The Impact of Energy Internet Enterprise Construction on Power Grid Business Organization Mechanism

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Abstract. The construction of Energy Internet enterprises by power grid enterprises is a key decision for power grid enterprises to grasp the major strategic opportunities, and a key measure for power grid enterprises to deeply understand the internal and external strategic situation and continuously lead of the transformation and development of energy and power. As the core measure, the construction of operation mechanism of power grid business organization needs to clearly study and judge the external environmental factors' new situation, new influence and new requirements faced by the construction of Energy Internet enterprises such as policies, market, technology, so as to deeply grasp the opportunities and challenges faced by the construction of Energy Internet enterprises.

1. Introduction
On the whole, the external policies, market and technology environment of Energy Internet enterprise construction put forward new demands, brought new challenges and created basic conditions for the optimization of power grid business organization and operation mechanism [1]. Under the organization mode of "strong front-end and big back-end" of power grid business, the external environment of Energy Internet enterprise construction has a direct impact on the "service quality" of front-end business and "multi business collaboration" of middle and back-end business.

2. Policy environment’s impact of Energy Internet Enterprise Construction
Since the 19th national congress, the Central Committee and the State Council have attached great importance to the coordinated development of economy, politics, society, culture and ecology, accelerating the modernization of the national governance system and governance capacity, and building a modern economic system, accelerating energy reform, optimizing business environment, deepening state-owned economic reform, and improving the cleaning, efficiency and intelligent level of energy system [2]. Power grid enterprises accelerate the construction of Energy Internet enterprises, not only being consistent with the central government’s promotion to the transformation of energy system, stimulation of vitality of the energy market and other policies, but also be the inevitable requirement of power grid enterprises to strengthen the power public service ability, improve the dynamic level of energy industry.

To "service quality", In recent years, the State Council continues to promote the reform of "deregulation, management and service". With the marketization of electric power, the level of electrification has improved significantly. Under the new situation, it is particularly important to
improve the service level of power supply and enhance the competitiveness of enterprises. Firstly, we need to deepen the reform of "discharge service" continuously and optimize the environment of power business. Secondly, we need to accelerate the construction of a new customer service system and provide first-class power supply services. Thirdly, it is required to expand the value-added service of power and innovate the marketing mode.

To "multi business collaboration", With the continuous and in-depth promotion of the power market reform, the optimization of enterprise management and control mode, the reform of "deregulation, management and service" and the optimization of business environment, the importance of multi professional and efficient cooperation for the stable development of power grid business has been significantly improved. The increasingly severe external policy situation not only puts forward new requirements for power grid enterprises to improve the level of multi professional collaboration, but also provides the possibility for optimizing the multi professional collaboration mechanism. Firstly, it speeds up the optimization of power grid business management system and mechanism to improve operation efficiency. Secondly, it speeds up the full authorization of business units at the grassroots level, and release the initiative of innovation and entrepreneurship at the grassroots level. Thirdly, it deepens the reform of the employment system and stimulates the vitality of talents.

3. Market environment's impact of Energy Internet Enterprise Construction
At present, with the deepening of a new round of power system reform, the energy and power industry is entering a new stage of stock optimization of power market, deep marketization of resource allocation and integrated energy development [3]. Especially, the monopoly status of power grid enterprises has been further broken. The power market is facing social development, the incremental distribution business is enriched, the trading mechanism of power market is more efficient, and the comprehensive energy service and other businesses are booming. The construction of Energy Internet enterprises of power grid enterprises will be directly affected by the changes of business structure and competition pattern, power grid enterprises will face more urgent situation in improving the quality of external service and strengthening multi-disciplinary cooperation.

To "service quality", With China's energy development entering a new stage and the energy market entering the stage of stock optimization and boundary expansion, the improvement of service quality of power grid enterprises is not only the basis for power grid enterprises to better fulfil their power supply service responsibilities, but also requires power grid enterprises to rely on customer resources to tap business potential, give full play to platform and resource advantages, and strive to expand new markets, open up new fields and cultivate new businesses, comprehensively improve service ability and service quality. Firstly, power grid enterprises are required to focus on customer satisfaction and innovate customer service concept. Secondly, it is required to enhance the traditional power supply service ability to meet the demand of safe, convenient and efficient power consumption. Thirdly, power grid enterprises are required to consolidate the advantages of power supply service organization based on group operation mode.

