Research on the Information Disclosure Mechanism of the Retail Market Based on the Liberalization of the Electricity Sale Market

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Abstract. Liberalizing the electricity sales market is an important direction for electricity reform and a major strategic move to implement the reform of the supply and demand structure. In the process of liberalizing the electricity retail market, various mechanisms are not yet sound, and many problems have arisen due to opaque information. Establishing an open and effective information disclosure mechanism has become a necessary condition for ensuring the orderly development of the retail market. The article proposes a framework for information disclosure in the retail electricity market. The research results can be used as the basis for the credit rating of electricity retail companies, and will help the stable and healthy operation of the electricity retail market.

Keywords: Electricity retail market; Electricity retail company; Information disclosure; Regulatory agency.

1. Introduction

As the focus of the new round of power system reform, competition is formed on the power sales side, and social capital is encouraged to enter the retail market, forming a diversified and open competitive retail market, which has become an irreversible trend for the power sales side reform. At present, with the continuous advancement of market construction, the retail market has begun to take shape, but it is still in the groping and learning stage, and various mechanisms are not yet sound. In actual operations, the following problems are caused by opaque information.

The current development status of China's electricity retail market:

1.1 Lack of trust between electricity sales companies and electricity users

In the past operation of the electricity retail market, the lack of trust between electricity sales companies and electricity users was the main problem facing the development of the entire market. On the one hand, due to incomplete information disclosure, users generally lack a clear understanding of the competitive advantages of electricity sales companies, which makes some electricity sales companies create the illusion that they have strong competitiveness to users. To strive for more market space, not only eventually disrupted the order of the electricity retail market, but also reduced the credibility of the electricity retail enterprises; on the other hand, in the actual electricity marketing process, the unilateral default of the electricity users caused the electricity selling enterprises to face bankruptcy. This problem is also commonplace, which makes it easy for users to conceal their personal economic conditions and cause major financial crises, which will eventually cause their own survival and development to be seriously affected.

1.2 Market management is not yet perfect

There are frequent disputes in the electricity retail market. In the domestic electricity retail market, users have signed intentions with multiple electricity sales companies, and some of the terms and conditions of contracts signed by users and electricity sales companies have repeatedly appeared. In the end, disputes and other situations can only resort to legal means for arbitration, which will adversely affect the development of the electricity retail market. In the face of a large number of electricity retail users, the "local promotion" of electricity sales companies face high operating costs, and various "intermediaries" are active in the market to facilitate transactions between electricity sales companies and retail users. The payment of intermediary fees to the "intermediary business" increases the operating costs of the electricity sales company. The existence of such intermediate links as "intermediaries" increases user transaction costs.

1.3 Information disclosure channels are relatively single

From the current point of view, electricity users choose electricity sales companies to rely on the corporate information unilaterally released by electricity sales companies. However, for electricity sales companies, they only unilaterally emphasize their own competitive advantages when propagating themselves. Therefore, Electricity users basically have no channels to evaluate the comprehensive information of electricity sales companies, and they will face greater risks in the process of blindly selecting electricity sales companies. At the same time, due to the relatively single information disclosure channel, most power users cannot understand the changes in power sales policies in time, and cannot adjust their own power purchasing decisions based on the development law of the power sales market, nor can they reasonably choose the best in the power sales market. Power sales partners restrict the organic formation of a complete power supply chain and are not conducive to the healthy development of the power retail market.

How to ensure the openness and transparency of the market and promote the healthy and stable development of the retail market has become one of the urgent problems to be solved. The theoretical research of information economics shows that information disclosure plays a pivotal role in establishing market order and standardizing market behaviour. Experts and scholars have conducted a lot of information disclosure on the electricity market Exploration, focusing on the operation and supervision system of the electricity wholesale market, and the impact of information disclosure on the electricity trading plan, market efficiency and trading mode; on the other hand, from the successive releases of regulations and market-oriented trading information announcements by provinces and cities, At present, the information disclosure of the domestic electricity market is mainly based on the relevant information of the wholesale market, and the operation of the retail market is rarely involved. However, in the internationally mature electricity market, due to the early opening of the retail market, relevant research and practice have been carried out on the information disclosure of the retail market, and a relatively complete information disclosure mechanism has been gradually established, of which the United Kingdom and the United States are the most typical

