Kongres Container

Energy Storage Project Quality Control Measures

Overview

Can FEMP assess battery energy storage system performance?

This report describes development of an effort to assess Battery Energy Storage System (BESS) performance that the U.S. Department of Energy (DOE) Federal Energy Management Program (FEMP) and others can employ to evaluate performance of deployed BESS or solar photovoltaic (PV) +BESS systems.

What should NREL consider when testing energy storage systems?

Photo by Owen Roberts, NREL Considerations for energy storage system testing include the following. If cost-justified by a large purchase, consider qualification testing of battery systems. Include test conditions in specifications for battery O&M diagnostics and testing.

Why is energy availability important in assessing PV systems?

Both energy and availability are necessary metrics for assessing PV systems. If the stakeholders involved in a contract are most interested in energy production, and if the contract holds parties responsible for energy production, then it is crucial that energy losses associated with unavailability and system performance are accounted for.

What standards should a monitoring system use?

Use open standards for information and data communication throughout the plant, fleet, and enterprise. Ensure that the monitoring system addresses the following: Ability to have entire monitoring system on an uninterruptible power supply. In this document, we do not pick a standard to be used to calculate and report system performance.

How is operations quality determined in PV plant operations?

In the field of PV plant operations, operations quality is determined by (1) the ratio of the amount of energy harvested to the potential amount of energy

available for a particular plant and (2) plant equipment availability over time.

What are the KPIs of a battery system?

For battery systems, Efficiency and Demonstrated Capacity are the KPIs that can be determined from the meter data. Efficiency is the sum of energy discharged from the battery divided by sum of energy charged into the battery (i.e., kWh in/kWh out).

Energy Storage Project Quality Control Measures

Contact Us

For catalog requests, pricing, or partnerships, please visit: https://www.drugiswiatowykongrespolakow.pl