Optimization of Energy Supply Processes at an Enterprise: Automated Systems

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key words

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Energy supply for industrial enterprises is one of the key tasks that affect the efficiency, sustainability, and competitiveness of production. Modern enterprises strive to minimize energy costs, improve energy supply reliability, and meet environmental requirements. To address these challenges, automated control systems are increasingly being used to optimize energy supply processes and provide real-time monitoring and control. This article examines the main objectives of energy supply systems, including generation, distribution, and control of energy consumption, as well as loss minimization. Particular attention is paid to the structure of automated systems and the benefits of their implementation. Examples of practical application, including smart grids and predictive algorithms, are described. Ways of solution to implementation challenges are proposed.

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