



National Development and Reform Commission National Energy

Administration about

Guiding Opinions on Accelerating the Construction of a Unified National Electricity Market System

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The people's governments of all provinces, autonomous regions and municipalities directly under the Central Government, ministries and commissions of the State Council, agencies directly under the State Council, State Grid Corporation Limited, China Southern Power Grid Co., Ltd., Inner Mongolia Electric Power (Group) Co., Ltd., China National Nuclear Corporation Limited, China Huaneng Group Co., Ltd., China Datang Group Co., Ltd., China Huadian Group Co., Ltd., State Power Investment Group Co., Ltd., China Three Gorges Corporation Limited, National Energy Investment Group Co., Ltd., State Development and Investment Group Co., Ltd., China Resources (Group) Co., Ltd., China General Nuclear Power Group Co., Ltd.:

Since the Party Central Committee and the State Council deployed and implemented a new round of power system reform, the construction of China's electricity market has been steadily and orderly advanced, the pattern of diversified competition subjects has initially taken shape, the role of the market in the optimal allocation of resources has been significantly enhanced, and the proportion of market-oriented trading electricity has increased significantly. At the same time, the electricity market still has problems such as incomplete system, imperfect functions, inconsistent trading rules, and market barriers to cross-provincial and cross-regional transactions. In order to accelerate the construction of a unified national electricity market system, realize the sharing and mutual assistance and optimal allocation of power resources on a larger scale, improve the stability and flexible regulation capacity of the power system, and promote the formation of a new power system suitable for China's national conditions and with stronger capacity for new energy consumption, the following opinions are hereby put forward with the consent of the State Council.

I. Overall Requirements

**(1) Guiding ideology.** Guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, fully implement the spirit of the 19th National Congress of the Communist Party of China and the 19th Plenary Session, implement the new development concept completely, accurately and comprehensively, follow the laws of power operation and market economy, adapt to the new requirements of the goal of carbon peak and carbon neutrality, better coordinate development and safety, optimize the overall design of the electricity market, improve the multi-level unified electricity market system, unify trading rules and technical standards, and break down market barriers. Promote the construction of electricity market mechanisms that adapt to the transformation of the energy structure, and accelerate the formation of a unified and open, orderly competition, safe and efficient electricity market system with sound governance.

(2) Principles of work.

**Overall design, steady progress.** Do a good job in the overall design of the functional structure of the electricity market, and realize efficient coordination and organic connection of different levels of the market. Adhere to the problem-oriented, actively and steadily promote market construction, and encourage exploration according to local conditions.

**Support transformation, safe and reliable.** Improve institutional mechanisms, innovate market models, promote investment, production, trading and consumption of new energy, and give play to the supporting role of the electricity market in the clean and low-carbon transformation of energy. Coordinate to promote market construction and power grid operation management, prevent market construction risks, and ensure the safe and stable operation of the power system.

**Based on national conditions, learn from the world.** Based on China's actual national conditions such as energy resource endowment and economic and social development, learn from the experience of international mature

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- 01 Notice on Launch National Energy ( Publicity Week at Low Car Gai Hua 2023-06-
- 02 Notice on the issi "Energy Efficiency Level and Bench Key Industrial Ar Edition)" (Develo Reform Industry 2023-07-04
- 03 The National Dev Reform Commiss six departments j the Notice on Fill Shortcomings of and Environment and Carrying out Rural Environme Clean-up and Rec 2023-07-18
- 04 Notice on the lau National Energy ( Publicity Week at Low Carbon Day 2023-06-26
- 05 From 2023:6 on J domestic refined raised according mechanism 2023-06-28

power market construction, give play to the advantages of the domestic market, adapt to the production and operation laws and development needs of the power industry, and scientifically and rationally design market models and paths.

**Take into account the overall situation and do a good job of connection.** Comprehensively consider the affordability of enterprises and society to afford electricity costs, do a good job in connecting the supply of basic public services and the construction of the electricity market, and ensure that the supply of public electricity services and the price of electricity for residents and agriculture are relatively stable.

**(3) Overall objectives.** By 2025, the national unified electricity market system will be initially completed, the national market and the provincial (regional, municipal) / regional market will operate in a coordinated manner, the medium and long-term, spot and auxiliary service markets will be integrated in the design and joint operation of electricity, and the market-oriented allocation of cross-provincial and cross-regional resources and the scale of green power trading will be significantly improved, which is conducive to the initial formation of market transactions and price mechanisms for the development of new energy and energy storage. By 2030, the national unified electricity market system will be basically completed, adapt to the requirements of the new power system, the national market will operate jointly with the provincial (autonomous region, municipal) / regional market, new energy will fully participate in market transactions, market entities will compete on an equal footing and make independent choices, and power resources will be further optimized and allocated nationwide.

