

**DIRECTIONS FOR THE DEVELOPMENT OF GENERATION
FACILITIES IN THE REPUBLIC OF BELARUS**

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No wonder that the electric power industry is called the main branch of the modern economy because it has a direct impact on all the life support systems of society, the social climate and economic development. Without a technologically modern, investment-attractive electric power industry, it is impossible to achieve sustainable GDP growth and increase the competitiveness of Belarusian producers. Today, the electric power industry faces serious and responsible tasks that require effective solutions. It is highly profitable production with minimal costs that is able to ensure the development of the country and is relevant not only today, but also in the distant future. Attention to the study of the methodology for improving the efficiency of generating facilities is explained by the lack of basic energy resources: almost 90% of the fuel used in the energy sector is imported from the Russian Federation; the increasing cost of their production, global environmental problems. Optimization of the equipment configuration of power generating sources of organizations of the State Production Association “Belenergo” is to be carried according to the specified values of the definite indicators and have an economically justified approach, taking into account external and internal conditions [1]. In particular, the values of the indicator “The ratio of the total installed capacity of power plants to the maximum actual load in the energy system (reservation)”, lying above the threshold of 140%, allow us to speak about the guaranteed possibility of providing reliable power supply to consumers by manufacturers, however, a significant excess of this threshold

generates an additional financial burden on the consumer. In order to ensure a balance between the interests of producers and consumers, it is necessary to prevent unreasonable growth of power generating capacities in the republic, and decommission depreciated capacities in a timely manner. The values of this indicator set by the Energy Security Concept are at the level of 155% in 2025 and 150% in 2030. To achieve them, it is necessary to decommission generating sources with a total installed capacity of 2026 - 3,077 MW, by 2031 - 3,242 MW (on an accrual basis) [2]. At the same time, taking into account the commissioning of NPPs, it is necessary to update the methodology for calculating the indicator, which will take into account the power reserve required for NPPs in the power system. Optimization of generating sources of the power system must be carried out considering modern trends in the development of science, engineering and technology. It is necessary to monitor the development of the production of electric energy storage devices and, if it is technically and economically feasible, to use this equipment in balancing the operating modes of the power system.

References

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