
Opinions of the CPC Central Committee and the State Council on further deepening the reform of the electric power system (ZhongFa [2015] No. 9)

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Central Committee of the Communist Party of China

State Council

Opinions on further deepening the reform of the electric power system

(ZhongFa [2015] No. 9)

(March 15, 2015)

In order to implement the spirit of the 18th CPC National Congress and the Third and Fourth Plenary Sessions of the 18th CPC Central Committee, as well as the spirit of the Sixth Meeting of the Central Leading Group for Financial and Economic Affairs and the First Meeting of the National Energy Commission, to further deepen the reform of the power system, resolve the prominent contradictions and deep-seated problems that restrict the scientific development of the power industry, promote the sound and rapid development of the power industry, and drive structural transformation and industrial upgrading, the following opinions are hereby put forward.

I. The Importance and Urgency of Power System Reform

Since the implementation of the power system reform in 2002, under the leadership of the CPC Central Committee and the State Council, the power industry has broken free from the institutional constraints of monopolistic power generation, fundamentally changed the problems of the mandatory planning system and the lack of separation between government and enterprise, and between power plants and grids, and has initially formed a diversified competitive landscape for the power market.

First, it has promoted the rapid development of the power industry. In 2014, the national installed power generation capacity reached 1.36 billion kilowatts, and the power generation reached 5.5 trillion kilowatt-hours. The circuit length of 220 kV and above power grid lines reached 572,000 kilometers, and the substation capacity of 220 kV and above reached 3.03 billion kVA, ranking first in the world in terms of power grid scale and power generation capacity. Second, it has improved the level of universal electricity service. Through rural power grid transformation and reform of the rural power management system, the rural power supply capacity and management level have been significantly improved, the reliability of rural power supply has been significantly enhanced, and the same price for urban and rural electricity has been basically achieved. The problem of electricity access for the unelectrified population has been basically solved. Third, a diversified market system has been initially formed. In terms of power

generation, multi-level, multi-ownership, and multi-regional power generation enterprises have been established; in terms of power grid, in addition to the State Grid and Southern Power Grid, local power grid enterprises such as the Inner Mongolia Power Grid have been established; in terms of auxiliary businesses, two integrated design and construction enterprises, China Power Construction Corporation and China Energy Engineering Corporation, have been established. Fourth, the electricity pricing mechanism has been gradually improved. In the power generation stage, benchmark prices for grid connection were implemented; in the transmission and distribution stage, transmission and distribution prices were gradually approved for most provinces; and in the sales stage, policies such as differentiated electricity pricing, punitive electricity pricing, and tiered pricing for residential electricity were successively introduced. Fifth, the market-based trading and regulation of electricity were actively explored. Pilot projects and explorations were successively carried out in areas such as competitive bidding for grid connection, direct transactions between large users and power generation enterprises, power generation rights trading, and inter-provincial electricity trading. Significant progress was made in the market-based trading of electricity, and important experience was accumulated in electricity regulation.

At the same time, the power industry also faces some problems that urgently need to be addressed through reform, mainly including:

First, the lack of a trading mechanism leads to low resource utilization efficiency. An effective competitive mechanism on the electricity sales side has not yet been established, market transactions between power generation companies and users are limited, and the decisive role of the market in resource allocation is difficult to realize. Energy-efficient and environmentally friendly generating units are not fully utilized, and instances of water, wind, and solar power curtailment occur frequently, with some regions experiencing both power shortages and surplus power. Second, price relationships are not rationalized, and a market-based pricing mechanism has not yet been fully formed. Current electricity price management is still mainly based on government pricing, and price adjustments often lag behind cost changes, making it difficult to reflect electricity costs, market supply and demand, resource scarcity, and environmental protection expenditures in a timely and reasonable manner. Third, the transformation of government functions is inadequate, and various planning coordination mechanisms are imperfect. There are significant discrepancies between various special development plans and between the actual implementation and planning of power plans. Fourth, the development mechanism is unsound, and the development and utilization of new and renewable energy face difficulties. The manufacturing capacity of equipment for new energy industries such as photovoltaic power generation is mismatched with construction, operation, and consumption demands, failing to form a virtuous cycle of mutual promotion between research and development, production, and utilization. The issues of non-discriminatory and barrier-free grid connection for renewable energy and renewable energy power generation have not been effectively resolved. Fifth, legislative and legislative work is relatively lagging, hindering the marketization and healthy development of the electricity market. Some existing electricity laws and regulations are no longer suitable for the actual needs of development, and some supporting reform policies have been delayed. There is an urgent need to revise relevant laws, regulations, policies and standards to provide a basis for the development of the power industry.

