

SOLAR BATTERY RETROFIT



Location: Gloucester, MA

Project Overview

This Gloucester homeowner already had an existing solar PV system but wanted to take the next step by adding battery storage. BD Electrical & Solar designed and installed a FranklinWH energy storage system that integrates with the existing solar installation, allowing the homeowner to store energy and add backup capability without replacing their original solar system. The project demonstrates an important option for Massachusetts homeowners: battery storage does not have to be installed at the same time as solar.

The Challenge

The existing solar array was already installed and operational. Rather than redesigning or replacing the PV system, the goal was to add energy storage while preserving the homeowner's existing solar investment.

BD evaluated the existing electrical and solar infrastructure and designed the battery retrofit around the equipment already in place.



The Solution

BD installed a FranklinWH battery system and associated energy management equipment, integrating the new storage system with the home's existing solar and electrical infrastructure.

The completed system allows the homeowner to capture and store energy for later use while providing additional resiliency during utility outages.

Because FranklinWH can be incorporated into existing residential energy systems, the homeowner was able to upgrade the property without starting over with a new solar installation.



Why Add a Battery to Existing Solar?

Thousands of Massachusetts homes already have solar systems that were originally installed without battery storage.

A properly designed battery retrofit can add capabilities that the original grid-tied solar system may not provide, including:

- Backup power during utility outages
- Energy storage for later use
- Greater control over household energy
- Reduced dependence on the utility grid
- A pathway toward a more complete home energy management system

The Result

The Gloucester project transformed an existing solar installation into a solar-plus-storage system while preserving the homeowner's original PV investment.

For homeowners who already have solar, adding battery storage can be a practical next step toward greater energy independence and backup power without replacing the system they already own.