

VILLAGE OF CHAGRIN FALLS UTILITIES COMMITTEE March 6, 2023

Members present: Corkran, Rockey
Members absent: Drum
Also present: Mayor Tomko, Elliott, DeFranco, Cyvas

The meeting was called to order at 7:00 p.m. by Mr. Corkran.

APPROVAL OF MINUTES

None.

WASTEWATER TREATMENT PLANT (WWTP) SOLAR PROJECT

The Utilities Committee met for an Administration presentation, led by Mayor Tomko, on the proposed WWTP solar project. As part of the project research and analysis, a Council-approved RFP was executed. Yellow Lite (contractor of the Progressive main campus project adjacent to I-271, as an example of their work) was the low bidder (www.yellowlite.com).

Based on the project presentation and in-depth discussion, the Committee voted to recommend the project for approval by Council at the earliest possible meeting.

The key project points discussed were:

- The project is attractive for the obvious Green Energy benefits, but also as a financially justified project that is self-funding from Day #1, generating cost reduction immediately upon operational start-up.
- The Village's Power Purchase Agreement (PPA) expires in June 2023. The best intelligence available is that our power generation rate will rise from \$0.035/kwhr to a likely level of ~\$0.08/kwhr – a 128% increase across our full electrical consumption, if we take no action.
- Based on the most conservative assumptions using actual 2022 WWTP electricity consumption and cost data, the power generated from the planned solar field will have a fixed “all-in” Levelized Cost of Power of \$0.0514 over the entire 25-year life of the field, inclusive of projected annual maintenance costs. As explained below, this fixed \$0.0514 modeled in the analysis is conservative and the “per kwhr” cost rate the Village could achieve will likely be lower, driving greater savings.
 - The planned solar installation is modeled to generate between 35% and 44% of current power needs based on actual 2022 data. Yellow Lite is guaranteeing a 35% rate and all financial modelling was done at this 35% rate – the lowest end of the range of expected benefits.
- The analysis does not include any WWTP Phase #2 project benefits targeted to reduce overall power consumption. That impact will increase the share of WWTP power needs provided by the solar field from the base “35%-44%” range and improve the overall economic benefits.
- In addition to the incremental WWTP Phase #2 benefits not included, the financial model does not include the following factors that will improve the realized economic benefits:
 - Expected 40% Federal “reimbursement” (from the Inflation Reduction Act) for project engineering costs modelled at \$160,000 (engineering costs may decline to

- closer to \$100K).
- 22% funding from Geauga County for their share of the net project funding.
- Actual energy offset exceeding the Yellow Lite “guaranteed” minimum 35% generation rate of WWTP demand used for financial modelling.
- Future sale potential of carbon credits generated.
- Based on the modelled assumptions and the Yellow Lite bid, total project cost is projected at \$1,100,000 (see Project #12 of the Capital Improvements Plan). Funding includes offsetting Cuyahoga County grant funding and direct federal government Green Energy project payments totaling \$626,000. Debt funding of the remaining \$474,000 is projected over 20 years at 2.5% interest. Of the debt, Geauga County will fund the cost of 22% of the debt (~\$104,000).
- The project yields a net positive operating cash flow in every year.

Based on high demand for Green Energy infrastructure, the lead time on the project is estimated at eleven (11) months from approval. The long lead time relates to availability of the electrical switchgear required. Assuming project approval by Council, the Village will still see the 128% increase in power cost from the June 2023 expiration of the current PPA until the installation is operational, when the benefits will reduce costs immediately. This is the reason why the Utilities Committee is recommending that Council approve the project for implementation at the earliest practical date.

In summary, proceeding with this solar installation is a self-funding, financially attractive stand-alone project that generates immediate cost savings. It is also a responsible Green Energy initiative.

MISCELLANEOUS

None.

ADJOURNMENT

The meeting adjourned.

W. Michael Corkran

Mike Corkran, Chairman
MNM