



GridStor's battery energy storage facilities are designed and built to fit into the communities in which they operate. We are proud to be recognized by the American Planning Association with an Award of Excellence for facility design.

## WHAT IS A BATTERY?

At their most basic, batteries store and deliver electricity to make things run.

In personal use, individual batteries get charged through an electrical outlet and then power our phones, computers, tools, and other devices when they aren't plugged in.

In our electric grid, many packs of batteries at an energy storage facility take in excess power directly from the grid, store it, and let us push that power back out to homes and businesses when demand for electricity is high – like at night, when families come home from work and school and turn on air conditioning, start the laundry, use the dishwasher, and watch TV.

## WHY DO BATTERY ENERGY STORAGE FACILITIES MATTER?

Battery energy storage facilities make our aging power infrastructure stronger and more flexible. As more homes are built and businesses grow, we need new resources to provide reliable electricity.

Unlike most things, electricity must be used right as it is generated or else it goes to waste. Batteries help us store the electricity created by all energy sources—gas, coal, hydro, nuclear, and renewables—to reduce waste and hold power in reserve for when it is needed most.

In addition, solar and wind power only generate electricity when the sun is shining or the wind is blowing. Batteries allow us to save the electricity they create and use it when the sun is down or the air is still, unlocking larger amounts of energy produced here in the United States.

## WHAT DOES A BATTERY ENERGY STORAGE FACILITY LOOK LIKE?

Battery energy storage system facilities are comprised of rows of free-standing purpose-built enclosures, each of which holds the batteries used to store and deliver energy. Enclosures also contain necessary communications, cooling, and safety equipment.

Individual batteries are grouped into packs, called modules, which are then stacked on metal racks. Racks are placed in 8-10-foot-tall enclosures, which are then connected to power conversion systems which include inverters, transformers, and an on-site substation so energy can flow from the facility onto the existing grid and into homes and businesses. Because they take up less space than other energy resources, battery energy storage facilities can be sited in a variety of locations.



GridStor's Goleta Energy Storage project



# DOES HAVING A BATTERY ENERGY STORAGE FACILITY IN MY NEIGHBORHOOD MEAN MY POWER WILL NEVER GO OUT?

## WHAT OUR BATTERIES CAN DO

Our batteries are linked to transmission lines that send power across the region. When demand throughout the region is high, our batteries supply extra power through those transmission lines to keep the larger power system stable, ensuring that the lights stay on everywhere and avoiding blackouts.

## WHAT OUR BATTERIES CAN'T DO

Our batteries can't help if a utility provider shuts off power to a neighborhood to fix a downed wire or as part of scheduled equipment maintenance. In those instances, power from the larger system where our batteries are installed won't be able to flow to your home or business.

## ARE BATTERY ENERGY STORAGE FACILITIES SAFE?

Yes, our battery energy storage facilities meet or exceed rigorous national safety and fire codes and standards. They are certified and tested at the battery and system-level and planned with local and regional first responders. The facilities use proven monitoring technology and advanced safety design features throughout their operations.



## ARE THERE IMPACTS FROM A BATTERY ENERGY STORAGE FACILITY?

Battery energy storage facilities do not generate any emissions or increase demand for public services. Facility operations are quiet, producing sound at levels comparable to a building air conditioning system, and they use less water than other energy sources. Because the facilities are operated remotely with typically no more than 1-2 on-site staff, there is minimal traffic to or from the site, making a BESS system a quiet, compatible neighbor.

## HOW LONG WILL THESE FACILITIES LAST?

Battery energy storage facilities are engineered to safely recharge and discharge power every day. We design and maintain our facilities to provide reliable service for 20 years before considering replacement.

Our battery energy storage facilities are monitored remotely 24 hours a day, 7 days a week year-round, providing information on the status of the system down to each individual battery cell. Any individual battery unit which is performing out of specification or declining in capacity can be identified and replaced without affecting the larger facility.

