

---

---

**VILLAGE OF SUGAR GROVE  
BOARD REPORT**

---

---

**TO:** VILLAGE PRESIDENT & BOARD OF TRUSTEES  
**FROM:** SCOTT KOEPEL, VILLAGE ADMINISTRATOR; MATT ANASTASIA, FINANCE DIRECTOR  
**SUBJECT:** DISCUSSION: SOLAR ENERGY ON VILLAGE PROPERTY – FINANCIALS & FOLLOW-UP  
**AGENDA:** SEPTEMBER 19, 2023  
**DATE:** SEPTEMBER 15, 2023

---

**ISSUE**

Shall the Board discuss purchasing solar panels to be installed on Village property at the Water Treatment Plant at 455 Arbor Ave.

**DISCUSSION**

At the Village Board meeting on September 5, 2023, Arnie Schramel, Progressive Business Solutions, presented the option of installing solar panels at the Water Treatment Plant located at 455 Arbor Ave. There were two types of contracts, 25-Year Power Purchase Agreement or Village purchase. The Board had discussion around the better option of a 25-Year Power Purchase Agreement or Cash Purchase of the Solar System. After reviewing the positive cash flows of the system, it was determined the Cash Purchase option was the best option. FD Anastasia stated we would bring back to the next meeting a discussion of how to fund the Cash Purchase option.

The current Water Capital Fund has a Fund Balance of \$2,779,538 for Water Infrastructure. The current bond interest rate for the Village is estimated anywhere between 4%-4.5%. The Water Capital Fund, based on the current Capital Improvement Program, will begin to run a deficit for Infrastructure in FYE2027. With the market the way it is now, it is recommended to use current Fund Balance to fund the cash purchase, instead of bonding currently.

The projections of Progressive Business Solutions for cash flow show the Village would need to upfront pay \$1,033,345 with General Energy. This would consist of the following:

- **Fiscal Year 2024 (unbudgeted) - \$620,008**
  - Time of Signing - \$310,004 (30%) – October 2023
  - Delivery of Material - \$310,004 (30%) – April 2024

- **Fiscal Year 2025 - \$413,337**
  - Due Upon Installation - \$310,004 (30%) – June 2024
  - Final Payment with Permission to Operate - \$103,333 (10%) – July 2024

However, with the rebates and savings, the Village would receive the following credits/rebates back:

- **Fiscal Year 2025 – Year 1 - \$487,053**
  - Investment Tax Credit (30%) - \$350,048
  - Illinois Power Authority SREC Payment - \$84,815
  - Electric Power Savings - \$52,190
- **Fiscal Year 2026 – Year 2 through Year 15 - \$121,779 (Estimate)**
  - Illinois Power Authority SREC Payment - \$69,848
  - Electric Power Savings - \$52,929

After **Year 1**, the Village Capital output would be a total of **\$546,292**.

To replenish the Water Capital Fund, an additional transfer amount of \$53,000 will be added to the Water Operating Fund (Fund 50) budget, as the electricity savings will be realized in this Fund. The Investment Tax Credits and Illinois Power Authority Payments will be deposited directly into the Water Capital Fund (Fund 51). The Village would see a positive cash flow from the project in Year 6 (Fiscal Year 2030). This does not change the Village's position for the Capital Improvement Program needs in Fiscal Year 2027, where a deficit happens. Without grants or a change in program needs, bonding or loan options are going to be explored regardless of whether to complete the required projects.

During the discussion at the Board meeting there were two items brought up by Board members for clarification and research: 1) Decommission costs of the panels, and 2) Research other green energy options.

Below is a chart from Progressive Business Solutions regarding the current costs for decommissioning the Solar Panels:

<b>Labor Costs</b>			
10 People X 24 hours (240 total hours) X \$90 per hour (Union Labor)			\$ 21,600
<b>Equipment Costs</b>			
Backhoe, Telehandler, dumpster, bobcat and truck 3 days			\$ 18,000
Miscellaneous cost and Contractor Profit			\$ 12,000
<b>Total estimated cost to remove Solar Field</b>			<b>\$ 51,600</b>
<b>Scrap Value of Materials</b>			
Material	Scrap Value	Weight	Scrap Value
Steel	\$200 Ton	200 tons	\$ 40,000
Copper Wire	\$2 lbs.	2,100 lbs.	\$ 4,200
Aluminum	\$0.47 lbs.	16,528 lbs.	\$ 7,768
Solar Inverters	\$1 lbs.	2,250	\$ 2,250
<b>Scrap Value Total</b>			<b>\$ 54,218</b>

Staff investigated other green energy opportunities to save the Village in the future. Currently, the best incentives are for solar projects and LEED certified buildings. Staff will seek out any incentives while renovating the Police Department building.

## **COST**

There is no cost to complete the Resolution.

## **RECOMMENDATION**

The Board discuss if they would like to proceed with the Solar Energy project on the Village property located at 455 Arbor Ave.