

**Response to the editor:**

Dear Editor,

We sincerely appreciate your valuable feedback and prompt response to our paper. We thank you and the reviewers for taking the time and effort to read and review our work, and for providing us with insightful comments and ideas to improve the quality of the article.

Based on the feedback from the last reviewer, we have modified the body of the manuscript. The reply to the reviewer with details of some analysis was provided in the previous round of revision.

We hope that our revised version adequately addresses your expectations and meets the concerns of the respected reviewer.

Sincerely,

**Reply to the Editor's comments**

In the revised version of the manuscript the authors have addressed the majority of reviewer comments. There is one outstanding comment regarding the effect of environmental conditions (such as wind speed) that the authors should address in a minor revision before the paper is published.

Additional private note (visible to authors and reviewers only):

Dear authors, one of the reviewers made the following comment on the revised manuscript:

"The authors conclude that 65% of fatigue damage is directly related to LFFD when  $m=5$ . This is an interesting conclusion however, this number is conditioned to a few more variables (variability of wind speed, waves, etc), which are completely neglected by the authors. Therefore, I consider it important that the authors explore these effects in the quantification of LFFD."

Please address this comment in a minor revision.

As the reviewer demanded, we clarified in the manuscript text that there is a clear relation between the SCADA parameters and the LFFD-factor, but to our knowledge, there is no widely accepted way to find this link. In the conclusion, we emphasized that the results are site-specific and might change for other sites/turbines.

Furthermore, the manuscript is checked carefully once more to avoid any typo or missing information.