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Optimal drop of pumped storage power station

This paper establishes an optimal operation model for pumped storage plants participating in the spot market aimed at maximizing the benefits from time-varied prices. Based on the predicted ...

Due to the limitation of geographical conditions, the long water diversion system and long tailrace system are inevitable in pumped storage power station (PSPS) [14], [15], ...

Large-scale integration of renewable sources has brought an impact on the economic and stable operation of the power system. Energy storage is a key technology for balancing energy ...

With the continuous increase in the penetration rate of renewable energy, the randomness and flexibility demand in the power system continues to increase. The main grid side of the power ...

Involving the uncertainties of PV output and electric load, a multi-objective distributionally robust optimization model with temporal correlation is constructed for UwHS planning and further ...

The paper studies the optimal configuration of pumped storage power station and new energy units in the power grid with the help of HOMER software. Firstly, summarize the power grid ...

As flexible resources, cascaded hydropower stations can regulate the fluctuations caused by wind and photovoltaic power. Constructing pumped-storage units between two upstream and downstream reservoirs is ...

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