UDC 620.91

USE OF WIND FARMS: ADVANTAGES AND DISADVANTAGES

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The development of wind energy is happening very rapidly. The leaders are China and the United States, but the rest of the world is developing this promising direction too. Every year more and more wind turbines are installed in the world, and there is a tendency for the further spread of technology.

Let's consider the advantages and disadvantages of using wind power plants. The advantages include the use of a fully renewable energy source, the absence of harmful emissions (that is, the technology is environmentally safe), no use of water for the operation of the wind farm, placement of a wind turbine and main working parts at a considerable height above the ground (the surrounding space can be successfully used for household needs), use in isolated areas (where electricity cannot be delivered by conventional methods), significant reduction in the cost of a kilowatt-hour of generated electricity, minimal maintenance during operation.

However, there are also disadvantages of using wind turbines, such as: dependence on external conditions at a particular moment, the wind may be strong, or it may not be at all; the construction of a wind turbine requires material costs; distortion of the natural landscape (their appearance violates the natural aesthetics); aerodynamic noise that can cause discomfort to people; the likelihood of a bird colliding with a windmill blade [1].

Despite the abovementioned disadvantages, the advantages of wind generators in terms of benefits for the environment are obvious.

References

1. Wind energy: advantages and disadvantages [Electronic resource]. – Mode of access: http://electricalschool.info/energy/1539-jenergija-vetra-preimushhestva-i.html. – Date of access: 10.02.2022.