

AGENDA ITEM SUMMARY

July 21, 2015

City Council

STAFF

Lance Smith, Strategic Financial Planning Manager

SUBJECT

Second Reading of Ordinance No. 078, 2015, Making Certain Amendments to Chapter 26 of the Code of the City of Fort Collins Pertaining to Electric Rates, Fees and Other Charges Associated with the Time of Use Pilot Rate Study.

EXECUTIVE SUMMARY

This Ordinance, unanimously adopted on First Reading on July 7, 2015, implements a residential time-of-use (TOU) pilot rate study. The pilot study will implement two parallel TOU rate structures for pre-selected residential customers for a 12-month period. Customers will have the option to opt-out. Staff is recommending a "best-bill" guarantee to encourage participation throughout the life of the study. A sampling of net metering solar photovoltaic (PV) customers will be included within each pilot rate group.

STAFF RECOMMENDATION

Staff recommends adoption of the Ordinance on Second Reading.

ATTACHMENTS

1. First Reading Agenda Item Summary, July 7, 2015 (w/o attachments) (PDF)
2. Ordinance No. 078, 2015 (PDF)

AGENDA ITEM SUMMARY

July 7, 2015

City Council

STAFF

Lance Smith, Strategic Financial Planning Manager

SUBJECT

First Reading of Ordinance No. 078, 2015, Making Certain Amendments to Chapter 26 of the Code of the City of Fort Collins Pertaining to Electric Rates, Fees and Other Charges Associated with the Time of Use Pilot Rate Study.

EXECUTIVE SUMMARY

The purpose of this item is to bring an ordinance forward to implement a residential time-of-use (TOU) pilot rate study. Staff presented information detailing the proposed TOU pilot study at the City Council work session on January 27, 2015, where an ad hoc committee was formed allowing Councilmen Campana and Cunniff to meet separately with City staff to discuss alternatives for TOU electric rates. Resolution 2015-022, creating the ad hoc committee, was signed by Mayor Weitkunat on February 3. The ad hoc meeting between Councilmen Campana and Cunniff and members of staff was held on February 24. Following this meeting, a memo was provided to Council summarizing the meeting discussions and outlined recommendations. The proposal for discussion outlines four objectives of the TOU pilot study and includes implementing two parallel TOU rate structures for pre-selected residential customers for a 12-month period. Customers will have the option to opt-out. Staff is recommending a "best-bill" guarantee to encourage participation throughout the life of the study. A sampling of net metering solar photovoltaic (PV) customers will be included within each pilot rate group.

STAFF RECOMMENDATION

Staff recommends adoption of the Ordinance on First Reading.

BACKGROUND / DISCUSSION

The deployment of advanced metering infrastructure across the Fort Collins Electric Utility network has created an opportunity to consider alternative utility service rate structures. The initial review of potential rate structures for electricity was presented to the City Council at the January 27, 2015 work session. Two potential time-of-use rate structures were identified for further consideration through a pilot study. The Ordinance before City Council for consideration here would implement the TOU pilot rate study.

The purpose of the TOU pilot study is to provide a report to City Council that details the data analysis results for two types of time-of-use rate structures. The four identified objectives below will be the main criteria for evaluating the pilot rates deployed during the study:

1. Determine if one of the piloted rate structures more effectively promotes energy conservation than the current seasonal, tiered rate structure.
2. Determine if one of the piloted rate structures more efficiently utilizes existing generation resources by encouraging customers to reduce their daily demand during peak hours for energy and more evenly utilize electricity throughout the day than the current seasonal, tiered rate structure.
3. Determine if customers have a preference for one of the piloted rate structures over the current seasonal, tiered rate structure.
4. Ensure adequate revenues are equitably collected through the piloted rate structures to meet the

revenue requirements for the residential customer class

Details of Pilot Study

The customers for the two new rate structures will be randomly selected from the residential class and include roughly 1,000 customers per study. Initial communications will be mailed to selected customers, likely in August, upon approval by City Council. Customers will have the choice to opt-out of the study before a pre-determined date; otherwise they will be automatically moved to the associated TOU rate structure by the first full billing cycle in October. For those customers that remain in the program for the entire 12 months, which will run through the customer's October 2016 billing cycle, a "best bill" guarantee will be provided: The customer will receive a credit, at the end of the 12 months, if they paid more during that timeframe on the TOU rate than the current tiered rate structure. The summer period will run from May 1st through September 30th, with the on peak hours from 2 pm until 7 pm Monday through Friday, excluding major holidays. The non-summer period will be from October 1st through April 30th, with on peak hours from 5 pm until 9 pm Monday through Friday, excluding major holidays. Also included in each pilot study group will be a sampling of net metering customers to help staff identify impacts to customers with solar production.

