

**THE CURRENT STATE OF THE ELECTRIC POWER INDUSTRY IN
THE REPUBLIC OF BELARUS**

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At present, the wear and tear of generating equipment of organizations State Production Association “Belenergo” is at a normal level and amounts to 42.5%, which is due to the systematic modernization of generating equipment carried out since 2006, including the commissioning of large generating sources at Berezovskaya GRES, Lukomlskaya GRES, CHPP-5. At the same time, until 2030, the standard operating life of a significant part of the equipment of generating sources expires. In order to maintain the depreciation indicator within the limits corresponding to energy security, when developing five-year development programs, it is necessary to rank objects for their replacement, modernization, and reasonable periods for extending operation or decommissioning. At the same time, it is necessary to take into account the need to maintain power reserves in the energy system, which will increase significantly after the commissioning of the Belarusian atomic power station. The existing heat supply schemes for regional and district cities, which were designed in the 60-70s of the last century, were suitable for centralized heat supply in the industry and housing and communal services, as well as to cover peak heat loads in heating systems. Since the mid-1990s, most boiler houses have been used exclusively as peak and backup heat sources, with thermal power plants providing the main heat load. Despite the annual increase in housing under construction, the actual consumption of thermal energy in the whole country is declining, which is due to the active implementation of energy-saving measures in industry and housing and communal services [1].

In 2018, the installed capacity utilization rate of district boiler houses as a whole for organizations of the State Production Association “Belenergo” amounted to 6.9%, and the number of hours of installed capacity use was 604 hours. This indicates the presence of excess capacity, which ultimately has a negative impact on the value of the constant component in the cost of thermal energy. For this reason, it is necessary to consider the possibility of optimizing the composition of the existing equipment of regional boiler houses with its possible decommissioning (dismantling, conservation). Moreover, the low level of use of boiler equipment is due to a significant reduction in industrial consumers of thermal energy, the need to maintain a reserve of thermal power for consumers [2]. To make a decision on the further operation of morally and physically obsolete power equipment and high-voltage transmission lines at the power grid facilities of the Republic of Belarus, their examination and technical opinion on the state of the facility and the need for its reconstruction is of vital importance. In addition, the depreciation policy of electric power industry organizations should be based on the need to take into account the actual depreciation of production assets (technical standards for operating time).

References

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