ITEM # <u>38a&b</u> DATE: 12-13-16

COUNCIL ACTION FORM

SUBJECT: FIRST PASSAGE OF ORDINANCES CHANGING ELECTRIC NET METERING

BACKGROUND:

Appendix H of the Municipal Code outlines the rules and regulations pertaining to receiving electric service. With the introduction of customer-owned generation, Section 2.7 *Availability of Net Metering* was added to the Code.

Net metering applies to a customer-owned generating system that primarily offsets part or all of the customer's electric service energy requirements provided by the City's Electric Services. Net Metering is available to any retail customer receiving electric service under a City of Ames Electric Services rate schedule who owns and operates an approved on-site generating system powered by a renewable resource capable of producing not more than 500 kW of power, and who interconnects with the City's electric system.

The last time this section of the Code was updated was in the fall of 2015 when the maximum allowable size of facilities was increased from 10 kW to 500 kW.

Over the last year, the number of new installations has grown significantly. In reviewing the new projects installed, staff is seeing a pattern emerge where customers are oversizing installations so that the total amount of energy produced by the solar system exceeds the total amount of energy consumed by the customer at certain times of the day.

The current design of the City's Net Metering language actually encourages this process of oversizing which creates three significant problems. First, when a solar array is oversized, the utility becomes a "storage medium" to which the customer can overproduce as much as it wants and then draws on that overproduction at a later time. This process creates a situation where the solar customers are using the City's electric grid without paying for the fixed costs associated with maintaining it. These costs are transferred to the non-solar customers. Second, since the utility does not store the excess solar energy, any overproduced energy is used by other customers at the time it is produced. Later, the utility has to purchase the replacement energy and the result is an increased cost to non-solar producing customers for the betterment of the solar producing customers. Third, the Code requires Electric Services to pay the solar customer the full retail rate that is charged to the utility, even though Electric Services is able to purchase less expensive energy on the wholesale market.

The City's Electric Utility Operations Review Advisory Board (EUORAB) held five public meetings (September 12th, October 6th, 2 meetings on October 18th, and November 1st) to review the current process, to listen to customers' and vendors' input, and to discuss alternative solutions.

At the November 1, 2016 EUORAB meeting, the Board voted to support the purchase of excess energy at a fixed cost from the customer based on the latest Cost of Service study. This recommendation was forwarded to the City Council for consideration.

At the November 15, 2016 City Council meeting, the City Council modified EUORAB's recommendation and added additional incentives. City Council approved the purchase of excess energy from customer generation using the "Fixed Cost" approach with the following additional incentives:

Residential: 2 ½ cents/kilowatt hour incentive
General Power: 2 cents/kilowatt hour incentive
Large Power: 1 ½ cents/kilowatt hour incentive
Industrial: 1 cent/kilowatt hour incentive

The Legal Department has drafted changes to Chapter 28 and Appendix H of the City's Municipal Code to accomplish the action approved by City Council. Since Chapter 28 and Appendix H are separate sections of the Municipal Code, the Council will need to approve each of the two proposed ordinance changes.

ALTERNATIVES:

- 1. Approve first passage of the changes to Chapter 28 and Appendix H of the City of Ames Municipal Code pertaining to Net Metering as outlined above.
- 2. Choose an alternate option.
- 3. Retain the existing language regarding net metering.

CITY MANAGER'S RECOMMENDED ACTION:

The current Net Metering language allows customers to produce energy at one period in time only to be able to use it at another time. The utility may be used as a storage system with the potential to negatively impact one group of customers in order to benefit another. Realizing the possible negative impact on the non-solar customers, but still willing to offer some incentive, the City Council opted for a compromise position from EUORAB's recommendation. These proposed code changes reflect the direction Council give to staff on November 15, 2016.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.



MEMO

To: Mayor and City Council

From: Diane R. Voss, City Clerk

Date: December 9, 2016

Subject: Items 38a and b: Net Metering Ordinances

Staff is still reviewing the Ordinances. They will be sent to you on Monday.

ML/drv