

Explore the Current Status and Development of the Control System for Electrical Engineering

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Abstract

With the continuous development of the times, the current demand for electricity consumption has become higher and higher. In order to meet people's electricity needs, relevant state departments have increased their funds to build electrical projects in an all-round way. Under such circumstances, the number and quality of electrical engineering have made significant progress. The one-time electrical engineering equipment has achieved a wide range of applications in the industrial field due to its series of advantages in actual applications and the significance of the stability of the power system. In order to comprehensively improve the effectiveness of the equipment application of electrical engineering, people have further increased their development efforts to control their control systems, making the application effect of the control system more superior. This article conducted a comprehensive investigation of the current status of the control system of electrical engineering, and discussed its future development trends in combination with my country's market development needs. It is hoped that this article can provide some references for related work.

Keywords

Electrical Engineering; One-time Control System; Status Quo; Development Trend.

1. Introduction

The so-called electrical system one device actually refers to high-voltage electrical equipment that is directly used in the circuit system to produce transmission and distribution energy production process. The content it covers is very rich. Automatic switching and so on. In order to meet the control requirements of a device, its control system includes circuit breakers, isolation switch, automatic switch, and contactor. Because the convenience of the control system in practical applications has been widely used in my country's industrial production work. With the continuous development of society, my country's electrical engineering control equipment has ushered in the second stage of high-speed development, and some problems accompanied by it have gradually exposed. Therefore, in order to promote the development of the control system for electrical engineering, it should actively respond to its existing problems to improve my country's economic development level.

2. The Development Status of the One-time Control System of Electrical Engineering

2.1 One Device Control System Maintenance and Maintenance Technology is Single

With the continuous progress of technology and the continuous development of the power market, after years of hard work, my country's electrical equipment control system has made great progress in my country's industrial production. However, due to the influence of various factors, its penetration rate is relatively low. The reason why this happens is because the content involved in the process of control systems in the process of manufacturing is very complicated, which affects the professional

knowledge of multiple disciplines. If some large enterprises want to fully realize electrical control, it is necessary to coordinate and cooperate with each other by multiple departments. At the same time, huge financial support is required in the process of building an automated control system. The existence of these situations has made the penetration rate of electrical engineering in my country in China relatively low, which has led to a single equipment technology maintenance and maintenance technology. In order to comprehensively change this situation, many large domestic enterprises have begun to actively respond and implement a series of optimization policies. First of all, several independent production lines were transformed, and then the linkage effects between different departments were used to promote technical cooperation to finally achieve overall electrical automation control. However, due to the influence of traditional ideas, some companies are still very long. This situation shows that corporate culture has a very important impact on technological innovation.

2.2 DCS System is Low Reliability

The DCS system is also called a distributed control system. This system has a very powerful advantage in the application. It is a new type of computer control system that develops on the basis of the centralized control system. The DCS system used by most enterprises is a traditional instrument. This system can operate in practical applications low and reliability. In addition, the current DCS system has a low degree of business development, lacking unified technical standards and quality evaluation standards. It is difficult to repair it in practical applications, and its price is relatively high in monopoly, which makes it difficult for a device to be promoted among Chinese companies. In addition, the DCS system is of great significance for a control system. The application quality of the system can have a huge impact on the reliability of the entire control system. Therefore, how to take effective ways to reduce the failure of the DCS system in use and make it more effective is the main direction of the future development of the system.

2.3 The Level of Skills of Employees is Not High

The automation of power system is a project involving a wide range of knowledge and strong professionalism. This requires relevant practitioners to have a high level of skill and strong comprehensive ability. The daily maintenance and maintenance of the power system, the reasonable allocation of power grid resources, and the daily monitoring of the operating status are inseparable from manual participation. Therefore, the level of the staff's own level affects the automation application level of the entire system to a certain extent. Due to the low level of skills of some staff, it is easy to cause safety accidents and even cause serious consequences. Related enterprises need to strengthen the level of emphasis on the skills of employees, and lay the foundation for the construction of power system automation in terms of human quality.

3. The Development Trend of the One-time Control System of Electrical Engineering

3.1 Informatization Level Continues to Rise

With the continuous development of information technology, it has now become an inevitable trend of the development of the times according to the actual situation of information technology and electrical systems and specific characteristics. Combined with the advantages of the two major technologies, it can be combined with real-time monitoring of the overall production situation of electrical equipment manufacturers to improve the industry's competitiveness in the business community of power equipment. In addition, through some electric power equipment, enterprises can coordinate between the internal departments, thereby effectively saving operating costs and improving management efficiency. For equipment production technology, with the continuous development of microelectronics technology, the interaction between system interface and electrical equipment has become more complete. The one-time control system of electrical engineering has continuously developed towards the trend of overall comprehensive nuclearization. In the process of

future development, this overall equipment system will be paid more and more attention. The existence of this situation is of great significance for the promotion of electrical automatic control technology and market expansion. After the integration of various information, the equipment control system for the entire electrical engineering will make great progress in personnel, machines, and environment, and control of some unstable factors will also steadily enhance.

3.2 Technological Innovation has Gradually Strengthened

Regardless of any industry, in order to obtain better development, it must be effectively innovated according to the actual needs of production work. To this end, related enterprises must always establish a sense of innovation and plan the technological innovation ideas with far-reaching development in conjunction with the actual situation of the enterprise, and put technological innovation in the primary position of various tasks. With the continuous development of automation technology in today's era, gaining innovation can allow companies to get more market share. For example, the widespread application of on-site bus technology in the system in the system of electrical engineering makes the connection between the underlying equipment and the headquarters more intimate, so that the equipment of different departments can feedback a series of information and data obtained to the headquarters in the process of use. Make different information effectively combined. This technological progress greatly saves the economic costs that the enterprise needs to invest in production and operation, and enables the competitiveness of the enterprise to substantially improve. Therefore, a reasonable prediction of future trends, and research and development of related technologies is a prerequisite for power companies to achieve long-term development. In addition, it is necessary to ensure that technological innovation must be guaranteed, and the government is also required to support the government. It is reasonable to plan the innovation path to contribute due to the improvement of innovation capabilities within the social scope.

4. Conclusion

Although the current actual situation is concerned, there are still many problems in the process of application of my country's power engineering control system in the process of application. However, it is believed that with the continuous efforts of related technical personnel and the continuous progress of science and technology, the system will definitely achieve better development. To this end, relevant companies should firmly seize the opportunity of the times and place technology and innovation in the primary position of various tasks. Improve the degree of comprehensiveization and intelligence of the system. In addition, the development of enterprise development should be closely linked with industry progress, and the cooperation between different enterprises should be continuously strengthened so that the level of sustainable development of the industry has been significantly improved.

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