

# **Vattenfall Wind Power Ltd**

## **Thanet Extension Offshore Wind Farm**

Annex C to Appendix 1 to Deadline 4B

Submission: Hazard workshop minutes as agreed  
by Trinity/MCA/Simon Moore

Relevant Examination Deadline: 4B

Submitted by Vattenfall Wind Power Ltd

Date: April 2019

Revision A

Drafted By:	Vattenfall Wind Power Ltd
Approved By:	Daniel Bates
Date of Approval:	April 2019
Revision:	A

Revision A	Original document submitted to the Examining Authority

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**THANET EXTENSION MEETING MINUTES – SHIPPING AND NAVIGATION**


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<b>MEETING ORGANISER:</b>	VATTENFALL WIND POWER LTD
<b>MEETING DATE</b>	29 <sup>TH</sup> MARCH 2019
<b>ATTENDEES:</b>	<p>DAN BATES (VWPL)</p> <p>SEAN LEAKE (GOBE CONSULTANTS)</p> <p>ED ROGERS (MARICO)</p> <p>TREVOR HARRIS (TRINITY HOUSE)</p> <p>STEPHEN VANSTONE (TRINITY HOUSE)</p> <p>SIMON MOORE (DOVER MARINE SERVICES)</p> <p>TREVOR HUTCHINSON (DPWLG/POTLL)</p> <p>VINCE CROCKET (DPWLG/POTLL)</p> <p>RICHARD JACKSON (ESL)</p> <p>DAVID NINNIM ((ESL)</p> <p>ANDY SIME (LONDON PILOT COUNCIL)</p> <p>NICK SALTER (MCA)</p> <p>RAKESH PANDIT (MCA)</p> <p>CATHRYN SPAIN (PLA)</p> <p>HELENA PAYNE (PLA)</p> <p>MERLIN JACKSON (TFA)</p>
<b>APOLOGIES/MEMBER NOT REQUIRED FOR PARTICULAR MEETING:</b>	<p>FENA BOYLE (CHAMBER OF SHIPPING)</p> <p>ROGER BARKER (TRINITY HOUSE)</p> <p>HELEN CROXSON (MCA)</p>

<b>Agenda item</b>		
<b>1</b>	Introductions	
<b>2</b>	Project Summary	
<b>3</b>	Representations	
<b>4</b>	<p>Towards of Statements of Common Ground</p> <p>Study Area / Consultation</p> <p>NRA methodology</p> <p>ES baseline and methodology</p> <p>Conclusions of the NRA / ES</p>	
<b>5</b>	A.O.B	
	<b>Notes</b>	<b>Notes &amp; Actions</b>
	<p><b>Introductions made</b></p> <p>Nick Salter confirmed MCA present as a nonactive role, overarching observer role (as is Rakesh Pandit)</p>	
	<b>Agenda</b>	