The two rate structures studied during the pilot project are as follows:

1. Time-of-Use

The TOU Rate charges a higher price per kWh when electricity is in higher demand; this is referred to as the "on-peak" period. These periods of higher demand are primarily attributable to cooling loads in the summer and heating loads in the winter. Since these summer and winter peak periods occur at different times during the day, the on-peak period will be different for the summer and winter months. The TOU rate charges more when electricity is in higher demand to reflect the higher costs of generating electricity during those peak periods. As such, the price signal of the TOU rate more accurately represents the cost of providing electric service than does a tiered rate.

STANDARD TOU			
With 6% PILOT			
		On Peak	Off Peak
Non-summer	\$	0.1908	\$ 0.0653
Summer	\$	0.2249	\$ 0.0670
Net Metering credit per kWh			
		On Peak	Off Peak
Non-summer	\$	0.1562	\$ 0.0378
Summer	\$	0.1883	\$ 0.0394

2. Time-of-Use with Energy Efficiency Tier

The TOU with Energy Efficiency Tier has the same on-peak periods as the TOU rate above. The per kWh charge is less than the TOU rate (structure 1 above) for the first 700 kWh, with an additional per kWh charge of \$0.0163 for all consumption above 700 kWh in a given month. The revenues from this charge will cover the costs of energy efficiency efforts. This approach is meant to fund these programs by users who can benefit from them the most and is based on total monthly consumption, rather than consumption during the on-peak period separately from the off-peak period.

TOU w/Energy Efficiency Tier				
With 6% PILOT				
	On Peak		Off Peak	
Non-summer	\$	0.1861	\$	0.0607
Summer	\$	0.2202	\$	0.0624
Per kWh over 700	\$	0.0163	\$	0.0163
Net Metering credit per kWh				
	On Peak		Off Peak	
Non-summer	\$	0.1562	\$	0.0378
Summer	\$	0.1883	\$	0.0394

CITY FINANCIAL IMPACTS

Customers that remain in the pilot study for the full 12 months will receive a “best-bill” guarantee. Each customer’s consumption for the 12 billing cycles will be calculated using the tiered rate and compared to the specific TOU rate they were billed on. If they paid more on the TOU rate during that timeframe, a credit will be applied to their bill. This will encourage customers to remain in the study for the full term, and alleviate any potential financial burden for participating in the study.

Net metering customers will also receive a best-bill guarantee for the 12 billing cycles during the pilot study. The kWh credit amounts shown above include the full wholesale energy and demand charges, with the demand charge rolled entirely into the on-peak period. The amount for distribution facilities would not be credited back to customers. Given the on-peak time hours during the non-summer months (5 pm - 9 pm) and how they align with solar production, customers may see a slightly higher bill during those months. During the summer months, the on-peak hours (2 pm - 7 pm) more closely match solar production. The credit per kWh is much higher than it is under tiered rates, therefore net metering customers may see a benefit under the TOU rate structure during those months.

Both of these rate structures have been designed to be revenue neutral for the residential rate class. Regardless of how the residential rate class is charged for its portion of the overall cost of service, the total revenue required from the residential rate class is determined independent of the rate structure for the rate class. While a shift from one rate structure to another may be designed to be revenue neutral at the rate class level, there may still be costs shifted among customers within the rate class. For example, the tiered rate structure currently in place allows those customers who use less than the average amount of electricity each month to pay less than the financial cost of providing electric services to them by requiring those customers who use more than the average amount of electricity to pay more than the financial cost of providing their electricity to them. Any move away from the current tiered rate structure may shift costs away from those who use more than average to those who use less than average depending on the design of the new rate structure. This is expected to be the case with both of the pilot rate structures. To address the financial hardship this may create for some customers, a low income rate was discussed as well at the January 27, 2015 City Council Work Session and is being developed now for further consideration by the City Council along with other rate adjustments for 2016.

It is the expectation of staff that the rate structure and prices in any pilot study will be revenue neutral, but this may not prove to be the case which is one of the reasons a pilot study is recommended. The pilot study will allow any modifications to the rate prices to be made before a new rate structure might be implemented for the residential rate class. The financial exposure of the Light & Power Enterprise Fund for the TOU pilot study is less than 1% of operating revenues for the Fund.

The pilot study would be conducted by staff without further improvements required to the metering and billing infrastructure so no additional costs are expected at this time.

BOARD / COMMISSION RECOMMENDATION

At its June 4, 2015 meeting, the Energy Board voted unanimously to support conducting the TOU rate study as proposed by staff.

