ITEM #: 46

DEPT: ELEC

Staff Report

ELECTRIC ENERGY UPGRADE PROGRAM AND USDA RURAL ENERGY SAVINGS PROGRAM (RESP)

June 9, 2026

BACKGROUND:

In September 2025, the City Council established an energy upgrade program and authorized staff to submit a federal loan application for the Rural Energy Savings Program (RESP), administered through the US Department of Agriculture (USDA). The City's proposal was to use the RESP funds to operate an on-bill financing program to implement home energy retrofits, which would ultimately reduce energy use in the community in alignment with Climate Action Plan goals.

In May 2026, the City received a conditional commitment from USDA for a $7.6 million zero-interest RESP loan. Staff plans to continue moving through the application process, which will involve working with USDA staff through the details of underwriting the loan. Staff will return to City Council in Fall 2026 to present the award agreement and program details. If approved, USDA would officially obligate funds at that time. Staff expects finalizing the program details will take an additional six months following the obligation of funds. An Energy Upgrade Program for the City would expect to launch in early 2027.

Under this program, the City would serve as a pass-through entity for RESP funds, using the loan to operate a revolving fund for the program. Funds would be drawn down from the USDA as projects occur, and the City would utilize these funds to pay contractors directly for individual projects. The City would then recoup investment costs over the customer repayment period of 10-15 years for each project. At the end of the 20-year RESP loan term, the City would remit all funds drawn back to USDA.

The goals of the program are to increase access to energy efficiency retrofits, reduce peak demand, improve home health and comfort, and stimulate economic development by hiring local contractors, while addressing the significant barrier many homeowners face with investing in energy efficiency and renewable energy improvements. It should be noted that the programs discussed are only available to City of Ames residents who are also electric customers of the City's utilities.

ON-BILL ENERGY EFFICIENCY FINANCING MODEL

In the on-bill financing model, the utility offers an upfront low-interest investment for energy upgrades, which may be too substantial in cost for a homeowner to consider

implementing on their own. The costs of the upgrades are repaid through the customer's monthly utility bill. The City's role in this model is to finance energy-efficient projects that customers choose to implement.

Through the program, customers experience much lower up-front costs to upgrade their homes with energy-efficient equipment and avoid paying high interest rates through traditional financing (e.g., bank loans). In the U.S., three out of four residential HVAC projects are financed, often resulting in thousands of dollars in interest payments charged over the life of an HVAC loan. The alternative, an on-bill financing program model, enables savings while supporting the adoption of efficient, electric equipment.

While this would be the first program of its kind in Iowa, this on-bill model has been successfully implemented in communities in other states. There are approximately 100 similar programs in the country. A 2022 study collected performance data on 24 similar programs in 10 states, including mostly electric cooperatives, with some investor-owned utilities and municipal utilities. Utilities ranged in size from 7,000 to over 1 million customers, and program inception dates ranged from 2002 to 2021. Cumulatively, there was over $50 million invested in almost 6,000 projects, with write-off (uncollectable) rates ranging from <0.1% to 0.22%.

ENERGY UPGRADE PROGRAM: SMARTSAVE

The program being proposed for Ames, under the name SmartSave, is designed to make installing upgrades straightforward and economical for Ames Electric customers. **The City would partner with a third-party program operator to administer the program and handle most day-to-day activities. The program operator would be selected through a competitive RFP process, with estimated annual program operator costs of $100,000. The program operator would also work collaboratively with staff to complete program design and start contractor engagement.**

Contractors will be trained in the program and provided educational materials to share with customers. Active participation by local contractors will be essential to a successful program. The City would not assume responsibility for or issue any guarantees or warranties regarding the performance of any contractor.

The initial focus will be on HVAC end-of-life replacement. This program would offer options for customers whose HVAC systems are nearing or have reached the end of their useful life. A streamlined process involving the program operator's mobile application will enable contractors to quickly gather basic information and present the customer with proposed investment and repayment terms. If the customer chooses to participate, the City investment would cover the majority of the system through the program, and the customer would pay a significantly reduced up-front cost to the contractor. **Upgrades under this program initially would be limited to air-source heat pumps, which offer summer peak load reduction and winter load growth.**

Other focuses could be considered for expansion in the future only if deemed feasible by the City and program operator. These improvements could include electric water heaters, EV charging equipment, weatherization, solar, and battery storage.

Table 1: *Program Focus and Eligible Upgrades, Cost, Incentives, and Useful Life*

Program	Eligible Upgrades	Average Project Cost	Target Number of Projects - Pilot Year	Target Number of Projects Annually if Pilot Year is successful	Expected Useful Life (years)
HVAC Replacement	All-Electric and dual-fuel heat pumps	$12,000	10	80	18

Repayment terms would be limited to 15 years or 80% of the upgrade's useful life, whichever is less. Customers must agree to maintain upgrades per the manufacturer's instructions. The on-bill charge would stay with the property in the event of a customer move-out or sale. Notice of the repayment arrangement would be filed with the Recorder, with the anticipation that a lien search would notify incoming property owners. On-bill charges are attached to the meter and remain until the City's costs are fully recovered.

RESP LOAN:

If the USDA loan is accepted, the RESP loan terms would be for up to $7.6 million repaid over 20 years at 0% interest. Loan funds are drawn down as they are used, and the City would maintain full control over the scale of the program and the amount of funds borrowed. **Program year 1 would be treated as a pilot year, and the program will not exceed 10 projects or approximately $150,000 investment in the pilot year.**

Additionally, USDA requires RESP loans to be secured with collateral, ensuring they are repaid in the event of a default. Staff proposes to use the electric utility fund balance as collateral. Due to the revolving nature of the loan and repayment, USDA borrowing likely would not exceed $5,000,000 at any one time. The City and USDA would agree on a process involving a joint account where the City would maintain a balance no less than the outstanding loan amount. USDA would hold priority over those funds in the event of a default by the City. As previously mentioned, staff estimates the default rate, or write-off rate, for customer financing would be less than 0.5%.

The City would charge a low, fixed fee on its investment offered to customers. USDA allows RESP programs to charge up to a 5% fee. All fee revenue would be used to cover the program operator cost. **Staff estimates the City will need to charge a program fee of 0.25% to cover program costs. The City's financial commitment to administer the program would include operations, loan loss reserve, program marketing, and staff time.**

Program costs are estimated in Table 2 assuming a working capital of $7.6 million. The actual cost will be dependent on the number of projects completed. Staff estimates direct costs to the City will be $125,000 in year one, and $75,000 each of the following years. Once the program is fully established (past the pilot phase), City staff will evaluate the ongoing offering of this program annually.

Table 2. *Uses and Sources of Funds*

Use of Funds	Source of Funds	Amount
Program Start-Up (marketing, legal fees, program design)	City of Ames Electric Utility Fund	$50,000
Operations (Program Operator) $100,000/year	City of Ames Electric Utility Fund	$75,000/year
	USDA RESP Loan (program fee)	$25,000/year
Working Capital	USDA RESP Loan	$7,600,000
Loss Reserve	City of Ames Electric Utility Fund	Write-offs (est. $75,000)

STAFF COMMENTS:

Since the creation of this new SmartSave program is another step in implementing the City's Climate Action Plan, City staff intends to proceed through the application process with USDA unless the City Council has any concerns about proceeding. Therefore, no action by the Council is required at this time.

Instead, this staff report provides an update regarding this new program. Staff will return to the City Council at a subsequent meeting with final documents from USDA. At that time, staff will seek final direction/approval of the program and funding opportunity.

ATTACHMENT(S):
Energy Upgrade Program 6-9-2026.pptx