SUNSTORM ENERGY

What do you want to run?

Worksheet 1: appliance use and power

Choose how many hours you want backup. Enter each appliance's running watts and hours of use. Check AC and pump startup with your installer.

Hours of backup | **Goal**

Equipment	Watts each	Quantity	Hours on	Energy kWh	Runs together?

Energy per row: watts x quantity x hours running / 1,000 = kWh.
Power: add watts x quantity for appliances running together; divide by 1,000 for kW.

Total energy needed (kWh)

Power needed at once (kW)

Hours on means hours running at the entered watts. Refrigerators and AC cycle on and off. Check startup, circuits, losses and installation limits with your installer.

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How long will it run?

Worksheet 2: backup time and solar recharge

Estimated hours: available kWh / average kW. Assume no recharging. Use energy the system can deliver to your appliances after losses, not just the battery's listed capacity.

Scenario	Available energy kWh	Average load kW	Runtime hours

Example: 10 kWh / 0.5 kW = 20 hours. At 2.5 kW, the same energy lasts 4 hours. Charge, temperature, battery condition and losses affect backup time.

AC and pumps

Write down the equipment model and LRA (locked-rotor amps) from its label. Have your installer check startup demand and circuits.

Appliances to pause during an outage

Solar recharge - use the same daytime hours for both figures

Solar production kWh	Daytime use kWh	Difference kWh

Subtract daytime use from solar production. A positive result leaves energy for charging, before losses and equipment limits. A negative result means no surplus. Check sunny and cloudy days.

Have your installer check starting charge, capacity, circuits, controls and recharge. Powerwall Backup Reserve is available during an outage. Do not subtract conversion losses twice if the energy rating already includes them.

Get your battery plan: sunstorm.energy/services/battery-storage/