

ITEM#: 20  
DATE: 12-13-22

## COUNCIL ACTION FORM

### SUBJECT: UPDATES TO SMART ENERGY REBATE PROGRAM

#### BACKGROUND:

Ames Electric Services has offered a broad range of energy efficiency rebates since 2008. This program is popular with customers and helps reduce the utility's peak energy demand. These changes were presented to the EUORAB at their October meeting and were approved for City Council consideration.

One of the six big moves in the City's Climate Action Plan is Building Retrofits, with a goal of adding air-source heat pumps and replacing hot water heating systems with electric to all buildings by 2040. Additionally, the big move of Net-Zero New Construction includes a goal to have all buildings constructed in 2026 and later to be net-zero ready and that by 2030 all buildings will meet passive house standards. The following updates align the Smart Energy Program with the Climate Action Plan goals by encouraging adoption of heating, cooling, water heating and transportation options that can be powered by increasingly clean, renewable electricity.

Five key changes to the electric rebate program effective January 1, 2023:

1. Add Energy Star freezers, induction stoves, and electric lawn mowers to appliance rebates
2. Increase air-source heat pump rebate
3. Increase geothermal rebate
4. Increase electric vehicle (EV) charger rebate
5. New criteria and rebate amount for Net-Zero Ready New Home Rebate

#### Additional Appliance Rebates

Staff proposes adding a rebate for induction stoves and a rebate for battery electric lawn mowers. Both rebates will help promote the adoption of equipment that uses no fossil fuels and has no on-site emissions. Additionally, staff recommends adding Energy Star rated freezers to the rebate portfolio.

#### Air Conditioning and Air Source Heat Pump Rebates

Currently, conventional air conditioners are rebated identically to Air-Source Heat Pumps. Both types of equipment have a base rebate of \$300 for the lowest rebated efficiency of 16 SEER. Additionally, both receive an additional rebate of \$50 per additional 0.5 SEER. For example, a model with a SEER rating of 17.5 will receive a \$450 rebate.

Staff would like to encourage the broader adoption of air-source heat pumps when customers are replacing their aging air conditioners. Air-source heat pumps can provide

cooling and heating from the same equipment. In our climate zone, it is possible to install a standalone heat pump with electric backup heat to provide heating throughout the entire year, though air-source heat pumps are often paired with natural gas furnaces. Other utilities have eliminated air conditioner rebates in favor of heat pump rebates for several years. Staff proposes increasing the base air-source heat pump rebates to \$500.

Ductless mini-split heat pumps are often used for heating or cooling just one room – either an addition or a hard to cool area. Staff proposes a separate category for ductless mini-splits with a set rebate of \$500 per unit.

#### Increased Geothermal Rebate

Geothermal heat pumps are an opportunity for customers to provide heating and cooling. They can also lower summer peak demand through greater cooling efficiency and increase winter electric sales (our off-peak season) by eliminating the need to heat with natural gas. Staff proposes raising the current rebate of \$300 per ton to \$400 per ton of capacity. Additionally, staff recommends a higher rebate of \$500 per ton for Energy Star rated geothermal systems.

There is currently no distinction in rebates between a new geothermal system (loop and equipment) versus replacement equipment (using an existing loop field). Staff recommends offering a smaller rebate of \$200 per ton for geothermal equipment replacement only.

#### Increased Electric Vehicle Charger Rebates

To encourage broader adoption of EVs, staff would like to raise the rebate amount for Level 2 charging equipment. The rebate is currently \$250 with a cap of 50% of the installed costs. Raising the rebate to \$500 and keeping the 50% cap will allow a larger rebate to customers that require more extensive electrical upgrades to install an EV charger. The City will require a networked or “smart” EV charger that can schedule charging automatically for customers to encourage off-peak charging habits.

EV chargers for shared or public use are a great deal more expensive than residential EV chargers. More than just a charging station, these stations need to have an internet or cell connection and customer payment options that raise their cost. Equipment alone for a dual-port level-2 charger can cost upwards of \$10,000. Staff would like to encourage installation of EV chargers at large employers and multifamily housings. Raising the rebate up to \$2,500 per plug (capped at 50% of project cost) will encourage installations that will allow broader adoption of EVs.

#### Net-Zero Ready Home

Ames Electric has an existing new home rebate program, but there has been no participation since 2018. The existing rebate is structured on a HERS (Home Energy Rating System) rating which worked well when builder’s tax credits also required a HERS rating. HERS certification can be expensive and cumbersome for builders. HERS ratings may see a resurgence with the renewal of the builder’s tax credits, but staff recommends basing the criteria on a compliance method similar to what the City’s Planning Department

already uses for code compliance. The rebate will be awarded to homes that *exceed* the minimum code standard (International Energy Conservation Code 2012) and have an air source heat pump or a geothermal heat pump, an electric water heater, and are EV ready.

**Staff is continuing to prepare updates to the retail solar rebate program. Modifications to that program will be presented to the City Council in early 2023.**

**ALTERNATIVES:**

1. Approve changes to Smart Energy Rebate Program as proposed by City Staff and recommend to Council for approval.
2. Approve selected changes to Smart Energy Rebate Program with adjustments.
3. Do not approve changes to Smart Energy Rebate Program.

**CITY MANAGER'S RECOMMENDED ACTION:**

The proposed rebate updates will help promote highly efficient, affordable, and sustainable options to Ames Electric customers that are upgrading a heating or cooling, or water heating system, building a new home, or choosing a new vehicle. Additionally, broad adoption of these technologies is essential to meeting the goals in the City's Climate Action Plan.

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