The Road to the Construction of Excellent System

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Abstract. The system is the “law” within the enterprise. The excellence system has five basic elements of legitimacy, consistency, standardization, procedural and operability. The construction of the excellence system is a systematic project. The construction of the excellence system guarantees the rule of law Enterprise to achieve excellent management. This article takes a nuclear power company as an example, and explores and analyses the methods and means of institutionalized operation, institutional process management and process optimization, institutional process integration, and standardization construction used in the process of creating an excellent institutional system.

1. Introduction
The system is the “law” within the enterprise, and the system construction is a systematic project [1-2]. The system of excellence is an effective guarantee for managing enterprises in accordance with the law, and it is also the foundation for enterprises to achieve excellent management [3-4]. Taking a nuclear power company (hereinafter referred to as a company) as an example, based on the company's strategic needs to implement external services and support the scale, standardization and internationalization of the nuclear power industry, the company continued to carry out system construction, through systematic operation, system process management and process optimization, system process integration, standardization construction and other means to explore and open up a positive and effective way to build an excellent system [5].

2. The concept of company system construction
From the framework design of the system, the development of the system, the review of the system, the optimization and improvement of the system, the five basic elements of the system are the legality, consistency, standardization, procedural, and operability (hereinafter referred to as the five elements) [6-7]. The company should closely focus on the company's strategic objectives and the deployment of higher-level units, and establish a system that meets the company's production and business activities and meets the deployment of higher-level units [8].

2.1 The Five Elements of the System
2.1.1. Legality
The basis for formulating the system, reference to national laws, regulations and policies should be effective; the management subjects, means, authorities and contents specified in the system should meet the requirements of the national laws, regulations and policies.
2.1.2. Consistency
When formulating the system, it must be consistent with the management regulations of the superior unit, the company's superior system, and the company's authorization regulations; the system and the system should be hierarchical and orderly, and can form a complete management system, and the business process regulated by the system Closed-loop management should be formed.

2.1.3. Procedure
The procedures for establishing the system and the procedures for public notification should be legal. According to relevant laws and regulations, the establishment of an enterprise system requires the implementation of certain procedures, especially those involving the vital interests of workers. It should be discussed by the employee congress or all employees, put forward plans and opinions, and negotiated with trade unions or employee representatives on an equal basis. The type of system fulfills the public notification procedure.

2.1.4. Operability
The business activities stipulated in the system should reflect the internal laws of the company’s operation and management, and should not be disconnected from the reality of the company. The system clauses should clearly define the main body of management, execution, supervision and inspection and their responsibilities.

2.1.5. Normative
The system name and format clauses should be standardized. The name of the system should not only be consistent with the main content of the system, but also coordinate with the system of the enterprise; the formulation of the system’s purpose, basis, scope of application, interpretation department, implementation date and other format terms should be unified and standardized. The relationship between the articles is strictly regulated.

3. The system management system is connected to the company management system to realize the systematized operation of the system

3.1. System management system docking company management system
As an important part of the company's management system, the systems must be based on the operational needs of the management elements of the company's management system as a starting point, and the development and construction of the systems in accordance with the management field; on the other hand, the system's standardized operation and management system provide important policy support.

The company's institutional system adopts a three-tier structure (Such as the figure 1): the one-level management outline is the top management commitment and management objectives in each management area, and clarifies the domain management organization form, management principles and various management elements. The two-tier management system describes the various management requirements and management processes that need to be implemented to achieve management policies and management goals; the three-tier management rules (including working rules and department rules) guide the detailed description of the implementation of the management process.

3.2. Publishing a series of normative documents such as system development, review and optimization
Management System Construction incorporates the company system into the company management system framework.

Program Preparation Requirements clarifies the system preparation requirements. In order to implement the management responsibility of the system and “find a master for each system”, that is, the system responsible person.
The Systematic Review of Procedures stipulates the overall requirements for the review of the five elements of the system and the management agency for the system review. Management System Upstream Document Management clarifies the management requirements for the legal basis of the system. System Legal Audit Management stipulates the management requirements for system legal audit. Guidelines for System Preparation and Auditing Legal Affairs is a practical guideline for system legal preparation and auditing, which deeply interprets ten laws and regulations closely related to the company's safety production and operation management. Self-assessment and Management Review clarify the working methods and principles of system self-assessment and management review.

![Figure 1 System framework of a management sub-field of a nuclear power company](image)

3.3. The organizational system of institutional management

1) Initially setting up a system management promotion leading group, which is responsible for approving the company's system planning and continuous optimization plan, the decision-making of major issues in the process of system management and providing resource guarantee for the construction of the system.

2) An overall working group is established under the management improvement leadership group (the permanent organization is the system management department), which is responsible for the establishment and planning of the company's system and the review of the organization's system.

