

# Geo Systems for NYS



NY-Geo Top Job

April 10, 2019

# The Goal

- To deliver
  - The most efficient
  - Standardized
  - Simplest
  - Reliable
  - Cost effective
  - Self adaptive

System to provide heating, cooling and 100% of domestic hot water.....without supplement heat

The Goal

At a fixed price

The Goal

Utility Scale

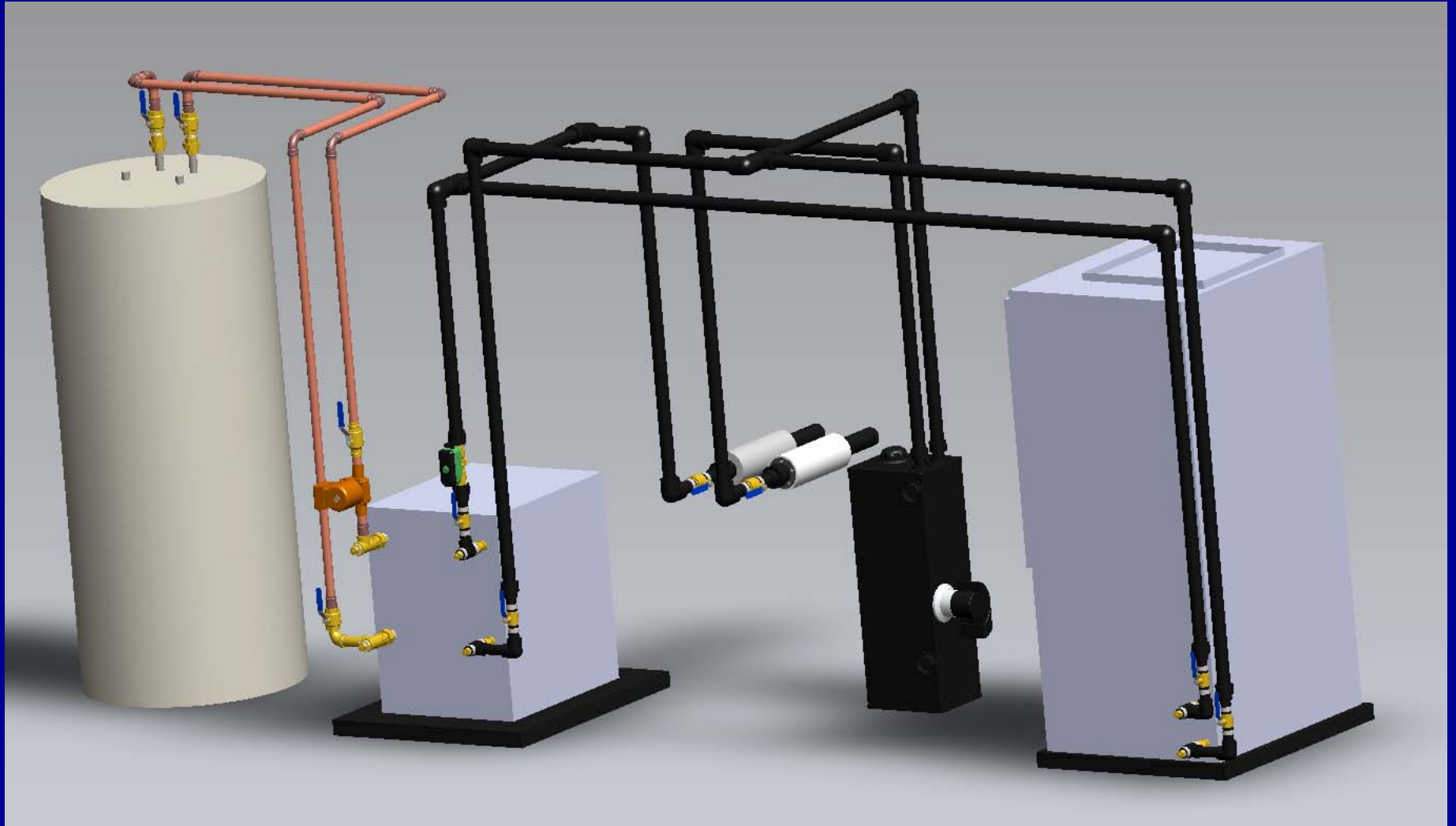
# Things needed

- System must adapt to most Occasions
- Variable Speed Technology
  - Compressor
  - Circulation Pump
  - Blower
- Waterfurnace 7-series
- Dedicated hot water heat pump
- Remote Control and monitoring
- Radicality

