



Legislation Details (With Text)

File #: 18-220 **Version:** 1

Type: Report **Status:** Agenda Ready

File created: 3/9/2018 **In control:** Public Utilities Advisory Board

On agenda: 3/15/2018 **Final action:**

Title: Receive the report and provide direction on the City's Electric Renewable Energy Program Options

Sponsors:

Indexes:

Code sections:

Attachments:

Date	Ver.	Action By	Action	Result
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PUBLIC UTILITIES ADVISORY BOARD AGENDA ITEM

ACTION REQUESTED:

Receive the report and provide direction on the City's Electric Renewable Energy Program Options

DEPARTMENT: Electric Utility

SUBMITTED BY: Mark Curran/Lucy Hynes

BOARD/COMMISSION REVIEW:

PUAB recommendation of the five options for consideration by Council

BACKGROUND:

In 2004, the Naperville City Council approved the Naperville Renewable Energy Program enabling utility customers (both residential and businesses) to make voluntarily monthly payments through their electric bill to support the City's investment in renewable energy. With a 5.53% participation rate in the program it is among the top 10 green power community programs in the United States according to the National Renewable Energy Laboratory (NREL). The renewable energy for the program is sourced 100% from Illinois-sited renewable energy facilities (99% wind, 1% solar). The program also provides grants to directly fund local community-based renewable energy projects for all commercial customers who invest in solar, wind, biomass, and fuel cell technologies projects. The goals of the program are to create opportunities for our community to learn about renewable solutions, support grant projects that measurably increase renewable energy usage and displace fossil fuels, and have projects that can be replicated. Awards include a \$50,000 maximum rebate (up to 50% of the applicant's total cost of the energy improvements and the city rebate award amount and grants from all other sources shall not exceed the total project cost). The program will also support the 50kW unit that will be installed on the Municipal Center roof.

The Renewable Energy Grant Program announcement and link to applications are posted on the City's website and communicated to customers via press releases and social media. Since 2014 the city has approved \$471,500 grant dollars in support of 790 kW of solar installation and one

geothermal installations (saving 3,810 therms of natural gas per year). The program maintains a fund balance of just over one million dollars and collects \$284,000 annually.

DISCUSSION:

Staff would like to expand the program with the following five options.

1. Increase the award amount for commercial grants
 - The current commercial grant program awards up to \$50,000. The program has supported eight commercial installations with cost varying from \$50,000 to \$1.5 million in support of 10-500kW. Staff is recommending this grant amount to be increase to a maximum of \$100,000 or up to 50% of the project cost and the total grant awards not exceeding \$400,000 in the budget per year. The increased dollar amount of the grant may increase the number of applicants considering installation of a system. Five commercial projects were installed within the last two years.
2. Include a grant program for all residential electric utility customers
 - The program would provide grants to directly fund renewable energy projects for all residential customers who invest in solar, wind, biomass, and fuel cell technologies projects. The goal of this program would be to help support the growth of such technologies. The award would be a \$5,000 maximum rebate per residence (city rebate award amount and grants from all other sources shall not exceed the total project cost) with the total grant awards not exceeding \$50,000 per budget year. Nine residential projects have been installed within the last two years through the permit process.
3. Increase the amount of Municipal owned solar
 - Pending the outcome of the Municipal Center solar project, staff will evaluate the feasibility of installing an additional 100kW of solar on municipal buildings. The cost for this is approximately \$300,000 and be budgeted over a two-year period.
4. Purchase more Renewable Energy Certificates
 - A Renewable Energy Certificates (RECs), also known as green energy certificates or tradable renewable certificates, are proof that energy has been generated from renewable sources such as solar or wind power. Each REC represents the environmental benefits of 1MWh of renewable energy generation. REC prices fluctuate on the market and have decreased in recent years. In the current program, a \$5 contribution will purchase 200kWh, or 1/5 of a REC. Staff recommends a \$5 contribution will purchase 1000kWh (1MWh), or 1 REC. This automatically increases the number of RECs the program will purchase and therefore supports the Illinois renewable energy market place. This can be easily implemented and reduces the fund balance over time.
5. Develop an 'All Wind' option for large commercial customer
 - There have been a few requests from large commercial customers to cover all their load from renewable wind energy. The current structure of the program does not allow this option. By establishing an 'All Wind' market rate we may be able to grow the program's participation rate while enhancing the City's partnership with these highly valued customers.

After 2 years, staff will reevaluate each option of the grant program, determine the participation rate, and provide future recommendations.

By year 3, if each option of the grant program is achieved, the anticipated fund balance would be near zero.