I appreciate the thoroughness of the authors' responses and changes.

R: We are very grateful again for the degree of involvement in the revision, which has undoubtedly allowed us to improve the manuscript.

Having said that, I still recommend the following:

Introduction:

- I see the existing reference to Harris 2009 and the new reference to Stammler et al 2024 in lines 27-28. Regarding the matter of a fretting corrosion factor and aside from the critical oscillation angles, Table 16 in Section 7 of Harris 2009 does provide a recommendation for maximum stresses for minimizing fretting corrosion. When compared to the operational stresses, this does provide a safety factor, so I so support the use of the phrase "…or high safety factors…" here. This Section in Harris 2009 also speaks to the importance of grease additives with respect to boundary lubrication, coincidentally. I only mentioned this here for our own understanding – I am not suggesting that anything be changed in the manuscript in this respect.

  R: We agree that although the existence of a safety factor is not explicitly specified in Harris, a comparison with respect to the angle of rotation can provide it. We also appreciate this clarification for our own understanding.

- I appreciate the corresponding changes with respect to the main objective of the paper in lines 59-61. However, regarding the revisions I think calling this a "complete methodology" might be a little overstated. I might suggest revising these lines to be a bit more direct "The objective of this work is to propose a methodology to analyze the relative contributions of productive and non-productive periods of wind turbine operation to pitch bearing fretting damage, including identification of the most likely location of damage on each raceway."

  R: Again, we agree that after the discussion in the previous review of the actual capabilities of the methodology, referring to it as complete is a bit overstated. Since the proposed phrase fits perfectly with the work, we have decided to take it.

- Line 64: as written, this sentence still implies the wear-based energy model is in IEC 61400-3-1. Please change to "IEC 61400-3-1 (61400-3-1, 2019) are evaluated through a wear energy-based model." and update the citation or "IEC 61400-3-1 are evaluated through a wear energy-based model." and delete the citation.

  R: We have revised this point and deleted the reference

- I think the added description in lines 65-70 is very useful, but I might still recommend further tweaking it a bit to be more explicit. The old adage that "all models are wrong, but some are useful" applies here I think, so as always it is very important to state the conditions under which the model applies and for what it can be used to determine. I recommend something like the following "In this work, the damage evaluation has been addressed using energy-based wear models that

have previously demonstrated adequate correlation to damage (Brinji et al., 2020), (Schwack et al., 2018), (Cubillas et al., 2022). Although the present analysis does not consider the effect of the lubricant, pitch bearings are likely to be in boundary lubrication conditions when the pitch angle is not changing in non-operative periods and even in some low wind speed operations in which the model is valid. Therefore, the authors believe that the proposed method provides a reliable framework for the prediction of the most critical areas on the raceway where fretting damage can occur as well as a basis for comparison between the severity of different wind speeds and operating conditions." I think this is the best (clearest) statement of the paper's hypothesis Having said that, I'm not enough of an expert in fretting corrosion to weigh in on its validity. I would be especially interested in my fellow reviewers' opinion in this respect.

R: We agree with this point as well, we like the proposed sentence, and we take it for the manuscript.

Methodology

- Caption of Figure 2 and Table 1. The variable r_pw is specified as the "Bearing pitch diameter", but the variable name implies a radius. The figure itself could be either, although 3610 mm would seem to be a diameter for a turbine of this size. If it truly is a diameter, I recommend D_pw to align with typical usage.

  R: The error is in the nomenclature, it should be d_pw, we have corrected it.

Results and Discussion

- Figure 7 I will admit is better but maybe a but confusing. In Figure 5 it looks like x' is vertical (wrt the page itself) and y' is horizontal (also wrt the page). The discarded figure you show in your author's response has a similar orientation. However, is Figure 7 "flipped" as shown, in which x is horizontal and y is vertical? Or are these mislabeled and should also be x' and y'? To be honest, I rather like your discarded Figures as they are much easier to interpret – in an electronic journal I wouldn't sweat the extra space.

  R: Yes, you are totally right, x'/y' direction were flipped. According to this comment, we have added the discarded picture to make the interpretation easier, and we have corrected the x', y' axis.

- Line 310: the statement "Therefore, it appears that locking the rotor at non-productive times DLC6.4 could help to limit the damage" could be met with some amount of resistance. Although from this analysis this might help the pitch bearing, I believe many would say it could harm the main bearing, gearbox teeth and bearings, and generator bearings. Additionally, compared to DLC 1.2 isn't the fretting in DLC 6.4 low (maybe even 3 orders of magnitude lower in Figure 8)? At least, that is my takeaway. So, practically speaking, even if you did lock the rotor, would it matter? The last Conclusion also reinforces my point here.

  R: Considering this comment, we have decided to delete this sentence.

- Lines 327-331: I appreciate the addition here with respect to new work, however, I recommend it be moved to the Conclusions as this generally applies to the whole thing and not just what can be concluded from Figure 9 which immediately precedes it.

  R: We fully agree that this text would work better in the conclusions section. We have moved it.

Minor grammatical comments:

- Line 26: I would add "..of the pitch bearing raceway..." here.

  R: Corrected

- Line 77: "what allows to create" is better phrased as "that allows creation of" or "that determines"

  R: Corrected

- Line 304: "dagame" is still mis-spelled.

  R: Corrected

Again we would like to thank the reviewer for his time and comments.