Deepening power system reform is an urgent task, crucial to my country's energy security and overall economic and social development. The Third Plenary Session of the 18th CPC Central Committee proposed that monopolistic industries where state-owned capital continues to hold controlling stakes should undergo reforms primarily focused on separating government and enterprise functions, separating government and capital functions, implementing franchise operations, and strengthening government regulation. The "Key Points of the Work of the Central Leading Group for Comprehensively Deepening Reform in 2014" and the "Notice of the State Council on Forwarding the Opinions of the National

Development and Reform Commission on Key Tasks for Deepening Economic System Reform in 2014" set forth new missions and requirements for deepening power system reform. Public calls for accelerating power system reform are growing louder, and social demands and consensus for reform are increasing, creating a favorable external environment and a solid foundation for further work.

II. Overall Approach and Basic Principles for Deepening Power System Reform

(1) Overall considerations

The guiding ideology and overall goal of deepening power system reform are: to adhere to the direction of socialist market economy reform, proceed from my country's national conditions, uphold clean, efficient, safe, and sustainable development, fully implement the national energy strategy, accelerate the construction of an effectively competitive market structure and system, form a mechanism in which energy prices are mainly determined by the market, transform the government's regulatory approach to energy, establish and improve the energy legal system, create a sound institutional environment for building a modern energy system and ensuring national energy security, fully consider the demands of all parties and the development laws of the power industry, and balance thorough reform with maintaining stability. Through reform, a sound market system for the power industry will be established that is "lawful, separate from government and enterprise, standardized entities, fair transactions, reasonable prices, and effective regulation," striving to reduce electricity costs, streamline price formation mechanisms, gradually break monopolies, orderly open up competitive businesses, achieve diversified supply, adjust the industrial structure, improve technological levels, control total energy consumption, improve energy utilization efficiency, enhance safety and reliability, promote fair competition, and promote energy conservation and environmental protection.

The key points and pathways for deepening power system reform are: on the basis of further improving the separation of government and enterprise, the separation of power plants and grids, and the separation of main and auxiliary businesses, in accordance with the institutional framework of controlling the middle and opening up both ends, orderly liberalize electricity prices in competitive links other than transmission and distribution, orderly open up power distribution and sales businesses to social capital, and orderly liberalize power generation and consumption plans other than public welfare and regulation; promote the relative independence and standardized operation of trading institutions; continue to deepen research on regional power grid construction and transmission and distribution systems suitable for my country's national conditions; further strengthen government supervision, further strengthen overall power planning, and further strengthen the safe, efficient operation and reliable supply of electricity.

(2) Basic principles

Ensure safety and reliability. The design of the system and mechanisms should follow the technical and economic laws governing the real-time nature, intangibility, supply and demand fluctuations, and homogeneity of electricity commodities, ensuring a dynamic balance in the production, transmission, and use of electricity, guaranteeing the safe and stable operation of the power system and a reliable power supply, and improving the level of power safety and reliability.

We will adhere to market-oriented reforms. We will differentiate between competitive and monopolistic sectors, promote effective competition on both the power generation and sales sides, cultivate independent market players, strive to build a diversified and orderly power trading structure, establish a pricing mechanism that adapts to market demands, stimulate the intrinsic vitality of enterprises, and enable the market to play a decisive role in resource allocation.

