

Title: Parked and Operating Loads Analysis in the Aerodynamic Design of Multi -megawatt-scale Floating Vertical Axis Wind Turbines

Author(s): Mohammad Sadman Sakib and D. Todd Griffith MS

Type: Research article

Summary

As in the abstract stated, this paper describes load calculations with a vortex code for Vertical Axis wind turbines. The manuscript is clearly written and the results are as expected (a three-bladed version shows less variation than a 2-bladed one) To my opinion, the manuscript is a little bit too extended. Authors should consider if it can be shortened.

General

The approach using a vortex type code to cover a broader parameter range seems meaningful as well as to focus on stand-still conditions. To get more insight on the overall accuracy of the “medium fidelity” approach authors should refer to recent CFD work, for example

Bangga et al. Energy 206 (2020) 118087

Specific

Figure 11: the information might be easier to compare if c_T (thrust coefficient) instead of absolute force would have been presented.

As the investigations presented seem to be part of a larger project “A Low-cost Floating ...” it would be interesting to read about how far this goal was achieved

Typos

Line 106: 2nd dot superfluous; exponent (-5) instead of 5