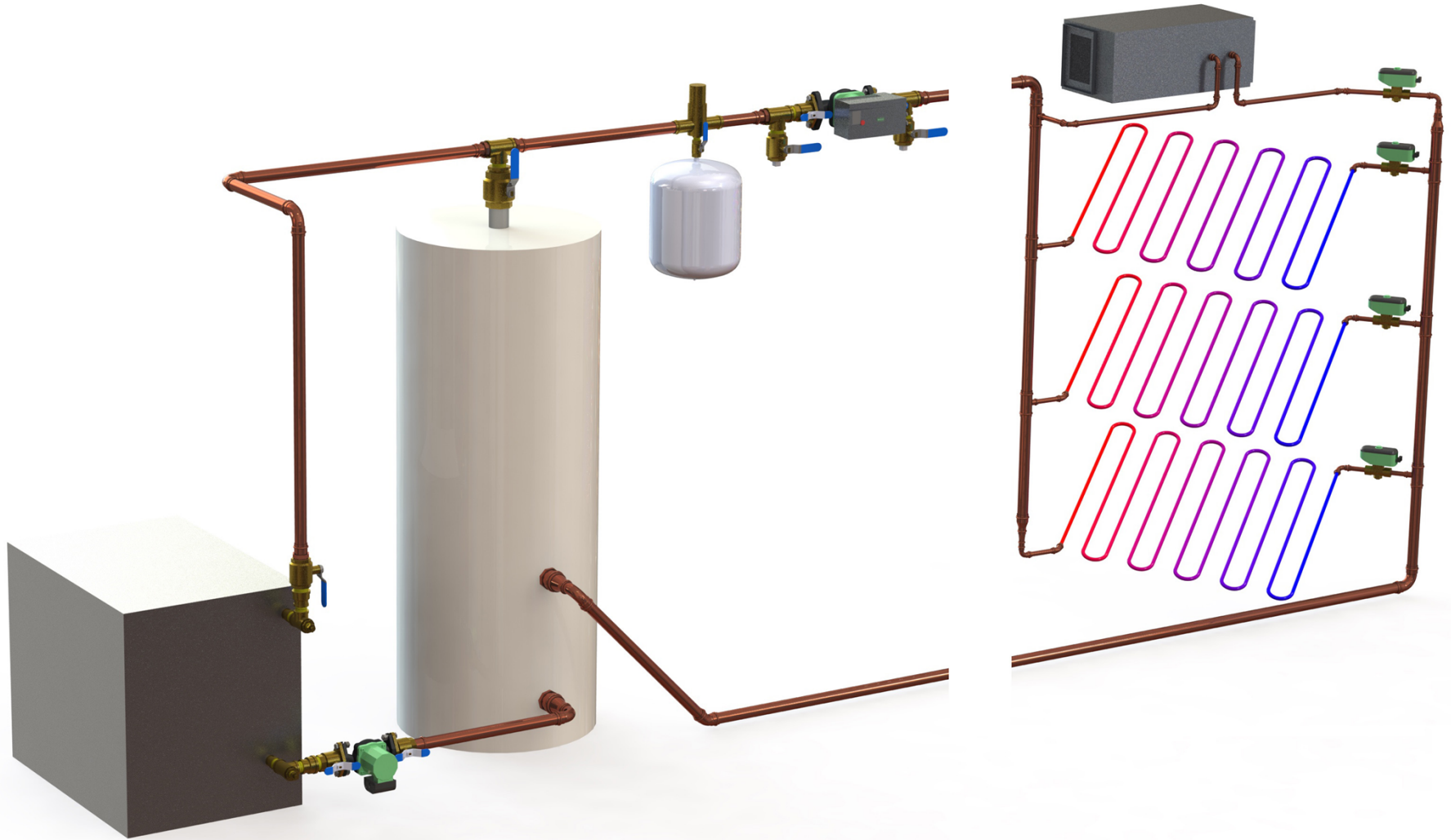
# Specs

- Serves 20,000 – 70,000 BTU/H
- Houses between 1,000 and 4,000 sqf
  - Good insulation
  - Excludes custom houses
- \$38,000