Upholding the principle of safeguarding people's livelihoods. Taking into account my country's national conditions and the current state of the power industry, and fully considering the affordability for enterprises and society, we will ensure the supply of basic public services. We will properly handle the issue of cross-subsidies, improve the tiered pricing mechanism, and ensure relatively stable electricity prices for residential, agricultural, essential public utilities, and public services, thereby effectively safeguarding people's livelihoods.

We will adhere to energy conservation and emission reduction. From the overall perspective of implementing the national security strategy, we will actively carry out electricity demand-side management and energy efficiency management, improve the system for orderly and economical electricity use, and promote economic restructuring, energy conservation and emission reduction, and industrial upgrading. We will strengthen technological innovation in the energy sector, promote the transformation of the power industry's development model and the optimization of the energy structure, improve the quality and efficiency of development, and increase the proportion of renewable energy generation and distributed energy system generation in the electricity supply.

Adhere to scientific regulation. Give better play to the government's role, focusing on strengthening the formulation and implementation of development strategies, plans, policies, and standards, and enhancing market regulation. Improve electricity regulatory agencies, measures, and methods; refine government regulatory approaches; and enhance the level of scientific regulation of technology, safety, trading, and operations.

III. Key Tasks for Advancing Power System Reform in the Near Future

(I) Promote electricity price reform in an orderly manner and streamline the electricity price formation mechanism.

1. Separately determined transmission and distribution prices. Government-set prices are mainly limited to important public utilities, public services, and natural monopolies in the power grid. The government primarily determines transmission and distribution prices and publishes them to the public for oversight. Transmission and distribution prices will gradually transition to being determined based on the principle of "permitted cost plus reasonable profit," differentiated by voltage level. Users or electricity retailers pay according to the transmission and distribution price corresponding to the voltage level of the power grid they are connected to.

2、分步实现公益性以外的发售电价格由市场形成。放开竞争性环节电力价格，把输配电价与发售电价在形成机制上分开。合理确定生物质发电补贴标准。参与电力市场交易的发电企业上网电价由用户或售电主体与发电企业通过协商、市场竞价等方式自主确定。参与电力市场交易的用户购电价格由市场交易价格、输配电价（含线损）、政府性基金三部分组成。其他没有参与直接交易和竞价交易的上网电量，以及居民、农业、重要公用事业和公益性服务用电，继续执行政府定价。

3、妥善处理电价交叉补贴。结合电价改革进程，配套改革不同种类电价之间的交叉补贴。过渡期间，由电网企业申报现有各类用户电价间交叉补贴数额，通过输配电价回收。

（二）推进电力交易体制改革，完善市场化交易机制

4、规范市场主体准入标准。按照接入电压等级，能耗水平、排放水平、产业政策以及区域差别化政策等确定并公布可参与直接交易的发电企业、售电主体和用户准入标准。按电压等级分期分批放开用户参与直接交易，参与直接交易企业的单位能耗、环保排放均应达到国家标准，不符合国家产业政策以及产品和工艺属于淘汰类的企业不得参与直接交易。进一步完善和创新制度，支持环保高效特别是超低排放机组通过直接交易

和科学调度多发电。准入标准确定后，升级政府按年公布当地符合标准的发电企业和售电主体目录，对用户目录实施动态监管，进入目录的发电企业、售电主体和用户可自愿到交易机构注册成为市场主体。

5、引导市场主体开展多方直接交易。有序探索对符合标准的发电企业、售电主体和用户赋予自主选择权，确定交易对象、电量和价格，按照国家规定的输配电价向电网企业支付相应的过网费，直接洽谈合同，实现多方直接交易，短期和即时交易通过调度和交易机构实现，为工商业企业等各类用户提供更加经济、优质的电力保障。

