

1:10 – The importance of proper insurance and risk management for the WindSCM

Energy & Transport Summit III

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Energy & Transport Summit III Index

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Insurance advisor to the 1st non-recourse financed offshore wind farm
(Princess Amalia Wind Farm)

Risk-, Claims- Engineer and Broker to Project Finance International's 'Best Europe Wind Deal of the Year 2011'
(Global Tech 1)

Advisor to 15GW of offshore grid connections (OFTOs) (UK and Germany)

Government adviser with respect to offshore grid connection issues (Germany)

Significant transactional experience of the largest offshore turbine in 2015 employed across the industry, Samsung's S7.0-171 7 MW turbine (UK)

Client relationships with 8 of the top 15 offshore manufacturers.

MARSH energy:

- 3bn USD annual gross premium
- 12.500 MW offshore wind power
- 40bn USD CAPEX offshore wind
- 50.000 MW onshore wind power
- 75bn USD CAPEX onshore wind

Broker to Project Finance Magazine's European Offshore Wind Deal of the Year 2012 (Northwind)

Broker to Project Finance Magazine's European Offshore Wind Deal of the Year 2016 (Veja Mate)

Insurance advisor to Germany's 1st commercial wind farm (Baltic 1)

Insurance consultant to the largest offshore wind farm in 2015 under construction
(Gwynt y Môr)

Insurance adviser to Scotland's first offshore wind farm and the first under the UK OFTO scheme (Robin Rigg)

Programme placement for the world's 1st large-scale offshore wind farm (Horns Rev)

1:10 – The importance of proper insurance and risk management for the WindSCM Research objectives of the WindSCM Ph.d.

Research objectives of the WindSCM Ph.d. (<http://windscm.com/content/Objectives>)

- Quantification of the wind energy market. Analysis of wind energy market size, technology, and on-going research & development (R+D) efforts
- Wind energy supply chains. Analysis of current and future supply chain designs, strategies, and business models
- End-to-end wind energy supply chain costs. Analysis of generic supply chain cost estimates and detailed cost component analysis
- Requirements for market participation. Types of players involved in the supply chain set-up and their roles and responsibilities both at present and in the future

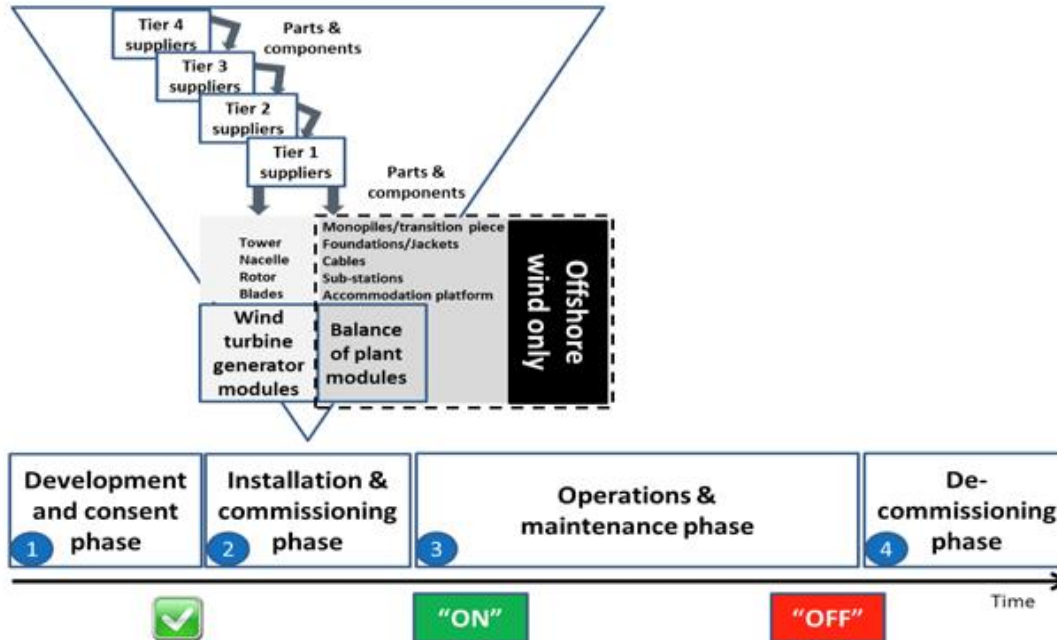
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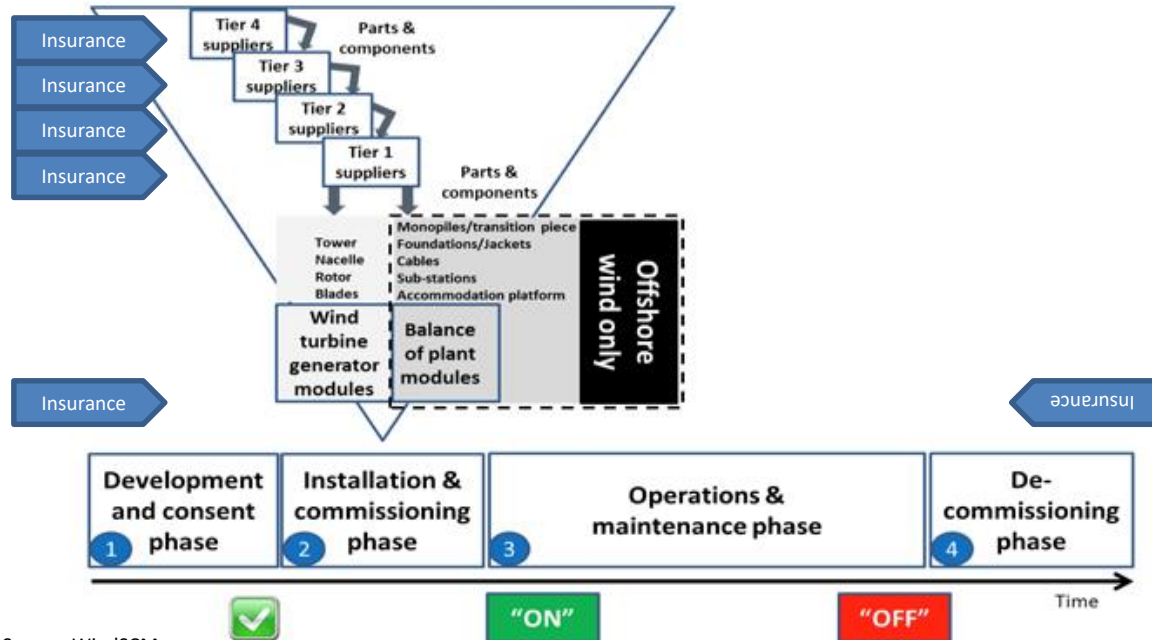
Marsh thesis: Proper insurance and contract risk management reduces the Total Cost of Risk (TCoR) of a supply chain.

