

Enerchange Meeting and Building Walk-thru

April 05, 2022

Present: Leroy Mitchell, Matt Mitchell, Gail Seaver

Guest: Mark Ginsbach, Enerchange, Energy Efficiency Engineer (612) 616-5632

Discussion points:

1. Gail provided Mark with a listing of Trinity's furnaces and Air conditioning units locations and years installed. Also provided him the most recent Aerotek bid, a partial copy of the Mint Company's roof report, the timeline of our building program, and some building schematics showing room locations. We also gave Mark a building tour of all of the mechanical rooms. The total time spent with Enerchange was 2 hours.
2. Mark explained his relationship with EnerChange. He is an energy engineer who works with the nonprofit Enerchange to help other nonprofits save energy. They are fully funded through Xcel Energy and Centerpoint Energy and there is no charge for his services. One of the items he looks at is the energy demand Trinity uses in the Winter and in the Summer for the previous three years. Trinity's peak demand comes in the Summer when we are running the air conditioning and use about 46 Kilowatts of energy while our Winter usage is about 18 Kilowatts. However, Xcel Energy billing is based on the winter demand being $\frac{1}{2}$ of the peak demand of summer so we are being billed about 23 KW ($\frac{1}{2}$ of 46) while we may only be using 18 KW. So, one of Mark's goals is to possibly schedule the air conditioning in the summer to use less air conditioning and not have to pay for unused energy in the Winter. Leroy pointed out because Covid had pretty much shut down the building for the past two years, the energy usage recorded for the past three years may not be realistic compared to prior and future usage. Leroy and Matt also noted that Trinity is in the process of getting Wi-Fi programmable, setback, thermostats which may help in reducing and leveling off Trinity's energy usage.
3. Mark would like to see the furnaces and air conditioning we install to be high efficiency (95%) compared to standard efficiency. Our most current estimate from Aerotek does not state the furnace efficiency, so we need to look at those unit replacements and decide if we need to upgrade them if they are standard efficiency. Mark noted that roof top units that are both heating and air conditioning (Trinity only has Air Conditioning Roof Top units) are standard efficiency because Minnesota climate will not allow a condensing unit of high efficiency without freezing.
4. Mark suggests that we look at the air handler in the sanctuary to see whether replacement or refurbishing is needed. The controls portion of the system seem to be in the most need of replacement.
5. Mark would like to see equipment estimates that we receive so he can review the equipment for energy efficiency.
6. Mark estimates that he can have a report for Trinity in about two weeks.
7. Mark will put in the report contact information for solar assistance from the non-profit Interfaith Power and Light who help congregations get into solar and do some energy efficiency things.

Gail