

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

William Finnegan et al.

william.finnegan@nuigalway.ie

Received and published: 6 August 2020

Thank you for your review. In response to your comments I have made a few minor edits to the paper: Line 12 has been revised to read "tip speed begin to reach over 300 km per hour", which is in line with the GE's 12MW Haliade-X that has a tip speed of 321 km/h (89.2m/s). The text in Section 3.2.3 has been revised to include: "The mesh for the computational domain of the blade substrate is defined using shell elements and the mesh for the computational domain of the LEP is defined using solid elements, where a contact region is defined between the outer blade surface and the inner LEP surface. The adhesive used for the physical demonstrator is also modelled using this

C1

contact region, where a "bonded" connection is defined, which restrains movement between the two surfaces in both the normal and tangential direction and, therefore, assumes a 'perfect' attachment."

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

C2