ATTACHMENTS

1. Work Session Summary, January 27, 2015 (PDF)
2. Staff memo re: Implementation plan(PDF)
3. Energy Board memo, June 15, 2015(PDF)
4. Resolution 2015-022 (PDF)

COPY

ORDINANCE NO. 078, 2015
OF THE COUNCIL OF THE CITY OF FORT COLLINS
MAKING CERTAIN AMENDMENTS TO CHAPTER 26
OF THE CODE OF THE CITY OF FORT COLLINS
PERTAINING TO ELECTRIC RATES, FEES AND CHARGES
ASSOCIATED WITH THE TIME OF USE PILOT RATE STUDY

WHEREAS, the City Council is empowered and directed by Article XII, Section 6, of the City Charter to fix, establish, maintain and provide for the collection of such rates, fees or charges for utility services furnished by the City as will produce revenues sufficient to pay the costs, expenses and other obligations of the electric utility, as set forth therein; and

WHEREAS, on October 21, 2014, City Council approved Ordinance No. 154, 2014, amending Chapter 26 of the City Code to revise electric rates, fees, and charges, based on a seasonal, tiered rate structure; and

WHEREAS, deployment of advanced metering infrastructure in the City has created the potential for more refined application of electric rates and practices, including studying whether time-of-use (TOU) rates, as opposed to the seasonal tiered rates, will encourage more efficient consumption across the system; and

WHEREAS, on February 3, 2015, City Council approved Resolution 2015-022, appointing an ad hoc City Council committee to coordinate with Electric Utility staff to design a pilot TOU electric rate study, as an option for City electric service rates, and

WHEREAS, on February 24, 2015, the ad hoc committee met with staff to provide direction on a pilot TOU rate study, and staff has incorporated the committee's direction into the parameters of a proposed study scope; and

WHEREAS, staff recommends conducting a TOU rate study over a period of twelve monthly residential customer billing cycles, beginning with the first full cycle starting after October 1, 2015; and

WHEREAS, the purpose of the TOU pilot study is to provide a report to City Council with data on two TOU rate sub-schedules, which data will be analyzed based on four objectives: promotion of energy conservation, efficient reduction in daily customer demand, customer preference, and revenue sustainability compared to operating expenses; and

WHEREAS, approximately 6,000, randomly-selected residential customers will be invited to participate in the study, and those not opting out will be placed on one of two pilot rates or in a control group during the study period: "TOU"- with a higher price per kWh when electricity is in higher demand, or "TOU with energy efficiency tier"- with a lower kWh charge for on-peak and off-peak charges, plus an additional per kWh charge for all consumption above 700 kWh in a given month; and control group customers will remain on their current rates; and

WHEREAS, each pilot study group will include a sampling of net metering solar customers to identify impacts of TOU rates on customers with on-site solar production; and

WHEREAS, after the study, a settlement will be performed on the accounts of customers who participated for the full study period to equalize the amounts paid during the study with the amounts the customers would have paid under seasonal tiered rates, without negatively impacting any financial benefit realized by the customers during the study; and

WHEREAS, on June 4, 2015, the Energy Board considered the proposed electric rates, fees and changes for the pilot TOU rate study, and unanimously recommended approval of the rate changes for the pilot rate study; and

WHEREAS, based on the foregoing, it is the desire of the City Council to amend Chapter 26 of the City Code to revise electric rates, fees and charges with regard to the study of time-of-use billed electric utility service.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FORT COLLINS as follows:

Section 1. That Section 26-464(p) of the Code of the City of Fort Collins is hereby amended by addition of a subpart (6) to read as follows:

Sec. 26-464. Residential energy service, schedule R.

...

(p) *Net metering.*

...

(6) TOU rates, for customer-generators participating in a qualifying “time-of-use” (TOU) rate study, consumption of energy from the utility and production of energy that flows into the utility's distribution system shall be measured on a monthly basis. The energy consumed from the utility by the customer-generator shall be billed at the applicable study rates under subsection (s) of this Section. The energy produced by the customer-generator shall be credited to the customer as follows:

a. The energy and demand credit, per kilowatt hour during the summer season billing months shall be as follows:

1. *On-Peak (Mon-Fri, 2 pm to 7 pm, excluding holidays)*, eighteen and eighty three one-hundredths cents (\$0.1883).

2. *Off-Peak*, three and ninety four one-hundredths cents (\$0.0394).

b. The energy and demand credit, per kilowatt hour during the non-summer season billing months shall be as follows:

1. *On-Peak (Mon-Fri, 5 pm to 9 pm, excluding holidays)*, fifteen and sixty two one-hundredths cents (\$0.1562).
2. *Off-Peak*, three and seventy eight one-hundredths cents (\$0.0378).

Section 2. That Section 26-464 of the Code of the City of Fort Collins is hereby amended by addition of a subsection (s) to read as follows:

Sec. 26-464. Residential energy service, schedule R.

...