To "multi business collaboration", with the improvement of the market-oriented level of competition, the uncertainty of the mode of competition and the focus of competition in the energy and power industry will be greatly increased. The development of Energy Internet business presents the trend of ecological, open and platform development. Power grid enterprises are required to change the relatively rigid power grid business organization and control mode, and widely integrate and reuse high-quality resources across borders, reconstruct the business process to adapt to digital operation, and drive the collaborative development of regulatory business and competitive business. Firstly, Power grid enterprises are required to focus on users’ needs and promote multi-dimensional multi-disciplinary cooperation. Secondly, Power grid enterprises are required to give full play to the advantages of platform hub and allocate business resources in high-efficiency and compliance. Thirdly, it requires Power grid enterprises to break the professional horizontal barriers and reshape the power supply business process. Fourthly, the management centre should be removed to the grass-roots level, and strengthen the vertical and orderly responsibility authorization of all disciplines.
4. Technology environment’s impact of Energy Internet Enterprise Construction

The continuous breakthrough of Energy Internet technology is the key foundation for power grid enterprises to ensure the security of energy supplement, help air pollution prevention and control, and support the sustainable development of economy and society, which is also the core support for power grid enterprises to better meet the diversified energy demand of users, improve the self-reliance ability of energy technology, and serve the modernization level of energy and power industry chain [4]. At present, Energy Internet technology is developing in the direction of safe and reliable, clean and low-carbon, economic and efficient, intelligent and open, which mainly includes the innovation and application of energy power technology, energy digital technology and platform operation technology.

To "service quality", from a global perspective, the Internet economy based on the information technology revolution is in the ascendant. The integration of new technologies such as big data cloud computing and Internet of Things with traditional industries has accelerated, which has promoted
profound changes in the mode of production and consumption, and also brought great opportunities for power grid enterprises to innovate business models, expand new businesses, and cultivate new kinetic energy. To power grid enterprises, firstly, need to innovate new energy power technology and change the traditional business service mode. Secondly, need to widely use digital technology to innovate the power supply service mode of power grid enterprises. Thirdly, improve the basic technology of business operation and promote the development of new business.

To "multi business collaboration", under the systematic change of power grid form, new technology has a profound impact on the operation mode of power grid enterprises, such as planning, infrastructure construction, dispatching, equipment, marketing and other professions, and the promotion of power grid operation organization mode needs to be optimized and adjusted accordingly [5]. At the same time, the innovative application of digital organization operation technology also provides feasible technical conditions for the construction, iteration and renewal of flexible platform organization system and mechanism, which firstly push the focus of power grid business management to the grassroots level, secondly promote more efficient and flexible business resource allocation of power grid enterprises. Thirdly, promote the power grid business process of power grid enterprises develop into intelligent self-development [6].

5. Conclusion
The policy, market and technology environment faced by power grid enterprises in the construction of Energy Internet enterprises has put forward new demands, brought new challenges and created basic conditions for the optimization of power grid business organization and operation mechanism. Under the organization mode of "strong front-end and big back-end" of power grid business, the external environment of Energy Internet enterprise construction has a direct impact on the "service quality" of front-end business and "multi business collaboration" of middle and back-end business.

Power grid enterprises should continuously optimize the functions of marketing system and intelligent operation terminal, strengthen the front-end service support of information system, which mainly includes increasing the mechanism of timely transmission and continuous reminder of user work orders in the pre acceptance stage, improving the function of on-site collection and modification of user information of app, and providing the app special processing channel for users to modify the power supply scheme on site.

Meanwhile, power grid enterprises should continue to decentralize the decision-making power and accelerate the materialization of power supply service command centre of city and county power grid enterprises, which refer to establish the coordination mechanism between the design centre of city and county power grid enterprises and marketing, dispatching, transportation inspection, power distribution and other departments, increase the command and assessment authority of the power supply service command centre, and promote the power supply service command information system to be fully embedded in the power supply service business process.

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