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Research on ways to improve electrical engineering and its automation

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ABSTRACT. *The implementation of the reform and opening up system has promoted the development of the domestic economy. The development of electrical automation technology with low labor costs is particularly prominent.In this paper, the author summarizes the problems encountered in the construction of electrical engineering automation, and puts forward reasonable solutions. The purpose is to promote the reform of electrical engineering automation technology and contribute to the development of electrical engineering automation technology in the future.*

KEYWORDS: *Electrical engineering; Automation; Problem; Suggestion*

1. Introduction

At present, it is the golden age of economic development. Under this background, electrical engineering automation has continuously implemented reforms in line with the needs of the times and has successfully entered a new stage.The development of industrial economy is inseparable from the support of electrical engineering automation technology. The level of electrical engineering automation represents the development state of industrial economy, which is of great significance.At present, domestic electrical engineering automation technology has achieved certain achievements, but due to various factors, it will encounter many problems in the future development, especially the failure to break the constraints of information technology.In order to achieve stable development of electrical engineering automation, it is necessary to deeply understand the problems encountered in the development of electrical engineering automation, through scientific analysis of problems, to find a reasonable solution, and ultimately to ensure the progress of electrical engineering automation.

2. *Problems encountered in the construction process of electrical engineering automation*

The development of electrical engineering automation has gone through a long period of time and has achieved remarkable results in some respects, but it is still unknown for future development.There are many factors that limit the development of electrical engineering automation[1]. The most common are three angles: the first

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is the limitation of energy saving angle; the second is the limitation of management angle; the third is the limitation of safety angle.Below we will delve into the three major constraints.

2.1 Energy saving problems for the development of electrical engineering automation

Electrical engineering automation contains scientific knowledge in many fields, the most important of which is photonics and electronic knowledge. Therefore, optoelectronic technology has become the core of electrical engineering automation development.It should be noted that although optoelectronic technology has provided the impetus for the development of electrical engineering automation, the energy saving problems it has brought cannot be solved.In recent years, the domestic construction industry has developed rapidly, and then put forward new requirements for the management of electrical engineering automation[2]. Therefore, the level of electrical engineering automation determines the quality of construction engineering to a certain extent.It is necessary to pay attention to the close relationship between the quality of construction engineering and energy. If there is a contradiction between the two, it will cause the decline of building quality and energy consumption from the side, which is not conducive to the development of electrical engineering automation.

2.2 Management issues for the development of electrical engineering automation

At present, domestic engineering enterprises often focus on the speed of construction, ignoring the quality control, which makes the quality of the building and the expected quality inconsistent, seriously lower than expected quality, and ultimately the automation of electrical engineering failed to play. Its construction advantages have formed certain construction safety hazards.

2.3 Security issues restrictions on the development of electrical engineering automation

Electrical engineering automation has been widely used in the industrial field, and has gradually penetrated into other fields, which has led to the development of many industries, especially in the commercial field[3].For the business world, the most important thing is the security of the data.The establishment of the network information platform has brought convenience to the information exchange between enterprises, but at the same time it also brings data security risks.At present, the

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development of electrical engineering automation has a large space, and the combination of knowledge in various fields has not been realized, and the problem of safety is prominent. In the future, the primary task of technicians is to improve through the integration of subject knowledge. Safety issues, reasonable design of the electrical engineering automation development model, to minimize the cost pressure of enterprises.

3. *Ways to improve automation of electrical engineering*

In order to break the constraints of the development of electrical engineering automation, we will carry out reforms from three perspectives[4]: the first is to create an independent electrical engineering automation development platform; the second is to implement an effective electrical engineering automation network model; the third is to regulate electrical The data docking standard for engineering automation, which we will describe in detail below.

3.1 Create an independent electrical engineering automation development platform

The core platform for the development of electrical engineering automation is the enterprise, but this is not the only platform for the development of electrical engineering automation. In the long run, the single form of electrical engineering development is not conducive to the expansion of corporate interests, but will increase the cost of enterprises. , bringing economic pressure for the further development of subsequent electrical engineering automation.In order to solve this problem, what enterprise technicians need to do is to break the technical constraints and plan a scientific electrical engineering automation research and development program.It is necessary to pay attention to the fact that in the early stage of R&D design, technicians must master the basic industry knowledge, clarify the future development trend of the industry, and form a primary R&D strategy.In addition, when in-depth refinement of the primary solution[5], time and cost factors must be considered, namely the so-called operation and maintenance of electrical engineering automation.Scientific research and development solutions enable a high degree of electrical engineering automation and significantly reduce business costs.

3.2 Implement an effective electrical engineering automation network model

The security of data transmission is determined to a certain extent by the level of electrical engineering automation technology. In other words, only by realizing the security of data transmission, can the information interaction between enterprises

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be protected, and the development of electrical engineering automation can be promoted.To achieve the security of data transmission, you must start with the network model and create a scientific network resource configuration[6].For electrical engineering automation, it consists of three parts: the first part is the control of the equipment; the second part is the supervision of the technology; the third part is the management of the enterprise.In order to maximize the optimization of the network model and realize the information security exchange between enterprises, the three parts of electrical engineering automation should be integrated, so that the three parts are mutually constrained and eventually promoted together.

3.3 Specification of data docking standards for electrical engineering automation

The development of enterprises must be based on the advancement of electrical engineering automation technology, and thus achieve stable and secure transmission of enterprise information.It should be noted that standardized data docking provides a guarantee for secure data transmission.For enterprises, the core of their research should be how to determine the data docking standard for electrical engineering automation. Only in this way can the operating cost of the enterprise be reduced and the data can be transmitted safely.

4. Conclusion

In this paper, the author takes electrical engineering automation as the starting point, summarizes the problems encountered in the development of electrical engineering automation, and puts forward suggestions for the development of subsequent electrical engineering automation.In recent years, the achievements of electrical engineering automation have been obvious to all, and electrical engineering has been pushed to a new stage, especially in the intelligent perspective.Electrical engineering automation will become the basis of future industrial development. As long as relevant personnel realize the creation of electrical engineering automation platform, improve the network model of electrical engineering automation, and standardize the data docking standard of electrical engineering automation, the goal of leaping development of electrical engineering automation can be achieved. .

References

[1] Chunxia Gong. Discussion on the construction and development of electrical engineering and automation [j]. Wireless Internet Technology, 2013 (2): 210-210.

ISSN 2616-5767 Vol. 2, Issue 1: 210-214, DOI: 10.25236/AJETS.020034

[2] Xinhan Qiao. Development and problem research of electrical engineering and automation [j]. Science and Technology Innovation Herald, 2015(2): 34-34.
[3] Ruizhe Zhang. Problems in electrical engineering and automation and solutions [j]. Shandong Industrial Technology, 2019, 279(1): 149.
[4] Lei Liu, Yun Zhang. Research on application problems of power system and automation technology [j]. Shandong Industrial Technology, 2019, 279(1): 203.
[5] Jieke Lin. Application research of electrical automation control technology in power system [j]. Shandong Industrial Technology, 2019, 279(1): 142-142.
[6] Gujing Han, Chuntian Liu, Yiqi Tao. Discussion on the construction and development of featured electrical engineering and its automation major [c] National Higher Education School Electrical Engineering and Automation Professional Teaching Reform Seminar. 2009.