(s) *Time of Use (TOU) Pilot Study.*

(1) Objective. The City has identified potential benefits available through time-of-use (TOU) based electric service rates, including encouraging reduced energy consumption and equitably shifting energy costs to customers who use more energy. In order to study these benefits, Fort Collins Utilities shall conduct a temporary pilot project beginning with the billing cycle commencing on or after October 1, 2015, and concluding after twelve (12) full billing cycles.

(2) Scope. The project shall include six thousand residential energy service (Schedule R) customers selected at random. Customers selected at random will be notified and given a one-time opportunity to “opt-out” of participation in the project. Customers who do not opt-out will be assigned, as determined by the Executive Director, to one of the two pilot rates described in subsections (s)(4) (pilot TOU rate) and (s)(5) (pilot TOU with energy efficiency tier rate), or monitored on their existing residential energy service tiered rate, as a control group.

(3) Best-bill guarantee. Customers participating in the pilot project for the full twelve (12) billing cycle period will be eligible for the following best-bill guarantee: the total energy costs paid by each customer under either of the pilot rates for the twelve full billing cycles shall be compared with the energy costs such customer would have paid under the base residential energy service tiered rate during the same twelve billing cycles, and each customer shall be reimbursed (by issuance of a billing credit or otherwise, as determined by the Executive Director) for the amount by which the total energy costs paid exceed the amount that would have been due under the base residential energy service tiered rate for such period. Each customer who pays total energy costs under either of the pilot rates during the twelve full billing cycles of the project that are less than the energy costs such customer would have paid under the base residential energy service tiered rate shall retain those savings.

(4) Pilot TOU rate. Customers assigned to this rate during the pilot study shall pay monthly rates under this sub-schedule as follows:

- a. Fixed charge, per account: five dollars and seven cents (\$5.07).
- b. Distribution facilities charge, per kilowatt hour: two and thirty eight one-hundredths cents (\$0.0238).
- c. Energy and demand charge, during the summer season billing months of May, June, July, August, and September. The energy and demand charge shall be billed as follows:
 - 1. *On-Peak (Mon-Fri, 2 pm to 7 pm, excluding holidays)*, eighteen and eighty three one-hundredths cents (\$0.1883).
 - 2. *Off-Peak*, three and ninety four one-hundredths cents (\$0.0394).
- d. Energy and demand charge, during the non-summer season billing months of January through April and October through December, The energy and demand charge shall be billed as follows:
 - 1. *On-Peak (Mon-Fri, 5 pm to 9 pm, excluding holidays)*, fifteen and sixty two one-hundredths cents (\$0.1562).
 - 2. *Off-Peak*, three and seventy eight one-hundredths cents (\$0.0378).
- e. In lieu of taxes and franchise: a charge at the rate of six and zero-tenths (6.0) percent of all monthly service charges billed pursuant to this Subsection.

(5) Pilot TOU with energy efficiency tier rate. Customers assigned to this rate during the pilot study shall pay monthly rates under this sub-schedule as follows:

- a. Fixed charge, per account: five dollars and seven cents (\$5.07).
- b. Distribution facilities charge, per kilowatt hour: one and ninety four one-hundredths cents (\$0.0194).
- c. Energy and demand charge, during the summer season billing months of May, June, July, August, and September The energy and demand charge shall be billed as follows:
 - 1. *On-Peak (Mon-Fri, 2 pm to 7 pm, excluding holidays)*, per kilowatt hour: eighteen and eighty three one-hundredths cents (\$0.1883)

2. *Off-Peak*, per kilowatt hour: three and ninety four one-hundredths cents (\$0.0394)

d. Energy and demand charge, during the non-summer season billing months of January through April and October through December. The energy and demand charge shall be billed as follows:

1. *On-Peak (Mon-Fri, 5 pm to 9 pm, excluding holidays)*, per kilowatt hour: fifteen and sixty two one-hundredths cents (\$0.1562)

2. *Off-Peak*, per kilowatt hour: three and seventy eight one-hundredths cents (\$0.0378)

e. Energy efficiency tier charge, per kilowatt hour for total consumption over 700 kWh in a billing month (regardless of on-peak or off-peak): one and sixty three one-hundredths cents (\$0.0163).

f. In lieu of taxes and franchise: a charge at the rate of six and zero-tenths (6.0) percent of all monthly service charges billed pursuant to this sub-Section.

Section 3. That the amendments herein shall go into effect for billing cycles beginning on or after October 1, 2015.

Introduced, considered favorably on first reading, and ordered published this 7th day of July, A.D. 2015, and to be presented for final passage on the 21st day of July, A.D. 2015.

Mayor

ATTEST:

City Clerk

Passed and adopted on final reading on the 21st day of July, A.D. 2015.

Mayor

ATTEST:

City Clerk