



AGENDA ITEM #: 17-162

COUNCIL MTG OF: December 19, 2017

FROM: Michael A. Fowler, P. E., Public Works Director

OFFERED BY: Michael A. Fowler, P. E., Public Works Director

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SUBJECT: Supplemental Appropriation – Solar Panel Installation Transfer Station

**STAFF REPORT**  
*Public Hearing 12-19-17*

#### PURPOSE

The purpose of the staff report is to seek Town Council approval of a supplemental appropriation to proceed with installation of a solar panel array at the Transfer Station

**TOWN ADMINISTRATOR COMMENTS** – The Council is encouraged to move this matter to a public hearing on December 19, 2017.

#### BACKGROUND

The Energy and Environmental Advisory Committee (EEAC) along with the Net Zero Committee have been promoting the goal of clean energy through the installation of solar panel arrays at private residences and public facilities. Initial estimates were provided to Town Council and subsequently, an RFP was solicited in September 2017 to obtain pricing to purchase and install solar panels to be placed at Marion Gerrish Community Center and Transfer Station. At the November 21, 2017 Town Council meeting, a presentation was made regarding the economics of these proposals. The RFP evaluation committee recommended that the Town seek to proceed with the Transfer Station proposal only, due to less attractive payback at Marion Gerrish Community Center.

#### DISCUSSION

The RFP process yielded two proposals to mount panels on the southwest facing slope of the Transfer Station facility. The leading proposal is to mount 240 ground mounted, tracking - 360 Watt panels.

\$282,400 gross = \$1.82 per kWh - \$ 58,812 rebate - \$223,588 net – **9.28 year payback**

155,200 kWh annual production

REC Credits = \$3880 per year

Avoided Utility Cost = \$20,176 per year

\*Financing costs will alter the payback equation to approximately 11.5 years.

It is estimated that the Transfer Station will use approximately 50,000 kWh annually from the solar panel array. The remainder of the electricity produced (105,200 kWh) will be used by the Wastewater Treatment plant.

#### FISCAL IMPACT

No impact to tax rate. A supplemental appropriation will be offset by proceeds of 10 year lease. Principal and interest payments would be covered by proceeds from rebates, renewable energy credits (RECs), and avoided utility costs for the Transfer Station and Wastewater divisions.

Electricity budgets (410) in these two divisions will be funded as if they were supplied by the grid, savings in each division will be used as principal and interest payments. Once the financing is paid off after ten years, these divisions will obtain electricity from the solar panels at no cost, avoiding approximately \$20,000 in utility costs, based on 2017 third party supply contract costs.

The Town will incur maintenance costs as the owner of the panels but the panels are expected to produce power for at least 25 years.

**RECOMMENDED ACTION BY COUNCIL**

It is recommended that the Town Council approve the attached resolution.