



Floating Wind – What Insurers care about. Wavec Seminar 2019

Michael Bullock



Who are MDS and RRA?

- MDS has grown from its roots in Portugal to become a multinational insurance and risk consulting group with worldwide reach. It is the only Portuguese Lloyd's Broker and therefore able to access specialists in emerging and complex risks;
- RRA is a specialist risk and insurance manager / consultant with a particular expertise in innovative offshore renewables projects.



Insurance Market conditions?

- Hard. Rising rates and deductibles, contracting coverage;
- Particularly marine and construction – many insurers scaling back or pulling out;
- Offshore Wind marginal – 57 out of 60 projects with cable claims ave. €25m, fibre-optic quality and severe weather;
- Concerns over stretched resources, human error, squeezed deadlines and accelerated rollout of larger models.



Insurer concerns in offshore renewables



Floating wind observations & concerns (1)

- Need clearer fabrication, weld standards;
- Dynamic cable configuration / static interface;
- Responsibility and details for TP export cables;
- Numerous mechanical problems experienced;
- Loss of auxiliary power (<8MW) if repair delay;
- Revenue (insurance?) loss if return to shore;
- OEM warranties ex marine ops, problems due to sub-structure, in tow or due to owner controls;
- Moorings standards, site-specific and shared;



Floating Wind observations & concerns (2)

- Dynamic cable length & handling time exposure;
- Onshore mock cable config v trial at site;
- Issues with cable pull-in at floating s stn;
- Semi-sub wave-load impact over time;
- Moorings with 3 connections, larger turbines;
- Inspection regime for wear inc. blades, moorings;
- Corrective O & M: offshore / onshore facilities?
- Legal classification, and liability risks;
- Approval to tow into port if leak.



Check list for insurers

Insurers risk priorities:

- a) Site conditions, moorings and substructure
- b) Length of tow, inc. for O & M
- c) Suitability of turbine
- d) Fabrication site and contractors;
- e) Maintenance and repair facilities and plan;
- f) Obligations for, and scope of, warranties;
- g) Project certification.



Mitigating factors

- Design for access, retrieval, onboard protection;
- Project design issues - connectors, redundancy, spares;
- Project planning, contingencies & unscheduled costs;
- TPV of fabrication process, design, moorings, cables;
- Experienced(!) contractors for installation plan;
- MWS to check methodology, tow plan, vessels ...;
- Supplier SLA's for testing, spares and lead times;
- Detailed inspection regime
- Insurance /risk experts to guide market approach.



How much?!?



Insuring floating wind

- Currently rates 50% to 100% higher than for fixed, limited cover on structure, inter-array cable, moorings;
- Siting is key – e.g. higher wind sites increase wear, near shore more moorings strain(?) but access to shorebase.

But *Demo projects will enhance confidence:*

- *cost reduces with bigger arrays (shared vessel costs, fixed sub-stations, less cable per turbine ...);*
- *Lessons from Oil and gas FPSO expertise;*
- *Loss, reliability data may prove better e.g. than fixed;*
- *Certification!*



Questions?



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