Wind turbine encounters reverse wind

To complete the experiment, NREL and DTU researchers literally flipped the rotor of a 1.5-megawatt research wind turbine that lives on NREL"s Flatirons Campus in Colorado--along with the ...

This interaction of the rotational direction of a wind turbine with a veering wind suggests that a preferential rotational direction of a wind turbine in a stably stratied atmospheric boundary layer ...

During periods of time without grid supply to a wind turbine, it is possible to continue to operate the wind turbine using an energy storage system.

Off the southwest coast of Norway, a strange-looking wind turbine is quietly making waves--by spinning in reverse. Developed by the Norwegian startup World Wide Wind, this 30-kilowatt floating prototype ...

This study presents practical solutions for wind turbines to leverage wind veer phenomena, contributing valuable insights to the ongoing development of wind turbine control systems.

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In this work, we consider a pumping AWES with a rigid wing and vertical takeoff and landing (VTOL) capability with onboard propellers. In fully autonomous operation, the system must ...

Most wind turbines spin clockwise, but a rebellious few don"t--and it"s sparking fierce engineering debates. Does this seemingly trivial difference secretly shape our energy future?

Here, we challenge the arbitrary choice of the rotational direction of the blades by investigating the interaction of the rotational direction with veering and backing winds in both ...

Using large-eddy simulations, we show how the rotational direction of the near wake is determined by the rotational direction of the wind turbine, whereas the rotational direction of the far wake is ...

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