ENERGY STORAGE

building the resilient grid of the future

BENEFITS OF ENERGY STORAGE

ENHANCES GRID RELIABILITY: The power grid has always depended on a “division of labor” among diverse generation resources to cost-effectively meet reliability and resilience needs, because no single energy source is perfectly reliable. Energy storage enhances reliability, ensuring the seamless, synchronized delivery of electricity to consumers and businesses.

CREATES A FLEXIBLE & NIMBLE ENERGY GRID: Storage increases flexibility for the grid and helps provide uninterrupted power for consumers, businesses, and other users.

I**NCREASES GRID RESILIENCE:** All power plants are affected by the weather, adding more renewable and storage resources can build a stronger grid by increasing resilience to disruptions due to severe weather. During brief outages, energy storage can help businesses avoid costly disruptions and continue normal operations.

REDUCES CONSUMER COSTS: Energy storage helps level the energy load. Storage can offset costs by storing energy when prices are low and discharging it during peak periods when rates are higher.

ENERGY STORAGE IS SAFE

- Safety is always the top priority for energy developers, and battery storage is no exception.
- The design, construction, and operation of an energy storage system begins with safe equipment and compliance with safety codes and regulations, including the International Fire Code 2018, National Fire Protection Association 855 Standard for the Installation of Stationary Energy Storage Systems and the National Electric Code (NFPA 70).
- Storage equipment complies with stringent quality and safety standards, ensuring all equipment is tested and certified by third party professionals.
- Suppliers are usually ISO 9001 specifies requirements for quality management systems, including the monitoring, inspection, and testing a supplier needs to demonstrate for quality products. 170 countries, including China, are members of the International Organization for Standardization (ISO) and work with third-party certification bodies for standard compliance.
- All energy generation facilities come with risk, including coal and nuclear facilities. It is standard practice for facilities to have an Emergency Response Plan in place to deal with an accident or injury. Energy storage facilities operate in the same manner and have protocol for staff to follow.
- In the unlikely event of a fire, the main goal of first responders will be thermal management and containing the extent of the fire from a safe distance. Battery fires do not present extra toxicity risks beyond that of structural or plastics fires and first responders may use standard PPE including SCBA.
    - No unique or specialized apparatus would be required to address it. Normal firefighting gear (i.e., coat, pants, boots, helmet, balaclava, and gloves, and self-contained breathing apparatuses if necessary for toxic gases which are typically present with any structural fire) will be sufficient PPE for first responders.