

Reducing Risk and Insurance Costs in Marine Renewables

Wavec Annual Seminar
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Insurance risk profile - from prototype to commodity



The path to insurer enlightenment

Insurance risk profile – across the renewable energy spectrum



Wave, Tidal, Floating: capacity?, low premium base, high rates, limited cover, poor losses;

Fixed Offshore wind: good capacity, variable premium/loss experience, refining T's & C's;

Onshore wind: near “commoditised”, rates flattening, broad coverage;

Solar PV: Mature market with some insurers offering long term performance / warranty

How much?!?



Drivers of Risk Transfer Cost (1)

- Technology track record
- Methodology track record
- Mooring / foundation track record
- Contractor / equipment / vessel track record & suitability
- Vessel costs, operating limits & weather windows
- Supplier / Spares Risks
- OEM warranty / guarantee availability

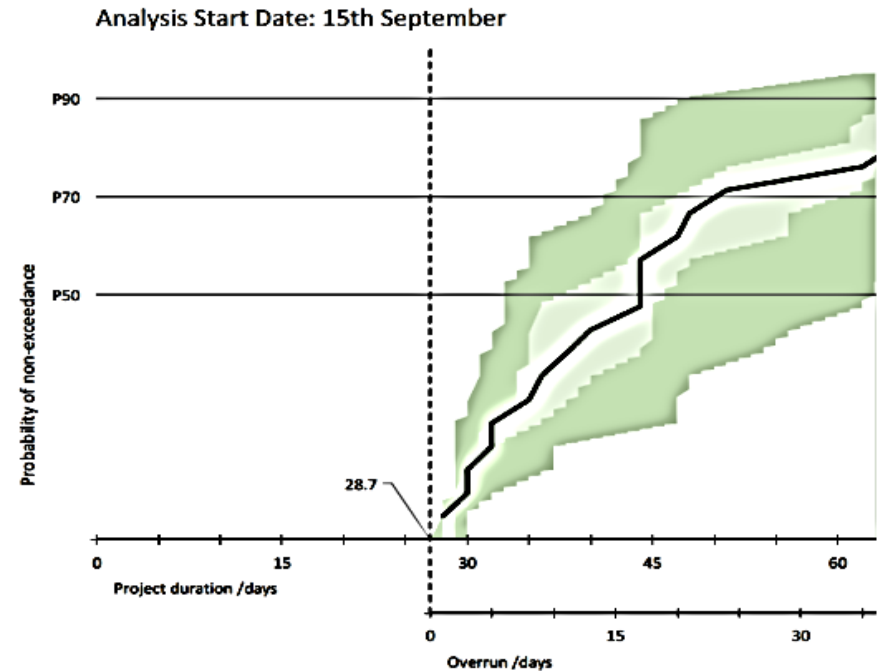
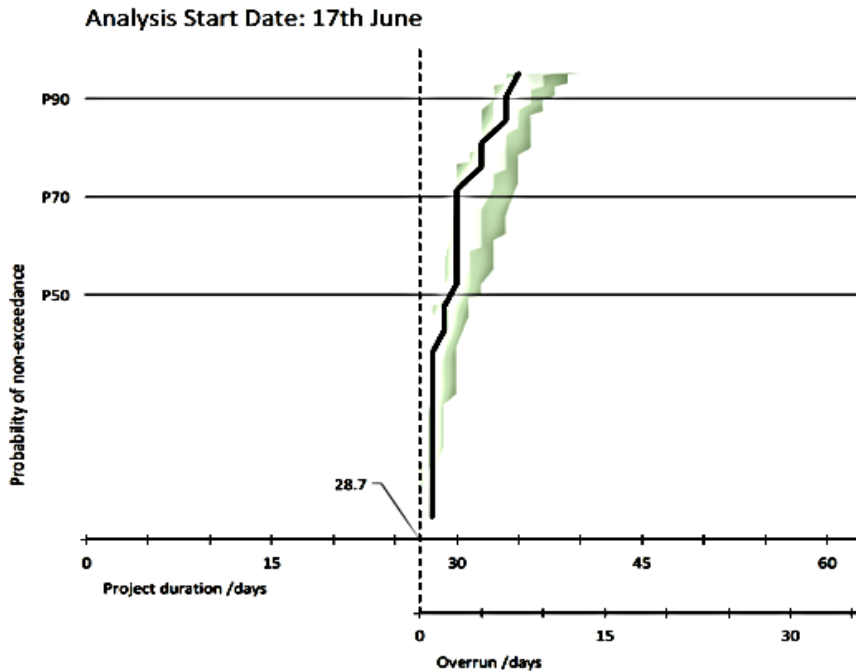
Drivers of Risk Transfer Cost (2)

- Location / Environment / Timing
- Third party exposures
- Cabling exposure
- Regulatory obligations
- Marine Warranty Surveyor oversight
- Insurer appetite & experience
- Extent of risk transfer coverage

Understanding the risks

Analysis Results

Probability of non-exceedance	Days overrun (Start date: 17th June)	Days overrun (Start date 2: 15th Sept.)
50%	2.2	17.0
70%	3.2	20.3
90%	6.6	52.9



Managing costs today

- Design engineering to minimise risk
- Maximise proven ingredients
- Contracting strategy and risk allocation
- Understand weather risk
- Early insurer and MWS engagement
- Use of local expertise
- External risk review
- Understand regulatory requirements
- Optimise risk mitigation package

Moving down the cost curve

- Design enhancements in technology
- Cost-efficient/proven methodologies, moorings, designs, cable protections, contractors & equipment
- Standardisation & O & M efficiencies
- Moving to lower risk environments?

Increasing insurers' confidence levels

The final leap



A mature risk profile

Scale roll-out of successful technologies should lower insurance costs/MW, e.g.:

- Reduction in insured replacement cost;
- Workable data / hours in the sea;
- Cabling – relatively less of an issue?
- MWS support and liability costs diluted?

Broader cover at more predictable rating level.

Questions?



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