

Application on “6s” Management Model of Information and Communication safety Management

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Keywords: “6s” management; information and communication safety; safety defense control system

Abstract. With the promotion of network safety, information management and electric power industry information, information and communication safety has become an important part of power system network safety and the safety requirements of electric system information has improved constantly. Through expounding the “6s” lean management theory and combining with the actual situation of electric power enterprise information and communication safety, this paper put forward safety defense measures of electric system information and communication network, realized the normality preservation of information and communication safety, established the comprehensive “6 dimensions” safety production defense system, supported the construction of information and communication safety defense system.

Introduction

Due to the UHV grid has entered ac-dc mixed linked age, rapid development of intelligent electric grid, increasingly complicated power control system and the more closely coupling degree of information and communication system and electric grid, it's necessary to establish the “dual-route, dual-system” to ensure the reliability and stability of electric grid. While, this method will aggravate the complexity of the system and make the information and communication operation to face a great safety pressure. At the same time, with the rapid development of information technology and further fusion between society and production, the national information safety events have occurred frequently, the risks of network and information safety have become higher and higher, the important information systems and industry control field have faced high risk, the strategic position of network space and the importance degree of information safety have improved unprecedentedly, the information safety situation has become serious and complicated. Therefore, not only require information and communication technician to strengthen the technological capability, but also make the information and communication safety management method adapt the new technology rapidly. In order to keep the pace with the new technology, it's the only way to establish a reliable electric power enterprise information and communication safety defense system. On the basis of “6s” enterprise safety management theory and combined with “seiri, seiton, seisu, seiketsu, shitsuke, safety”, this paper put forward the electric system information and communication network safety defense measure, realized the normality preservation of information and communication safety, established the comprehensive “6 dimensions” safety production defense system, supported the construction of information and communication safety defense system[1-2].

Utilize “6s” Safety Management Theory, Realize The Normality Preservation Of Information And Communication Safety.

Through 6 links of “seiri, seiton, seisu, seiketsu, shitsuke, safety”, the electric power enterprises

develop the closed-loop hierarchical classification management of information and communication defects and the “self-check, patrol, check” of the hidden risks of province, city and country. Carding and analysis various problems[3], establish problem and hidden risks library, require each company treat the problems in limited interval, realize the “5 implementation” of treatment responsibility, measure, capital, term and preparedness. At the same time, check the weak risk link of information and communication system comprehensively, strengthen defects management and tracking of the hidden risk treatment process, control safety risk[4].

Seiri. Establish problem and hidden risks library, carding and analysis “check, treatment, acceptance, picture of hidden risk , picture after treatment”, realize the closed-loop hierarchical classification management of information and communication defects.

Seiton. “3 cards” supervision, regulate behavior, establish “red yellow blue” supervision mechanism, strengthen the goal orientation. Through self-check and check to find out the various problems, carding and analysis various problems^[3], establish problem and hidden risks library, require each company treat the problems in limited interval, realize the “5 implementation” of treatment responsibility, measure, capital, term and preparedness.

Seisu. Develop the “self-check, patrol, check” of the hidden risks of province, city and country, promote the closed-loop management and dynamic monitoring level of hidden risk. Check the weak risk link of information and communication system comprehensively, strengthen defects management and tracking of the hidden risk treatment process, control safety risk.

Seiketsu. Develop safety supervision and management at site. Aiming at the specific high risk sites, supervise and guide the company to adopt a series of powerful measures to strengthen the risk control. Further strengthen the regulation management of information and communication maintenance, establish the three-in-one safety management mechanism that involved maintenance management, execution and business department.

Shitsuke. Conduct safety training, trace and supervise the related personnel to develop information and communication safety knowledge training and talent training. Establish the three-level emergency expert team of province, city and country, organize and develop various emergency response exercise.

Safety. Find safety hidden risks and eliminate them timely or compile the effective defense measure. Carry out fault bulletin and analysis mechanism. On the basis of the analysis on electric communication network safety defense, publish the different defense requirement to different networks, ensure the regulation of communication network safety. Referent the safety evaluation experience of communication industry, establish safety evaluation index of electric communication network.

Establish The “6 Dimensions” Safety Production Comprehensive Defense System, Support The Construction Of Information And Communication Safety Defense System.

Aiming at problem and hidden risk library and risk weak links of information and communication system, strengthen defects management and treatment process tracking of hidden risks, control safety risk. At the same time, establish a long-acting, scientific and systematic information and communication safety production comprehensive defense system[5]. From the points of institution, organization, technology, guarantee, service, construct a perfect supportive system which includes 6 dimensions such as safety production standard system, safety production supervision organization system, safety production technology supportive system, safety production information network system, safety emergency support system, safety training and propaganda education system[6].

Safety production standard system. Establish and improve information and communication

safety standard system and core business process. According to the changes of organization, business process, management model and so on, construct the institution and process system premeditated.

Safety production supervision organization system. Establish organization guarantee mechanism and province, city and country management network. This network covers many departments such as information and communication, development and planning, economic research, design, operation, basic construction, safety supervision and the whole process from planning and design to construction and operation of information and communication.

Safety production technology supportive system. Further strengthen the analysis of safety production basic theory and applied science and technology. Accelerate the development of safety production science technology and the popularization and application of new technology. Establish the comprehensive information and communication customer service and technology supportive system, organize training of the new system, improve operation level of the new system and equipment, guarantee safe and stable operation of the system, improve the level of system practicality.

Safety production information network system. IMS and TMS are the important guarantee for the information and communication safety production comprehensive defense system. Strengthen application, establish an efficient, sensible, rapid and reliable information network system, master the information and communication safety production comprehensive information timely, combine safety production system management with accident statistics, accident analysis, simulation and prediction, early warning and assistant decision, realize “real-time monitoring, standardized operation, standardized operation”, improve the level of safety production supervision.

Safety emergency support system. Modified the information and communication safety emergency plan, unexpected event concept, important event guarantee concept regularly, analysis the safety risk, put forward measure and advice with pertinence. Strengthen coordination work between scheduling, emergency material reserve and emergency communication. Commit emergency repair team, emergency material, instrument and logistics support, improve ability of emergency repair support.

Safety training and propaganda education system. Insist human-oriented, improve safety self consciousness of employee, strengthen construction of safety culture, cultivate prevention first safety culture.

Conclusion

On the basis of “6s” enterprise safety management theory and combined with “seiri, seiton, seisu, seiketsu, shitsuke, safety”, this paper put forward the electric system information and communication network safety defense measure, realized the normality preservation of information and communication safety, established the comprehensive “6 dimensions” safety production defense system, supported the construction of information and communication safety defense system. Through innovate management means, optimize management process, promote information and communication safety management methods to change from passive management to active management, establish an information and communication “five in one”(institution, organization, technology, guarantee, service) safety production comprehensive defense system, provide a powerful support for the information and communication system.

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