Wind Energ. Sci. Discuss., https://doi.org/10.5194/wes-2020-20-RC1, 2020 © Author(s) 2020. This work is distributed under the Creative Commons Attribution 4.0 License.



Interactive comment on "Development of a numerical model of a novel leading edge protection component for wind turbine blades" by William Finnegan et al.

Anonymous Referee #1

Received and published: 4 April 2020

The paper solves very important problem for wind energy development. Leading edge erosion of wind turbine blades is a critical factor which might increase the wind energy costs and reduce AEP. Thus, LEP is an important solution for the wind blade protection. The advanced finite element model of this new leading edge protection component presents an important result. The model was validated and compared with experimental results. The results are new and original, and the paper should be accepted for publication as it is.

With view on the paper results, it would be interesting to use the validated model for the further development and exploration of LEP materials. It can be interesting to

C1

carry out various parameter studies, and see how the variations of LEP properties can influence the stress distribution. Among these parameters, one can mention the adhesive properties of LEP, viscoelastic properties of materials, stiffness of LEP and other parameters.

Interactive comment on Wind Energ. Sci. Discuss., https://doi.org/10.5194/wes-2020-20, 2020.