



Research on Standardized Management Measures for Materials of the Former Subordinate Collective Enterprises of Power Grid Enterprises

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Abstract. The former subordinate collective enterprises of power grid enterprises are in a critical period of promoting reform and seeking development. The supervision of state-owned assets and enterprises has put forward profound requirements for power grid enterprises to further consolidate the management foundation of the original subordinate collective enterprises, requiring power grid enterprises to further improve the standardized management level of materials of the original subordinate collective enterprises and solve key risk problems. This study analyzes and judges the impact of the requirements of state-owned asset supervision on the standardized management of materials in the former subordinate collective enterprises of power grid enterprises. On the basis of theoretical, policy, situation, current situation, and problem analysis, this paper proposes ideas and key measures for the construction of a long-term mechanism for standardized management of materials in the former subordinate collective enterprises of power grid enterprises, and puts forward relevant suggestions to provide new assistance for the high-quality development of the former subordinate collective enterprises of power grid enterprises.

Keywords: power grid enterprises; collective enterprise; material management; standardization

1 Introduction

The former subordinate collective enterprises of power grid enterprises are in a critical period of promoting reform and seeking development. The supervision of state-owned assets and enterprises has put forward profound requirements for power grid enterprises to further consolidate the management foundation of the former subordinate collective enterprises. After the reform and restructuring, the property rights relationship, development environment, and management mode of the former subordinate collective enterprises of power grid enterprises will undergo changes, and the standardization of production and operation will face new requirements and challenges. At present, the former collective enterprises under the power grid still have problems such as inadequate management system and extensive operation and management. Key areas and

links such as materials still have problems of exceeding the level of carrying business and non-standard bidding, which have a negative impact on the healthy development of the enterprise and the company's image ^[1]. The power grid enterprise urgently needs to further improve the standardized management level of materials under the former collective enterprises and solve key risk problems.

Construction and installation is the core business of the former collective enterprises under the power grid enterprise, and it is an important support and guarantee force for serving the construction and operation of the power grid and the development of local social economy. Material management is its key link, and risks and benefits are concentrated, with high attention from all aspects. Building a long-term mechanism for standardized material management is of great significance. This project focuses on the prominent problems and potential risks of non compliant and inadequate material management in the former subordinate collective enterprises of power grid enterprises. It diagnoses the crux of the problem, benchmarks the table, proposes ideas and measures for the construction of a long-term mechanism for standardized management, and promotes the standardization, lean and modern management of materials in the former subordinate collective enterprises of power grid enterprises to a new level, providing new assistance for the high-quality development of the former subordinate collective enterprises of power grid enterprises.

2 Analysis of the Situation and Requirements for State Owned Assets Supervision

2.1 Strengthen the Requirement of Governing Enterprises According to Law

In recent years, the State owned Assets Supervision and Administration Commission of the State Council has required central enterprises to enhance their internal control efficiency and major risk prevention and control capabilities, deepen the construction of rule of law central enterprises with improved governance, compliant operations, standardized management, and law-abiding integrity. Power grid enterprises should implement the comprehensive strategy of governing the country by law, accelerate the construction of the rule of law network, make arrangements for decision-making and compliance management in accordance with the law, and clarify the task requirements for strengthening the construction of rule of law enterprises in the former subordinate collective enterprise units of power grid enterprises. At the same time, the former collective enterprises under the power grid enterprises are facing stricter external supervision. Inspection and auditing pay high attention to new energy investment, real estate and equipment manufacturing business exit, engineering materials and other matters, and put forward higher requirements for compliant operation and strengthening risk prevention in key areas. Therefore, the material management of the former collective enterprises under the power grid enterprise should firmly establish the awareness of the rule of law, strengthen compliance management, improve the ability to prevent and resolve major risks, and safeguard the safe, healthy, and sustainable development of the enterprise.

2.2 Requirements for a Sound Modern Enterprise System

In recent years, the Central Committee of the Communist Party of China and the State Council have made multiple decisions and deployments to improve the system of modern state-owned enterprises with Chinese characteristics. In terms of improving the governance structure, they have put forward requirements such as integrating the leadership of the Party into corporate governance, strengthening the construction of the board of directors, implementing the powers of the board of directors, and ensuring that the management exercises their powers and performs their duties in accordance with the law; In the face of a new era and a new journey, the Central Committee of the Communist Party of China and the State Council have deployed actions to deepen and enhance the reform of state-owned enterprises, proposing to focus on improving vitality and efficiency, and further improve the modern corporate governance and market-oriented operation mechanism of state-owned enterprises with Chinese characteristics. In terms of material management, the Central Committee of the Communist Party of China, the State Council, and relevant departments attach great importance to state-owned enterprises playing the role of industry chain leaders, ensuring the safe and stable operation of the supply chain, emphasizing supply chain management, material quality control, standardized bidding and procurement cost control. It is necessary to strengthen the infrastructure of material management, enhance the dominant position of enterprises, clarify responsibilities and rights, achieve legal and compliant material management, reduce costs and increase efficiency, and fully stimulate the vitality of the material circulation market. With the full integration into the state-owned asset supervision system, the former collective enterprises under the power grid enterprise need to accelerate the formation of a systematic, scientific, standardized, and effective governance structure, institutional system, and operational mechanism. They need to further integrate into the state-owned asset supervision system, strengthen the comprehensive leadership of the Party, improve the legal governance system, consolidate the foundation of standardized management, and strengthen the construction of core capabilities, especially in the field of materials, they need to continuously improve their level of legal compliance and lean management.