6、鼓励建立长期稳定的交易机制。构建体现市场主体意愿、长期稳定的双边市场模式，任何部门和单位不得干预市场主体的合法交易行为。直接交易双方通过自主协商决定交易事项，依法依规签订电网企业参与的三方合同。鼓励用户与发电企业之间签订长期稳定的合同，建立并完善实现合同调整及偏差电量处理的交易平衡机制。

7、建立辅助服务分担共享新机制。适应电网调峰、调频、调压和用户可中断负荷等辅助服务新要求，完善并网发电企业辅助服务考核新机制和补偿机制。根据电网可靠性和服务质量，按照谁受益、谁承担的原则，建立用户参与的服务服务分担共享机制。用户可以结合自身负荷特性，自愿选择与发电企业或电网企业签订保供电协议、可中断负荷协议等合同，约定各自的服务服务权利与义务，承担必要的辅助服务费用，或按照贡献获得相应的经济补偿。

8、完善跨省跨区电力交易机制。按照国家能源战略和经济、节能、环保、安全的原则，采取中长期交易为主、临时交易为补充的交易模式，推进跨省跨区电力市场化交易，促进电力资源在更大范围优化配置。鼓励具备条件的区域在政府指导下建立规范的跨省跨区电力市场交易机制，促使电力富余地区更好地向缺电地区输送电力，充分发挥市场配置资源、调剂余缺的作用。积极开展跨省跨区辅助服务交易。待时机成熟时，探索开展电力期货和电力场外衍生品交易，为发电企业、售电主体和用户提供远期价格基准和风险管理手段。

（三）建立相对独立的电力交易机构，形成公平规范的市场交易平台

9、遵循市场经济规律和电力技术特性定位电网企业功能。改变电网企业集电力输送、电力统购统销、调度交易为一体的状况，电网企业主要从事电网投资运行、电力传输配送，负责电网系统安全，保障电网公平无歧视开放，按国家规定履行电力普遍服务义务。继续完善主辅分离。

10、改革和规范电网企业运营模式。电网企业不再以上网电价和销售电价价差作为收入来源，按照政府核定的输配电价收取过网费。确保电网企业稳定的收入来源和收益水平。规范电网企业投资和资产管理行为。

11、组建和规范运行电力交易机构。将原来由电网企业承担的交易业务与其他业务分开，实现交易机构相对独立运行。电力交易机构按照政府批准的章程和规则为电力市场交易提供服务。相关政府部门依据职责对电力交易机构实施有效监管。

12、完善电力交易机构的市场功能。电力交易机构主要负责市场交易平台的建设、运营和管理，负责市场交易组织，提供结算依据和服务，汇总用户与发电企业自主签订的双边合同，负责市场主体的注册和相应管理，披露和发布市场信息等。

（四）推进发用电计划改革，更多发挥市场机制的作用

13、有序缩减发用电计划。根据市场发育程度，直接交易的电量和容量不再纳入发用电计划。鼓励新增工业用户和新核准的发电机组积极参与电力市场交易，其电量尽快实现以市场交易为主。

14、完善政府公益性调节性服务功能。政府保留必要的公益性调节性发用电计划，以确保居民、农业、重要公用事业和公益性服务等用电，确保维护电网调峰调频和安全运行，确保可再生能源发电依照规划保障性收购。积极开展电力需求侧管理和能效管理，通过运用现代信息技术、培育电能服务、实施需求响应等，促进供需平衡和节能减排。加强老少边穷地区电力供应保障，确保无电人口用电全覆盖。

15、进一步提升以需求侧管理为主的供需平衡保障水平。政府有关部门要按照市场化的方向，从需求侧和供应侧两方面入手，搞好电力电量整体平衡。提高电力供应的安全可靠水平。常态化、精细化开展有序用电工

