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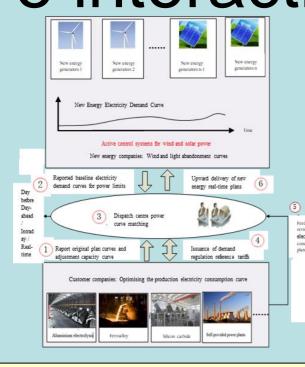
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Research on Electricity Contract Trading Mechanism under the Coordinated Control Model of Source-Grid-Load

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Sub title

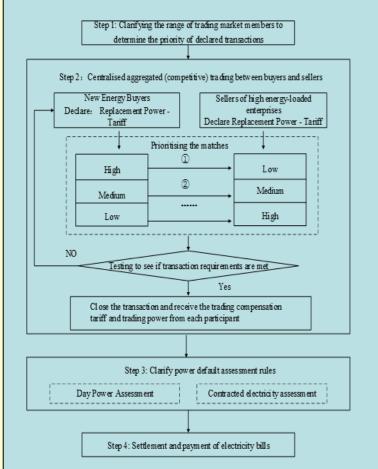
Coordinated source-net-load control system based on large-s cale grid-connected wind/high-load energy, enabling real-time interaction between source-load and load-side information.



The source-grid-load coordinated control system is the basic guarantee for the implementation of electricity contract trading, and is the basis for contract execution and assessment.

Figure caption

Under the source-grid-load coordination and control model, the paper designs the electricity contract trading process as shown in Figure 2, as follows:



- (1) Priorities declarations: Consider the differences between the various market members involved in the transaction and determine the priority of declaration according to the a ctual situation of each grid. Ensure more reasonable trading results
- (2) Conducting centralized aggregated (competitive) trading: Matching priority based on the declared power-price of each trading party. Then high low match aggregation is performed until the valid conditions for the end of the aggregation are met. Finally receive a compensatory tariff and traded electricity from each participant.
- (3) Clarify the rules for power and electricity default assessment. Daily power assessment and electricity assessment of the counterparty at the time of contract execution in the source-grid-load coordination control mode.

Text

This paper proposes an electricity contract trading mechanism under the "source-grid-load" coordination and control model. A detailed design of the coordination and control model, the power contract trading process and the power consumption assessment has been carried out. The model is conducive to achieving power balance between new energy generation and load consumption, and enhancing the level of new energy consumption.

Summary

Mobilizing the various participants in the source load for trading through market-based instruments. Under the source-grid-load coordination and control mode, the power contract with the feature of "daily power assessment and monthly power settlement" can truly achieve the power balance between new energy generation and load power consumption. Which are more adaptable to the stochastic volatility of new energy output than traditional medium to long-term power contracts. Further enhance the capacity to dissipate new energy abandoned wind and electricity. In addition, the trading model is conducive to the cultivation of market trading members and is more suitable for the current development stage of China's dual-track plan and market, and has certain prospects for promotion.