

## Title: Green power trading

In order to achieve the “3060” ambitious goal, installed capacity of new energy station are surely keeping fast increasing in coming years. The trend is a huge change, not only for the power grid operation, but for the electricity trading. New energy trading mechanism design is never easy at the moment, and possible solutions are to be discussed. Firstly, demand of power consumers on green power is greatly influenced by the price, and premium due to the green energy inherent environmental benefit now impedes the trading. Secondly, for new energy power station participating in trading with power curve, contract compliance is difficult. Long-term power prediction is not reliable, and the real power can hardly match the power curve in the contract. This predicament is against the mechanism of electricity spot market. Thirdly, once the new energy station is involved in the trading, it is not easy to recover the investment. On one hand, spot market price is reversely related to the power of new energy, that the more a station is powerful, the less it can profit from the market. On the other hand, the new energy station should probably pay the ancillary service fee. Conventional power plants provides the services of frequency regulation and new energy power absorption, and new energy station should therefore share the cost. Experience from the practice of new energy trading mechanism organized by Beijing, North Hebei, and the new energy trading plan in five provinces making up the Southern Power Grid will be introduced.