作，有效保障供需紧张下居民等重点用电需求不受影响。加强电力应急能力建设，提升应急响应水平，确保紧急状态下社会秩序稳定。

（五）稳步推进售电侧改革，有序向社会资本放开售电业务

16、鼓励社会资本投资配电业务。按照有利于促进配电网建设发展和提高配电运营效率的要求，探索社会资本投资配电业务的有效途径。逐步向符合条件的市场主体放开增量配电投资业务，鼓励以混合所有制方式发展配电业务。

17、建立市场主体准入和退出机制。根据开放售电侧市场的要求和各地实际情况，科学界定符合技术、安全、环保、节能和社会责任要求的售电主体条件。明确售电主体的市场准入、退出规则，加强监管，切实保障各相关方的合法权益。电网企业应无歧视地向售电主体及其用户提供报装、计量、抄表、维修等各类供电服务，按约定履行保底供应商义务，确保无议价能力用户也有电可用。

18、多途径培育市场主体。允许符合条件的高新产业园区或经济技术开发区，组建售电主体直接购电；鼓励社会资本投资成立售电主体，允许其从发电企业购买电量向用户销售；允许拥有分布式电源的用户或微网系统参与电力交易；鼓励供水、供气、供热等公共服务行业和节能服务公司从事售电业务；允许符合条件的发电企业投资和组建售电主体进入售电市场，从事售电业务。

19、赋予市场主体相应的权责。售电主体可以采取多种方式通过电力市场购电，包括向发电企业购电、通过集中竞价购电、向其他售电商购电等。售电主体、用户、其他相关方依法签订合同，明确相应的权利义务，约定交易、服务、收费、结算等事项。鼓励售电主体创新服务，向用户提供包括合同能源管理、综合节能和用能咨询等增值服务。各种电力生产方式都要严格按照国家有关规定承担电力基金、政策性交叉补贴、普遍服务、社会责任等义务。

（六）开放电网公平接入，建立分布式电源发展新机制

20. Actively develop distributed power sources. Distributed power sources mainly adopt the operation mode of "self-generation and self-consumption, surplus power to the grid, and grid regulation". Under the premise of ensuring safety, actively develop microgrids and smart grid technologies that integrate advanced energy storage technology and information technology to improve system absorption capacity and energy utilization efficiency.

21. Improve grid connection and operation services. Accelerate the revision and improvement of technical standards, engineering specifications, and related management measures for grid connection; support the grid connection of new energy, renewable energy, energy-saving and emission-reducing, and resource-integrated utilization units; actively promote the effective connection of new energy and renewable energy power generation with other power grids; earnestly implement the guaranteed purchase system for renewable energy power generation in accordance with the plan; and properly address the issues of non-discriminatory and barrier-free grid connection. Accelerate the formulation and improvement of national technical standards for the research and development, manufacturing, assembly, grid connection, maintenance, and upgrading of new energy and renewable energy.

22. Strengthen and standardize the supervision and management of self-owned power plants. Standardize the entry criteria for self-owned power plants; their construction and operation should comply with national energy industry policies and power planning layout requirements, strictly adhere to national energy conservation and environmental emission standards, fairly assume social responsibility, and fulfill corresponding peak-shaving obligations. Enterprises owning self-owned power plants should, as stipulated, bear government funds, policy-based cross-subsidies, and system standby fees consistent with the self-owned power plant industry policy. Improve and standardize support policies for self-owned power plants that comprehensively utilize resources such as waste heat, waste pressure, waste gas, and gas extraction. Standardize the criteria for existing self-owned power plants to become qualified market

entities, allowing them to participate in electricity market transactions under the condition of fairly assuming the social responsibility of power generation enterprises.

23. Fully open up the user-side distributed power market. Actively conduct various pilot and demonstration projects for distributed power generation. Open up the construction of user-side distributed power generation, supporting enterprises, institutions, communities, and households to invest in and construct various types of distributed power sources, such as solar, wind, biomass power generation, and gas-fired combined heat, power, and cooling (CHP), according to their own conditions and local conditions, and permitting their connection to distribution networks and end-user electricity systems at all voltage levels. Encourage specialized energy service companies to cooperate with users or construct distributed power sources using the "contract energy management" model.