2.3 Strengthening the Requirements of Market-Oriented Reform

In recent years, state-owned asset supervision has focused on capital management and advocated market-oriented development as the main direction. The purpose of this requirement is to promote market-oriented operation of enterprises by innovating institutional mechanisms, focusing on their main responsibilities and businesses, enhancing their adaptability to the modern market system, and improving the quality and efficiency of development. Except for the supply and service business for rural power grids, operation and maintenance repair business, and natural monopoly power transmission and distribution business that are difficult to strictly divide, the key businesses such as construction design supervision, material supply and other supporting businesses, and emerging businesses such as comprehensive energy services engaged in by the collective enterprises under the former power grid enterprises are all competitive

business links in the power industry, especially in the field of construction and installation business, which has a high degree of marketization and fierce competition, emphasizing input-output, innovation and creation. The material management of former collective enterprises under the power grid enterprise needs to comply with the requirements of market-oriented reform, accelerate the establishment of institutional mechanisms that are compatible with market competition, while ensuring fairness and standardization, not disrupting market order, and withstanding external supervision and inspection.

3 Key Measures for Strengthening Supply Performance Quality Control

3.1 Strengthen Supplier Performance Quality Control

Improve the supplier reward and punishment incentive mechanism, establish and improve the supplier cultivation incentive mechanism that combines reputation, rights and interests, and positive rewards and negative punishments by analyzing and summarizing the reward and punishment factors of suppliers; Associate the performance evaluation results with bidding procurement and contract shares, establish a negative list of supplier performance, adopt a veto system for suppliers included in the list, and restrict their participation in bidding; Further strengthen material sampling, quality supervision, and supply cycle management for low scoring suppliers; Provide policy incentives for high scoring suppliers in terms of payment cycle, contract amount, payment ratio, and agreement inventory. Establish a sound mechanism for handling supplier misconduct and breach of contract, unify the standards for handling supplier misconduct and holding them accountable for breach of contract, establish a classification and grading mechanism for handling supplier misconduct, and regularly conduct review and centralized rectification of misconduct based on supplier contract performance quality evaluation; Any violation of contract terms shall be strictly held accountable for breach of contract in accordance with the contract agreement.

3.2 Strengthen the Management Concept of Quality Control System

Strengthen the material quality supervision responsibility of the former collective enterprise units under the power grid enterprise, follow the work requirements of State Grid Corporation of China's material quality supervision, and implement the material supply quality supervision responsibility in accordance with the principle of "whoever controls the material, whoever bears the responsibility". Implement material quality control throughout the entire process and stages of material bidding, procurement, sampling, and arrival acceptance. At the same time, clarify and refine the responsibilities of material departments and technical support units at all levels, and assess and supervise them. Improve the horizontal and vertical communication mechanism, strengthen the horizontal communication and information sharing between the former collective

enterprises under the power grid enterprise and other professional departments; Intensify communication and exchange with social quality supervision agencies, and strengthen the special material sampling efforts of third-party authoritative testing institutions.

3.3 Establish a Sound Material Quality Control System

Establish a sound material quality testing system, improve the quality supervision mechanism, coordinate the testing resources of the original subordinate collective enterprises of power grid enterprises, promote the construction of self owned material testing capabilities of the original subordinate collective enterprises of power grid enterprises by units with conditions, strengthen CMA, CNAS and other testing qualification certifications, and enhance the resource sharing of material quality testing institutions and testing equipment between the main business and the original subordinate collective enterprises of power grid enterprises. Establish a sound material quality sampling mechanism for former collective enterprises under the power grid enterprise, set up dedicated personnel for material sampling, prepare material sampling plans on schedule, refer to the main business material quality testing system, take into account the differences in material quality requirements for different project types, and improve the scope and testing standards of the material quality sampling catalog for former collective enterprises under the power grid enterprise; Verify key characteristic indicators through on-site supervision, random sampling, and other methods to achieve full coverage of quality testing for suppliers, supply batches, and specifications of former collective enterprises under the power grid enterprise; Strengthen the initial inspection of the appearance quality of incoming materials and enrich the methods of material sampling.^[2] Strengthen the targeted sampling of materials, increase the sampling frequency for low pass rates, relatively small sampling quantities, and new manufacturers. For first-time suppliers, verification testing shall be conducted based on the type test report provided during their bidding process. We need to strengthen the closed-loop management of initial sampling, expanded sampling, and retesting to ensure that the sampling results are representative and authoritative. For categories with prominent quality issues, carry out a special online quality inspection campaign in batches. Promote material sampling into the system, empower on-site personnel to proactively submit testing requirements, monitor the entire process of material quality sampling online, and assist in the efficient implementation of sampling plans. By using modular procurement to improve the quality and efficiency of equipment supply, focusing on personalized design needs for complete sets of equipment, modular decomposition is carried out for complete sets of equipment and materials such as box type substations, outdoor mesh boxes, and low-voltage feeder cabinets, promoting suppliers to assemble and supply with building blocks.

