



Application Simulation for Battery Energy Storage System (BESS)



BENEFITS:

Battery System Sizing

Analyze the load profile and the utility price to size the battery system and provide a strategic operating plan to achieve the maximum battery lifespan.

Peak-Shaving Analysis

Identify peak power demand volume and frequencies, simulate peak load reduction after the BESS is installed.

Microgrid Simulation

Simulate the existing power resource with an additional BESS to estimate the maximum energy efficiency improvements.

Load Shifting Simulation

The local utility floating power rate is used to simulate an ideal BESS operating strategy to achieve load shifting or energy arbitrage.

OBJECTIVES:

TROES's new strategic battery system simulation method is focused on providing a reliable and simple BESS solution for clients. TROES engineers will review all possible solutions to develop a customized battery storage system to meet clients' requirements safely and effectively.

CHALLENGES:

Having clients understand the instant benefits of using a BESS as a part of their power supply. Also, help clients to analyze system ROI and payback years for their best purchasing options.

TROES' SOLUTION:

TROES has developed a turnkey solution, with a renewable energy system and Battery Energy Storage System (BESS) that addresses the power demand issues of commercial, residential and industrial buildings. TROES took these valuable experiences to provide these energy simulation services to support clients based on their existing power solutions and energy load profile.

