

Interactive comment on "An active power control approach for wake-induced load alleviation in a fully developed wind farm boundary layer" by Mehdi Vali et al.

Boersma

s.boersma@tudelft.nl

Received and published: 6 December 2018

Dear authors,

I was pleased to see this work and I believe that the authors are working on an important and interesting control problem. However, I also believe that a significant amount of literature is missing. For example:

- 1) V. Spudic, C. Conte, M. Baotic, M. Morari, "Cooperative distributed model predictive control for wind farms", Optimal Control Applications and Methods, 2014.
- 2) S. Siniscalchi-Minna, F. D. Bianchi, M. De Prada Gil, C. Ocampo-Martinez, "A wind

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farm control strategy for power reserve maximization", Renewable Energy, 2018.

- 3) H. Zhao, Q. Wu, Q. Guo, H. Sun, Y. Xue, "Distributed model predictive control of a wind farm for optimal active power controlpart I: Clusteringbased wind turbine model linearization", IEEE Transactions on Sustainable Energy, 2015.
- 4) T.N. Jensen, T. Knudsen, T. Bak, "Fatigue minimising power reference control of a de-rated wind farm" Journal of Physics: Conference Series, 2016.
- 5) A.D. Hansen, P. Sørensen, F. lov, and F. Blaabjerg, "Centralised power control of wind farm with doubly fed induction generators", Renewable Energy, 2006.
- 6) B. Biegel, D.D. Madjidian, V. Spudic, A. Rantzer, J. Stoustrup, "Distributed low-complexity controller for wind power plant in derated operation", International Conference on Control Applications, 2013.
- 7) D. van der Hoek, S. Kanev, W. Engels, "Comparison of Down-Regulation Strategies for Wind Farm Control and their Effects on Fatigue Loads", American Conrtol Conference, 2018.
- 8) S. Siniscalchi-Minna, F. D. Bianchi, C. Ocampo-Martinez, "Predictive control of wind farms based on lexicographic minimizers for power reserve maximization", American Control Conference, 2018.
- 9) S. Boersma, B.M. Doekemeijer, S. Siniscalchi-Minna, J.W. van Wingerden, "A constrained wind farm controller providing secondary frequency regulation: an LES study", Renewable Energy, 2018.

These are all articles that deal with wind farm APC/reference tracking/derate strategies, though are all not addressed. The last article in the list is even using the same high-fidelity code as the submitted work.

I believe that the above literature should be addressed in the submitted manuscript.

Regards

Interactive comment on Wind Energ. Sci. Discuss., https://doi.org/10.5194/wes-2018-70, 2018.