3) The overall working group has a management improvement working group, which divides the responsibility scope of each management improvement working group according to production and operation, human resources, enterprise management business, finance and other business fields, and is responsible for reviewing the planning and continuous optimization plan of the management system in this field. Coordinate the problems in the process of system management and control in the field, report major issues to the overall working group for management improvement, organize the development and preparation and continuously optimize the system of file systems in this field.

4) Setting up the system responsible person, who is responsible for the preparation of the system, and continuously optimize the system documents in accordance with the feedback of management issues and changes in relevant laws, regulations, and standards.
4. Process management to create a compliance and efficient system

4.1. The self-developed process document tracking management system (DTS system for short) is mainly used for process management and control of system planning introduction, editing and review, countersignature, approval, system review (five-element review). Through the control and traceability management of system formulation nodes, it can ensure efficient compliance of the system (figure 2).

![Figure 2 DTS business flowchart](image)

4.2. Introducing the process design and management system platform (ARIS platform for short) to assist DTS to complete the standardization and standardization management of system procedure documents.

On the one hand, by establishing an institutional model on the ARIS platform, the previously decentralized and disordered systems and their business processes are integrated through the ARIS platform to achieve institutional process structure and visualization; On the other hand, it organized and standardized the organization and management elements such as records, definitions, responsibilities, upper-level documents. Through the above optimization, the company's institutional system model framework has been established, which satisfies the requirements of the system's standardization and consistency, laying a foundation for the company's institutional system to achieve standardization.

5. Continuous improvement and optimization of the system

5.1. Upstream file change management triggers the improvement of the associated system
1) Upstream documents refer to documents that enforce or recommend the effectiveness of company management and technical activities, including laws and regulations, guidelines, national standards, and corporate management authority documents.

2) The central department of the system (referred to as the central department) is responsible for maintaining and managing the upstream documents in the DTS system; analyse and evaluate the impact of the changes in upstream documents on its associated systems, and trigger the adaptation of the relevant systems.

5.2. The annual review further enhances the compliance of the system:
The annual system law special review focuses on compliance assessment review in key areas such as work safety, environment, occupational health, human resources, financial audit, and material procurement. The annual review is carried out by system review experts, internal and external legal consultants.

5.3. Carry out special work on process optimization, set up a special working group, and establish a management mechanism for process complaints and process suggestions, analyzing and evaluating management issues such as process suggestions and process complaints, and eliminate process nodes that lead to waste and inefficiency by finding process bottlenecks and formulating systems. Optimization and improvement of programs and measures, process optimization make all business processes clearer, which find the weak links in the past management, reduce the company's management costs, and further improve the system.

6. Institutional process integration and standardization are the only way to build an excellent system

6.1. Rebuilding the system of management and organization
The original management and improvement organization system was replaced by a standardized business work organization system.

The standardized business work organization system is divided into the following three levels:
1) Operation Command: Standardization Business Leading Group
2) Coordination decision layer: domain business working group, overall working group
3) Planning executive layer: business team, system responsible person

The company has a total of 12 business areas, and 40 business groups in 12 areas.

The overall working group is responsible for coordinating the work of working groups, business groups, and system owners in various fields, coordinating business process issues between decision-making areas, and submitting to the leadership group for decision when necessary.

Each business team is responsible for conducting business process management review, compliance analysis, standardization improvement, end-to-end performance analysis, planning optimization plans and curing optimization result.

6.2. Integration of institutional processes and implementation of standardized construction in stages
In the first stage, the business processes in the system in the business team area are sorted out. Starting from the company's overall business situation, the relatively discrete processes are re-checked for clear end-to-end process relationships, and several key business processes of the company are sorted out. The so-called business process end-to-end refers to the company's management sub-fields as a unit, showing the entire process of each business in the management sub-field from initiation to end in a process map, end-to-end processes are usually cross-departmental, all business processes are seamlessly connected.

In the second stage, with the help of the ARIS platform, the process is the main line, and the laws and regulations, nuclear power quality assurance system, quality/environment and occupational health
and safety, comprehensive risk management, internal control management and other systems and rules in various management systems are integrated and clarified.

In the third stage, through the process optimization cycle, that is, using status reports, IT service desks, process complaints, etc. as the main source of process problems, management review of important process problems is carried out. Optimize the plan, establish a compliant and efficient "end-to-end" business process system and process governance system, form a long-term management of the system process and a continuous optimization mechanism, achieve an excellent system of system integration and standardization, and promote the construction of nuclear power base and Implementation of company strategy. Integrated system process system is shown in figure 3.

![Figure 3 Integrated system process system and its continuous optimization and improvement mechanism](image_url)

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