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Insurance costs as part of the LCoE of a supply chain



Supplier:

- corporate insurance
- additional insurance

Contractor:

- corporate insurance
- additional insurance

Employer:

- Project insurance

Risks:

- double premium
- coverage gaps
- claims problems

Contractual risks and insurance provisions alignment

Case Study 1: Three times the premium...

Employer's CAR insurance covers:

- Permanent works, materials, including those supplied free to the Project by or on behalf of the Principal, provided the value is included in the Contracts Works Sum Insured.
- An ITEM is included in the above, because it is classifiable as materials included in the Sum Insured.
- **Premium paid** by the Employer.

Contractors/Supplier's CAR covers:

- Works and materials in care, custody and control of the Contractor/ Supplier.
- An ITEM – the same as insured under 1. – is included in the above, because it is classifiable as materials which are or at certain point pass under the care, custody and control.
- **Second premium added** to the contractual price and invoiced to the Employer.

Supplier's Marine Cargo + temporary storage:

- “Owner reserves the right to delay the shipping of all or part of the Works deliverables. In this case the Supplier is committed to keeping the Works deliverables at its premises or at third party premises and to preserve it until approval for delivery is received.”
- An ITEM – the same as insured under 1. or 2., or eventually under both 1. and 2...?
- **Third premium added** to the contractual price and invoiced to the Principal.

Contractual risks and insurance provisions alignment

Case Study 1: ...but no coverage...

A loss occurs:

- A loss due to theft occurs BUT is not detected at the time and is not duly reported to the Police. All insurers deny coverage due to the “unexplained shortage” exclusion in the insurance policies.
- In spite of the ITEM being insured under the
 - Employer’s CAR insurance and/or
 - Contractor’s/Supplier’s CAR / PD insurance for goods under care, custody and control and/or
 - Supplier’s Marine Cargo (+ temporary storage) insurance

there will be no recovery under the insurance policy in spite of the premium(s) being paid THREE TIMES.

- Solutions with the aim to save insurance costs and to receive indemnification:
 - Early and clear definition of insurance regime in the complete contractual cascade
 - Errors and omissions clause
 - Representative Clause

Contractual risks and insurance provisions alignment

Case Study 2: Serial Loss and Serial Defect

The TSA states: “Serial Defect” means a Defect:

- of the same or similar type;
- that occurs in a minimum of ten percent (10%) of the same part or parts of a Major Component;
- and that arises from the same root cause.

