

## Overview of the Spot Power Market Rules (Draft)

Since 2017, China has established 14 provincial spot power markets, 5 of which have entered the stage of long-term settlement trial operation (see the [CET website](#) for details). In July 2022, the southern regional power market was launched, which includes the first regional spot power market in China (see the [August 2022 newsletter](#) for details). According to the statistics of the China Electricity Council (CEC), from January to October this year, the transaction volume of power markets nationwide increased by 43.3% year-on-year, accounting for 60.1% of the total electricity consumption, of which more than 80% is medium and long-term transactions<sup>5</sup>, which means the current spot trading volume of electricity is still very limited.

On November 25, the National Energy Administration (NEA) issued two important documents for the construction of the spot power market to solicit public opinion, *Basic Rules of the Spot Power Market (Draft for Comment)* (hereinafter referred to as the *Rules*) and *Supervising Measures of the Spot Power Market (Draft for Comment)* (hereinafter referred to as the *Supervising Measures*).<sup>6</sup> This may effectively increase the spot transaction volume, and at the same time, promote the construction of the spot power market from the pilot to the whole country. The *Rules* put forward the short-term, medium-term, and long-term construction plans of the spot power market, and clarified the composition, participants, price mechanism, settlement mechanism, and other rules of the spot power market. The *Supervising Measures* clarified that the NEA and its dispatched agencies, relevant departments of the State Council, and provincial governments and their relevant departments would implement the supervision of the spot power market.

It is noted that both documents apply to centralised provincial and regional spot power markets. The core concept of the centralised market is to deeply combine the economics of power trading with the security of the power grid, that is, the market-clearing price in the day-ahead market not only reflects the balance of supply and demand but also takes the constraints of grid congestion into concern. Therefore, the day-ahead price of the centralised spot power market is closer to the real-time market price.<sup>7</sup>

### The construction steps of the spot power market are clear

According to the construction path of the spot power market proposed by the *Rules*, **in the short term**, the construction of provincial, inter-provincial and regional markets will be the key task. Adhering to the principle of a unified market and coordinated operation, the government will gradually promote the integration of the three types of markets. The *Rules* require strengthening the connection between the spot power market and the medium and long-term contracts, the ancillary service market, and the capacity compensation mechanism of being reserves. For example, the *Rules* requires that medium and long-term contracts in areas where the spot power market operates should adopt time-of-use electricity and time-of-use prices; if the spot power market meets the system's peak-shaving needs, no similar ancillary service products will be set up; to explore a market-oriented capacity compensation mechanism combined with actual needs. The *Rules* also emphasis the connection between the spot power market and the existing new energy guarantee policies, aiming to promote the smooth transition of new energy power generation from planned acquisitions to market-oriented competition.

**In the medium and long term**, the key tasks include promoting the transition of provincial and regional markets to a unified national power market system. The *Rules* require further improvement of the spot power market, medium and long-term contracts and ancillary service market. The **spot power market** focuses on expanding the scope of participation of emerging market entities such as energy storage and virtual power plants (VPP), and shortening the intraday and real-time trading units; the **medium and long-term contract transactions** to fully release power generation and consumption plans, and explore derivative transactions such as power futures and transmission rights; the **ancillary service market** mainly explores new types of products such as ramp-up services and promotes the sharing of ancillary service resources in a broader range.

## Basic Rules of Spot Power Market

- **Market composition:** Generally, it includes the day-ahead, intraday, and real-time markets, and each region can choose the actual composition according to the real situation;
- **Market players:** In addition to power generation enterprises, power users, and power retailers, it also includes energy storage, distributed power generation, load aggregators, virtual power plants (VPPs), and new energy microgrids, which means that these emerging market players can independently participate in the power market transactions;
- **Price mechanism:** When the spot power market is cleared, the unified marginal price in the market is used as the system electricity price, distinguishing between nodes or price zones is not necessary;
- **Price limit mechanism:** The price upper limit and lower limit (i.e. first-level price limit) should be set for spot electricity and ancillary service transactions, and the second-level price limit (i.e. lower than the first-level price limit) can also be placed in the spot electricity transactions; when the market price exceeds the first-level limit price for a certain number of hours in a row, the second-level limit price settlement is adopted to stabilise the market price.

## References

5 "全国各电力交易中心完成市场交易电量43102.4亿千瓦时" China Electricity Council, 28 November 2022, accessed at

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6 "国家能源局综合司关于公开征求《电力现货市场基本规则（征求意见稿）》《电力现货市场监管办法（征求意见稿）》意见的通知," National Energy Administration, 22 November 2022, accessed at [http://www.nea.gov.cn/2022-11/25/c\\_1310679693.htm](http://www.nea.gov.cn/2022-11/25/c_1310679693.htm).

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