# GroundUp standardized design 3-5 tons ... plus 2 ton DHW



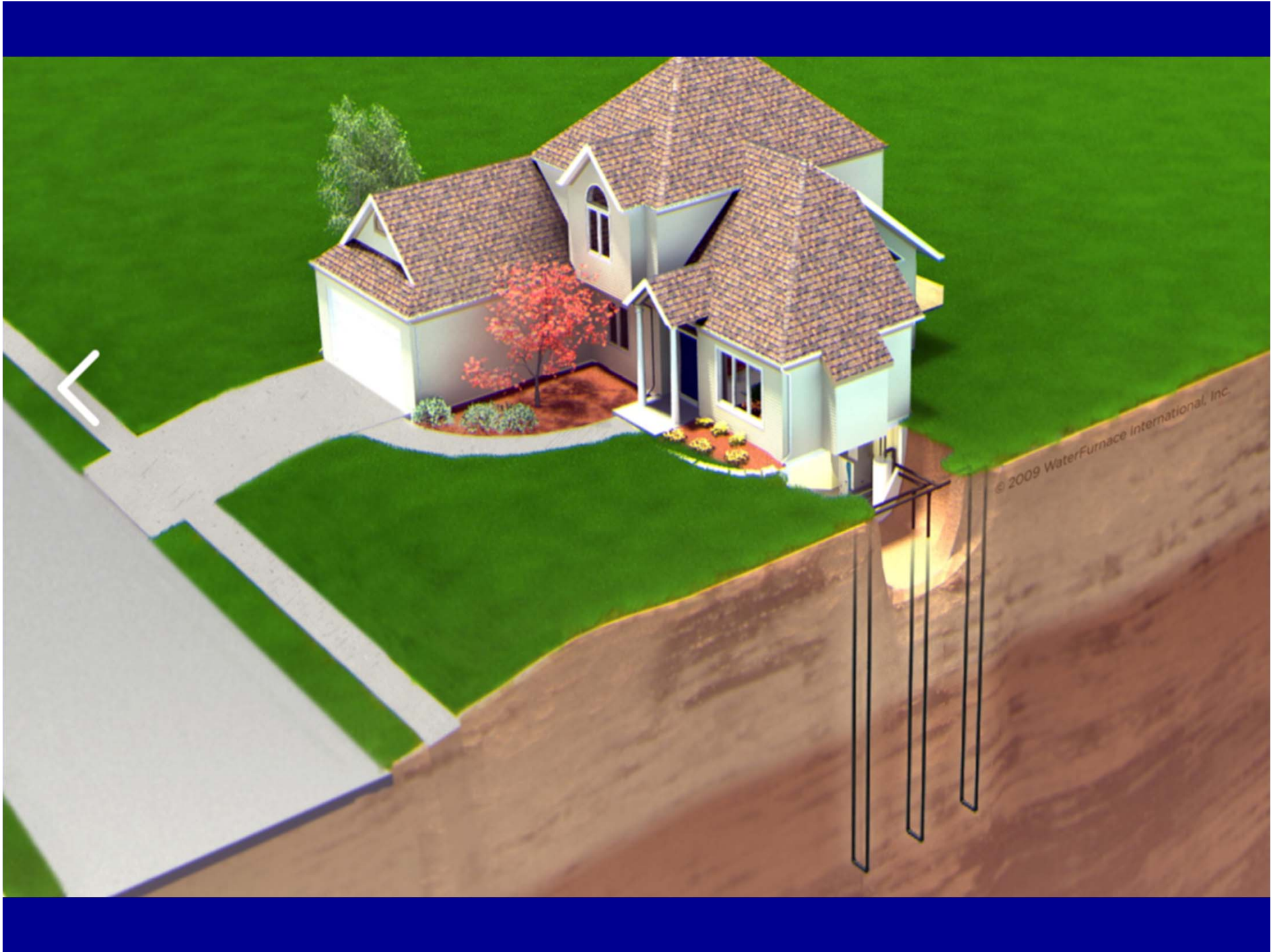
# GroundUp Radiant including High Temp





# Most Important Thing Needed

- Change in Mindset









Show Temperatures in

°F

### CURRENT STATUS:

9:42 AM Tue 3/12 Eastern



Heating Speed 2

### THERMOSTAT SUMMARY

74°

78° Cool      74° Heat

● Heat

### MIDDLEPORT, NY



Current Temp: 29°

### EQUIPMENT SUMMARY

Series: 7 Series  
Model: NVV060A101CTR0KN  
Serial #: 180801484

Supply Air: 89.6°F



Humidity Level: 41%



Comp Speed 2



Fan Motor 2



Aux Elect Heat OFF

### CURRENT ENERGY USE



Compressor 859 W



Fan Motor 39 W



Total Unit Energy 934 W



Aux Elect Heat 0 W



Loop Pump 36 W

Wednesday ☁ 44° 25°

Thursday ☁ 57° 41°

Friday ☁ 57° 42°

Saturday ☁ 41° 28°

Sunday ☁ 37° 22°

Powered by [Dark Sky](#)

