

# Problems and prospects of power system reform in Inner Mongolia Power Grid

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**Abstract.** Inner Mongolia Power (Group) Co., Ltd is a large state-owned power grid enterprise which is directly under the Inner Mongolia and the second largest power grid enterprise in the country. Inner Mongolia power grid also plays a great role in fulfilling social responsibilities and obligations on the basis of maintaining economic benefits under various development strategies of the state and local governments. With the process of power system reform, the sustainable development of Inner Mongolia power grid is facing excellent opportunities and severe challenges. In addition, there are some problems, such as oversupply of power, difficult delivery situation, unreasonable power grid structure, relatively backward power technology, increasing environmental damage and so on. This paper is mainly focusing on the theme of the research on the sustainable development of Inner Mongolia power grid in the process of power system reform, analyzing the impact of power system reform on Inner Mongolia power grid, defining the goal and direction of low-carbon development of power grid in view of the challenges and existing problems faced in the reform process, and putting forward the research idea of trying to open up a green development path.

**Keywords:** Inner Mongolia; power; reform; development.

## 1. Introduction

The new round of power system reform will change from the functional orientation of China's traditional power grid enterprises to specific functional categories, changing the profit model of earning the purchase and sale price difference in the past, and promote the development of power grid operation and maintenance and infrastructure investment towards a more market-oriented direction. Permitting social capital to participate in market competition on the power generation side and power sales side may promote the gradual maturity of market subjects, and strive to form a new pattern of power trading with diversified subjects and orderly competition. Emerging business ecology and business model innovation emerge one after another. The market really plays a decisive role in resource allocation. Marketization is becoming a new wave leading the reform and development of China's power industry.

Power system reform is an inevitable trend of the historical development. As the only power grid belonging to the autonomous region, Inner Mongolia Power Grid has formed its own unique management system and developed more independent. With the further deepening of power system reform, Inner Mongolia Power Grid has entered the fast lane of rapid development relying on its location and resource advantages. Inner Mongolia Power Grid is mainly responsible for the construction, operation and maintenance of the central and western transmission and distribution power grid with an area of about 720000 square kilometers. At the same time, it undertakes to provide trans provincial and regional services to North China power grid, Yulin, Shaanxi and Mongolia. Now, the power supply and demand situation in Inner Mongolia Autonomous Region is changing, and the development of the company is facing new opportunities and challenges, the pace of enterprise strategic transformation will be accelerated.

The deepening power system reform has strong policy nature and wide coverage, affecting the development of Inner Mongolia Power Grid extensively and profoundly. In the process of reform, the great changes in the internal and external business environment of Inner Mongolia power grid have achieved rapid and effective development, but also brought business uncertainty and risk. The impact

of power system reform on Inner Mongolia power grid can be summarized into two aspects of the impact of profitability and the impact of operation and management.

## **2. Reform course of Inner Mongolia electric power system**

Facing the complex economic situation, arduous reform and development tasks as well as the external opportunities and challenges, the market-oriented reform of power system promoted by the state will be a major strategic issue that Inner Mongolia Electric Power Group Corporation must think deeply in the future. Inner Mongolia Electric Power Group Corporation should objectively and fairly analyze and evaluate its own ability and the new reform environment, make use of the relevant theories and practices of enterprise strategic management science, and further increase the investment in reform research, constantly seek transformation and upgrading, formulate corresponding enterprise development strategies through rational allocation of resources and research, thereby better provide strong power grid support for regional economic and social development.

The power system reform in Inner Mongolia has experienced three historical development stages, which is the year before and after the reform and opening up, and the system reform stage of "separation of power plant and power grid". During the period before reform and opening up, Hohhot Electric Power Bureau and Baotou Electric Power Bureau were abolished and changed into units directly under the control of the Department of water resources and electric power of Inner Mongolia In 1963. At the stage of the year after the reform and opening up, the essence of China's power system reform is to establish a new system that meets the requirements of socialist market economy. In this context, Inner Mongolia power system has also begun to implement corporate management and commercial operation. In the third stage of "the split on electricity powerindustry and quotation", Inner Mongolia electric power system reform also took a historic step in the process of national electric power system reform in 2004. Through several years of operation planning, Inner Mongolia electric power (Group) Co., Ltd. and North United Electric Power Co., Ltd. were officially established. After restructuring, Inner Mongolia electric power (Group) Co., Ltd. is committed to power grid construction and management.

