

Energy Storage - Lithium Titanate SCiB Batteries

Safe and Super Long Life Battery Energy Storage Systems

- Lithium Titanate SCiB Batteries has x 3 longer life than Lithium Ion battery systems
 - No replacement for >30 years
 - 20-40% less long term cost
- Reliable and Safe
- Fast charge and discharge/wide usable SOC



GridRabbit GW Coordinating Battery Discharge/Charge in correlation with facility energy usage which it can also monitor and control

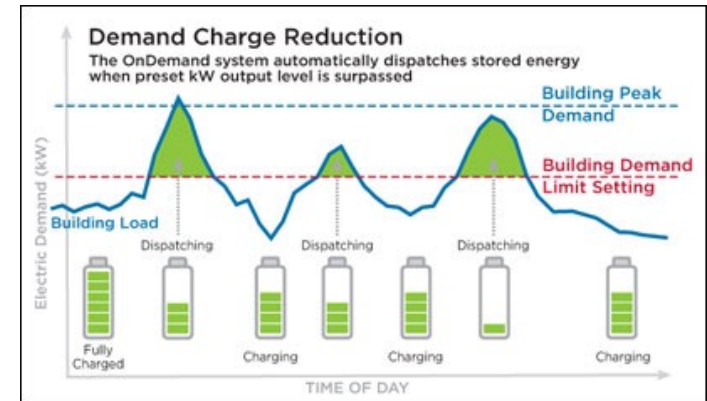


ZigBee enabled
Smart Devices

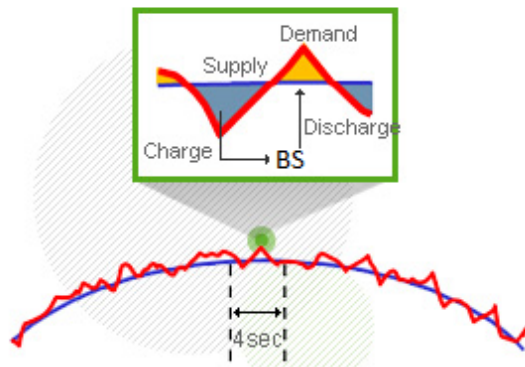
Applications

Opportunity 1: Load Optimization by controlling peak demand

- Manage peak building demand by discharging battery during load spikes. Main cause of load spikes are:
 - Central HVAC system coming online at the same time due to global temperature adjustment.
 - Variable load processes such as water heaters, large motors and other variable processes activating.
- System is automated based on facility load profile



Frequency Regulation



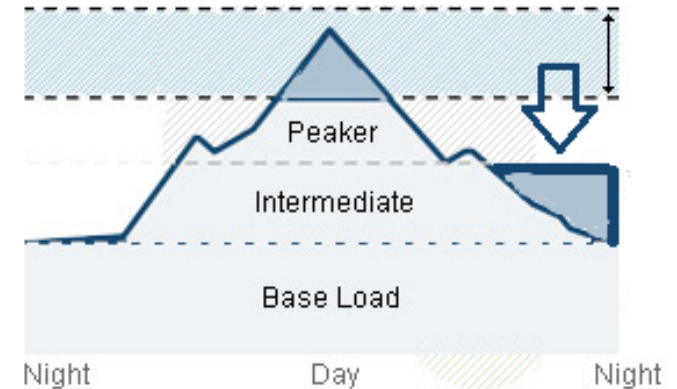
Opportunity 2: Improving power quality for facility

- Leverage battery system to condition the power to ensure voltage and frequency support for the facility:
 - Ensure 60 HZ other frequency targets are kept
 - Ensure 120V or 480V targets are kept
- Provide support for inductive load to reduce cost for VAR consumption.
 - Sync start-up of large motors with battery providing VAR support for facility.

Applications

Opportunity 3: Load Optimization through Load Shifting

- Flattening load curve by shifting load to off peak hours
- Solution works well in rates that have time of use
- Enables participation in Demand Response programs
- Shift up to three to four hours of load of off peak hours through a combination of onsite generation and/or battery storage



Opportunity 4: Increase integration of renewable and variable generations

- Location the prevent back-feed power to the grid battery storage enables increasing the capacity of solar and wind.
- Enables greater monitoring and control on site generating resources.