The status quo of the development of information disclosure mechanisms in foreign power retail markets

According to the theory of modern information economics, information disclosure has great value in establishing a harmonious market order and regulating market transaction behaviours. For foreign countries, especially some western developed countries, they have already built a relatively complete information disclosure mechanism for the electricity retail market, and have largely guaranteed the stable development of the electricity retail market. In this regard, we took the information disclosure mechanisms of the United Kingdom and the United States as examples to conduct a specific analysis:

1.4 Centralized disclosure mechanism in the UK

The UK's centralized disclosure mechanism, also known as OFGEM, is a form of information disclosure based on dynamic data and regular reports. It provides electricity consumers with information on the market structure, transaction operations, and price fluctuations of the electricity retail market through centralized information display. At the same time, the disclosure mechanism puts more emphasis on information feedback, can regularly summarize user experience and user reviews, and provide a basis for electricity supply and sales companies to adjust purchase and sales decisions.

1.5 The United States joint disclosure mechanism

In the U.S. electricity market, the information disclosure mechanism it adopts puts more emphasis on government supervision, that is, with the help of government agencies to realize the construction and management of information disclosure platforms. On this basis, market information including market capacity and transaction results can be obtained. Timely and accurate display to electricity users and electricity sales companies not only makes the entire information disclosure process more reasonable, but also basically realizes the construction of a comprehensive information disclosure system, which helps to ensure the fairness and transparency of the electricity retail market.

2. Design of the retail market information disclosure framework

In order to promote the healthy and orderly development of China's power market, it is urgent to systematically consider the principles, mechanisms, and measures of information disclosure when designing market plans, and establish an information disclosure system that can support the optimal allocation of resources in China's power industry and the scientific and optimal decision-making of market members.

2.1 Establish an information disclosure system that combines the national and provincial levels

China should carry out the overall design of the electricity market information disclosure system, establish a complete information disclosure system, establish an information disclosure mechanism at the national level that guides the cross-regional flow of resources, and establish a self-certified market credibility at the provincial level to improve the provincial market Efficiency is the core information disclosure mechanism, clarify the responsibilities of each information disclosure entity, establish a standardized information disclosure system, and improve the level of optimal allocation of resources across the country.

2.2 Clearly define the information that should be disclosed

In accordance with the principle of "public information assumption of monopoly business", for information involving monopoly business, if the publication of the information does not harm the legitimate interests of the enterprise, it shall be handled in accordance with public information and published appropriately. China's energy regulatory agency should clearly define what information involves state and corporate secrets, and establish a standardized information disclosure system. In principle, all information that promotes market efficiency and improves market transparency should be disclosed to the market without harming the interests of the country and enterprises.

2.3 Third-party market surveillance agencies should be introduced

In the provincial power market, in addition to the market organizers' self-disclosure of the original market operation data, the role of third-party agencies should also be fully utilized. Third-party institutions need to have professional market analysis capabilities, and be widely recognized by market regulators, market organizers, and various market entities, and be able to maintain objectivity, impartiality, and independence in market analysis. Third-party market monitoring agencies regularly conduct objective and fair analysis of the operation of the electricity market, and disclose market operations to market members through analysis reports, thereby improving market transparency and market credibility of transaction results.

3. The main content and management methods of information disclosure in the electricity retail market

On the whole, electricity retail market information involves multiple levels of market entities' basic information, market transaction operation information, market annual report information, market default information, and generally, it can be divided into three types: public information, public information and private information according to the scope of disclosure and confidentiality requirements.

3.1 Basic information of market entities

For power grid enterprises, in accordance with the contents of the “Implementation Opinions on Promoting the Reform of the Electricity Sales Side” accompanying Circular 9, the role of grid companies is to “provide power transmission and distribution services to market entities” and “according to regulations” Charge transmission and distribution fees from transaction entities.” Therefore, in the entire retail power market, grid companies should always adhere to the principles of open, fair, and transparent transactions to implement all power transactions. They must not only disclose transmissions in a timely manner Distribution price information, but also clearly show their own service performance.

