

ITEM #: 32
DATE: 03-12-24
DEPT: Electric

COUNCIL ACTION FORM

**SUBJECT: MODIFICATIONS TO COMMERCIAL ELECTRIC VEHICLE CHARGING
RATE**

BACKGROUND:

On January 10, 2023, the City Council adopted an ordinance to establish a Commercial Electric Vehicle Charging Rate in the Ames Municipal Code (Sec. 28.106). Currently, one customer takes service under this rate. Over time, staff anticipates more customers taking advantage of this rate in the future. **The purpose of the rate is to encourage the charging of commercial electric vehicles during off-peak hours, when the cost for the utility to purchase electricity is low and the use is not expected to contribute to setting a new utility-wide electrical consumption peak.**

Under the current code language, the billing demand calculated for customers using this rate is the greater of five measurements:

- A) The peak 15-minute demand measured Monday-Friday from 9 am to 9 pm ("Premium Hours"),
- B) 30% of the peak demand measured all other hours ("Economy Hours"),
- C) 75% of the peak demand measured in the prior 11 summer months,
- D) 60% of the peak demand measured in the prior 11 months (regardless of season), or
- E) 40 kVA (this serves as a minimum demand for this rate class)

These different measurements incentivize customers to use their charging infrastructure during the non-peak "Economy Hours". Doing so allows the customer to qualify for Measurement B to be used to calculate the demand charge. This is a substantial discount compared to the typical commercial rate calculations. However, if a customer uses their charging infrastructure during peak hours for a particular month, the effect will be that their bill for that month will be calculated using that peak demand (Measurement A), and that new peak demand will impact future bills for at least the next 11 months (Measurement C or Measurement D). This results in substantial penalties for a customer charging during a peak time.

After the first year of implementation, Electric staff analyzed customer usage to determine if the rate accomplished what was intended and whether any adjustments are necessary. **From the data analysis, staff is recommending that the length of the "Premium Hours" should be reduced, thereby increasing the discounted demand period.** This change would greatly benefit the customer by giving them more flexibility when charging and shrinks the peak demand change window. This change benefits the Utility by placing more focus on the critical peak period of the day (3 pm to 8 pm) when the Utility typically achieves a new peak.

Under the proposed code language, the billing demand would be the greater of A) the peak 15-minute demand measured Monday-Friday from 3 pm to 8 pm or B) 30% of the peak demand measures all other hours. This discount is to incentivize customers to charge outside of the Utility's peak period. This change reducing the on-peak demand window from twelve hours to five hours.

ALTERNATIVES:

1. Approve second passage of ordinance amending Chapter 28 Section 28.106 of Ames *Municipal Code* approving Minor Changes to Commercial Electric Vehicle Charging Rate.
2. Refer this item to staff for further consideration.

CITY MANAGER'S RECOMMENDED ACTION:

This change to the City's Electric Vehicle charging rate directly benefits electric customers by expanding the window when discounted rates can be applied. At the same time, standard rates are applied if the charging contributes to the City's peak consumption. This is sound rate design containing both incentives and disincentives. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as described above.

ATTACHMENT(S):

[Ordinance Electric Vehicle Chrg Rate.PDF](#)