

The property at 5471 comes with solar panels and a Tesla Power wall to provide backup power. These form an integrated unit. The power wall is the large white box in the back yard labeled Tesla. It is a unit for the home and has nothing to do with Tesla vehicles.

The solar panels generate power during daytime and they send the power out in the following order:

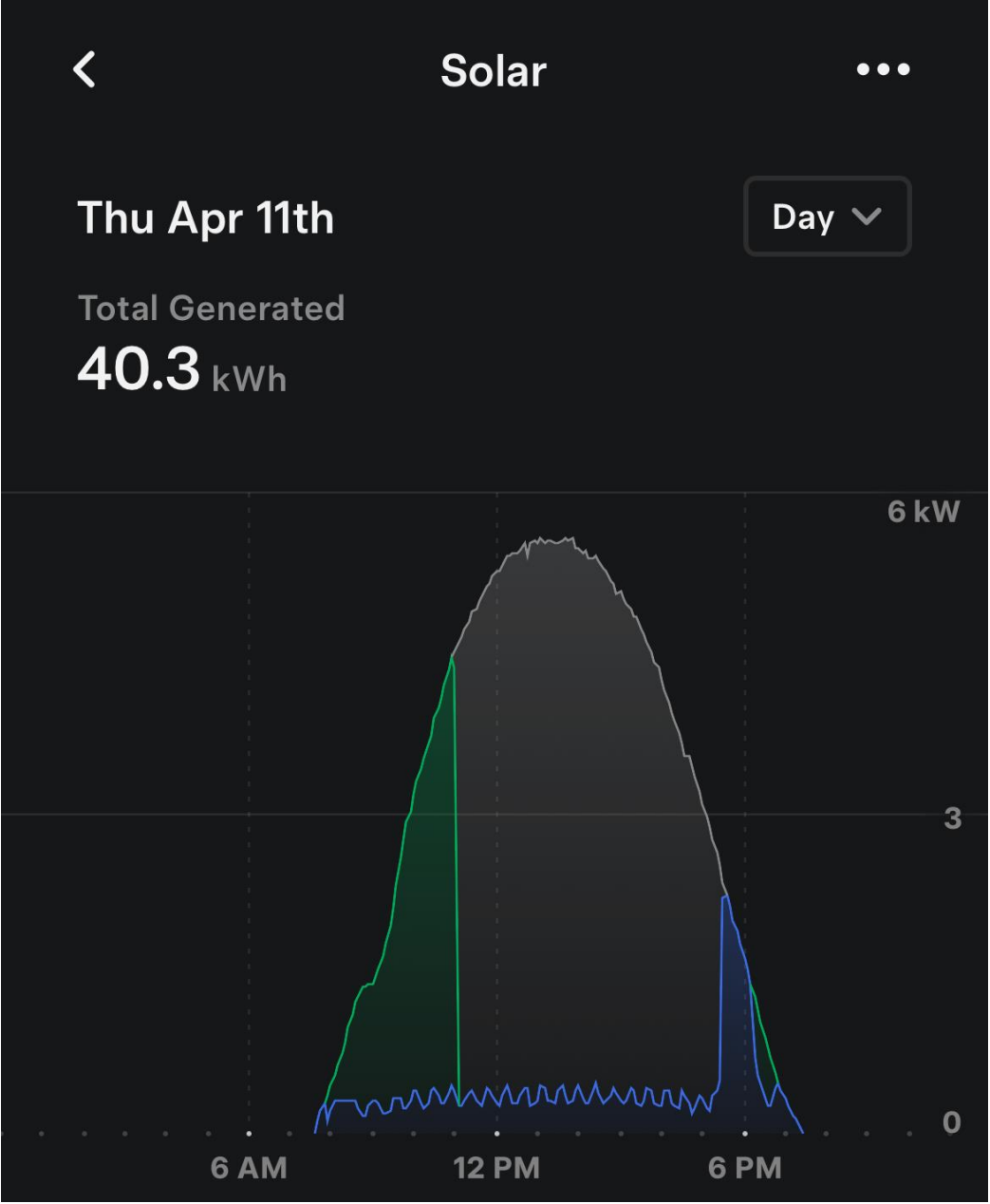
- 1) To the house to meet the electrical needs of the house at any given moment
- 2) If there is leftover energy, it is then routed to the Tesla Power Wall to charge it up to 100%
- 3) If there is leftover energy and the Power Wall is already charged to 100% then the remaining power is sold or donated to the electrical grid