**II. Improve the Multi-level Unified Electricity Market System**

**(1) Accelerate the construction of the national electricity market.** Give full play to the role of the Beijing and Guangzhou power trading centers, and improve the operation management of the power trading platform and the cross-provincial and cross-regional market trading mechanism. According to the layout and interconnection of power infrastructure construction, study and promote the establishment of a national electricity trading center in a timely manner, introduce market entities such as power generation enterprises, electricity sales companies, and users and relevant strategic investors, and establish a corporate governance system and operation mechanism that is regulated according to law and has clear rights and responsibilities; Establish corresponding market management committees to improve deliberative coordination and supervision mechanisms.

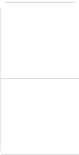
**(2) Steadily advance the construction of provincial (regional, municipal) / regional electricity markets.** Give full play to the basic role of the provincial (autonomous region, municipal) market in the national unified electricity market system, improve the efficiency of power resource allocation within the province, and ensure the basic balance of local electricity. Implement major national and regional strategies such as the coordinated development of the Beijing-Tianjin-Hebei region, the integration of the Yangtze River Delta, and the construction of the Guangdong-Hong Kong-Macao Greater Bay Area, encourage the construction of corresponding regional power markets, carry out inter-provincial and cross-regional electricity medium and long-term trading and frequency regulation, standby and other auxiliary service transactions, and optimize the allocation of regional power resources.

**(3) Guide the coordinated operation of the electricity market at all levels.** Promote the construction of national markets and provincial (regional, municipal) / regional electricity markets in an orderly manner, and strengthen the mutual coupling and orderly connection of different levels of markets. When conditions are ripe, support the integrated development of provincial (regional, municipal) markets and national markets, or integrate and develop with national markets after multiple provinces (autonomous regions and municipalities) jointly form regional markets. Promote the exploration of the formation of a joint venture of power trading centers, and establish a sound collaborative operation mechanism.

**(4) Orderly promote open cooperation between cross-provincial and cross-regional markets.** On the basis of implementing the security of the power grid to support the power supply, in accordance with the principle of first increment and then stock, the priority power generation plan across provinces and regions will be liberalized by category, and the national power transmission plan and local government power transmission agreement will be transformed into medium- and long-term contracts authorized by the government. Establish a mechanism for multiple market entities to participate in cross-provincial and cross-regional transactions, and encourage and support power generation enterprises to carry out direct transactions with electricity sales companies and users. Strengthen the dynamic connection between cross-provincial and inter-regional and intra-provincial markets in terms of economic responsibility and price formation mechanism. Accelerate the establishment of a market-oriented inter-provincial and cross-regional transmission right allocation and trading mechanism, and maximize the use of inter-provincial and cross-regional affluent channels to optimize the allocation of power resources.

**III. Improve the Functions of the**

**Unified Electricity Market System (1) Continue to promote the construction of a medium- and long-term electricity market.** Further give play to the basic role of the medium and long-term market in balancing long-term supply and demand and stabilizing market expectations. Improve the market-oriented adjustment mechanism for medium- and long-term contracts, shorten the transaction cycle, increase the frequency of transactions,



enrich trading varieties, encourage medium- and long-term transactions with a longer term, and standardize the process of organizing medium- and long-term transactions and signing contracts. Promote market entities to form time-based electricity and electricity prices in various levels of the market through market transactions, better widen the peak-valley price difference, and guide users to cut peaks and fill valleys.

**(2) Actively and steadily promote the construction of the electricity spot market.** Guide the spot market to better discover the real-time price of electricity and accurately reflect the relationship between supply and demand of electric energy. Organize and implement the pilot electricity spot market, support the uninterrupted operation of qualified pilots, and gradually form a long-term and stable operation of the electricity spot market. Promote all kinds of priority power generation entities and user sides to jointly participate in the spot market, strengthen the connection between spot trading and the liberalization of priority power generation and consumption plans, and medium- and long-term transactions, and establish a reasonable fee channeling mechanism.

