charge Ahead–Electric Vehicles Infrastructure Incentive Program -Budget $11M
2) Charge Ahead – Business Solutions (Efficient Electrification) -Budget $7M
3) Line Extension Program (revised existing policy)

• **Overarching Objective of Programs- > Increase the Utilization of the Electric Grid**

**Benefits of Programs**

• Lower Rates (*non-participants*) - proliferation of EVs and their ability to improve utilization of fixed assets when charging is done during off-peak time periods.

• Energy Conservation (*participants*) - lower energy costs through lower overall energy consumption on a BTU basis

• Consumer Choice (*participants*) – more technology options

• Cleaner Environment (*society*) - Lower local and global emissions
Opportunities for Rate Structuring

Rate Designs that take advantage of this flexibility will provide great benefits to participants & non-participants.
Ameren Illinois
Rate & Market Structure

• Delivery Service
  • Residential & Sm. Comm. - KWh Energy Charge
  • Lg. C&I – kW Demand Charge
• Power Supply (Customer Choice)

<table>
<thead>
<tr>
<th>% of total energy delivered</th>
<th>BGS</th>
<th>RTP</th>
<th>RES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>41%</td>
<td>1%</td>
<td>58%</td>
</tr>
<tr>
<td>Small Commercial</td>
<td>32%</td>
<td>1%</td>
<td>68%</td>
</tr>
<tr>
<td>Commercial and Industrial</td>
<td>n/a</td>
<td>15%</td>
<td>85%</td>
</tr>
<tr>
<td>Large Commercial and Industrial</td>
<td>n/a</td>
<td>9%</td>
<td>91%</td>
</tr>
</tbody>
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red denotes Ameren Supply Option
How can IL promote efficient deployment of EV’s?

• Leverage Advanced Meter Infrastructure (AMI) & other technologies for rate designs

• *Alternative Delivery Service* Rate Structures
  • kWh ENERGY-based Time of Use Rate, OR
  • kW DEMAND-based Time-of-Use Rate

• *Power Supply* Rate Structures
  • Encourage RES to offer innovative pricing options
  • Encourage Real Time Pricing Options

• Provide cost recovery mechanisms for utility sponsored EV programs