	No matters arising	
	<b>Terms of reference</b> Focus on key hazards; focus on operational phase; where consensus is not possible scores will be noted down. No matters arising	
	<b>Assessment</b> Assessment to be based on SEZ <i>in situ</i> . No matters arising beyond question raised by Rakesh on when the baseline will be considered contemporary (with TOWF, without TEOWF)	
	<b>NRA Addendum</b> – Vince asked what it will do – will included updated data validation/analysis; updated risk register associated with SEZ (including consultation). Methods will be the same; updated control list.	
	<b>Methodology</b> – same methodology will be applied. It is standard, and generally 5 steps as standard, employ risk matrix, need to apply controls where base risk is intolerable, step 5 is recommendations (additional controls). No matters arising. <ul style="list-style-type: none"> <li>- Baseline and inherent risk will be primary focus</li> <li>- Define the baseline</li> <li>- Review the inherent risk</li> <li>- Cost benefit – won’t be focussed on</li> <li>- Recommendations – unlikely to be focussed on</li> </ul>	
	<b>Step 1 - Hazard identification –</b> <ul style="list-style-type: none"> <li>o Focus will be on the west of array – no matters arising</li> <li>o Focus will be collision, contact, grounding (all navigation) – no matters arising</li> <li>o Focus will be on 5 vessel types - (additional category will be PC/self-piloted) – PLA raised concern of draught; can be considered with reference to D1 or 27th Feb meeting submissions. HRW – raise draught as key consideration for NE Spit cardinal (with near misses noted in this area. ER noted that near misses is an important area that factors in consequence).</li> <li>☑ Hazards (days focus) were queried with some identified that could be prioritised</li> </ul>	
	<b>Step 2 – Scoring –</b> <ul style="list-style-type: none"> <li>o Likelihood (most likely vs worst credible) – no matters arising</li> <li>o Consequence – no matters arising – ESL raise matter on loss of earnings – ER confirm it sits under ‘business’ but note that property may take account of vessel ‘loss’ or ‘damage’.</li> <li>o LG – raise query on ‘business’ needing to account for other ‘business’ outside of wind farm operations. ER agreed.</li> <li>o ER talked through likelihood and consequence tables.</li> <li>o HRW raise query on single watchkeeper vessels. Simon Moore raised that all vessels are single watch keeper and they are well rested. PLA raise that nearby vessels watchkeeper is undermanaged sometimes. ER confirmed that this can be accommodated. LPC identify that those sorts of risks are more likely to occur on passage rather than nearshore/risk areas.</li> </ul>	
	<b>Step 3 – identify controls</b> <ul style="list-style-type: none"> <li>o Identification of ALARP – no matters arising</li> <li>o Controls from NRA – opportunity today to revise – no matters arising</li> </ul>	
	<b>Step 4 – cost benefit</b> <ul style="list-style-type: none"> <li>o Not core focus of today</li> </ul>	
	<b>Step 5 – recommendations – not focus of today</b>	
	<b>Data – various data sources available to us today.</b> <ul style="list-style-type: none"> <li>o ESL identifying distribution of pilot transfers – ER noted as helpful</li> </ul>	