We have found that the best energy plans with the solar panels are:

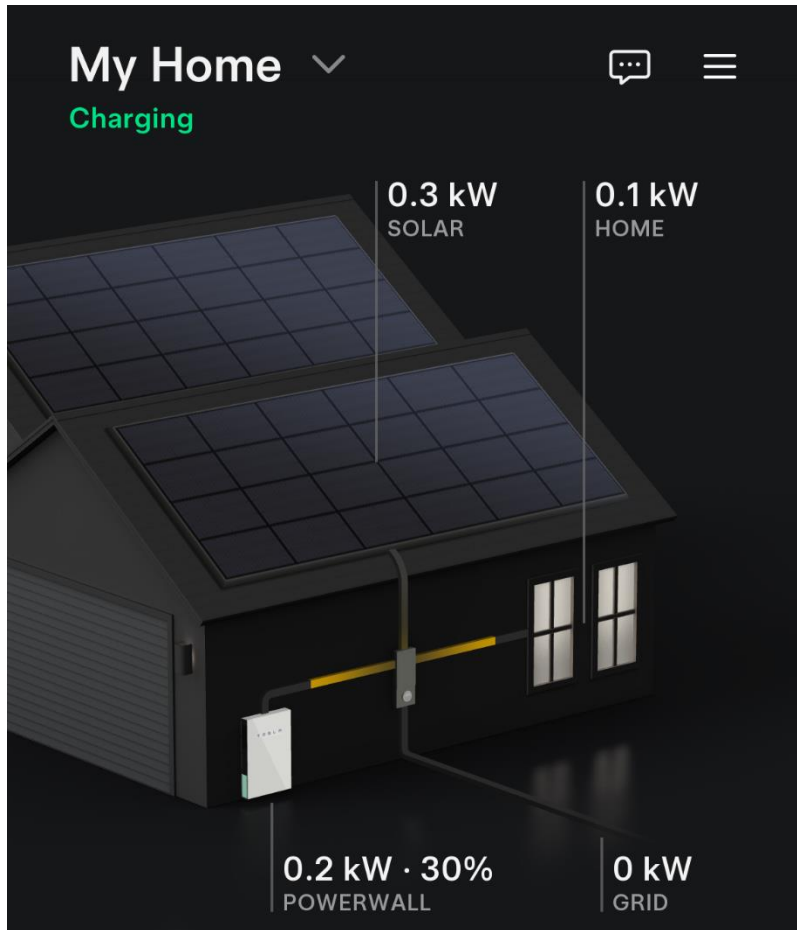
- 1) Plans that let you sell energy at the same rate that you buy it (as of June 2024 TXU's Solar 36 is the only plan that does this)
- 2) Plans with free nights since the solar panels will provide most of your daytime electrical needs then you get free electricity from the grid at night

In the event of a power outage you have 2 systems of backup.

