

Vattenfall Wind Power Ltd

Thanet Extension Offshore Wind Farm

Appendix 23 to Deadline 4 Submission: Review of the Environment Statement and Report to Inform Appropriate Assessment in relation to the Structure Exclusion Zone

Relevant Examination Deadline: 4

Submitted by Vattenfall Wind Power Ltd

Date: March 2019

Revision A

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Date of Approval:	March 2019
Revision:	A

Revision A	Original Document submitted to the Examining Authority
N/A	
N/A	
N/A	

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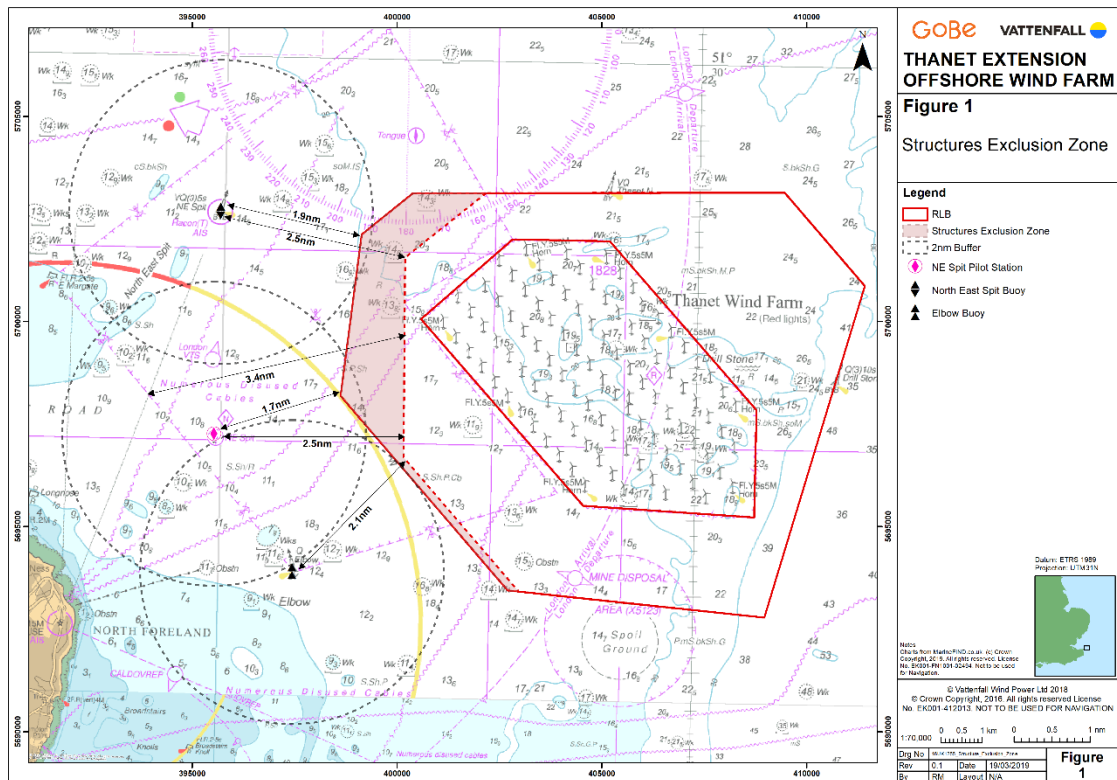
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1 Introduction

- 1 At Deadline 3, a number of responses were received regarding shipping and navigation issues (with these summarised in Appendix 4 to Deadline 4). Appendix 14 to Deadline 4 details a proposed structures exclusion zone (SEZ) to the western extent of the array Red Line Boundary (RLB). The purpose of the SEZ is to identify an area within the RLB where no above sea structures will be installed – noting that cables may still be installed within this zone.
- 2 The purpose of the current note is to review, on a topic by topic basis, what the implications of the SEZ are (if any) for each topic. The current note is structured according to the chapters as presented within the Environmental Statement (ES) together with the designated sites screened in for LSE within the Report to Inform Appropriate Assessment (RIAA).
- 3 Where an individual topic (or designated site) is identified as being sensitive to the SEZ (i.e. where the potential exists for the SEZ to affect the existing assessment), then additional information is appended.

