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Efficiency of establishment of energy service system in industrial enterprises

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ABSTRACT: The article describes the introduction of energy service systems in industrial enterprises in the production process to increase the reliability of electricity consumers, save energy, create additional facilities. As an example, the issues of electricity saved as a result of equal distribution of the load through the quality transformers supplied to enterprises, the prevention of such cases as rapid disconnection of electrical contacts were considered.

KEYWORDS: energy service, energy resources, energy saving, Electricity consumers, electrical contacts, severe physical and mental obsolescence, energy consumption control.

I. RELATED WORK

Electricity is one of the leading sectors of our economy. Indeed, the provision of sustainable economic growth, increased labor productivity, welfare and living standards are inextricably linked with the prospects of this sector. Taking into account the steady growth of demand for electricity, modernization of the facilities of this system with the participation of global financial institutions is being carried out. Controlling the energy consumption of electricity consumers, saving electricity is one of the current problems. The introduction of energy service systems in industrial enterprises is a modern area of consumer services.

II. INTRODUCTION

The main reasons for the low efficiency of energy infrastructure in production are the serious physical and mental obsolescence of fixed assets and, consequently, the breakdown rate of equipment; energy consumption control, low level of regulation; Increased losses in production processes and high consumption of fuel and energy resources, increased demand for electricity in industrial enterprises, increased electricity consumption, the impact on the cost of production, reduced capacity to produce modern quality products that meet world standards, the reliability of electricity consumers increase is one of the most pressing issues today. The organization of energy service systems in industrial enterprises is one of the main tools for the formation of a stable system of market quality and competition to meet the demand for electricity [1].

Measures to be taken in the field of energy saving in industrial enterprises should take into account the mechanisms of management of energy saving and energy efficiency processes to ensure consistency, coherence and control of measures. However, despite the experience in implementing energy-saving projects and the developed regulatory framework, process management in industrial enterprises is, as a rule, situational (local) in nature. Therefore, it is necessary to develop a single strategy that takes into account the operating conditions and characteristics of power supply systems of enterprises and allows to solve the main problems in the long run. In the process of manufacturing products, enterprises consume large amounts of energy and energy carriers of different types and parameters: electricity, gaseous, liquid and solid fuels, hot and cold water, steam, compressed air, oxygen, acetylene and others. Every enterprise needs a stable energy supply to ensure the normal continuation of the production process. This task is assigned to the energy sector of the enterprise. The purpose of the power facilities of the enterprise is to fully and reliably meet the energy needs of the production units of the enterprise with the minimum parameters and the required parameters.



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Energy service:

- 1) Energy service energy consumption is a set of special measures taken to reduce the existing energy consumption of the facility
- 2) Energy service - the implementation of measures aimed at identifying the existing potential of the energy-saving facility, which is considered as a concept, or its conversion into energy;
- 3) Energy service - a type of service aimed at servicing electric motors and increasing their reliability;
- 4) Energy service - the implementation of modern projects based on the potential of the enterprise;
- 5) Energy service - in determining the position of the product on the world market and the implementation of measures aimed at the production of quality products;

In addition to raw materials and labor, energy is often the biggest cost for industrial facilities and manufacturing plants. Improving the system of energy services is one of the priorities of industrial enterprises, the implementation of which is used in the practice of modern developing countries. Regular monitoring of electricity consumers, quality control of products, conclusions were drawn and work was done to eliminate shortcomings through service. Due to the unequal distribution of electricity, the efficiency of low-load transformers is much lower than the passport. .

The service system for industrial enterprises includes:

- build use.
- expansion, reconstruction.
- capital repairs, technical re-equipment.
- Installation, adjustment, maintenance, and repair of electrical equipment at production facilities.

-The role of the service system in the production can be explained as follows:

- 1) Ensuring the efficient operation of the organization's energy system.
- 2) Application of a particular product or service to production processes.
- 3) In accordance with the standards of continuous control and use of electricity consumers for the efficient use

of energy resources.

- The results that can be achieved through the introduction of a service system for production processes [2]:
- Improving the quality of enterprises
- Increasing the continuity of electrical equipment.
- Energy saving and quality energy supply.
- One of the important aspects of the prospects of the enterprise.

Service is one of the new directions in the development strategy of modern business organizations. Improving the reliability of electrical equipment, controlling electricity consumption, increasing the cost of the product through full control over the performance of electric motors, create the basis for the production of products in accordance with international standards by controlling the quality of electricity. Through the introduction of the service system, enterprises save energy, prevent the breakdown of electric motors and other electrical appliances that endanger the lives of workers, prevent the impact of frequency fluctuations on the quality of the product. A number of shortcomings in the maintenance of transformers and electric motors will be eliminated through the introduction of the proposed service system. After the service, a certificate of service will be issued [3].

Service to obsolete consumers will be studied, the principles of their operation will be studied, the service will be carried out in accordance with the quality indicators of enterprises and organizations, the application of energy-saving projects will be studied, the operation of motors will be thoroughly studied, As a result of the study, recommendations for the provision of services to industrial enterprises will be prepared.

III.CONCLUSION

In the organization of the service system in industrial enterprises, the customer provides services to reduce energy costs at the facility, increase the reliability of electricity consumers.

Thus, improving the competitiveness of the enterprise by increasing the sustainability, reducing energy consumption and increasing energy efficiency through the establishment of a service system. In today's developing world, the growing demand for electricity takes into account such criteria as the rapid development of production, the increase in the number of electricity consumers. With this in mind, it is necessary to constantly monitor electricity consumers and certify that they have been serviced after service.



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