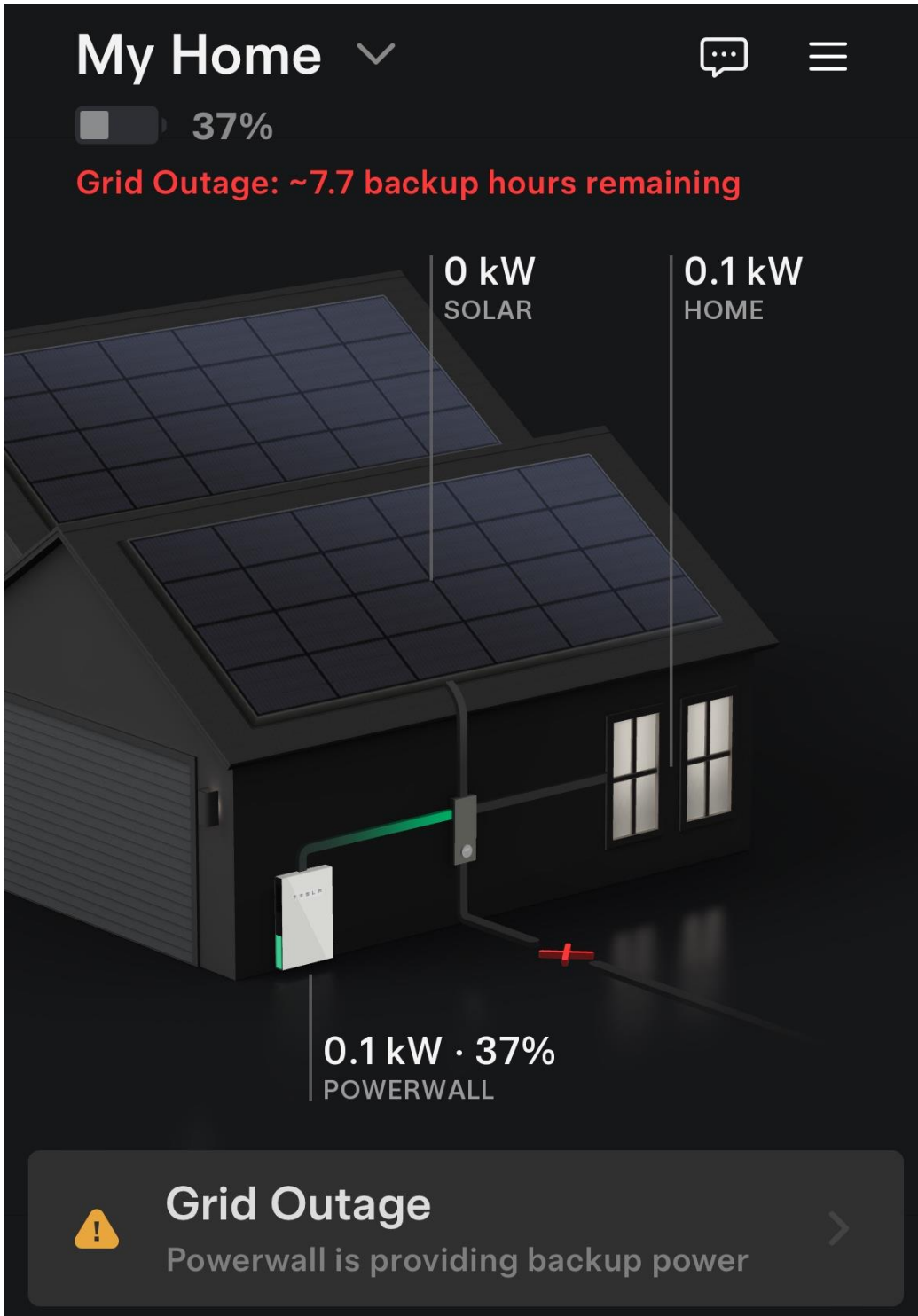
- 1) If the solar panels are producing, they will provide power to keep the house running.
- 2) If the house's electrical needs are more than the panels are producing, the Tesla Power Wall will kick-in and provide up to 5kWh of additional energy to the house



This image shows the energy production on a completely cloud-free day in April. The panels produced a total of 40.3 kWh that day.



This image shows the flow of energy from the panels. At this moment in time the panels were producing 0.3kw. The house was using 0.1kw. The remaining 0.2 kw were being sent to recharge the Telsa Power Wall because it was only at a 30% charge.



This screenshot shows the system during the Houston Derecho storm of 5/16/24 when the city had a massive power failure. Because it was nighttime and storming the panels were not producing any energy. The grid was down, so the Tesla Power Wall provided the energy to the house. The power wall kicks on instantaneously and the clocks don't even blink/reset when it kicks on and takes over.