

RESIDENTIAL TIME OF USE

**Public Utilities Commission
Smart Grid Workshop
April 5, 2013**

Owned by the members we serve.





Who we are

Why we modified our TOU rate

Member Feedback - Before

Rate Design Considerations

Member Feedback – After

Moving Forward

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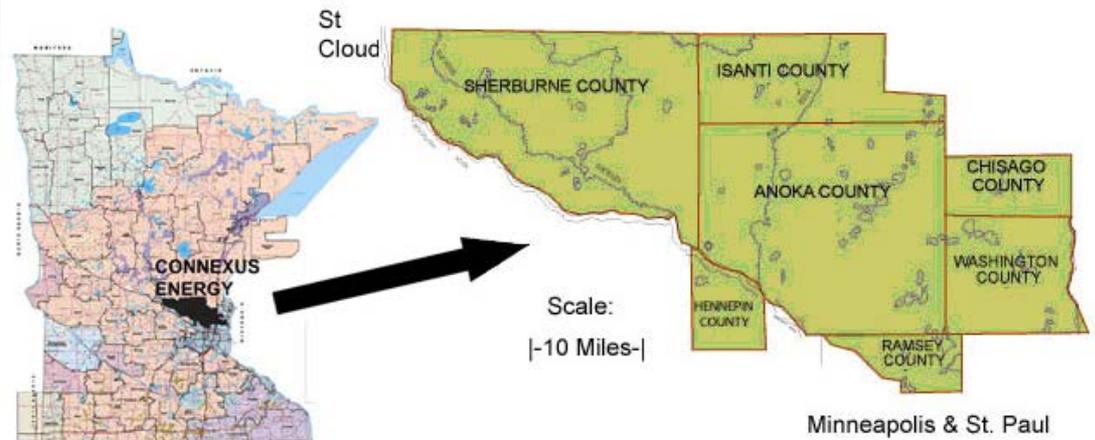
Connexus Energy

Not for Profit – Member Owned Cooperative

Serve 126,000 member/owners

2,245 GWH Sales

52% Residential
35% Commercial
13% Other



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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

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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”



How members could charge their vehicles

Type	Voltage	Demand	Charging Time
Level 1	120	1.9 kW	10 Hours
Level 2	240	3.4 kW	5.6 Hours
Level 3	240	6.6 kW	2.9 Hours

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RATE IMPACT IF EV CHARGES DURING SYSTEM PEAK

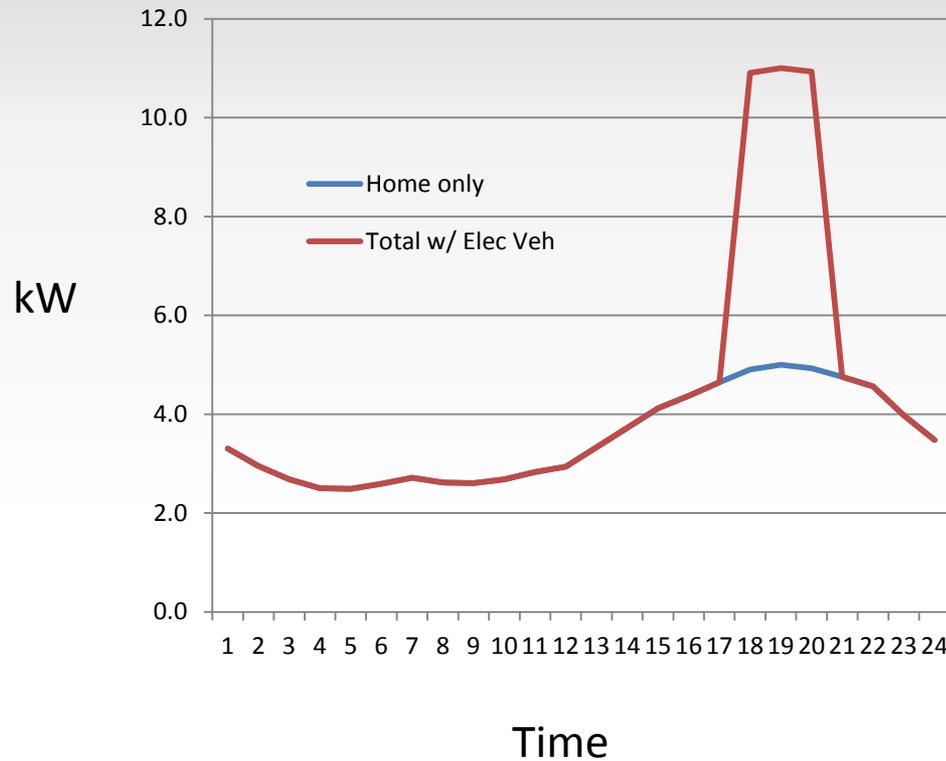


	EV Saturation	\$/kWh	% increase in	
			kWh	Rate
Base Case	0%	\$ 0.126		
1.9 kW charger	10%	\$ 0.127	3.5%	0.4%
1.9 kW charger	50%	\$ 0.129	21.1%	1.9%
3.4 kW charger	10%	\$ 0.129	3.5%	2.4%
3.4 kW charger	50%	\$ 0.139	21.1%	10.5%
6.6 kW charger	10%	\$ 0.135	3.5%	6.7%
6.6 kW charger	50%	\$ 0.163	21.1%	29.0%

Based on 2011 Cost of Service Study / Residential Revenue Requirements

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CONTRIBUTION TO PEAK DEMAND



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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)

TOU KEY PRINCIPLES – REDUCE BARRIERS TO ADOPTION



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)

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Residential Time-Of-Day

Whole House or Electric Vehicle Charging

Connexus 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. That'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 Connexus Energy meter technician will replace your existing meter with a Time-Of-Day meter. You'll pay the kWh rate 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

Connexus members will pay reduced electric rates to charge their electric vehicle(s) over 7,700 hours per year. Giving electric vehicle owners even more opportunity to reduce their cost per mile. And, unlike traditional off-peak programs, the sophisticated charging system is energized 24 hours a day. Members may contract their own electrician, or Connexus Energy's contract electrician will schedule a time to install the metering equipment. All work must be permitted and inspected.

Time of Day Rate

Wholehouse Cost of Basic Service: ... \$0.50 per month (in lieu of General Service Cost of Basic Service)

**Electric Vehicle Charging: \$270 Rebate for installation of Time-of-Day meter

Energy Charge	Time	Day	Month
Peak Period Summer* (4%)	\$0.438/kWh	4 p.m. - 8 p.m.	M-F June - Sept.
Peak Period Winter* (8%)	\$0.328/kWh	4 p.m. - 8 p.m.	M-F Oct. - May
Intermediate Period* (38%)	\$0.069/kWh	8 a.m. - 4 p.m. 8 a.m. - 8 p.m.	M-F Sat/Sun All Year
Off Peak Period* (50%)	\$0.057/kWh	8 p.m. - 8 a.m.	All Days All Year

*Percent of hours during year

There are no peak periods on weekends or the following holidays: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas Day.

It's Guaranteed!

If after 12 months you pay more on the Time-of-Day rate, when compared to the current standard electric rate, Connexus Energy will credit the difference of the two rates as per Residential Time-of-Day Rate Tariff.

Contact Us

Connexus Energy can help you determine if this rate is a good fit for your household. For more information contact Ken Glaser at 763.323.2648 or email to ken.glaser@connexusenergy.com.



Time of Day
Rev 2012



Voice of the Member – After

Eight immediately installed TOU

Two whole house

Six TOU sub metered

Two pending installations

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Continue to monitor member feedback

Search out EV Owners

Newsletters

Associations

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