ANALYSIS OF THE AUTOMATION PROCESS OF TWO-RATE CONSUMERS

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Abstract: The most responsible work in terms of automation, without a doubt, falls on personnel. Today's personnel should be able to use new equipment and technology, to widely introduce automation of technological processes, to identify and accelerate production reserves, to know their native language, the State language, at a high technical and technological level. In particular, young personnel have the responsible task of becoming pioneers of science and technology development. Therefore, it is important that not only specialists in this field know the basics of control and automation of technological processes, but also technologists-designers, economists and others

Key words: Automation, production, technological processes, Energy control and calculation automation systems, technological waste.

It envisages the implementation of a large volume of work related to the solution of various automation issues. Development of automation systems and implementation directly into production processes is a multi-stage process. It includes scientific research, design and assembly-adjustment works, as well as a set of activities that ensure reliable operation of automation systems during operation. The issues to be solved in the automation of the production processes of modern production require experts to know the principles of the structure and operation of various automation devices, the methods of making different types and classes of automatic systems, as well as the work in the field of automation of technological processes. also requires mastery of technical language. This means that a logically calculated and technically based system of automation of a technological process should be expressed in a language that is equally understandable for specialists who are engaged in the issues of installation, adjustment and use of automation systems. In this case, all specialists should have the same understanding in the field of equipment supply of the automation system being created, implementation of the given adjustment laws, methods of assembly of tools and automation tools, transfer of impulse and command lines, and source lines.

It leads to the emergence of energy control and calculation automation systems (ENHAT). ENHAT performs continuous control based on transmission of liquid, gas and electric energy, etc., in the form of a continuous, digital signal to any distance. This system provides continuous control and management of commercial consumption and all desired quantities when provided with appropriate EHM software. It allows to completely eliminate technological waste (losses) and waste caused by the "human factor". Information and communication technologies reduce the consumption of fuel, gas, electricity and reduce wastage, thus solving the problem of energy saving. The automatic control and registration system serves as the most necessary tool of the market economy, it clarifies the mutual problems of the parties. Modernization, technical and technological re-equipment of the leading sectors of the economy is carried out on the basis of information and communication technologies.

It was reported that until 2030, the production of electricity will be increased from 5900 MW to 29200 MW, the consumption of natural gas in the production of electricity will be reduced from 16.5 billion cubic meters to 12.1 billion cubic meters, and the losses in the transmission of electricity will be reduced by 2.35%. , and it is planned to reduce it by 6.5% in distribution.

According to the report, this strategy sets medium-term and long-term goals for the country's electricity supply in the period from 2020 to 2030 and will be analyzed as necessary based on continuous analysis.

The strategic goal of the document is to provide the population and economy of Uzbekistan with electricity on the basis of competitive prices, to develop a balanced energy sector that includes the best world practices and modern trends in global electricity.

• modernization and reconstruction of existing power plants, construction of new power plants using energy-efficient technologies for power generation;

• improvement of the electricity accounting system;

• development of renewable, especially solar energy sources; implementation of legal reforms to improve the tariff policy and ensure access to the wholesale market.

Also, in this strategy, in the development of renewable energy sources, special attention is paid to the improvement of energy supply to the regions that currently have a shortage of electricity. For this purpose, it was announced that measures for wide application of public-private partnership in this field are defined in the strategy.

