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Energy security as a component of Ukraine's national security

The report examines theoretical studies on the impact of threats to Ukraine's energy security as a component of national security. The study identifies the factors that affect the level of energy security, substantiates the main directions of the energy policy of Ukraine in order to ensure its energy security.

The text of the report. Energy security is an integral part of national security, a necessary condition for the existence and development of the state, a priority of public policy. According to the National Security Strategy of Ukraine, the main threats to energy security today are:

- distortion of market mechanisms in the energy sector;
- insufficient level of diversification of sources of energy supplies and technologies;
- criminalization and corruption of the energy sector; Ineffective energy efficiency and energy policy [1].

In addition, the adverse changes in the geopolitical situation as a result of Russian military aggression in eastern Ukraine, the annexation of the Crimea, redistribution of the influence of the leading countries on the energy market, as well as the political and economic problems in the middle of the country, led to an aggravation of such threats to energy security of Ukraine, as a deficiency of energy resources (natural gas, oil, coal of the anthracite group), the risk of losing part of the grid and transit status, high energy intensity of the gross domestic product (GDP), the technological backwardness of enterprises in the energy and manufacturing sectors, and a significant depreciation of the fixed assets of production, transportation and distribution of electricity and heat [2, 3].

The current level of Ukraine's energy security in many of its components is unsatisfactory. The main factors are:

- ultra-high energy consumption of energy products consumption in the branches of economy and social sphere;
- a significant share of imports in the balance of energy consumption with the bulk of imports from one country of natural gas, nuclear fuel, and oil;
- irrational structure of fuel and energy balances (PEBs) of the country;
- reduction of efficiency of production and transportation of energy products;
- high level of harmful effects of energy objects on the environment.

Taking into account the above, the main objectives of ensuring energy security in Ukraine are:

- reliable provision of energy resources of the needs of the national economy and the population in objectively necessary volumes;

reliable and efficient functioning and development of branches and enterprises of the fuel and energy complex (fuel and energy complex);

provision at the state level of the social orientation of the energy policy complex regarding the energy supply of the population and the fuel and energy sector employees;

reduction of the harmful effect of the activities of fuel and energy complex on the environment and population in accordance with internal and international requirements.

The issue of the ownership of energy facilities is important for the country's energy security. In the state property it is necessary to preserve nuclear and hydroelectric power stations, underground gas storage facilities, main and intergovernmental power grids, oil and gas pipelines and dispatch control over them.

The main directions of the energy policy of Ukraine in terms of ensuring energy security are:

increasing the reliability and efficiency of energy supply, ensuring the efficient and sustainable development of the fuel and energy complex;

reducing the level of energy dependence of the country by increasing production (production) and consumption of own energy resources, diversifying external and internal sources of energy supply, maximizing the attraction of energy saving potential;

raising the level of public safety against emergencies of anthropogenic nature;

increase of the level of safety, stability and durability of energy objects in order to prevent ecological disasters and reduce the level of technogenic influence of energy objects on the environment;

ensuring Ukraine's entry into the energy markets of Europe and the world.

The main measures to reduce the level of energy dependence of the country are:

increase in the level of own production of fuel and energy resources (FER) (due to growth of their production, reduction of absolute level of import, efficient and optimal energy consumption);

increase of the level of safety, stability and durability of energy objects in order to prevent ecological disasters and reduce the level of technogenic influence of energy objects on the environment;

diversification of sources of external supply of FER (natural gas, oil, nuclear fuel), providing at least 3 sources of supply for each type of energy resources with 25 - 30% of collateral from the total volume; in particular, to create conditions for the stable and competitive import of nuclear fuel, gas, oil, coal of mark "A" from several supplier countries;

consolidation of the strategic position of Ukraine in the international system of transportation of energy resources and ensuring the proper participation of Ukraine in the world energy markets and in the implementation of international energy projects; including the adoption of a political decision on the model of technical connection of the UES of Ukraine to the integrated ENTSO-E continental network as well as the construction of DC inserts on the western borders of Ukraine of the necessary capacity for the diversification of potential electricity imports;

ensuring internal energy independence (prevention of monopoly position in the internal PP markets, formation of equal competitive conditions of activity, creation of state strategic reserves of PP, improvement of regulatory and legislative framework, implementation of state control);

solving problems of spent nuclear fuel and radioactive waste management of nuclear power plants, first of all, completion of the construction of the Centralized storage of spent nuclear fuel;

increase in electricity generation from renewable energy sources, energy generation with state-of-the-art technologies and equipment;

maximum use of domestic scientific and technical potential in the sectors of the fuel and energy sector.

Conclusion. The implementation of these measures for the modernization and development of national energy should contribute to improving the energy efficiency indicators as the basis for increasing energy independence and ensuring Ukraine's energy security.

References

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3. Khalatov AA Ukraine's energy security: Is there a safety margin? Bulletin of the National Academy of Sciences of Ukraine, 2017. No. 9. Pp. 23-31.