

This study advocates for the integration of the Sharpe ratio as an economic metric to optimize the day-ahead bidding process. By maximizing the Sharpe ratio value, the objective function of the ...

By participating in peak shaving for interruptible loads and energy storage, a peak shaving bidding model aiming at the lowest cost of VPP peak shaving was established . Virtual power plants influence and restrict one ...

For the virtual power plants containing energy storage power stations and photovoltaic and wind power, the output of PV and wind power is uncertain and virtual power plants must consider this ...

A novel scheme for optimizing the operation and bidding strategy of VPPs and the results verify the effectiveness of the proposed method VPP with various combinations of renewable energy ...

based energy and reserve bidding strategy for a virtual power plant (VPP) with mobile energy storages, renewable energy resources (RESs) and load demands at multiple buses. In the ...

In Tan and Zhang (2017), a coordinated control strategy of the BESS was proposed to ensure the wind power plants' commitment to frequency ancillary services, ...

This paper proposes the use of Artificial Neural Networks (ANN) for the efficient bidding of a Photovoltaic power plant with Energy Storage System (PV-ESS) participating in Day-Ahead ...

This paper studies the bidding strategy of a Virtual Power Plant (VPP) in a market of energy and regulation service. The operation of distributed energy resources (DER) and ...

Abstract: This paper proposes a stochastic optimization-based energy and reserve bidding strategy for a virtual power plant (VPP) with mobile energy storages, renewable energy ...

Figure 1 introduces a virtual power plant including wind, photovoltaic, and energy storage station to compete with traditional energy in the power market. How to realize the maximum benefit of ...

By participating in peak shaving for interruptible loads and energy storage, a peak shaving bidding model aiming at the lowest cost of VPP peak shaving was established . Virtual ...

Web: <https://purelysolar.co.za>