REFERENCES

1. Kholiddinov, I. K., Musinova, G. F., Yulchiev, M. E., Tuychiev, Z. Z., & Kholiddinova, M. M. (2020). Modeling of calculation of voltage unbalance factor using Simulink (Matlab). *The American Journal of Applied sciences*, *2*(10), 33-37.
2. Yulchiev, M. E., & Qodirov, A. A. O. (2020). Electricity Quality And Power Consumption In Low Power (0.4 Kv) Networks. *The American Journal of Engineering and Technology*, *2*(09), 159-165.
3. Yulchiev, M. E. (2023). POWER QUALITY IN THE LOW-VOLTAGE AIR NETWORK. *Spectrum Journal of Innovation, Reforms and Development*, *15*, 79-84.
4. Эралиев, А. Х., Юлчиев, М. Э., & Латипова, М. И. (2020). ЭКСПЕРИМЕНТАЛЬНЫЕ МЕТОДЫ И ОБЪЕМ ИСПЫТАНИЙ ТРАНСФОРМАТОРОВ ТОКА. *Universum: технические науки*, (12-5 (81)), 39-43.
5. Mash'albek, E. (2022). CONTENTS, PROBLEMS AND DIDACTICAL BASIS OF TEACHING THE SUBJECT" ELECTRIC NETWORKS AND SYSTEMS" IN THE ELECTRONIC EDUCATIONAL ENVIRONMENT. European International Journal of Multidisciplinary Research and Management Studies, 2(04), 341-349.
6. Yulchiyev, M. E., & Salokhiddinova, M. (2023). ORGANIZATION OF MULTI-STAGE ENHAT FOR MEDIUM AND LARGE POWER INDUSTRIES OR ENERGY SYSTEM. World scientific research journal, 20(1), 13-18.
7. Muslima, S. (2023). APPLICATION OF A HYBRID SYSTEM OF RENEWABLE ENERGY SOURCES IN THE SUPPLY OF ELECTRICITY THROUGH A MULTIFUNCTIONAL DEVICE. International journal of advanced research in education, technology and management, 2(10).
8. Zuhritdinov, A., & Xakimov, T. (2023). STUDY OF TEMPERATURE DEPENDENCE OF LINEAR EXPANSION COEFFICIENT OF SOLID BODIES. *International Bulletin of Applied Science and Technology*, *3*(5), 888-893.
9. Erkinovich, Y. M. A., & Asadbek Gulom og, Y. (2024). LIGHTING IN PRODUCTION AND ITS STANDARDS. NATURAL AND ARTIFICIAL LIGHTING. *Лучшие интеллектуальные исследования*, *14*(2), 110-115.
10. Erkinovich, Y. M. A. (2024). PROBLEMS OF EFFECTIVE USE OF ELECTRICAL ENERGY IN AGRICULTURE AND WATER MANAGEMENT. *Лучшие интеллектуальные исследования*, *14*(2), 72-78.
11. Erkinovich, Y. M. A., & Sirojiddin, X. (2024). AUTOMATION OF ELECTRICITY CONSUMERS. *Лучшие интеллектуальные исследования*, *14*(2), 86-92.
12. Erkinovich, Y. M. A., & Sirojiddin, X. (2024). WHAT DOES IT DEPEND ON TO ENSURE THE CONTINUITY OF ELECTRICITY CONSUMPTION. *Лучшие интеллектуальные исследования*, *14*(2), 100-104.
13. Erkinovich, Y. M. A., & Umurzoqbek, D. (2024). APPLICATION OF HYBRID SYSTEM IN MULTIFUNCTIONAL DEVICES USING BOTH RENEWABLE AND CONVENTIONAL ENERGY RESOURCES. *Лучшие интеллектуальные исследования*, *14*(2), 226-233.
14. Erkinovich, Y. M. (2024). TYPES OF LIGHTING LAMPS AND THEIR CHARACTERISTICS. *Лучшие интеллектуальные исследования*, *14*(2), 28-34.

15. Abdulhamid o‘g‘li, T. N., & Botırjon o‘g‘li, A. M. (2024). FOTOELEKTRIK STANSIYALARNING TIZIMLARINI HISOBLASH TURLARI. *Oriental Journal of Academic and Multidisciplinary Research*, *2*(3), 49-54.
16. Abdulhamid o‘g‘li, T. N., & Botırjon o‘g‘li, A. M. (2024). FOTOELEKTRIK STANSIYALARDAGI INVERTORLARNI XISOBLASH. *Oriental Journal of Academic and Multidisciplinary Research*, *2*(3), 43-48.
17. Abdulhamid ogli, T. N., & Axmadaliyev, U. A. (2024). DEVELOPMENT AND APPLICATION OF 3rd GENERATION SOLAR ELEMENTS. *Лучшие интеллектуальные исследования*, *14*(2), 219-225.
18. Abdulhamid ogli, T. N., & Azamjon ogli, S. H. (2024). IMPLEMENTATION OF SMALL HYDROPOWER PLANTS IN AGRICULTURE. *Лучшие интеллектуальные исследования*, *14*(2), 182-186.
19. Abdulhamid ogli, T. N., & Yuldashboyevich, X. J. (2024). ENERGY-EFFICIENT HIGH-RISE RESIDENTIAL BUILDINGS. *Лучшие интеллектуальные исследования*, *14*(2), 93-99.
20. Abdulhamid ogli, T. N., & Yuldashboyevich, X. J. (2024). SOLAR PANEL INSTALLATION REQUIREMENTS AND INSTALLATION PROCESS. *Лучшие интеллектуальные исследования*, *14*(2), 40-47.
21. Abdulhamid ogli, T. N., Axmadaliyev, U. A., & Botirjon ogli, A. M. (2024). A GUIDE TO SELECTING INVERTERS AND CONTROLLERS FOR SOLAR ENERGY DEVICES. *Лучшие интеллектуальные исследования*, *14*(2), 142-148.
22. Topvoldiyev, N. (2023). KREMNIY ASOSIDAGI QUYOSH ELEMENTILARI KONSTRUKTSIYASI. *Interpretation and researches*, *1*(1).
23. Abdulhamid o‘g‘li, T. N., & Sharipov, M. Z. (2023). ENERGY DEVELOPMENT PROCESSES IN UZBEKISTAN. Science Promotion, 1 (1), 177–179.
24. Topvoldiyev, N. (2023). Storage of Electricity Produced by Photovoltaic Systems.
25. Alijanov, D. D. (2023). Storage of Electricity Produced by Photovoltaic Systems.
26. Abdulhamid o‘g‘li, T. N. (2022). Stirling Engine and Principle of Operation. *Global Scientific Review*, *4*, 9-13.
27. Abdulhamid o‘g‘li, T. N., & Muhtorovich, K. M. (2022). Stirling's Engine. *Texas Journal of Multidisciplinary Studies*, *9*, 95-97.
28. Topvoldiyev, N. (2021). SOLAR TRACKER SYSTEM USING ARDUINO. *Scienceweb academic papers collection*.