Electricity sales companies often directly assume the important responsibility of participating in the wholesale and retail electricity market and responding to the retail price of electricity. Therefore, electricity sales companies often have a lot of cross-information, and usually rely on their own information advantages to expand their own sales markets. On the one hand, the registration access information of the company is publicly disclosed, and public supervision is used to ensure the openness and transparency of its own electricity sales operations; on the other hand, for the operation process of electricity sales enterprises, in order to avoid "moral hazards" and other risk factors that violate the principles of fair market competition. , Electricity sales companies need to continuously disclose their own contract information and service content, but taking into account user privacy and trade secrets, they can be handed over to a third-party operating agency for information disclosure management, so as to ensure the lawful and orderly process of electricity retail. For power users, in the actual electricity retail process, different power users will be accompanied by different power consumption attributes. Therefore, it is usually necessary to analyse the overall structure of power users. On the one hand, after power users enter the market, due to the differences in the operation of the power market in different regions, some regions will set thresholds for the power consumption of power users. On the other hand, electricity users not only need to regularly disclose their own electricity consumption curve and electricity consumption, but also timely display the electricity consumption adjustment caused by mass production and production reduction, so as to effectively protect the electricity retail market. The interests of all participants can ensure the stable and orderly development of the retail market.

3.2 Market transaction operation information

Grid operation information, the causes of electricity market risks are often diverse. They are not only affected by the policy environment and the regulation of laws and regulations, but also related to various grid construction work during the operation of the grid. Therefore, grid companies need to disclose grid operation information in a timely manner to ensure that power users adjust the time of electricity consumption in a timely manner. Market supply and demand information, retail companies need to regularly disclose market supply and demand information, so as to provide data support for power users to evaluate retail companies on the one hand, and build sustainable retail market relationships on the other, and ultimately provide a reference for promoting the healthy operation of the retail market. Market structure information, at the level of market structure information, government departments should rely on third-party government supervision mechanisms to disclose market entity structure information in a timely manner, and use public supervision to ensure the standardization and transparency of companies participating in the market, and ultimately avoid the phenomenon of illegal companies disrupting market order.

Market transaction information, in the transaction process, the transaction information includes the difficulty of the transaction process and the specific quality of the electricity sales service. Its disclosed value mostly exists in providing a reference for users to evaluate the electricity sales company; in the transaction stage, the electricity sales company often needs to make a deal Electricity-price information is disclosed, especially under the requirements of retail market development that emphasizes market price fairness. The disclosure of transaction price information can provide certain help for electricity sales companies to expand market space and win market users.

3.3 Market annual report information

Information disclosure in the annual report of electricity sales companies includes but is not limited to: operational evaluation information, corporate assets, operating conditions (including financial health information), continuous compliance with market access requirements, transaction contract signing and performance, compliance with market rules, etc.; whether it exists Information on administrative penalties or other regulatory measures taken by regulatory agencies, and whether there are other violations of laws and regulations that have been handled by government or judicial departments; electricity sales companies that have the right to operate distribution networks should also publish information about important distribution and transformation equipment Information on maintenance and transformation plans, distribution and transformation equipment failures, unplanned outages, and operating conditions. The annual report information of electric power trading institutions includes, but is not limited to: complete external financial audit work annually, and disclose financial audit reports to the public in accordance with procedures; annual transaction status and other information.

3.4 Market default information

As a kind of negative information, breach of contract information plays an indispensable role in constructing a complete information disclosure mechanism, managing the transaction behavior of market entities, and conducting credit evaluation on market entities. The default evaluation information provided by power grid companies and market operation agencies includes but is not limited to: negative list of registered members of the market, credit evaluation, market default evaluation and punishment, power generation companies, power users, and power sales companies' violations and rectifications. The breach assessment information provided by power generation companies, power sales companies, and power users includes, but is not limited to, their own breaches of contract and rectification.

4. Concluding remarks

Based on the current status of information disclosure in China's electricity retail market, combined with the development status of domestic and foreign disclosure mechanisms, this article further explores the classified information of the electricity retail market, analyses the specific content of the electricity retail market information disclosure in detail, and relies on a complete and comprehensive information network , The establishment of a systematic information disclosure mechanism has reference and reference significance for ensuring the orderly and stability of the electricity retail market and promoting the diversified development of the electricity retail market.

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