

The reviewer strongly believes that the paper presents insights into fatigue loading for large floating wind turbines with flexible drivetrains, but not a lot of focus was given to the veer aspect of the study. The results appear original and are well written.

Page 1: Abstract: This is a nontechnical review comment – In academic writing, an abstract does not include intext references (e.g Gaertner et al., 2020, Allen et al., 2020, etc). Rewrite to suit.

Page 1: Introduction: Line 24: It would be beneficial to state or quantify the layer in which you are determining the ABL (in the form of an elevation, say, 100-300m or whether it is stable or unstable, or NBL)

Page 1-3: Introduction: The introduction so far is well structured. The roadmap is clear. However, where you have descriptions like “becomes more uncertain” or “questionable”, it would be best to quantify this uncertainty where possible.

Page 1-3: Introduction: The introduction so far is well structured. So, the roadmap is clear. However, where you have descriptions like “becomes more uncertain” or “questionable”, it would be best to quantify this uncertainty where possible.

Page 3-10: Introduction: Make a bold statement about why semisubmersible only was chosen. It will prevent questions about other floating systems

Page 5: Methodology: Line 106: The reviewer is interested in how the kxx, kyy, kxy, and kzz is mapped into SubDyn spring elements. Specifically, how you rotate the off diagonal from the local coordinate frame of the bearing into SubDyn’s element axes. This might interest the general reader too, so consider including it in the paper.

Page 3-10: Methodology: Line 115: Not critical, but is there a reason why the time steps differ between 15MW and 22MW models? Was dt chosen to satisfy stability and accuracy in the Craig-Bampton RO model?

Page 7: Methodology: Line 147: Are semisubmersibles not sensitive to directional spreading, since you use a Pierson-Moskowitz spectrum for wave generation. Did you model the wave as unidirectional.

Page 9: Methodology: Table 6: Is there a reason why your grid width (264/316 m) only barely exceeds the rotor diameter?

Page 14-19: Result and discussion: You present DELs for SV, ST, SVT, and SBT, but without discussing the linearity or complexities of the wind veer cases, readers cannot understand the incremental effect of veer itself. There should be a baseline case (i.e., without veer) for

comparison. I believe this is what the study meant by analyzing the influence of veer. This is the comparison the reviewer expects. Otherwise, the topic could simply be “Fatigue loading for large floating wind turbines with flexible drivetrains.”

Page 18: Result and discussion: It would be better to keep the y-axis uniform in Figures 12, 13, and 14, as it appears the magnitudes are the same when it is not.

Page 20: Conclusion: Again, to be clear, you rightly discussed the effect of veer, perhaps using your prior knowledge of the topic, but did not provide details on how veer drives DEL increases. The methods and results lack a clear, standalone “veer-only” case and do not show how veer was implemented or isolated in your analysis.