

While many Intermountain West homeowners who install solar panels choose to remain connected to the electrical grid, an increasing number are investing solar battery backup systems – and you may want to join them.

With a grid-tied photovoltaic array, batteries aren't required. Sure, solar panels don't generate electricity when the sun goes down and on days that are cloudy, but the grid kicks in and provides power. Given the added expense, why should you consider home battery installation?

Actually, adding solar battery storage can be a smart investment for several reasons:

Use More Solar Energy – and Less Grid Electricity

By pairing your home PV system with a solar battery backup system, you'll have a source of free electricity for your household. The power of the sun can keep the batteries charged, and you won't have to rely on the utility grid. As such, you'll see big savings on your monthly energy bills.

Dodge Unfavorable Utility Company Rate Structures

Throughout the country, including much of the Intermountain West region, utility companies are applying new rate structures. If yours is collecting peak demand charges or if they've adopted time-of-use rates, home battery installation can help you avoid paying more than you have to for the electricity you need.

Get Value from Excess Energy Without Net Metering

Net metering policies vary from state to state. In some, homeowners are paid the full retail rate for any energy their solar energy system sends to the grid. In others, the net metering rate is reduced – or homeowners get nothing at all. If you aren't getting full credit, investing in solar battery storage can be financially beneficial.

Have Power for Your Home When the Grid Goes Down

Blackouts have been on the rise in recent years, and whether you live in Utah, Idaho, Wyoming, Nevada or Oregon, you could be without electricity at any time. During a power outage, grid-tied photovoltaic arrays automatically shut off for safety purposes. With a battery backup system, you won't be left without power.

Live in a Remote Location Not Connected to the Grid

For homes in rural parts of the Intermountain West, utility service may not be available. Installing an off-grid solar energy system can be cheaper than paying to extend the utility lines out to a remote property – and a home battery bank can ensure that your household has ample electricity at all times.

How Solar Battery Storage Works

Home PV systems are sized to match household electricity consumption. However, a well-designed system takes maximum advantage of the sun – and sometimes, solar panels produce more power than needed.

In that situation, the excess normally goes to the utility grid. When you have a home battery backup as part of your solar energy system, that still happens, but only after the batteries are completely charged. Once those are fueled up, the reserve power in the bank is ready for use at night or whenever necessary.

For homeowners, a high-capacity solar battery -- like the Tesla Powerwall – is the ideal solution. The storage capacity is greater than other home battery options, so when the sun isn't shining, the Powerwall can easily meet the needs of most households. If yours is an exception to the rule, the Tesla Powerwall isn't off the table. It's a modular home battery system, and you can add more Powerwalls to ensure you always have enough electricity.

Home Battery Installation with the Intermountain Wind & Solar Team

Ultimately, when it comes to solar battery storage, size is the most important consideration. With an off-grid photovoltaic array, the capacity must allow for two to three days' worth of power. A grid-tied solar energy system can get away with a smaller bank, as a reserve of electricity isn't needed on a daily basis.

Whatever route you decide to take with home battery installation, the professional team at Intermountain Wind & Solar can help you maximize your investment in photovoltaic power. We've been doing exactly that for homeowners in Utah, Idaho, Wyoming, Nevada and Oregon for more than a decade, and we'd love to handle your project. Contact us for a free, no-obligation consultation today!