Delivering insurance solutions for the wind industry

Offshore Insurance – Getting into deep water?

www.windpro-insurance.com

Fraser McLachlan

Introduction – What is WindPro

- An underwriting faciility for Wind Energy
- Insurance for wind energy projects on <u>or</u> offshore
- Gross premium circa USD30,000,000
- Excess of 200 wind projects
- Global Expertise

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WindPro - Offshore

Experience includes:-

- North Hoyle
- Nysted
- Lynn
- Inner Dowsing

Photograph courtesy of www.Airtricity.com

Agenda

- Market Forces ✓ No Control
- Contracts ✓ Greater Control
- Underwriting Expectations ✓ Complete Control

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Market Forces

- Category 4 Hurriane
- 29 foot storm surges
- Katrina – costliest natural disaster in US history
- Largest business interruption claim in history

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Market Forces

How does this impact offshore wind insurance?

- European Underwritng capacity is widely used for US risks
- Either on a direct or reinsurance basis
- Too early to asses the full impact
- Losses expect to be around 60 billion
- Exceeding those of 9/11

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Market Forces

- Category 5 landfall in ‘invetable’
- Recapilistion will be needed
- No more ‘softening’ of the market
- Distinct possibility of rates increasing
- End of the year before full impact can be assesed

Insurance Losses due to Katrina & Rita

Company	Estimate (in USD million)
Lloyds of London	$2,500,000,000
Swiss Re	$1,200,000,000
Montpelier Re	$ 675,000,000
Allianz	$ 585,000,000
Ace	$ 550,000,000
Munich Re	$ 490,000,000
Hannover Re	$ 310,000,000
Codan (RSA)	$ 45,000,000
Mapfre	$ 30,000,000

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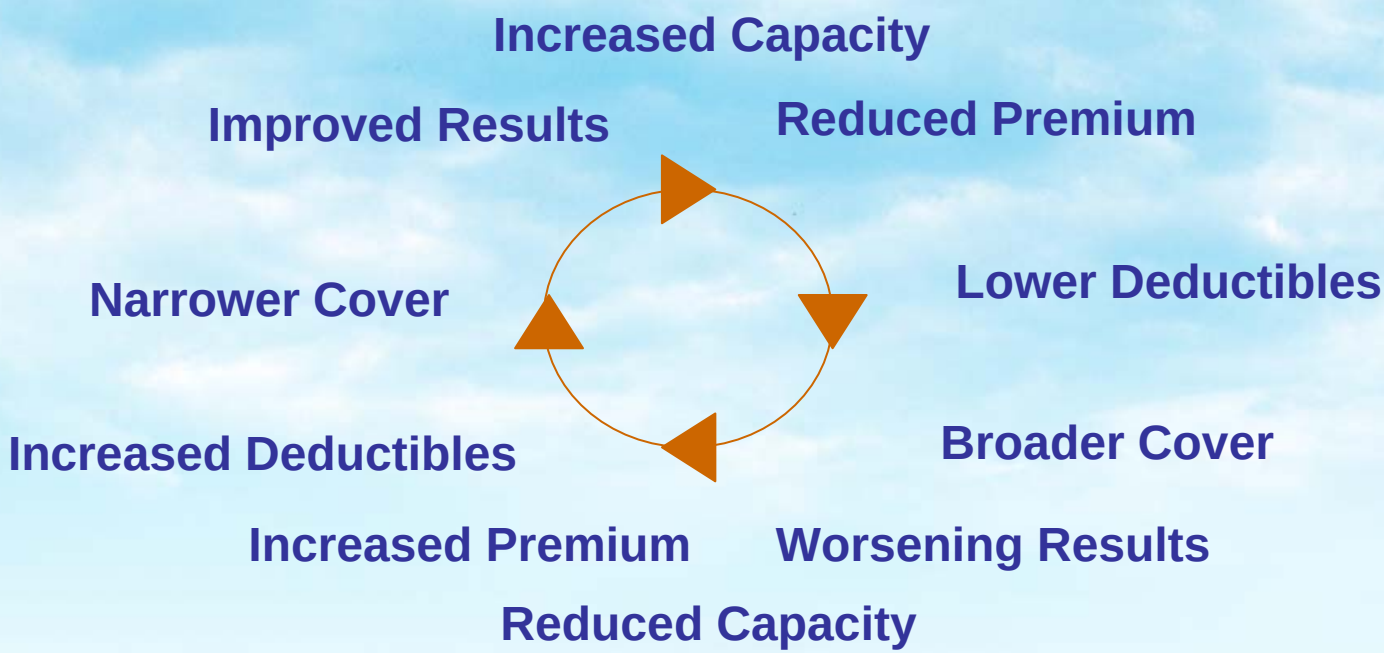
Market Cycle and Interventions



