

ITEM #: 30
DATE: 07-09-24
DEPT: ELEC

COUNCIL ACTION FORM

SUBJECT: **UPDATES TO CHAPTER 28, ELECTRIC RATE MODIFICATIONS**

BACKGROUND:

Electric utilities periodically conduct cost-of-service and rate design studies to help make long-term financial plans, promote efficient use of resources, and provide fair and equitable rates for customers. Ames Electric Services previously completed a cost-of-service study in 2012.

On June 23, 2023, City Council awarded a contract to Utility Financial Solutions to complete a cost-of-service and rate design study. Utility Financial Solutions worked with staff over the past year to analyze the utility's costs to serve its customers. At the June 18, 2024 City Council/EUORAB Workshop, Mark Beauchamp from Utility Financial Solutions presented results from the cost-of-service study. The Electric Utility Operations Review and Advisory Board (EUORAB) met on June 20, 2024 to discuss the cost-of-service study and issues raised by the City Council.

Based on the results of the study, EUORAB is recommending adjustments to customer rates that will send clearer price signals to customers and provide fair and equitable rates. The proposed adjustments will result in no overall revenue increase. As a result of the proposed rate adjustments, some customers will see higher electric bills, while the changes will result in lower bills for other customers. If approved, staff asks that these changes become effective October 1, 2024. However, staff also requests permission to begin a residential pilot of the Time-of-Use rate, for no greater than 40 customers, as soon as August 1, 2024.

PROPOSED CHANGES TO ELECTRIC RATES:

1) Change in Monthly Service Charges and Energy Rates

The Customer Service Charge is a fixed monthly amount charged to each customer, regardless of how much energy is used. The Customer Service Charge covers the cost of customer class-specific infrastructure (like a service drop and meter), a portion of the distribution system needed to serve the customer, meter reading, and billing. **The cost-of-service study recommends raising the Customer Service Charge for Residential, Small Commercial, Industrial, and Large Customer Time-of-Use customers.**

With no need to increase total utility revenue, the increase in the customer service charge is partially or wholly offset by a lowering in the proposed energy rates. The changes overall will have a larger impact on customers within a class that has low electric usage. For example, the median residential electric customer uses 600 kWh per month. With the proposed changes the median residential customer will see their average monthly electric bill decrease by \$1.15.

Customer Class	Existing			Proposed		
	Customer Service Charge	Winter Energy Rate \$/kWh	Summer Energy Rate \$/kWh	Customer Service Charge	Winter Energy Rate \$/kWh	Summer Energy Rate \$/kWh
Residential	\$ 8.32	\$ 0.1005	\$ 0.1231	\$ 14.25	\$ 0.0893	\$ 0.1101
Small Commercial	\$ 15.60	\$ 0.0986	\$ 0.1194	\$ 20.50	\$ 0.9673	\$ 0.1175
Commercial	\$ 156.00	\$ 0.0644	\$ 0.0644	\$ 156.00	\$ 0.0653	\$ 0.0653
Industrial	\$ 156.00	\$ 0.0644	\$ 0.0644	\$ 1,100.00	\$ 0.0642	\$ 0.0642

2. New Optional Time-of-Use Rates

Time-of-Use rates create energy pricing that more closely reflects the cost of electricity during select periods within a day. The consultant is proposing a three-period rate structure. The three periods are:

1. On-peak pricing from 2pm to 6 pm, Monday through Friday,
2. Off-peak rates from 7am to 2pm and 6pm to 8pm, weekdays, and
3. All other times, including six major holidays are “Super Off-Peak” when demand for energy is especially low and energy prices are at their lowest.

Adopting Time-of-Use rates will encourage customers to shift energy usage from the utility's peak period to off-peak and super off-peak periods, which can save money for them and the utility by reducing energy usage during the highest cost periods. Managing the utility's peak demand is important to controlling costs for the utility and its customers.

Time-of-Use Rates can be beneficial for all customers who manage their electric usage and can be especially advantageous to those charging an electric vehicle. Electric vehicles are large power users whose charging can easily be shifted to off-peak and super-off-peak periods. Offering a very low energy cost for off-peak charging is a significant way Electric Services hopes to help encourage the adoption of electric vehicles, a key component of the City’s Climate Action Plan.

Electrification of homes and businesses is also a Climate Action Plan goal. Time-of-Use rates can encourage growth of electric appliances (including water heating and space heating appliances) and ensures that they are used in a way that benefits the grid instead of overburdening it.

