

***Interactive comment on “Online model calibration for a simplified LES model in pursuit of real-time closed-loop wind farm control” by Bart Doekemeijer et al.***

**Anonymous Referee #1**

Received and published: 4 May 2018

General comments:

Good and relevant work.

Specific comments:

I have concerns about the validity of neglecting the vertical dimension, given significant effects such as vertical meandering, wind shear and veer. There should be more comment about this.

In the introduction, some re-wording is necessary: "all commercial turbines are currently disconnected from the electricity grid by their power electronics" is not right. They

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are certainly connected, it's only that the rotational speed is decoupled from the grid frequency. Also in the next line, "grid-disconnected renewable energy plants": maybe "non-synchronous" or some other expression, but not "grid-disconnected"!

Technical corrections:

Equation (5): Actually there is now plenty of evidence that the cos-cubed law for the effect of yaw on power coefficient is not at all correct. There should at least be some comment about this.

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Interactive comment on Wind Energ. Sci. Discuss., <https://doi.org/10.5194/wes-2018-33>, 2018.

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