

Dear Editor,

thank you again for your comments and for taking the time to review our work.

In the following we go through your comments and provide, for each one, both our responses and the actions we have taken to accommodate your feedback in the revised manuscript.

Best regards,

The Authors

Editor Comment(s):

- Concentrate the discussion on ultimate conditions, which is the novelty of your study. This will improve readability and should drastically simplify the discussion, which at the moment is confused and difficult to follow.
- Move the discussion on fatigue to a less prominent position (for example, in an appendix). Better highlight the limits of your results on fatigue (which might increase or decrease, depending on the site and specific location of a turbine in a farm).
- Use design as a way to preliminarily quantify the effects of changes in ultimate loads and tip deflection. Even if fatigue is approximate (see above), still the re-design exercise can have the role of indicating the impact of the changed ultimate states. Clearly indicate the qualitative nature of the re-design and its limits.
- Reflect the new focus also in the title, abstract and introduction.

Authors Answer(s):

Thank you again Editor for your comments.

The above points have been addressed in the submitted reports. In particular, the fatigue analysis has been further reduced in the paper (but not completely removed) and, most important, we better highlighted the limitations of this simplified fatigue analyses, also by adding some comments with respect to the present literature. This is also done in the final "design" section, where we tried to better explain the procedure (i.e. the need to have the fatigue loads in the baseline and the need to highlight the impact of the ultimate loads in the re-designed one). Title, abstract and introduction have been consequently updated. **The final paper has in red the new sections/sentences.**

Editor Comment(s):

- Avoid claiming that the study is general because you look at sensitivities. Clearly your results still depend on the specific turbine that you have selected.
- Eliminate statements to the effects that loads are overlooked (abstract), because clearly loads cannot be overlooked by industry given the obvious implications on safety.
- Please review all the discussion from line 128 to the end of Section 2. I cannot follow the logic, and I suggest to eliminate it altogether.
- The discussion on directional dependence of fatigue (from line 259 onwards) is rather obvious, please reduce or consider eliminating.
- "Downwind turbine" might be misunderstood, use downstream or reword.

Authors Answer(s):

- We put even more stress on the fact that the results are highly dependent on the model used.
- We added in the abstract the words "in the literature" to better explain that what has been overlooked are not the loads in the Industry, but our proposed analyses on ultimate loads in the scientific literature.

- Section 2 has been simplified and reduced as suggested. Thanks again for this comment, we also now think that this section is more readable.
- Also the discussion on the direction of fatigue loads has been removed. We also think it was rather obvious, even if a lot of papers still do not present the worst fatigue direction, but only the classical fore-aft and side-side.
- “Downwind” has been replaced with “Downstream”