Show Temperatures in

°F

### CURRENT STATUS:

9:41 AM Tue 3/12 Eastern



Standby

### HYDROSTAT SUMMARY

129°

60° Cool      130° Heat

● Heat

### MIDDLEPORT, NY



Current Temp: 29°

### EQUIPMENT SUMMARY

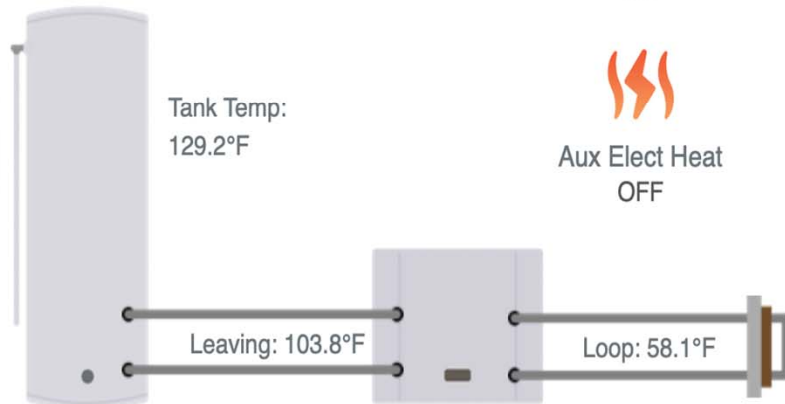
Series: NSW Water To Water  
Model: NSW025G10HCSS0DA  
Serial #: 180801489



Comp Speed  
Off



Aux Elect Heat  
OFF



### CURRENT ENERGY USE



Compressor  
0 W



Load Pump  
0 W



Total Unit  
Energy  
0 W



Aux Elect Heat  
0 W



Loop Pump  
0 W

Wednesday      ☁ 44° 25°

Thursday      ☁ 57° 41°

Friday      ☁ 57° 42°

Saturday      ☁ 41° 28°

Sunday      ☁ 37° 22°

Powered by Dark Sky



# Hot water for \$10-15/month

## Family of 4

### MY ENERGY USE

Power

Dollars

● Heating (Part) ● Heating (Full) ● Cooling (Part) ● Cooling (Full) ● Aux Heat ● Fan



