Interactive comment on “Unlocking the Full Potential of Wake Steering: Implementation and Assessment of a Controls-Oriented Model” by Christopher J. Bay et al.

Christopher J. Bay et al.
christopher.bay@nrel.gov

Received and published: 24 September 2019

The authors would like to thank the reviewers for their comments and time spent reviewing our paper. We have been working diligently to address the reviewer’s comments and to update our results based on some recent changes/fixes to the FLORIS wake simulation code. During this process, as we have investigated some of the details requested by the reviewers and dug into some of the details behind the turbulence model, we have identified that the curled wake model can be tuned to match several cases very well, but as implemented, these tunings do not cover the full range of environmental conditions without additional retuning. Through these efforts, we have found
areas of the implementation of the turbulence that we plan to improve over the next 6-12 months.

While our initial intention with this paper was to quickly publish the preliminary results and the model details with the open-source code so that users could have a reference (which was accomplished with the record available on Wind Energy Science Discussions), we are now more of the mind of taking additional time to refine the implementation, further validate the model predictions, and more fully address the range of turbulence and wind conditions that can exist for the final version of the paper. As such, we will withdraw this current paper and re-submit an updated version in the near future, allowing us to fully address the reviewer's comments and implement the additional improvements that we have decided to pursue.

Again, thank you for your time and effort. Your comments and feedback help us to publish the best research possible.