

AMERESCO SOLAR

Green • Clean • Sustainable

DC Coupled Battery Backup Systems with Outback Inverters

Did you know that a grid-tied ONLY solar electric system will leave you powerless when the grid goes down?

DC coupled battery backup systems, offered by Ameresco Solar, provide an ideal way to add the functionality of battery backup power to the daily electrical production of a photovoltaic (PV) system.

Our battery backup systems allow you to power loads on your dedicated load center in the event of an electrical outage.



System Sizing

Please give us a call for exact system sizing.

1-855-43-SOLAR

Our DC coupled battery backup systems automatically transfer power from batteries to the dedicated loads when the utility grid is offline. The batteries remain fully charged when the utility is present to ensure the longest run time when the utility fails. The included MATE3 system controller can automatically start and stop the generator to maximize charge and minimize fuel usage.

Incorporation of a backup generator with your grid-tie system will add peace of mind and increase the length of time power is available during an outage.

Our DC coupled system allows you to sell power to the grid and also use your solar panels to charge your batteries when the utility fails.

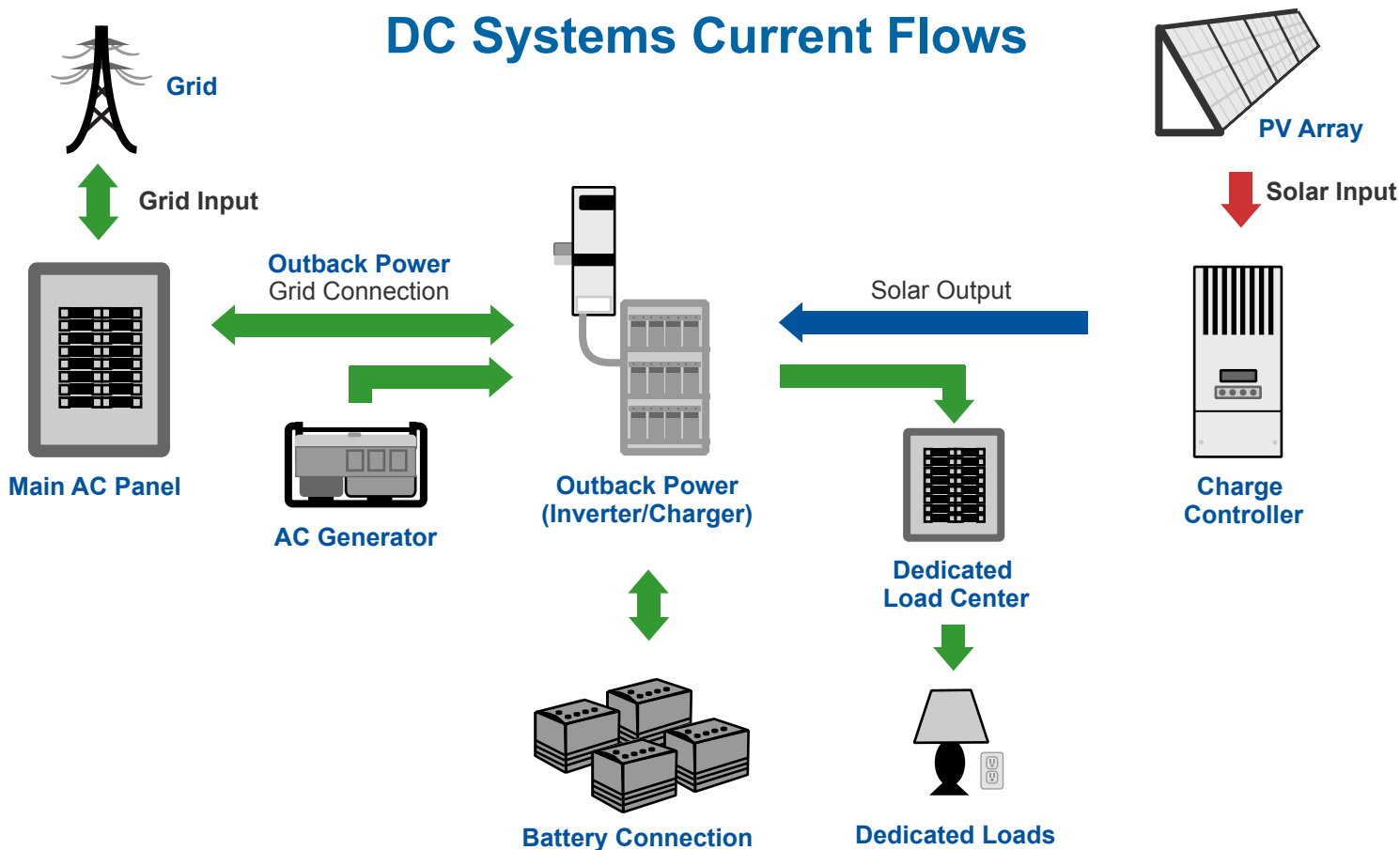
Benefits of emergency backup power include:

- **Security**
- **Lighting**
- **Refrigeration**
- **Heating**
- **Communications**
- **Entertainment**
- **Water pumping**
- **Electric Doors and Gates**

Nearly all household electrical needs can be addressed using our battery backup systems. Note that, depending on system sizing, running high resistance electrical heating such as electric dryers, electric stoves, and electric heat for long durations is not recommended.

Additionally, a battery backup system installed with solar modules may qualify for state and federal incentives. Check www.dsireusa.org for incentives in your location.

DC Systems Current Flows



Our small systems are ideal for most residences with 3600 Watt, 120VAC output. These systems are prewired for fast and clean NEC compliant installation and the included solar charge controller can accept up to 4 kW of solar power.

Small systems include:

- A single Outback inverter -120VAC output
- FLEXmax solar charge controller
- Mate system monitor
- Surge protector
- No generator input

Our large systems, 4-8-16 kW, have 120/240 VAC output and can accept a backup generator.

Large systems include:

- Outback Power Radian 4 or 8 kW inverter
- Radian GS prewired load center
- MATE3 system controller
- Outback Power FM80, 80 Amp charge controller(s)
- Battery cables
- Batteries and enclosures
- System wiring diagrams

Batteries

You can rely on our extensive experience with battery-based solar electric systems to help you select a battery bank to meet your specific power needs.