Residential Time-of-Use Rates

	Summer	Winter
On Peak Energy	\$ 0.2655 per kWh	\$ 0.1368 per kWh
Off-Peak Energy	\$ 0.0877 per kWh	\$ 0.1268 per kWh
Super Off-Peak Energy	\$ 0.0740 per kWh	\$ 0.0694 per kWh

Small Commercial Time-of-Use Rates

	Summer	Winter
On Peak Energy	\$ 0.2712 per kWh	\$ 0.1425 per kWh
Off-Peak Energy	\$ 0.0934 per kWh	\$ 0.1325 per kWh
Super Off-Peak Energy	\$ 0.0797 per kWh	\$ 0.0751 per kWh

Commercial Time-of-Use Rates

	Summer	Winter
On Peak Energy	\$ 0.2453 per kWh	\$ 0.1166 per kWh
Off-Peak Energy	\$ 0.0675 per kWh	\$ 0.1066 per kWh
Super Off-Peak Energy	\$ 0.0538 per kWh	\$ 0.0492 per kWh
Billing Demand for Time of Use Commercial: \$4.86 per kVA		

At this time, Time-of-Use rates will be optional for customers and may be limited by the number of available specialized meters that can properly bill a time-of-use rate. Electric Services plans to implement advanced metering infrastructure in the next year, which will allow for broad adoption of time-of-use rates. At first, participation will be limited to interested customers on a first-come, first-served basis.

3. Large Customer Interruptible Option Bill Credit

The cost-of-service study suggests making small changes to the bill credit large energy customers receive for participating in the utility's interruptible program, and when they successfully curtail load as requested.

	Current Credit/Penalty	Proposed Credit/Penalty
Signup Demand Credit	\$ (2.60)/kVA	\$ (3.00)/kVA
When Called to Curtail Demand Credit	\$ (2.60)/kVA	\$ (2.20)/kVA
Total	\$ (5.20)/kVA	\$ (5.20)/kVA
Failure to Curtail Penalty	\$ 12.00/kVA	\$ 12.00/kVA

Adjustments Between Customer Classes

The cost-of-service study analyzed the actual cost of how each customer class contributed to the overall expenses needed to operate the electric utility. Some customer classes create more costs per kilowatt-hour for the utility compared to other customer classes. The cost-of-service study recommends adjusting total customer class revenue, by no more than plus or minus one percent, to begin to align utility rates closer to the actual cost of service. **This is accomplished by adopting the specific changes described above.** The table below shows expected revenue under the current and proposed rates.

Customer Class	Projected Revenues Under Current Rates	Projected Revenues Under Proposed Rates	Percentage Change
Residential	\$ 22,857,359	\$ 22,619,810	-1.0%
Small Commercial	\$ 6,658,711	\$ 6,716,808	0.9%
Commercial	\$ 21,243,291	\$ 21,428,639	0.9%
Industrial	\$ 7,639,880	\$ 7,678,079	0.5%
Industrial Time of Use	\$ 5,623,169	\$ 5,566,938	-1.0%

It should be emphasized Based on discussions held at the joint Council/EUORAB workshop, staff is delaying action on the Renewable Energy Buyback rate until EUORAB has time to develop its recommendation.

ALTERNATIVES:

1. Adopt the attached changes to City Code, Chapter 28, as described above, to:
 - a. Adjust monthly service charges and energy rates to better reflect cost of service, effective October 1, 2024.
 - b. Create optional Time-of-Use Rates for Residential, Small Commercial, and Commercial rate customers, effective October 1, 2024
 - c. Authorize the implementation of a Time-of-Use pilot study of the residential rates no sooner than August 1, 2024
 - d. Adjust the interruptible bill credit for Large Customers who choose to participate in the Interruptible Load Program, effective October 1, 2024.
2. Do not adopt changes to City Code, Chapter 28, and refer this item back to EUORAB for additional study.

CITY MANAGER'S RECOMMENDED ACTION:

Adopting the proposed changes will better align existing rates with the cost-of-service study results and create new time-of-use rates. The proposed rate changes result in no net increase in overall utility revenue. The proposed changes have been developed by the consultant with staff overview and approved by EUORAB for adoption by the City Council. Implementing the proposed rate adjustments will promote efficient use of resources, provide fair and equitable rates for customers, and advance the utility's goals of reducing peak consumption and encouraging beneficial electrification. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative 1 A-D, as noted above.

It should be emphasized Based on discussions held at the joint Council/EUORAB workshop, staff is delaying action on the Renewable Energy Buyback rate until EUORAB has time to develop its recommendation.

ATTACHMENT(S):

[Ordinance Chap 28 Electric Cost-Service Rate.pdf](#)