### Averages (kWh)

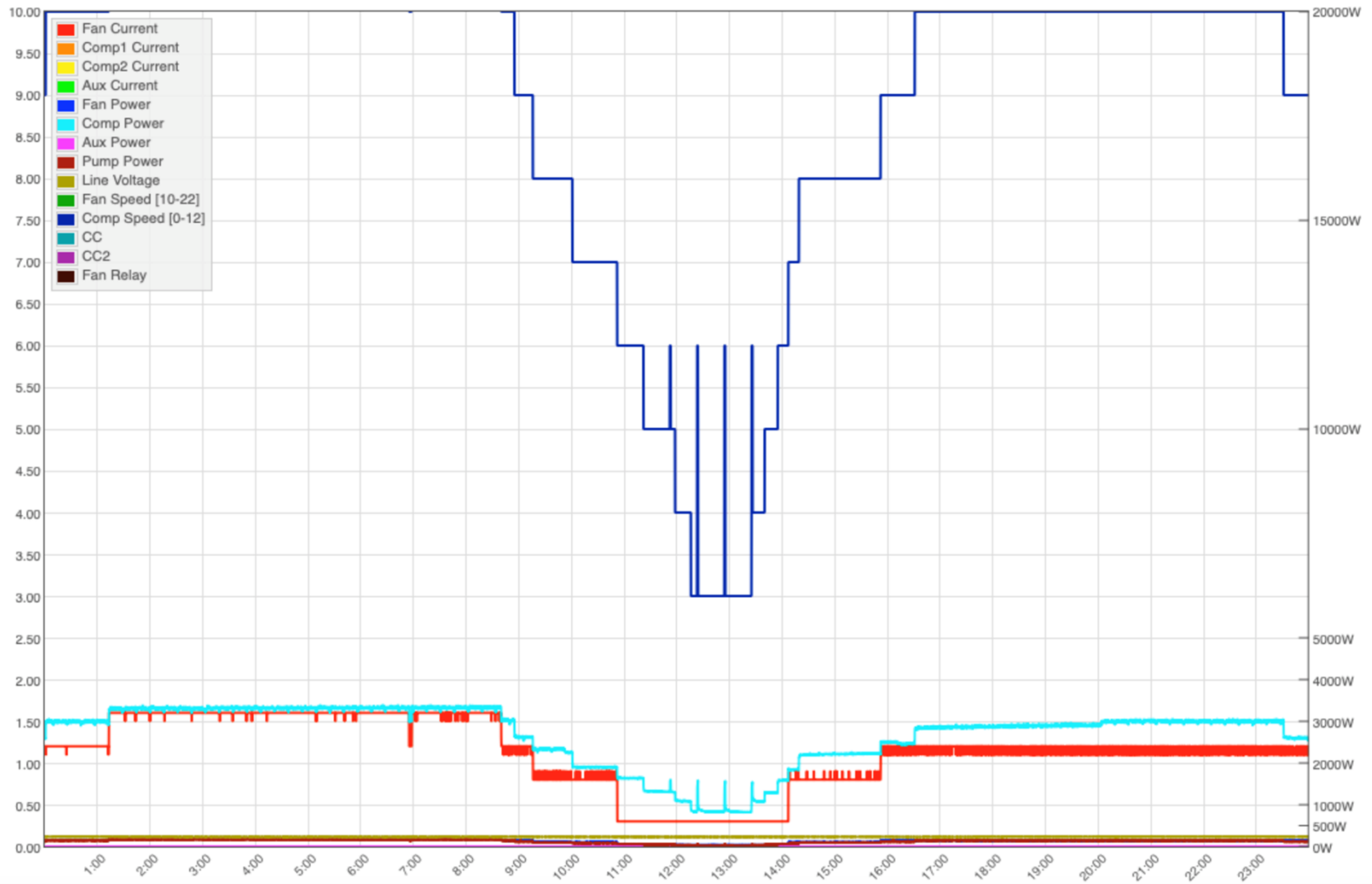
Heat Stg 1:	116
Heat Stg 2:	0
Elec Heat:	0
Total Heating:	116
Cool Stg 1:	0
Cool Stg 2:	0
Total Cooling:	0
Fan Only:	0
Total (Htg, Clg, Fan):	116

