

Pump House Committee

2023

- Oct. 21, 2023
 - Flynn Drilling replaced a number of pipe sections connected to the well pump
 - Holes in the pipes were the reason for low pressure (many complaints about low water pressure prior to the repair)
- Generator - Desire from BCA residents to look into a backup generator for the pump house. **Pump house 10HP motor does not have soft start or variable speed. It's either off or at full power. This drives up the load and the required generator to support the system.**
 - Manual transfer switch (requires BCA residents to run the system) - assume someone can get out of the neighborhood/or someone can get in.
 - Transfer Switch - Bathe Electric - at least \$2,690 (estimate is 1 year old)
 - Generator
 - Rental - would require BCA to rent/pick up a generator each power loss event
 - NuWay - \$195 per day, \$650 per week
 - Buy (30KW - Flynn estimate)
 - Diesel \$6000-\$16,000
 - Maintenance - regular maintenance/testing required
 - Fully automated (kicks on by itself when the power goes out), including self test; address the scenario of ice storm/major storm with road closures
 - Academy Air (no supporting calculations - SWAG'd the load)
 - Liquid Propane 24KW system - \$18,717 plus gas service to be priced by BCA
 - Brda
 - Liquid Propane 60 KW system- \$33,599 plus gas service to be priced by BCA
 - Diesel system 100KW - \$48,399 (includes tank for 4 Days runtime)
 - Maintenance - regular maintenance/testing required

Brda took the time to calculate the load for the building. The building has the following electrical loads in it

1. An air compressor, A dehumidifier, A heater , A well pump, Inside Lights, Exterior Lights, Well pump controller, some outlets

Brda staff were able to chase down the details on the motor, the pump itself and additional details on the controller system through discussions with Flynn Drilling. With the type of electrical motor used in the system, the motor does not have a soft start or a variable speed. Thus it produces a very significant electrical load upon start up. Pump draws roughly 50 Amps during steady state and 150 amps during startup. System is 240V -> 36kW at startup.