4 Standardize Warehouse and Logistics Management

4.1 Strengthen the Management of Warehouse Allocation Resources

Optimize warehouse layout, reasonably divide cargo areas, storage locations, and material classifications, clarify material storage locations and labeling, and combine warehouse resources and development needs of each unit to carry out optimization of the storage network and standardization of infrastructure for the former collective enterprises under the power grid enterprise. Strengthen warehouse security management, regularly conduct on-site inspections of warehouse security, fire protection, hardware infrastructure, and identification signs of former collective enterprises under the power grid enterprise, enhance the safety awareness of warehouse management personnel, and standardize warehouse safety operating procedures.^[3] Promote the coordinated management of warehousing and material resources, cultivate professional provincial-level warehouse operation and supply chain management entities, and break down material allocation barriers between different corporate entities through methods such as agreement custody; To meet the requirements of comprehensive material supply cost control, single project accounting, and coordination with material procurement, we will explore the establishment of a mechanism for mutual assistance and coordinated allocation of materials between main industries and former collective enterprises under different power grid enterprises, in order to improve the efficiency of material supply and utilization.^[4]

4.2 Establish a Standardized Management System for Warehousing

Improve the standardized management system and process for warehousing, unify the management standards and operating procedures for materials in various stages such as inbound acceptance, in warehouse management, outbound handover, and data archiving, and strengthen supervision of the implementation of warehousing management regulations and management standards. Strengthen the management of material inbound and outbound, establish a long-term management and supervision mechanism for inventory, counting, and disposal of waste materials, strictly control the work processes of material acceptance and inbound, storage and preservation, transfer and outbound, audit and inventory, inventory scrapping, and material return, and strengthen the registration of information on material receipt, dispatch, transfer, and return. Strengthen the consistency control of material accounts, cards, and inventory, regularly conduct inventory checks, and verify the warehouse facilities and physical storage situation of each unit; Regularly organize physical inventory of materials, verify the cross disciplinary data coordination between material requisition and procurement, engineering, and finance, and establish a long-term collaborative mechanism for material inventory management and financial management^[5]. Optimize and upgrade the warehouse management system to achieve timely and dynamic updates of material inbound and outbound management, achieve precise material management, improve operational efficiency and work quality, and enhance the quality and efficiency of warehouse operations.

4.3 Strengthen Material Inventory Management

Improve the control mechanism of "inventory first, procurement later", sort out and determine the work standards and business processes for balancing inventory at the provincial and municipal levels, and expand the channels for balancing inventory; Explore cross disciplinary linkage for inventory management, move the inventory control checkpoint to the material demand planning stage, and promote the revitalization of the value of existing materials; Establish a regular mechanism for identifying, storing, and revitalizing materials for reuse, regularly conduct technical assessments on backlogged materials, timely carry out standardized disposal of backlogged materials such as technology elimination and exceeding shelf life, and strengthen the management of the entire chain of disposal of scrapped materials, dismantling, bidding, settlement, and hand-over. Develop a dedicated area for the disposal of idle materials on a digital platform. Based on the development needs of collective enterprises under the power grid enterprise, develop an e-commerce platform for the trading of idle materials, establish a dedicated area for the adjustment and trading of idle materials, and support efficient utilization of materials. Explore the creation of a fast entry point and efficient point selection module for emergency repair materials, rely on online platforms to build a cross city emergency material allocation mechanism, break down regional barriers to physical resources, and ensure timely supply of emergency materials.

5 Conclusions

This study analyzes and judges the impact of the requirements of state-owned asset supervision on the standardized management of materials in the former subordinate collective enterprises of power grid enterprises. Focusing on the prominent problems and potential risks of non-compliance and inadequate material management in the former subordinate collective enterprises of power grid enterprises, measures are proposed to implement a long-term mechanism for standardized management. In terms of supply quality control, it is necessary to strengthen supplier performance quality control, enhance the application of supplier performance evaluation results, strengthen the management concept of quality control system, and improve the material quality control system^[6]. In terms of logistics and warehousing management, it is necessary to strengthen warehouse allocation resource management, establish a standardized warehousing management system, and enhance material inventory management.

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