

Revised manuscript review – note review of changes or unaddressed comments from previous review.

Abstract:

Line 5 ‘the deep-water floating wind reference case’. Not clear what ‘the’ refers to, suggest ‘a’ since it defined in this work rather than a previously established benchmark.

Reply: Agree, it is revised as suggested.

Section 2.1 improved clarity and caveats.

Resource dispatch logic – This provides improved clarity around resource constraint logic however a further recognition that in a time based contractual availability approach, this logic would not be rigidly implemented and is a limitation of the modelling approach should be added.

Reply: Added a sidenote: “It should be noted that, in practice, maintenance prioritization under contractual conditions, such as time-based availability contracts, may be more flexible and depend on contractual considerations. This aspect is not represented in the present models.

Turbine operational status – the changes from turbine ‘shall always’ to ‘may’ indicates a difference in logic, was this change implemented and simulations carried out again? If not, confirm how a decision was made as to whether the turbine was shut down or not.

Reply: That was miscommunication in the manuscript. It is meant to be “shall always”, whenever there’s technician working on the turbine the turbine cannot be operating for safety reasons. It is updated.

Section 2.2 Improved clarity around process and justification for approach.

Reply: We have carefully reviewed Section 2.2 but were unable to identify which specific part the comment refers to. We would appreciate it if the reviewer could indicate the paragraph that would benefit from improved clarity.

3.1 ‘Based on experience’ is not sufficient evidence of 20 simulations providing sufficient convergence. Some quantification / evidence of convergence vs number of simulations should be provided.

Reply: Based on the existing 20-run results, we did a convergence assessment and it shows that the 20 runs already achieve quite stable results (<2% change after 15 runs for both models). Appendix B is added for clarity.

Section 3.2 – improved description and justification of study approach behind this. Clarity around model logic implementation

Reply: We have carefully reviewed Section 3.2 but were unable to identify which specific part the comment refers to. We would appreciate it if the reviewer could indicate the paragraph that would benefit from improved clarity.

Future work – suggest reflecting how some of the limitations now acknowledged in the study could be overcome in future work.

Reply: The last paragraph is added with: “Future work could, for example, leverage operational data from original equipment manufacturers (OEMs) and wind farm operators to validate and

refine maintenance and logistics models, while incorporating more realistic dispatch strategies, contractual arrangements, and operational decision-making processes.”