

# The optimization research of investment management in power grid enterprise

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**Abstract.** As an important platform for the power grid enterprise, investment management is an important gripper for implementing precise investment and lean management, and has a great significance on ensuring the strategic, planning of the company and achieving the overall efficiency and effectiveness. In recent years power grid enterprise put a high premium on investment management, and pay attention on the core role of investment management in enterprise management. However, with the continuous advancement of the power system reform and state-owned enterprise reform, the power grid enterprises face many new challenges in operation management. In order to improve the power grid enterprises' management efficiency, it is necessary for the power grid enterprises to improve the content and models of investment management.

## 1. Introduction

Investment management is the annual business development target of the enterprise, which is formed based on comprehensive balance and overall optimization of enterprise's core resources and needs. Investment management is the implementation plan to fully implement enterprise strategy and planning. As large state-owned key enterprises related to the lifeline of the national economy and national energy security, power grid enterprises undertake the basic missions of ensuring safer, more economical, cleaner and sustainable electricity supply. Reasonable investment management provides a strong guarantee for realizing the important mission of power grid enterprises. Meanwhile, reasonable investment management can put the guiding principles of supporting state capital in becoming stronger, doing better, and growing bigger into action, and is the effective power to promote the development of enterprise's capital operation. Therefore, the research of investment management is important for promoting the innovation and upgrading of power grid enterprise. The research results of this paper can provide reference experience for other state-owned enterprises and have a certain promotion value for the power industry.

## 2. The situation analysis of investment management in power grid enterprise

Investment management plays a key role in the development decision of power grid enterprise. However, with the continuous advancement of the power system reform and state-owned enterprise reform, and the presentation of new era development strategy in power grid enterprise, the investment management of power grid enterprise faces growing uncertainties and destabilizing factors.

First, the new round of power system reform proposed to release power selling side, which has changed the pricing model of the power price. The new round of power system reform built the accounting mechanism of the power grid enterprise's permitted income based on the effective assets.



Therefore, the new round of power system reform proposed more stringent and more detailed requirements for the investment and project arrangement of power grid enterprise.

Second, with the continuous advancement of state-owned enterprise reform, the central enterprise regrouping and mixed-ownership reform have entered a fast development stage. And yet, most central enterprises are accelerating the implementation of lean management mechanism. Therefore, it is necessary for the power grid enterprise to carry out the optimization and adjustment of investment differentiation control mechanism for the different business types.

Third, with the continuous strengthening of investment supervision in central enterprises and the continuous liberalization of government decentralization, important adjustments have been made to the investment's regulatory principles, methods, and contents in the central enterprise. Therefore, the investment management of power grid enterprise has faced more challenges in management content, mode and efficiency.

Finally, the power grid enterprise has established a new era development strategy for building a world-class energy internet enterprise with excellent competitiveness. The new era development strategy claimed the power grid enterprise should be vigorously propelled the high quality development of power grid and enterprise.

### **3. Optimized improvement plans for investment management in power grid enterprise**

To further adapt to the new situation of reform and development and changes in the internal and external environment, and implement the working deploy of vigorously propelling the high quality development of power grid and enterprise, this paper proposes the optimized improvement plan for investment management in power grid enterprise. This plan considers the principle of efficiency, the philosophy of lean management and precise investment, and contains three tasks: adjusting the investment indicators to implement the new era development strategy, improving the management mode to implement the requirements of government supervision and state-owned enterprise reform and optimize management procedure to implement the government decentralization.

#### *3.1. Establish an indicator system based on the new era development strategy*

At present, the power grid enterprise adopts indicator management and project management, and indicator management is an important means to implement the strategic planning goals for power grid enterprise. Nowadays, the development of power grid enterprises has entered a new era. In order to implement the development strategy of the new era of enterprises, it is necessary to optimize the development of investment indicators. The new indicators should highlight strategic guidance and goal orientation, realize the transition from task-oriented to goal-oriented, and ensure the realization of phased strategic goals.

Combining the new strategic goals of power grid enterprises and new requirements of enterprise business development, we can decompose the new era development strategy into four key strategic tasks. The strategic tasks are creating outstanding competitiveness, striving for world-class enterprises, promoting extensive interconnection of energy, and adhering to customer service.

Creating outstanding competitiveness means that we must continue to uphold the development of power grid as the top priority, and strive to enhance the supporting role of industry, finance and international business in the power business. We will continue to strengthen the power grid enterprise's market competitiveness and profit creation capabilities by promoting the industry to move toward medium and high-end, optimizing the development of financial business and promoting the development of international business.

