A Stronger, More Resilient Energy System for Your Home

Adding battery storage strengthens your home's energy system. It allows you to store excess solar energy for later use, maintain power during outages, and reduce dependence on the utility grid.

As your Energy Expert, our goal is to help you understand how each part of your system works together — production, usage, and protection — so you feel confident in how your home performs.

WHY ADD A BATTERY?

A home battery helps you:

- Store excess solar energy for use after sunset
- Maintain power during grid outages
- Reduce reliance on utility rate changes
- Improve long-term energy stability

When paired with solar, battery storage increases control and predictability in how your home uses energy.

HOW YOUR BATTERY SYSTEM WORKS

Your system is designed to prioritize efficiency and seamless operation:

1	Solar panels generate electricity during daylight hours.
2	Your home uses solar energy first.
3	Excess production charges your battery.
4	At night, or during outages, stored energy powers selected loads.
5	If the battery becomes depleted, your system automatically transitions to grid power (when available).

This process happens automatically. No manual switching is required.

BACKUP CONFIGURATION OPTIONS

Every home is different. Your battery system is designed based on your goals and household needs.

Essential Backup	Powers selected circuits such as refrigerators, lighting, outlets, and internet equipment during outages.
Whole-Home Backup	Designed to power most or all of the home, including HVAC systems and larger appliances, depending on battery capacity and system design.

Your installation plan reflects the right balance of protection and performance for your household.

WHAT TO EXPECT ON INSTALLATION DAY

Our licensed electricians will:

1. Review the installation plan with you.
2. Temporarily shut down power (typically 4-8 hours).
3. Mount and integrate the battery system.
4. Test and commission the system.
5. Set up monitoring and walk you through system operation.

We approach every installation with precision and care to ensure long-term reliability.

WHAT HAPPENS DURING A POWER OUTAGE

If the grid goes down:

1. Your system automatically switches to battery backup.
2. You may notice a brief flicker during the transfer.
3. Only designated circuits will receive backup power (if applicable).
4. Heavy energy usage may shorten backup duration.

Your battery is designed to provide stability when it matters most.

BATTERY OPERATING MODES

Depending on your goals and utility rate structure, your system may operate in different modes:

1. Backup-Only Mode

- Battery remains reserved for outages.
- Minimal daily cycling.
- Maximizes emergency protection.

Best for homeowners who prioritize outage security.

2. Self-Powered Mode

- Stores excess solar energy during the day.
- Powers your home at night.
- Reduces grid dependence.

Best for homeowners focused on maximizing solar usage.

3. Time-Based Control (if applicable)

- Charges and discharges based on electricity pricing.
- Helps avoid peak-rate periods.

Best for homes on Time-of-Use (TOU) utility plans.

4. Storm Watch / Automatic Reserve

- Automatically reserves energy when severe weather is forecast.
- Ensures backup capacity before a storm arrives.

Best for all homeowners during severe weather seasons.

BEST PRACTICES FOR BATTERY PERFORMANCE

To support long-term performance:

1. Avoid running multiple large appliances simultaneously during outages.
2. Monitor system performance through your mobile app.
3. Keep the battery area clean and unobstructed.
4. Contact SunnyMac before modifying any backed-up circuits.

Your battery is built for durability, but thoughtful use supports long-term system health.

WHY MAINTAINING A 20% RESERVE MATTERS

Frequent deep discharges can increase wear on battery cells over time. Maintaining a minimum reserve helps:

- Reduce deep discharge stress
- Preserve long-term capacity
- Extend overall system lifespan
- Maintain reliable emergency availability

Recommended Setting: Maintain at least a 20% backup reserve whenever possible.

This approach supports long-term system stability.

MAINTENANCE & MONITORING

Home battery systems require minimal routine maintenance. Monitoring and software updates are typically automatic.

If your app displays alerts or you have questions about performance, our team is here to help.

OUR COMMITMENT TO YOU

At SunnyMac, we see your home as a complete energy system — not just individual components. Solar, battery storage, HVAC, and roofing all play a role in long-term comfort, efficiency, and protection.

Your battery system is installed with careful attention to safety, performance, and durability. Our responsibility doesn't end at installation — we're here to provide dependable support and clear guidance throughout the life of your system.

Energy stability isn't just about backup power. It's about confidence in how your home performs

Welcome to the SunnyMac Family

Thank you for choosing SunnyMac. You're now on your way to cleaner energy, lower bills, and a smarter home.