



Development of Nuclear Energy in Ukraine. Necessity, Advantages and Disadvantages

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According to current projections of economic development of Ukraine, domestic consumption of electricity will grow from the present level of 190 billion kWh/year to about 280 billion kWh/year in 2030, which determines the prospects of the electricity industry development.

Alternative “green” energy sources - solar, wind and small hydropower can develop only within a commercially reasonable considering temporary “green” tariff, which is far above the rates for traditional sources. According to prognoses the share of “green” energy sources in Ukraine in 2030 will not exceed 10-15% regardless of their environmental appeal.

The updated nuclear energy development strategy by 2030 will save the share of nuclear electricity generation at the achieved level about half of total domestic electricity production. Development of nuclear power generation in the period to 2030 provides:

- Increase the safety of the operating NPP;
- Efficiency increase of existing nuclear power plants (up to 85% in terms of the basic mode of operation);
- Continued of NPP units operation for 20 years over time, provided the original design;
- Completion of the units 3,4 Khmelnitsky nuclear power plant in 2017;
- Construction and commissioning prior to 2027 three new nuclear power units the total capacity to 3.5 GW on new NPP site;
- Beginning in 2022-2029 years construction of new nuclear reactors at sites of existing nuclear power plants to replace existing units that will be decommissioned after 2030;
- Implementation of the units preparation to decommissioning after an additional period of operation;
- Improvement of infrastructure support and development of nuclear power generation.

In the article analyzes the necessity, advantages and disadvantages of nuclear energy in Ukraine in the Updated Energy Strategy of Ukraine until 2030.

Keywords: *nuclear energy planning, infrastructure, Ukraine*