Striving for world-class enterprises means that we must fully recognize the historical orientation of the "six forces" of state-owned enterprises. We should actively fulfill the economic responsibilities of power grid enterprises, vigorously promote quality change, efficiency change and power change, continuously improve operational efficiency, stimulate enterprise's business vitality, increase total factor productivity, and ensure the preservation and appreciation of state-owned assets.

Promoting extensive interconnection of energy, means accelerating the promotion of energy clean and low carbon transformation. We can improve the efficiency of power grid operations by constructing a wide-area, open and shared energy internet. This energy internet can give full play to the hub and platform, and promote large-scale optimal deployment of clean energy.

Adhering to customer service means firmly establishing a customer-centric concept. The power grid companies should actively fulfil their social responsibilities, take creating value for customers as an important point of work, accelerate the construction of a modern service system, strive to improve service quality and level, and demonstrate the social responsibility of state-owned enterprises.

Based on four key strategic tasks and the new strategic goals of power grid enterprises, the development of investment indicators can be classified into four categories: development investment, business benefit, operational efficiency and customer service.

### *3.2. Optimize the management mode of development investment*

To further implement the relevant policies of classification reform of state-owned enterprises, this paper proposes the management and control mode for the investment management in power grid enterprise. In this management and control mode, some department management authorities are decentralized.

First, this management and control mode clarifies management responsibilities at all levels. As the core of investment management in power grid enterprises, the headquarters, in accordance with the working principles of standardization, scale control and strict assessment, will formulate various business processes and management standards, control all indicators and the overall scale of investment, strictly manages all kinds of management assessments, and coordinate all kinds of development resources. The provincial companies will implement the decisions of headquarters, manage various indicators and project details, prevent production and operation risks, and collaborate to advance various mission objectives. The municipal companies will accurately grasp the production and operation situation, increase sensitivity of policies and markets, quickly respond the market demands and improve the efficiency of input and output.

Second, this management and control mode apply hierarchical decision in project management. In order to improve the efficiency of investment management, the projects of the power grid enterprises are divided into two categories, limited upper project and limited lower project. We will make reasonable decentralization according to the different decisions of this two projects. The limited upper projects are decided by the headquarters. The limited lower projects are decided by the provincial companies, and all the details of limited lower projects should be reported to the headquarters.

Third, this management and control mode advocates classification management in enterprise management. According to the principle of classification reform of state-owned enterprises and the functional position of the power grid enterprise, we will carry out classification management of the enterprise. For grid supervision enterprises, we will focus on external supervision, strengthen investment management and ensure that relevant investment are included in effective asset approval. For market competition enterprises, we will focus on market changes, and carry out differentiated management of these enterprises based on their functional position and core business.

### *3.3. Establish an efficient management procedure*

With the continuous advancement of the power system reform, incremental power distribution market accelerates release and continued attention to the business environment, the existing management processes of investment development has shown some incompatibility. In order to adapt to the development of the new situation, power grid enterprises should further optimize the processes of the investment management. This paper proposes the optimization and improvement strategy of the investment management process in power grid enterprise based on the specific work of three major phases: prior stage, inter-stage and post-event.

Prior streamline the approval process. In this phase, we will cancel the reserve items for regular storage and solidification. The projects will be put into storage and dynamically adjusted on demand. The total target are accurately measured and scientifically determined according to the communication

between headquarters and subordinates. Some department management authorities of headquarters are decentralized, and the limited lower projects are decided by subordinates. The professional departments of headquarters may conduct spot checks on the projects that are included in the storage and those included in the investment development.

Strengthen tracking analysis in the inter-stage phase. The annual investment development is broken down in batches, and the project arrangement is adjusted as needed. In this phase, the emergency project was implemented in time, and the green channel was smooth and efficient. Implement the whole process of tracking and early warning, and implement the plan in time.

Strengthen assessment loop in the post-event phase. In this phase, we will strengthen the rigid implementation of the investment development and deepen the analysis of input and output. To prevent illegal investment risk and promote the investment management, strict assessment and evaluation will be implemented in the post-event phase.

#### 4. Conclusion

This paper focuses on the new requirements of power system reform, state-owned enterprise reform and other relevant policies for the investment management of power grid enterprises, and proposes the optimization plan for the investment management in power grid enterprises. This optimization plan can provide effective protection for improving the lean management level of power grid enterprises and promoting high-quality development of enterprises and power grid.

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