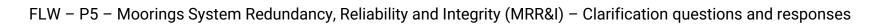


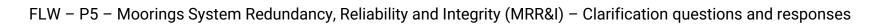


Question No.	Question	Response
1	Please confirm if the intention of the "reliability analysis (strength and fatigue)" is to perform a numerical analysis of the mooring system response (e.g. loads and offsets) under both strength and fatigue loading conditions, and use the output to inform an evaluation of the reliability of different mooring systems? Is it correct to assume that 'reliability' is not expected to be a direct output of this analysis but will be inferred from the system performance?	The motivation of this project is to assess reliability specific to floating offshore wind mooring design rather than inferring from other sectors (such as oil and gas or maritime). We welcome suggestions from bidders as to the best approach to achieving this specific to floating offshore wind mooring system design.
2	Will directional metocean data be made available or is TENDERER required to generate their own scenario? If the data is to be supplied following contract award, please advise on the approximate contents and format of the data, and whether the data considers a single or multiple locations.	Generic met ocean conditions and geographical scenarios may be supplied, but bidders are encouraged to suggest their own conditions and scenarios if relevant to this project.
3	Is there a requirement for specific floating system concepts to be modelled in the numerical analysis (for example the 4 reference foundation models considered in the Floating Wind Yield study for this JIP), or is TENDERER required to make assumptions? Please clarify if one or more floater concepts are expected to be modelled to support this evaluation?	Carbon Trust have information on four platform types at 15MW scale which may be used for generic scenarios. It is the expectation that modelling for scenarios experienced across all platform types or mooring configurations would not need to be repeated (i.e., making use of a base-case) however scenarios unique to one or multiple platform types or mooring configurations may need to be considered if relevant.
4	Please provide further clarification of the nature of the required inputs. For example, will this simply require reporting details of CAPEX / OPEX for different mooring systems based on the outcomes of this scope? Or will it be necessary to have a more controlled interface with the JIP Cost Model?	The requirement is to establish a level of cost data to make comparisons between mooring system types versus performance, and the effect various mooring types have on CAPEX and OPEX. The results of this study will then feed into the wider Floating Wind JIP cost model.



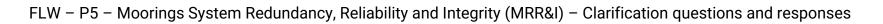


5	Does the Floating wind JIP have requisites about how many combinations of floater type / mooring system / WTG rated power should be investigated? Or should we propose a number of combinations?	See response to question 3.
6	Will we have access to the generic floater models of the Floating Wind JIP?	See response to question 3.
7	Will the Floating Wind JIP provide the directional metocean data? Should a single site or several sites be considered?	See response to question 2.
8	In WP1, are there any geographic constraints on the site conditions to be considered? Should regions affected by tropical cyclones be considered?	See response to question 2.
9	In WP3, should contractor propose a baseline cost model for a floating wind farm or will this be provided by the Floating Wind JIP?	See response to question 4 however a baseline wind farm cost model will not be provided by the Floating Wind JIP.
10	Is there a specific location in which the design is to be tailored for?	See response to question 2.
11	Will metocean data be provided (environmental contours, wind speeds, current profiles, etc.), or would the environment need to be defined by the contractor?	See response to question 2.
12	Is there an assumed water depth?	See response to question 2.





13	Has the hull structure for the floating foundation been developed or will the contractor need to propose a hull form?	See response to question 3.
14	What return period events constitute maximum operational environment versus survival conditions?	It would be the responsibility of the bidder to propose or establish maximum operational environment versus survival conditions.
15	Is there an existing or preferred mooring equipment and installation contractor partnered with the JIP that could provide a cost estimate based on the design of the mooring system?	No installation contractor is partnered with the JIP we would look for the contractor to develop indicative cost indicators to different designs proposed.
16	Have the wind turbines been selected so as to provide a basis for wind loading?	See response to question 3.
17	What is the design life for the offshore wind field?	A design life of 25-30 years is assumed but responsibility to confirm this would fall to the preferred bidder.
18	Is there a requirement for using any particular analysis method, or for the minimum requirements of the analysis method to be used?	It would be the responsibility of the bidder to propose analysis methods and minimum requirements.
19	The scope in the ITT does not include reference to interfacing with other stakeholders and players in the industry, which is likely to be required in relation to the collection of failure and reliability data. Would it be responsibility of the bidder to establish these interfaces?	Although the Floating Wind JIP partners will provide input regarding the specific project requirements, it is expected that the bidder will have sufficient contacts to engage with wider industry and obtain the required information independently.





20	The ITT does not specify the type of platforms and floating wind concepts that should be part of the study. Should the study cover the full range of floating wind concepts? Should TLPs be included in the reliability analysis?	See response to question 3.
21	It is likely that the moorings will be different depending on water depths and site conditions. Is it expected that the bidder makes reference to a specific set of scenarios with a limited range of water depths / conditions applicable for the assessment?	See response to question 2.
22	The text in the ITT makes reference to the fact that "mooring system should be considered as part of a coupled system (specifically interaction between moorings, platform, and turbine) throughout the project". Does this imply the use of coupled modelling for any dynamic analysis scope?	The purpose of this study is to consider moorings as part of the whole turbine / floater /moorings system, rather than the moorings alone. It would be the responsibility of the bidder to propose whether coupled modelling is required to achieve this outcome.