	<ul style="list-style-type: none"> <li>o MAIB incidents – revised and updated</li> <li>☐ HRW identify risk profiles can be altered for different state/vessels</li> <li>☐ ESL asked clarification on the study area of relevance for incidents should it be expanded out to 10nm. ER confirm that where risk is low often you have to scope out to wider study area. ESL asked if it should be considered to aid in likelihood? VC suggest 5nm is reasonable; ESL consider hazard of Norwegian dream should inform the baseline – VC consider it a bit far away, but ESL identify that it is a pertinent example for the region more broadly. ER confirm it is important for consequence.</li> <li>☐ ER undertaken quick review of PLA incident to help inform the baseline. In terms of those incidents – all incidents near miss incident (i.e. grounding) rather than ‘actual’ grounding</li> <li>☐ PLA – raise that pilot ladder points are a key issue, and care needs to be placed presenting the statistics clearly. VC noted this is not a locational issue.             <ul style="list-style-type: none"> <li>• ESL raise that there are a range of defective ladder reports – from still used through to abortion, and delay/more searoom needed in between.</li> <li>• PLA confirm that this impinges on other traffic ops as well</li> </ul> </li> <li>o ER identify some further incident data provided by IPs.</li> <li>o ER identified MAIB international data</li> <li>☐ VC raise query about merchant vessel fleet being limited/non-existent. ER confirmed that MAIB is all vessels in UK waters.</li> </ul>					
	<p><b>HAZARD LOG – section</b></p> <p>Hazard type – ER noted that primary focus was to agree hazards – the following updates were made on request by IPs including PLA/TFA/DWLG:</p> <p>add in hazards 3 and 4 (previously not included)          non-piloted vessels added;          CONTACT clarified as windfarm;          fishing vessel contact added in;          contact 11 removed ,          hazard 12 added in.          Grounding – increased risk with decrease in sea room;          hazard 17 removed.          All hazards then agreed with IPs– no further matters arising.</p>					
<p><b>HAZARD LOG scoring notes:</b></p>						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #4F81BD; color: white;"> <th style="width: 15%;">HAZARD</th> <th>Notes</th> </tr> </thead> <tbody> <tr style="background-color: #D9E1F2;"> <td style="text-align: center; vertical-align: top;">1</td> <td> <p>Most likely – Causes discussed, and likely outcome agreed as minor (low damage/costs), environmental implications discussed to understand negligible – tier 1 v 2 etc negligible agreed. ‘Stakeholders’, generally agreed as likely to be negligible/not in public domain.</p> <p>Worst credible, fire/sinking, loss of cargo and single fatality (major); major pollution event – defined as catastrophic, with major effect on stakeholders. Questions over the nature of the vessels, unladen fuel vessels. Large tankers may be brought down to the inner diamond, with a dip down/turn forming the higher risk activity, with tankers forming the potential highest risk that may credibly be present but Class 1 vessels more broadly.</p> </td> </tr> </tbody> </table>			HAZARD	Notes	1	<p>Most likely – Causes discussed, and likely outcome agreed as minor (low damage/costs), environmental implications discussed to understand negligible – tier 1 v 2 etc negligible agreed. ‘Stakeholders’, generally agreed as likely to be negligible/not in public domain.</p> <p>Worst credible, fire/sinking, loss of cargo and single fatality (major); major pollution event – defined as catastrophic, with major effect on stakeholders. Questions over the nature of the vessels, unladen fuel vessels. Large tankers may be brought down to the inner diamond, with a dip down/turn forming the higher risk activity, with tankers forming the potential highest risk that may credibly be present but Class 1 vessels more broadly.</p>
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	Scoring then undertaken according to the consequence table. Agreed. Baseline likelihood then discussed and agreed as 1:40 for most likely vs worst credible (1:500).	
2	Next hazard identified using the same general narrative. Discussion on classes of vessels – 3 and 4 vessels being the focus (tug and tow discussion held, consideration given to focus. Likelihoods agreement as 1:30 for most likely (higher than class 1/ 2 due to greater numbers of vessels) and 1:400 for worst credible.	
3	Identified similar general narrative. Large PCs generally come across top, smaller PCs will come through the south. Agreed risk likelihood as same as class 3/ 4.	
4	Fishing vessels – MJ leading. Environment, avoiding traffic, constriction of routes, mechanical, loss of UKC – no, all other matters yes. Lighting of windfarm is an issue, as to fishermen using the area but will be retained in the ‘contact’ with OWF issue and within narrative of this impact. Challenging to breakdown vessels but generally the 8-10m; and impact broken down into most likely being a small vessel collision, with a worst credible being collision with a larger vessel. Most likely, 1:7; worst credible is 1:500 however further consideration to be given to this by IPs.	
<b>Residual likelihood scoring</b>		
	Scoring of hazard 1 for TEOW in place Discussion on most likely scenario – general feel for doubling of likelihood for most likely and worst credible	
	Scoring of hazard 2 for TEOW in place General feel for a ‘pro rata’ of an increase in likelihood proportional to the decrease in searoom (1/3)	
	Scoring of hazard 3 for TEOW in place General feel for a ‘pro rata’ of an increase in likelihood proportional to the decrease in searoom (1/3)	
	Scoring of hazard 4 for TEOW in place General feel for a ‘20%’ increase in likelihood, not quite proportional to the decrease in searoom as the wind farm is permeable for fishing vessels.	
	<p><b>AOB</b></p> <p>ER thanked everyone for their time and requested confirmation that the process was helpful</p> <p>Parties agreed</p> <p>No further matters arising</p> <p>Due to time constraints it was agreed that Marico will complete the scoring for the remaining hazards and send to the group (including the CoS) on 01/04/19.</p>	