**(3) Continue to improve the market for auxiliary electric power services.** Promote the power auxiliary service market to better reflect the market value of flexible and adjustable resources, establish and improve the auxiliary service market such as frequency regulation and backup, explore user-adjustable load to participate in auxiliary service transactions, promote the integrated construction of source, grid, load and storage and multi-energy complementary coordinated operation, and improve the cost sharing and revenue sharing mechanism. Make overall plans to promote the construction of medium- and long-term, spot, and ancillary service markets for electricity, strengthen orderly coordination between markets, and do a good job in connecting transaction timing, market access, and price formation mechanisms.

**(4) Cultivate diversified and competitive market entities.** Orderly release and develop electricity consumption plans, promote the participation of priority power generation entities such as gas, cogeneration, new energy, and nuclear power in the market, promote the full participation of operational users in the market in batches, and promote the transformation of priority power generation and priority power purchase plans into medium- and long-term contracts authorized by the government. Strict access standards and conditions for electricity sales companies, guide social capital to participate in electricity sales business in an orderly manner, give full play to the important role of power grid enterprises and state-owned electricity sales companies, improve the guaranteed power supply system to ensure the reliability of power supply, encourage electricity sales companies to innovate business models, and provide value-added services such as comprehensive energy management and load integration. Guide new market entities such as user-side adjustable load resources, energy storage, distributed energy, and new energy vehicles to participate in market transactions, and fully stimulate and release user-side flexible adjustment capabilities.

**IV. Improve the Trading Mechanism**

of the Unified Electricity Market System **(1) Standardize the basic trading rules and technical standards of the unified market.** The Development and Reform Commission and the Energy Administration organize relevant parties to formulate basic transaction rules such as market access and withdrawal, trading varieties, transaction timing, transaction execution and settlement, as well as unified transaction technical standards and data interface standards. All localities organize provincial (autonomous region, municipal) electricity trading centers to formulate local trading rules in accordance with the basic trading rules. Promote effective convergence and overall consistency between trading centers in terms of technology and data standards.

**(2) Improve the electricity price formation mechanism.** Reform and improve the market-oriented formation mechanism of coal and electricity prices, improve the electricity price transmission mechanism, uniformly standardize the price rules of local electricity markets, and effectively balance electricity supply and demand. Promote the entry of all industrial and commercial users into the electricity market in an orderly manner, and ensure that the prices of electricity for residents, agriculture, and public welfare undertakings are relatively stable. Encourage clean heating users to reduce heating costs by participating in the electricity market. Strengthen the supervision of permitted income from power grid transmission and distribution, promote the separate accounting of power transmission and distribution business and power purchase and sale business of power grid enterprises, and properly handle policy cross-subsidies. Improve the flexibility of the inter-provincial and cross-regional transmission price mechanism, and explore inter-provincial and cross-regional transactions to collect transmission fees according to the optimal path combination.

**(3) Do a good job in the efficient connection between market-oriented transactions and scheduling operations.** Under the premise of ensuring the safe operation of the power grid and the reliable supply of electricity, we will coordinate and optimize the operation of the power market and the dispatching operation of the power grid, and improve the relevant business processes and institutional standards of power grid enterprises. Strengthen business coordination between power trading centers and power grid enterprises, and promote the exchange and sharing of information such as planning, marketing, metering, finance, and dispatching. Improve the intelligent level of the power grid, strengthen power operation dispatch and safety management, and implement the results of electricity market transactions in accordance with laws and regulations.



**(4) Strengthen information sharing and disclosure.** Promote the sharing of registration information among entities in the national electricity market. Implement the requirements of the information disclosure system, standardize the disclosure process, and disclose key information such as power grid safety constraints and cross-province and cross-regional available transmission capacity in accordance with laws and regulations. Establish a unified information disclosure platform, improve information security assurance mechanisms, and ensure that power operation information is safe and controllable.

**V. Strengthen overall planning and scientific supervision**

of electric power **(1) Improve the power planning system that adapts to the market-oriented environment.** Coordinate the planning and layout of renewable energy and conventional power sources, strengthen the connection between national power planning and local power planning, power supply planning and power grid planning, power planning and market construction, and pay attention to giving play to the guiding role of market price signals in power planning and construction.

**(2) Improve the modern electricity market regulatory system.** Improve the ability of scientific supervision of the electricity market, strengthen monitoring and early warning, strengthen the operational monitoring and risk prevention and control responsibilities of power trading institutions and dispatching agencies, and do a good job in supervising and evaluating the disclosure of electricity market information. Strengthen the supervision of the natural monopoly business of power grid enterprises, improve the fair and open supervision system of power grids, and strengthen the evaluation of operation safety and service quality.

