Wind Energ. Sci. Discuss., doi:10.5194/wes-2017-5-RC2, 2017 © Author(s) 2017. CC-BY 3.0 License.



## **WESD**

Interactive comment

## Interactive comment on "Design of advanced airfoil for stall-regulated wind turbines" by Francesco Grasso et al.

## **Anonymous Referee #2**

Received and published: 27 March 2017

The paper address a relevant scientific questions within the scope of WES. Although not "revolutionary", the paper presents an original mix of design tool and procedures. Thus the paper is, in my opinion, of broad international interest. The Objectives are very clearly outlined. Considering the hypotheses, I would appreciate a discussion about the "2D stall assumption" implicitly contained in this design procedure. Under the mentioned 2D assumption, the methods are valid and are indeed very well described. Thus I agree with reviewer N.1 that the reliability of RFOIL stall prediction must in some way documented but, furthermore, I think that a sort of validation of the whole rotor behavior (including 3D effects on the stall) should be in some way included (or, at list, this point should be discussed). An interesting article including this point is: A. Le Pape\* and J. Lecanu, 3D Navier—Stokes Computations of a Stall-regulated Wind Turbine, Wind Energ. 2004; 7:309—324 (DOI: 10.1002/we.129). Beside this "weak-

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ness" the article is very clear, and well written. As a last point, I would suggest to include a more complete list of references so that the article results more framed in the existing literature.

Interactive comment on Wind Energ. Sci. Discuss., doi:10.5194/wes-2017-5, 2017.

## **WESD**

Interactive comment

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