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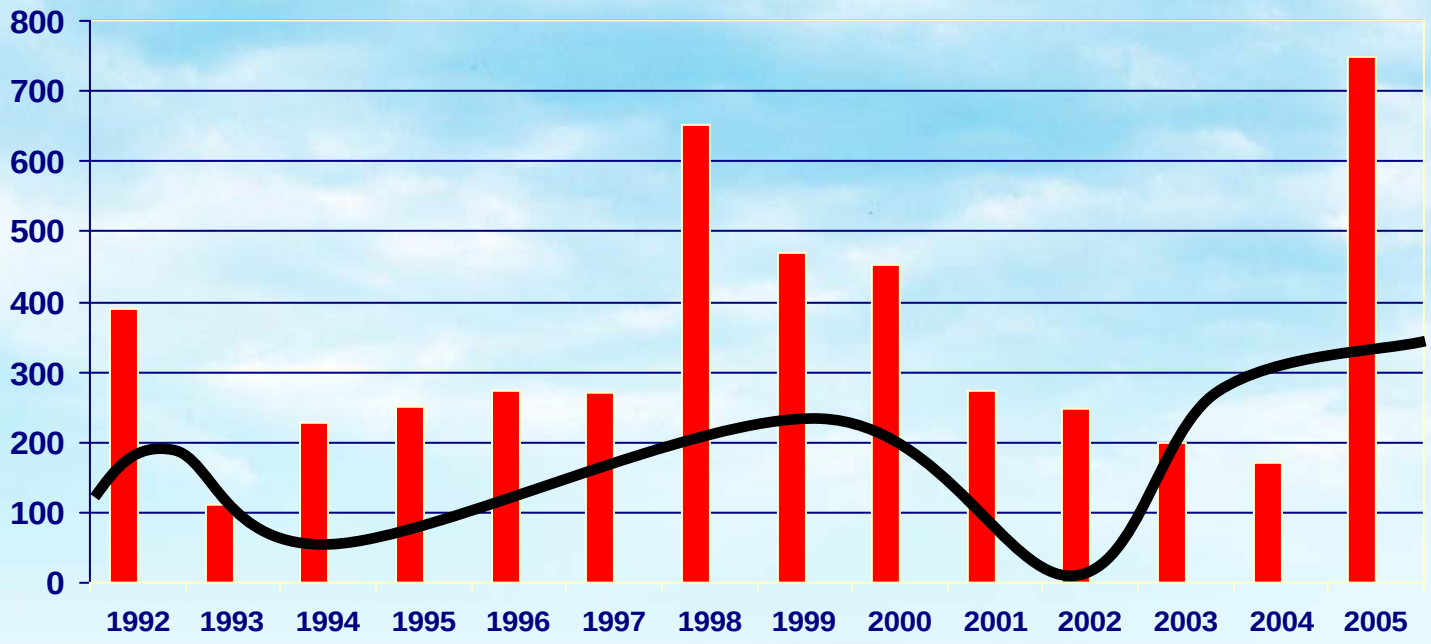
Contracts

- Is the ‘turn key’ the best solution?
- *Risk* is with the contractor until TOC
- Project owner assumes insurance control
- Does an owner controlled insurance work in the offshore wind industry?
- Could projects be bid on an individual contract basis?

Contracts – O&M

- Be clear where the manufacturers warranty ends and insurance starts
- Will the *Warranty* cover defects or
- Will the *Insurance* cover defects
- Which party covers consequential loss?
- Ensure these issues are sorted out <u>prior</u> to contract completion

Offshore Claims vs Premium



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Market Cycle and Interventions

Submission Quality

Survey/Engineering

Differentiation

Attitude to Risk

Increased Capacity

Improved Results

Narrower Cover

Increased Deductibles

Increased Premium

Reduced Capacity

Worsening Results

Broader Cover

Lower Deductibles

Reduced Premium

Post Loss Remedial Work

Maintenance

Operating Regime

Risk Management

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Risks – Wind Turbines

The Main Hazards - Turbines

- **Lightning Strike**
  - To electrical equipment
  - To mechanical equipment
  - To blades
  - To Towers/Foundations
- **Mechanical Breakdown or Fire**
  - Damage to Nacelle
- **Ice**
  - Induced vibration
  - Damage to foundations
- **Windstorm/Earthquake**
  - Damage to blades
  - Damage to mechanical equipment
- **Collision by Vessel/Aircraft**
- **Errosion**
  - Damaghe to foundations
- **Turbine Access**
  - Bad weather

Risks – Balance of Plant

The Main Hazards – Balance of Plant

- **Mechanical Breakdown or Fire**
  - At main substation
  - Failure of circuit breakers
  - Failure of Power Supply to Substation
  - Substation Access
  - Lightning
- **Windstorm**
  - Damage to main cable
- **Collision by vessel**
  - Cable dragging
- **Aircraft Impact**
- **Ice**
  - At shore side
  - Damage to Substation
- **Earthquake**
  - Damage to Main Cable
  - Damage to Substation
- **Erosion**

  Damage to main cable

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Conclusions

- Diligent operators should be rewarded
- Difficult to reward in a ‘soft’ market
- Select your insurance intermediary carefully
- Select your insurance carrier carefully

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Conclusions

- Three key areas:
  - Market cycle
  - Contract terms
  - Quality of underwriting submission
- Differentiation is key
- Approach market early

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