**(3) Complete the electricity market credit system.** Complete mechanisms for self-discipline and social supervision of market entities, improve the credit evaluation system for the electricity market, carry out credit evaluation efforts for market entities, promote hierarchical and categorical regulation, bring about the sharing of credit information of market entities, complete mechanisms for incentives for trustworthiness and punishment for untrustworthiness, and build new credit-based regulatory mechanisms.

**(4) Improve the emergency power supply mechanism.** Accelerate the capacity building of emergency backup and peak shaving power sources, establish and improve the cost recovery mechanism, and achieve reasonable economic compensation through the capacity cost recovery mechanism and the ancillary service market. Improve the market emergency response mechanism, give priority to ensuring the supply of electricity for people's livelihood, and ensure the security of power supply.

**6. Build a market mechanism**

to adapt to the new power system **(1) Improve the adaptability of the electricity market to a high proportion of new energy.** Strictly implement laws, regulations and policy measures to support the development of new energy, improve the market mechanism that adapts to a high proportion of new energy, promote the participation of new energy in electricity market transactions in an orderly manner, attract social capital with market-oriented returns, and promote sustainable investment in new energy. Establish a medium- and long-term power trading mechanism that is compatible with the characteristics of new energy, and guide new energy to sign medium- and long-term contracts with a longer term. Encourage new energy quotations to participate in the spot market, and the electricity that has not won the bid will not be included in the assessment of abandoned wind and abandoned solar power. Promote peak shaving services in the spot market, and regions with a high proportion of new energy can explore the introduction of new auxiliary services such as climbing.

**(2) Establish a cost recovery mechanism for power generation capacity in accordance with local conditions.** Guide all regions to establish a market-oriented power generation capacity cost recovery mechanism according to the actual situation, and explore various methods such as capacity compensation mechanism, capacity market, and scarce electricity price to ensure the recovery of fixed power supply costs and long-term power supply security. Encourage investment and construction of regulated power sources such as pumped storage, energy storage, and virtual power plants.

**(3) Explore the development of green electricity trading.** Innovate institutional mechanisms, carry out pilot green power trading, discover the environmental value of green electricity in a market-oriented way, and reflect the priority position of green electricity in trading organization and grid dispatch. Guide users in need to purchase green electricity directly, and promote grid enterprises to prioritize the implementation of direct transaction results of green electricity. Do a good job in effectively linking green electricity trading, green certificate trading, and carbon emission rights trading.

**(4) Improve the market-oriented trading mechanism for distributed generation .** Encourage distributed photovoltaics, decentralized wind power and other entities to directly trade with surrounding users, improve the transaction settlement, operation scheduling and other mechanisms between microgrids, stock small power grids, incremental distribution networks and large power grids, and enhance the ability to absorb new energy and safe operation nearby.

**VII. Strengthen organizational implementation (1) Strengthen organizational implementation**

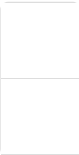
. We must always uphold and strengthen the party's leadership, and run the party's leadership through the entire process of building a unified national electricity market system. It is necessary to strengthen the work of overall power planning, policies and regulations, scientific monitoring, etc., and scientifically



guide power planning and effective investment. The Development and Reform Commission and the Energy Bureau should strengthen the overall guidance for the construction of a unified electricity market system, comprehensively consider conditions such as energy resource endowments, electricity price levels, and safe operation of power grids, strengthen systematic research, coordination and promotion, improve emergency control plans and supply guarantee mechanisms, improve relevant supporting policies, and strengthen organizational coordination, supervision and management and risk prevention. All provincial (autonomous region, municipal) governments should clarify the leading departments and the division of tasks, do a solid job in the construction of the local electricity market in accordance with the overall deployment, and promote comprehensive and coordinated supervision.

**(2) Create an atmosphere of reform.** Organize and carry out special research and training on the construction of the electricity market, encourage and guide relevant market entities to give play to their respective advantages, actively adapt to the construction of new power systems and the direction of marketization, and actively participate in the construction of the electricity market. Through press conferences and other forms, strengthen publicity and guidance and policy interpretation on the construction of the national unified electricity market system, condense consensus on the development of the electricity market, and create a good atmosphere for reform.

**(3) Timely follow-up assessments.** Electricity trading institutions and dispatching institutions shall, in accordance with their duties and division of labor, do a good job of recording, summarizing, analyzing and disclosing market operation information, and promptly and accurately reflect the operation status of the electricity market。 The Development and Reform Commission and the Energy Bureau shall carry out regular assessments of the operation status of the electricity market, sum up experience in a timely manner, and strengthen supervision and guidance for the construction of local electricity markets.



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