**Solar Panel Update**

Green Team Meeting

3 March 2024

Tom Meyer

**RE-volv Situation**

Because of the new rules in the Inflation Reduction Act, in order to get the solar power credits, the property owner must own the solar array. This kills the Power Purchase Agreement we had been discussing. The best they can offer is a loan at 7 percent. We do not need this, so we are ending our relationship with them.

**CB Solar, Urbandale, IA**

This is the firm we would have worked with had things worked out with RE-volve. I had put RE-volve in touch with them since they were the firm I chose for my own solar panels in 2017, and had no issues with them.

Their proposal:

* Rating: 23 kilowatts AC
* Raw price $73,878
* ITC rebate (IRA): $22,163
* City of Ames rebate (est.) $2000
* Net cost: **$49,715**
* Estimated annual output: 37,590 kWh
* Estimated payback period: **15 to 16 years**. (11.5 years at $0.12/kWh, 19.2 years at $0.07/kWh)

**First site visit**, 13 Dec 2023

Cory Novak from CB Solar did a survey of the site. We would have to separate the office from the church building in any installation. The office is only 15 percent of our usage, so we are looking only at the church building.

Cory is not an engineer, so we will need to have a visit from their engineer, to assess the building’s strength.

**Second site visit**, 15 Feb 2024

Matt Edwards visited with Ken Birt and myself

The flat roof covers two separate additions: a 1958 one containing Fellowship Hall and the kitchen and a 1929 one from Fellowship Hall to the start of the parlor.

We found the blueprints for the 1958 addition but they are barely readable. We have not yet searched for the 1929 blueprints.

Matt was able to use an existing ceiling hole in the NE nursery room to look into the roof support and take measurements. He feels he has enough information for that part of the building.

We were unable to see above the ceiling in the 1929 part, and this is the next step. If they can gain access, they will take care of the engineering assessment cost. If they cannot, we will have to pay an estimated amount up to around $2000. Matt suggested installing a 24”x24” ceiling access panel. These cost $80 to $150 just for the panel.

Our options:

1. Find the blueprints and hope they are readable and have the needed information.
2. Poke a small (4”) hole in the ceiling and hope we can get enough measurements.
3. Buy one (for 1929 addition) or two (for both additions) ceiling access panels and install them ourselves.
4. Buy one or two panels and hire someone else to install them.

**Next steps**

1. Complete the engineering assessment. How to Pay? Memorial fund?
2. If the engineering assessment says we are structurally sound, present a proposal to the congregation to proceed and approve using 150th Anniversary Funds to pay for it.

V1.0

3 Mar 2024

T. Meyer