(vii) Strengthen overall planning and scientific supervision of the power sector to improve the level of power safety and reliability.

24. Strengthen the overall planning of the power industry, especially the power grid. Relevant government departments should earnestly fulfill their responsibilities in power planning, optimize the layout of power sources and the power grid, and strengthen the effective connection between power planning and power source planning, as well as between national power planning and local power planning. Enhance the coverage, authority, and scientific rigor of planning, increase its transparency and public participation, and ensure that the construction of various power sources and the layout of the power grid are strictly planned and implemented in an orderly manner. Power planning should fully consider the carrying capacity of resources and the environment, and conduct environmental impact assessments in accordance with the law. After being reviewed through legal procedures, plans should be made public. Establish a mechanism for the inspection, supervision, evaluation, and assessment of plan implementation to ensure the effective execution of power planning.

25. Strengthen scientific supervision of the power industry and related fields. Improve the power regulatory organization system, innovate regulatory measures and methods, effectively carry out power trading, dispatching, power supply services, and safety supervision, strengthen supervision of fair grid access, grid investment behavior, costs, and investment and operational efficiency, effectively guarantee the grid connection of new energy sources, promote energy conservation and emission reduction, and ensure residential power supply and the safe and reliable operation of the power grid. Strengthen and improve the self-regulatory, coordinating, supervisory, and service functions of industry associations, and give full play to their role as a bridge between the government, users, and enterprises.

26. Reduce and standardize administrative approvals in the power industry. Further transform government functions, streamline administration and delegate power, cancel or delegate the approval authority for power projects, effectively implement planning, clarify review conditions and standards, standardize and simplify approval procedures, improve market planning, and ensure the effective implementation of power development strategies, policies and standards.

27. Establish and improve the credit system for market entities. Strengthen the integrity of market entities and regulate market order. Relevant departments should establish credit records for corporate legal persons, their responsible persons, and employees, and incorporate them into a unified credit information platform to make the credit status of all types of enterprises transparent, traceable, and verifiable. Increase supervision and publicly disclose illegal and dishonest behavior by enterprises and individuals. For serious illegal and dishonest behavior that affects power safety, strict industry bans should be implemented.

28. Expedite the revision of electricity laws and regulations. In accordance with the overall requirements and progress of reform, expedite the revision of the Electricity Law and the research and drafting of related administrative regulations, fully leveraging the guiding, promoting, regulating, and safeguarding role of legislation in reform. Strengthen the rule of law in electricity administration. Increase the implementation of the Renewable Energy Law. Accelerate the formulation of energy regulatory regulations to adapt to the requirements of lawful and effective regulation, and promptly formulate and revise other relevant laws, regulations, and rules.

IV. Strengthen the organization and implementation of power system reform.

The reform of the power system is related to economic development, people's livelihood and social stability. We must strengthen organizational leadership, follow the requirements of overall design, key breakthroughs, phased implementation, orderly advancement and pilot projects, mobilize the enthusiasm of all parties, and ensure that the reform is carried out in a standardized, orderly and steady manner.

(I) Strengthen organization and coordination. Improve the working group mechanism for power system reform, formulate practical and feasible special reform work plans and related supporting measures, further clarify the division of responsibilities, and clarify the responsibilities of the central government, local governments, and enterprises to ensure the smooth progress of power system reform.

(II) Actively create a favorable atmosphere. Strengthen communication and coordination with the news media, increase publicity and reporting on the power system reform, create a strong atmosphere for promoting the power system reform throughout society, strengthen communication and coordination on reform work, fully mobilize the enthusiasm of all parties, build consensus, and form a joint effort.

(III) Proceed Steadily and Orderly. Power system reform is a systemic...