## **3. Current situation of power system reform in Inner Mongolia**

### **3.1 Construction situation**

Inner Mongolia power grid has increased investment and improved its functions. For the purpose of fully ensuring the power demand for economic development of eight league cities, it has scientifically organized and actively carried out the construction of Inner Mongolia power grid. In recent years, the pace of power grid construction in Inner Mongolia has been significantly accelerated. In the future, it will further increase investment in power grid construction, playing an important role on the advantages of Inner Mongolia energy base.

### **3.2 Influence on the development of Inner Mongolia Power Grid**

The deepening power system reform has strong policy nature and covers a wide range. It is widely and deeply affecting the development of Inner Mongolia power grid. In the process of reform, the internal and external business environment of Inner Mongolia power grid has undergone great changes. While achieving rapid and effective development, it has also brought operational uncertainty and risk. The impact of power system reform on Inner Mongolia power grid can be summarized into two aspects of the impact on profitability and the impact of operation and management. From the analysis of the content of power system reform in recent years, the main factors affecting the profitability of Inner Mongolia power grid can be summarized as follows: "the split on electricity, power reform and direct power supply for large users. While the effect on the operation and management of Inner Mongolia power grid is specifically involves the power system reform, such as

the transfer of power administrative functions, the reform of rural power system, the linkage of coal and power prices, and strengthening the universal service of power society.

#### **4. Problems faced by the current exhibition**

In recent years, Inner Mongolia power grid has always been committed to strengthening power grid construction, adhering to the general principle of "unified planning, moderate advance and coordinated development", continuously improving the healthy development level of power grid. However, Inner Mongolia power grid is also facing inevitable challenges in its development. Firstly, Inner Mongolia power grid is a local power grid company independent of the State Grid, and there are some contradictions between them in the construction of power transmission lines, which seriously affects the power transmission. Secondly, the installed capacity of electric power in the central and western regions of Inner Mongolia is increasing day by day, and the contradiction between supply and demand is becoming more and more serious, which affects the sustainable economic and social development of Inner Mongolia to a certain extent.

#### **5. Prospect of future reform strategy**

In terms of power system reform, Inner Mongolia Electric Power Group Corporation should next implement the deployment of power system reform and actively promote the reform of key areas and key links. Fully implement the new round of transmission and distribution price policy and reduce the power consumption cost of manufacturing industry, promote the pilot construction of incremental distribution business reform, and increase the investment in distribution network in important parks. Adhere to the basic market model of "focusing on medium and long-term transactions as well as supplemented by spot transactions", steadily promote spot transactions, seriously carry out capacity market research, improve the consumption mechanism of new energy, promote all entities in the power market to share the dividends of reform achievements, and realize the common prosperity of the industry and the development and growth of enterprises. Besides, the process of industrialization and urbanization in Inner Mongolia has not only promoted the development of the national economy in Inner Mongolia, but also brought problems such as environmental pollution and the depletion of non renewable resources. As an autonomous pillar industry, Inner Mongolia power grid has to change its development mode and open up a green road of sustainable development.

#### **6. Conclusion**

Finally, with the deepening of power system reform, the government will further strengthen cost supervision in the field of transmission and distribution. In this case, Inner Mongolia Power (Group) Co.,Ltd must improve its operation efficiency through lean management mode. Change the previous main business management and control mode, optimize the internal system and process of the organization, establish and improve the modern enterprise system, and standardize corporate governance. Find a balance between management and control and service, and pay attention to improving the decision-making efficiency and innovation vitality of the new business company while controlling the operational risk of the new business. Inner Mongolia Power (Group) Co.,Ltd should also actively expand new business and look for new profit growth points under the condition of the change of income composition and the compression of profit space of its main business.

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