Versicherungsvertragsgesetz (VVG) – German Insurance Code – similar with Danish Insurance Code

- Insured’s obligation to prevent the property loss or damage latest after he becomes aware of the second identical defect
 - a) by inspecting and replacing defective parts without undue delay
 - b) in case of upcoming major losses or damage: shutdown of a wind farm
- Who bears the costs and loss of revenue in cases that fall below 10%?
- Solutions:
 - to limit the Serial Defect clause to “second identical defect” or
 - to clarify in the insurance policy (difficult)

Risk allocation and insurance coverage

Case Study 3: “Insurance relevant” clauses

“... are insured all for their respective rights and interests”

- Employer grants right to Contractor under the contract (signed between Employer and Contractor)

BUT

- Does the Employer grant such a right to a Sub-Contractor?
- Insurance policy wording states: Additional Insured: “any person or company the Principal Insured is **obliged by agreement to include as an Additional Insured**, including...”
- What about the Sub-Contractor?
- Solutions:
 - Early and clear definition of insurance regime in the complete contractual cascade Employer/Contractor/Subcontractor

Risk allocation and insurance coverage

Case Study 4: Marine Warranty Surveyor (MWS)

The MWS steps in at a very late stage of the process...the Supply- and Installation Contract states:

- “The Supplier and its subcontractors of any tier shall during the offshore activities comply with all instructions and recommendations of the Marine Warranty Surveyor.
- Any non-compliance with the instructions and recommendations of the Marine Warranty Surveyor (MWS) may result in a breach of the coverage of the Construction All Risks insurance provided by the Employer.
- Should an event or damage occur as a result of the Supplier's non-compliance with the instructions or recommendations of the Marine Warranty Surveyor, the Supplier shall indemnify and hold harmless the Contractor and/or any third party (including the Employer), against and from all damages, losses and expenses, including legal fees, fines and expenses and any claim from third parties faced by the Contractor and directly linked to the non-coverage by the insurance.”

Where does this party suddenly come from?

These risks and liabilities are not allocated correctly...

Risk allocation and insurance coverage

Case Study 4: Marine Warranty Surveyor (MWS)

The MWS comes on stage at a very late stage of the process...

Where does this party come from? These risks and liabilities are not allocated correctly.

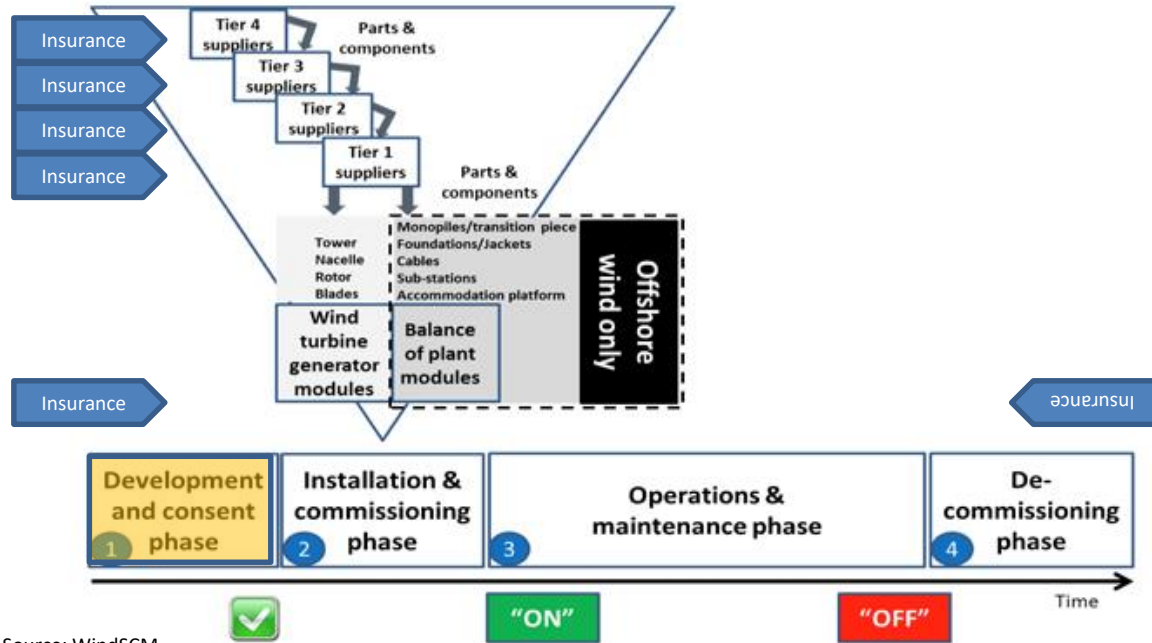
- “The Supplier and its subcontractors of any tier shall during the offshore activities comply with all instructions and recommendations of the Marine Warranty Surveyor.”
- The supplier has to take the full responsibility, although he does not know the SOW of the MWS
- who is bearing the additional costs occurring from formerly unknown “instructions”...?
- A hidden additional liability clause..?

Possible solutions:

- to limit the clause solely to non indemnification of the CAR insurer in respect of loss of or damage to the own supplies (recommendation for the supplier)
- to involve the MWS at a very early stage (recommendation for the Employer)
- to negotiate a MWS clause in the policy which limits the exclusion to loss of or damage to the works and goods of the respective supplier (recommendation for the Employer)

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Insurance costs as part of the LCoE of a supply chain



Conclusions:

Proper contractual insurance and risk allocation lowers the Total Cost of Risk (TCoR) in particular through

- avoidance of double or triple insurance
- minimization of GAPs between contract and insurance policy
- clear definition of the scope of the MWS insurance

Early involvement during the development and consent phase is the key for success.



Thank you for your attention.

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