

The manuscript has improved and the authors have adequately addressed most of the comments. Some minor remarks still remain unaddressed and are reported in the following:

- A general revision of the English is recommended. For example, line 301 “produce” not “produced”.
- The following comment was not addressed in the manuscript:
Comment RC1- No. 11: P12 L223: Do the authors have an explanation on why pitch response (fig 12a) at the systems natural frequency seems to be almost completely missed by the numerical models?
Response to comment RC1- No. 11: We have discarded that the difference in the PSD peaks are caused by low frequency 2nd order effects because this difference also appears at the turbulent wind only cases. Thus, we believe that the difference in PSD pitch peaks are related with uncertainties in the characterization of the couplings in DoF of the retention systems and the changes of the hydrostatic coefficient in pitch that are occurring in the experiments but not modeled in OpenFAST.
Please include this hypothesis in the manuscript, it could help other researchers that are observing the same. Also, underprediction of low-frequency response is also observed in various literature works, that may help explain what you observed: [1,2]
[1] Robertson A N, Gueydon S, Bachynski E, Wang L, Jonkman J, Alarcón D, Amet E, Beardsell A, Bonnet P, Boudet B, Brun C, Chen Z, Féron M, Forbush D, Galinos C, Galvan J, Gilbert P, Gómez J, Harnois V, Haudin F, Hu Z, Dreff J L, Leimeister M, Lemmer F, Li H, Mckinnon G, Mendikoa I, Moghtadaei A, Netzband S, Oh S, Pegalajar-Jurado A, Nguyen M Q, Ruehl K, Schünemann P, Shi W, Shin H, Si Y, Surmont F, Trubat P, Qwist J and Wohlfahrt-Laymann S 2020 OC6 Phase I: Investigating the underprediction of low-frequency hydrodynamic loads and responses of a floating wind turbine *J. Phys.: Conf. Ser.* **1618** 032033
[2] Wang L, Robertson A, Jonkman J and Yu Y-H 2022 OC6 phase I: Improvements to the OpenFAST predictions of nonlinear, low-frequency responses of a floating offshore wind turbine platform *Renewable Energy* **187** 282–301
- **Figures 7-16:** No values are present in the x-axis. Please add labels to the x-axis of the PSDs if possible. I suggest normalizing the x-values by some physical parameter. A good choice could be the surge natural frequency.