RESIDENTIAL TIME OF USE

Public Utilities Commission
Smart Grid Workshop
April 5, 2013
WHAT WE’LL COVER

Who we are
Why we modified our TOU rate
Member Feedback - Before
Rate Design Considerations
Member Feedback – After
Moving Forward
WHO WE ARE

Connexus Energy
Not for Profit – Member Owned Cooperative
Serve 126,000 member/owners
2,245 GWH Sales

52% Residential
35% Commercial
13% Other

Owned by the members we serve.
WHY WE MODIFIED OUR TOU RATE

Only 116 on Residential TOU
Members very cautious

Peak Period Summer $0.2145/kWh
Peak Period Other $0.1585
Off Peak Period $0.0608

(peak period 2PM-7PM 7 days/week)

Small increase in number of Electric Vehicles and member inquires:

Chevy Volts
Nissan Leafs
Tesla’s
Voice of the Member – Before
Purchased vehicle for:
Economic reasons – 50%
Environmental reasons – 50%
Volt owners haven’t used any gas since purchase
Wanted choice of when to charge
Most wanted “fast” chargers
Most would install TOU
Brett V –
“I would move from charging my vehicle at 6PM to non-peak times with TOU”
## Rate Design Considerations

How members could charge their vehicles

<table>
<thead>
<tr>
<th>Type</th>
<th>Voltage</th>
<th>Demand</th>
<th>Charging Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>120</td>
<td>1.9 kW</td>
<td>10 Hours</td>
</tr>
<tr>
<td>Level 2</td>
<td>240</td>
<td>3.4 kW</td>
<td>5.6 Hours</td>
</tr>
<tr>
<td>Level 3</td>
<td>240</td>
<td>6.6 kW</td>
<td>2.9 Hours</td>
</tr>
<tr>
<td></td>
<td>EV Saturation</td>
<td>$/kWh</td>
<td>kWh</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------</td>
<td>-------</td>
<td>-----</td>
</tr>
<tr>
<td><strong>Base Case</strong></td>
<td>0%</td>
<td>$0.126</td>
<td></td>
</tr>
<tr>
<td>1.9 kW charger</td>
<td>10%</td>
<td>$0.127</td>
<td>3.5%</td>
</tr>
<tr>
<td>1.9 kW charger</td>
<td>50%</td>
<td>$0.129</td>
<td>21.1%</td>
</tr>
<tr>
<td>3.4 kW charger</td>
<td>10%</td>
<td>$0.129</td>
<td>3.5%</td>
</tr>
<tr>
<td>3.4 kW charger</td>
<td>50%</td>
<td>$0.139</td>
<td>21.1%</td>
</tr>
<tr>
<td>6.6 kW charger</td>
<td>10%</td>
<td>$0.135</td>
<td>3.5%</td>
</tr>
<tr>
<td>6.6 kW charger</td>
<td>50%</td>
<td>$0.163</td>
<td>21.1%</td>
</tr>
</tbody>
</table>

Based on 2011 Cost of Service Study / Residential Revenue Requirements
Potential impact to Connexus Energy

Off Peak Charging
Positive Margins

Peak Charging
Level 1 – ok
Level 2-3 – Up to $900 loss/EV/Yr
(Considerable Cost Shifting)
No risk 12 month trial

Meter premium – None (blend cost into rate)

Minimize On-Peak Period

- 4 hours per day (4 PM to 8 PM)
- Week days only + holiday exclusion

Two Options

- Whole house (1 meter)
- Sub-metered for electric car only (two meters)
NEW TOU RATE

Residential Time-Of-Day
Whole House or Electric Vehicle Charging

Conexus Energy is leading the way in energy saving opportunities for members. Because wholesale electricity costs fluctuate throughout any given day, we’ve designed a rate to help you decide when you can save the most on your electricity costs. It’s Good for You, Good for Us, and Good for the Environment.

How it works - choose a rate option

Whole House Time-of-Day
A Conexus Energy meter technician will install your existing meter with a Time-Of-Day feature. You’ll pay the kWh rates listed for all the electricity you use throughout your home, according to the time of day. The savings can add up when you make the choice to use energy at different times of day.

Electric Vehicle Only** — $270 Rebate
Conexus members will pay reduced electric rates to charge their electric vehicle(s) over 7,000 hours per year. Giving electric vehicle owners even more opportunity to reduce their cost per mile. And, unlike traditional electric programs, the sophisticated charging system is energized 24 hours a day. Members may restrict their own charging, or Conexus Energy’s contract with utilities will schedule a time to install the metering equipment. All work must be permitted and inspected.

Time of Day Rate

<table>
<thead>
<tr>
<th>Energy Change</th>
<th>Time</th>
<th>Day</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Period (Summer)**</td>
<td>4 p.m. - 8 p.m.</td>
<td>M-F</td>
<td>June - Sept.</td>
</tr>
<tr>
<td>Peak Period (Winter)**</td>
<td>4 p.m. - 8 p.m.</td>
<td>M-F</td>
<td>Oct. - May</td>
</tr>
<tr>
<td>Intermediate Period*</td>
<td>8 a.m. - 4 p.m.</td>
<td>M-F</td>
<td>All Year</td>
</tr>
<tr>
<td>Off Peak Period*</td>
<td>6 p.m. - 9 a.m.</td>
<td>All Days</td>
<td>All Year</td>
</tr>
</tbody>
</table>

*Present or hours during years
There are no peak periods or weekends on the following holidays: New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas Day.

It’s Guaranteed!
Whether 12 months or more on the Time-of-Day rate, when compared to the current standard electric rate, Conexus Energy will credit the difference of the two rates as per Residential Time-of-Day Rate Table.

Contact Us
Conexus Energy can help you determine if this rate is a good fit for your household. For more information contact Kent Glazer at 761.325.2648 or email to kent.glazer@conexusenergy.com.

Owned by the members we serve.
Voice of the Member – After

Eight immediately installed TOU

Two whole house

Six TOU sub metered

Two pending installations
Continue to monitor member feedback
Search out EV Owners
Newsletters
Associations
John Gasal
Connexus Energy
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Manager, Regulatory and Government Affairs
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