

Frederick Douglass Solar Project - Options

Option 1: 28.2 KW PV feeding the 400 Amp service only (Panel PP)

- Single Meter Connection Cost: \$112k for PV only
- Inverter is 30 KW Sol-Ark hybrid (works with or without batteries)
- Battery Options – up to 3 x 40 kWh increments (120 kWh max)
- 30 KW Inverter Sol-Ark is smallest size, so not cost effective to split system

Option 2: 28.2 KW PV system split between two meters

- Two Meter Connection Cost: \$121k for PV only
 - Use Hybrid Microinverters (also work with or without batteries)
 - 4 panels per inverter, 16 total microinverters required
 - 17.6 KW PV using 10 microinverters connected to the 400 Amp service (Panel PP)
 - 10.6 KW PV using 6 microinverters connected to the 225 Amp service (Panel TP)
 - AC Connection can be made directly to each service panel, allowing solar to operate while on generator.
 - Battery Options: Up to 64 kWh max (one per solar panel)
 - This Battery Option is 60% more expensive per kWh than the Option 1 battery.
- NOTE: If the goal is to avoid selling any energy back to the grid at the highly discounted rate, Option 2 achieves that goal by splitting the solar at an increased cost of \$9 k, whereas Option one must use a battery to achieve that objective, which adds \$48 k of additional cost.

