

عنوان مقاله:

Numerical study of the Hunter turbine performance in order to generate electricity from marine currents and waves

محل انتشار:

هجدهمین همایش صنایع دریایی (سال: 1395)

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نویسنده:

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خلاصه مقاله:

This project is concerned with the study of a novel design of vertical wind turbine, called hunter turbine. Rotor with 6 blades selected and tested for calculate power coefficient and Torque produce with rotor. the kinetic energy of the incident flow can be effectively transferred into the movement of the rotor. Experimental data shows when the blades open or closed. Small windward set top of the blades that causes blades early opening and closing which increase the rotational speed and power coefficient. Three-dimensional steady CFD was then used to obtain detailed information about the flow field, including pressure and velocity contours, and the pressure distribution on the surface of the blades with Fluent. At the end result shows the hunter turbine has good efficiency at the special rang of flow coefficient.

کلمات کلیدی:

Vertical wind turbine, Hunter turbine, Flapping blades, Power coefficient, CFD

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