

## Statement on Time of Use Electric Rate Options

*Statement updated on July 9, 2017*

The City of Fort Collins is presently considering changing its predominant residential electric rate from a “tiered” structure to a “time of use” (TOU) structure. A tiered rate structure charges customers progressively more, by blocks, per unit of electric energy as they use more energy over each billing cycle. A TOU rate structure charges customers significantly more per kilo-Watt hour (kWh) at those times of day when the total demand for power is greatest, compensated by a reduced rate outside of the peak-demand period. A third option under consideration is a TOU + tiered rate structure, which includes a TOU component and which would also slightly increase the cost of ALL electricity used over a 700 kWh monthly break point, regardless of when that electricity is used.

Fort Collins Utilities conducted a rigorous TOU pilot study between November 2015 and October 2016, which involved over 5,000 of its customers. The study compared energy use, greenhouse gas emissions, peak period demand, and cost impacts on different types of customers for tiered, TOU, and TOU + tiered rates. Details of the study may be viewed and downloaded here:

<http://citydocs.fcgov.com/?cmd=convert&vid=218&docid=2942346&dt=MAIL+PACKET>

### **Study findings**

The study found the following:

1. Both the TOU and TOU + tiered rates reduced total energy use by 2.5% compared to the present tiered rate. More importantly from an environmental impact standpoint, the TOU and TOU + tiered rates also reduced greenhouse gas emissions by 2.0 – 2.3% compared to the tiered rate.
2. Both the TOU and TOU + tiered rates reduced total demand during the peak period by 8%. This reduction is significant because it means fewer generation resources would be needed to meet the City’s peak power requirement, which in turn would reduce the demand cost paid by Fort Collins Utilities to the regional generation utility, the Platte River Power Authority (PRPA).
3. All three customer rates considered would allow Fort Collins Utilities to recoup all of the costs it pays to the PRPA for wholesale electric energy and demand, as designed.
4. The TOU + tiered rate results in lower costs for low-income customers than do the other two rates.
5. The TOU + tiered rate does not increase costs for rooftop solar customers significantly compared to the present tiered rate. The straight TOU rate increases costs for those customers by an average of 12.4% compared to the present tiered rate.
6. The TOU + tiered rate results in higher costs for customers with electric heating (as opposed to natural gas heating) than either the straight TOU rate or the current special “residential demand” rate that was created to assist all-electric customers. We note that these customers currently make up approximately 3% of all residential customers.

## FCSG recommendations

**The Fort Collins Sustainability Group (FCSG) recommends that the City adopt a TOU + tiered rate for the majority of its residential customers, with an option for a straight TOU rate for those with electric heating.** The advantages of this approach are as follow:

1. Significant reductions in energy use, greenhouse gas emissions, and total demand compared to the present tiered rate,
2. Reduced rates for customers charging plug-in electric vehicles during off-peak times compared to the present tiered rate,
3. Lowest costs of the three rates considered for those customers in the lowest third of the City's income distribution,
4. No significant penalty to rooftop solar customers compared to the present tiered rate (and the increased cost to these customers with the straight TOU rate could potentially conflict with the nondiscriminatory rates clause in Colorado Revised Statutes section 40-2-124), and
5. Limited cost impact on the relatively small numbers of customers with electric heating compared to the present tiered rate via the straight TOU rate option for these customers. We observe that since one of the Climate Action Plan strategies is to move toward all-electric heating in the form of air- and ground-source heat pumps, it is particularly important not to penalize customers with electric heating.

We note that Fort Collins Utilities is recommending a "one size fits all" approach of placing ALL residential customers on a straight TOU rate. We believe that dropping the tiered component would be disadvantageous for low-income customers and other customers who use less electric energy than the average, and would also unfairly penalize rooftop solar customers. That is why we support implementing a TOU + tiered rate applying to the majority of the City's utility customers, and a straight TOU rate for all-electric households.

For a table comparing the FCSG's recommended approach to the Utilities Departments, please see the archived file titled "Comparison of FCSG TOU Rate Recommendation to Straight TOU Rate 070917."