

Dual-system wind turbine includes a rotary head with a wind wheel, an energy converter and a fixed support. The rotary head is placed on a fixed support and is pivotally connected to it. The axis of rotation of the wind wheel is placed horizontally. The wind wheel is equipped with extensions that are installed between the blades of the wind wheel and its hub. The extensions are placed radially and their length is equal to 0.1-1.0 of the length of the blades. Additional wind wheels are fixed on the generator shafts. The energy converter is made in the form of generators and placed on the extensions. An additional generator is fixed in the rotary head on the axis of the wind wheel, which is connected to a power semiconductor frequency converter through a switching unit. The output of the power semiconductor converter is connected to the outputs of the generators that are installed on the non-rotating parts of the blades of the main wind wheel and connected to the network. Additionally, it contains a power regulator, the output of which is connected to the control input of the frequency converter. The inputs of the power regulator are connected to the outputs of the sensors of the operating parameters of all generators and wind wheels.