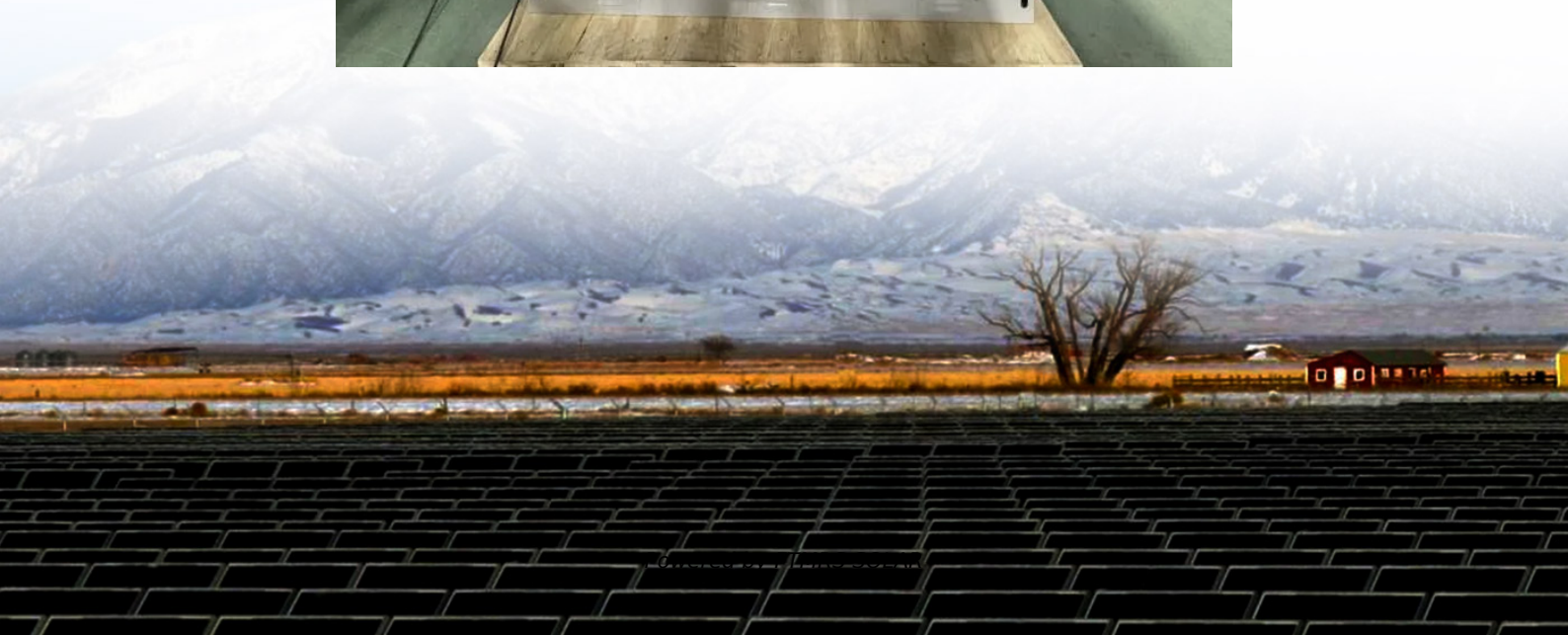


Energy storage peak load control system





Overview

Can battery energy storage systems improve peaking load shaving and power regulation quality?

To improve the capability of the peaking load shaving and the power regulation quality, battery energy storage systems (BESS) can be used to cooperate power units to satisfy the multi-objective regulation needs.

What are battery energy storage systems?

Battery energy storage systems are widely acknowledged as a promising technology to improve the power quality, which can absorb or inject active power and reactive power controlled by bidirectional converters .

Is battery energy storage a promising control strategy for a unified generation unit?

By fully exploiting the potential of battery energy storage technology, we proposed a promising control strategy for a unified generation unit consisting of a boiler-turbine unit and a BESS.

What is AGC in energy management system?

AGC is of most important control function in the energy management system (EMS), which allocates the power demand to each generation unit and BESS. Thus, the power demands (or area control errors) are computed without fully taking the dynamics of the generation unit and BESS into account.



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