# Peak Heating Performance

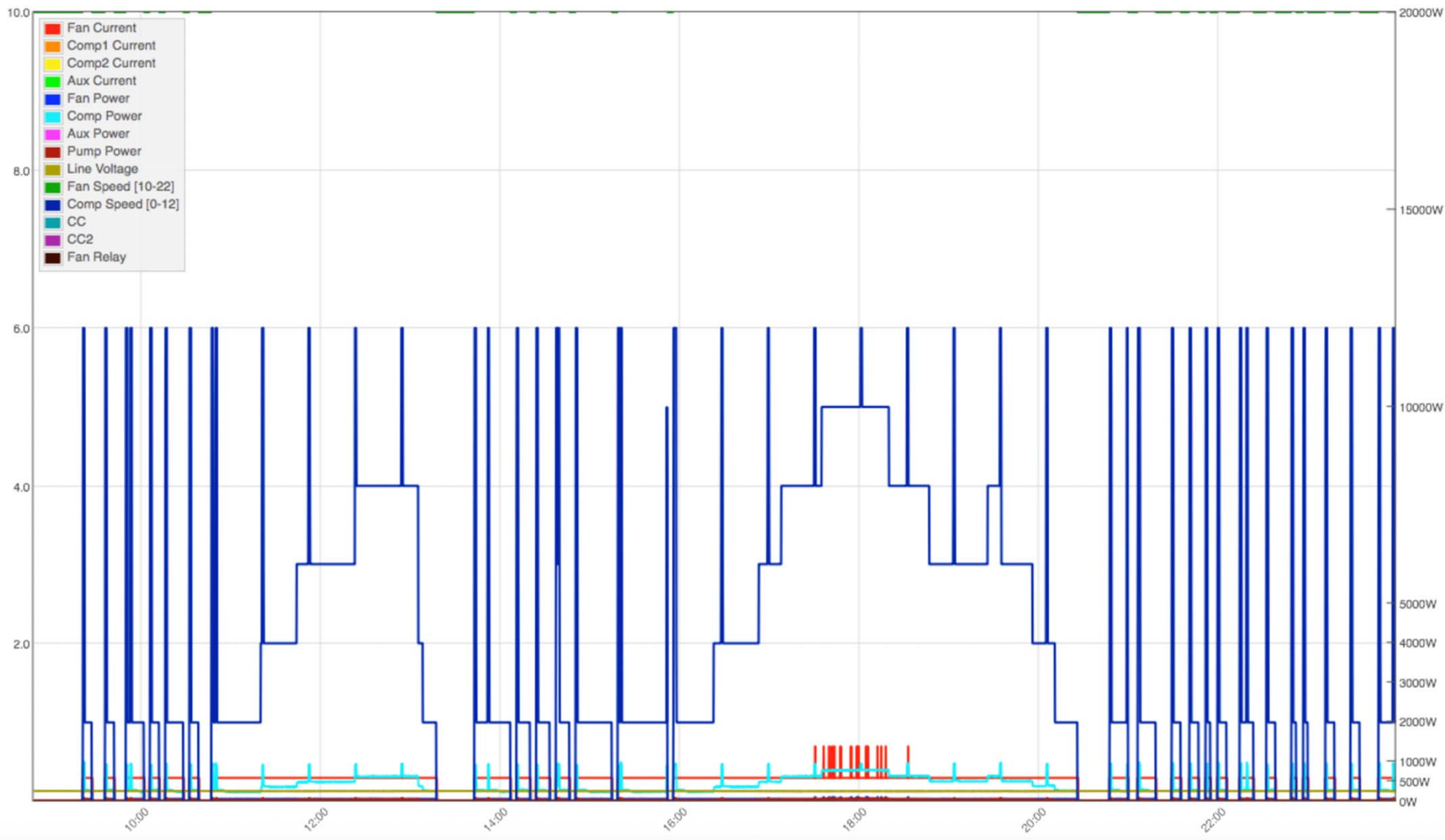
Energy Monitoring - 01-31-2019



Single-click without selecting to reset zoom







One last thing...

# Financing

- Zero Down
- \$128/month
  - over 20 years

# Key Data

- GroundUp Members account for  
–55% of NYSERDA Rebate \$  
&  
–41.5% of projects

– April 2019

# Thank you !



Dailey Electric, Inc.