1.1 The Structures Exclusion Zone

- 4 The location of the SEZ is depicted in Figure 1 below, in relation to the RLB.



1.2 Environmental Statement

- 5 An initial screening process has been undertaken to identify whether (or not) the location of structures above sea level within the RLB is relevant to that particular chapter. This is presented in Table 1.
- 6 Section 3 identifies the topic areas for which more detailed appraisals will be submitted at Deadline 4a.

Table 1: Screening table for consideration within this clarification note

Chapter	Screened in/out of consideration
Volume 2, Chapter 2: Marine Geology, Oceanography and Physical Processes	Screened out - no increase in the maximum adverse scenario assessed
Volume 2, Chapter 3: Marine Water and Sediment Quality	Screened out - no increase in the maximum adverse scenario assessed
Volume 2, Chapter 4: Offshore Ornithology	Screened out - no increase in the maximum adverse scenario assessed (noting the implications for offshore ornithology within the RIAA – see Table 2)
Volume 2, Chapter 5: Benthic Subtidal and Intertidal Ecology	Screened out - no increase in the maximum adverse scenario assessed
Volume 2, Chapter 6: Fish and Shellfish Ecology	Screened out - no increase in the maximum adverse scenario assessed (noting the implications for commercial fisheries)
Volume 2, Chapter 7: Marine Mammals	Screened out - no increase in the maximum adverse scenario assessed
Volume 2, Chapter 8: Offshore Designated Sites	Screened out - no increase in the maximum adverse scenario assessed (noting the implications for relevant designated sites within the RIAA – see Table 2)
Volume 2, Chapter 9: Commercial Fisheries	Screened in – SEZ assessed
Volume 2, Chapter 10: Shipping and Navigation	Screened in – SEZ assessed
Volume 2, Chapter 11: Infrastructure and Other Users	Screened out - no increase in the maximum adverse scenario assessed
Volume 2, Chapter 12: Seascape, Landscape Visual Impact Assessment (LVIA)	Screened in – SEZ assessed

Chapter	Screened in/out of consideration
Volume 2, Chapter 13: Offshore Archaeology and Cultural Heritage	Screened out - no increase in the maximum adverse scenario assessed
Volume 3, Chapter 2: Landscape Visual Impact Assessment	Screened out - no increase in the maximum adverse scenario assessed
Volume 3, Chapter 3: Socioeconomics	Screened out - no increase in the maximum adverse scenario assessed
Volume 3, Chapter 4: Tourism and Recreation	Screened out - no increase in the maximum adverse scenario assessed
Volume 3, Chapter 5: Onshore Biodiversity	Screened out - no increase in the maximum adverse scenario assessed
Volume 3, Chapter 6: Ground Conditions, Flood Risk and Land Use	Screened out - no increase in the maximum adverse scenario assessed
Volume 3, Chapter 7: Historic Environment	Screened in – SEZ assessed
Volume 3, Chapter 8: Traffic and Access	Screened out - no change in the maximum adverse scenario assessed
Volume 3, Chapter 9: Air Quality	Screened out - no increase in the maximum adverse scenario assessed
Volume 3, Chapter 10: Noise and Vibration	Screened out - no increase in the maximum adverse scenario assessed
Volume 3, Chapter 11: Aviation and Radar	Screened out - no increase in the maximum adverse scenario assessed
Volume 3, Chapter 12 Public Health	Screened out - no increase in the maximum adverse scenario assessed

1.3 Report to Inform Appropriate Assessment

- 7 The following presents an appraisal of maximum design scenario with respect to the array RLB assessed as relevant to each of the designated sites screened in for Likely Significant Effect (LSE) within the RIAA. An initial screening process has been undertaken to identify whether (or not) the location of structures above sea level within the RLB is relevant to that designated site. This is presented in Table 2.

Table 2: Screening table for consideration within this clarification note¹

Designated Site	Screened in/out of consideration
Thanet Coast SAC	Screened out - no increase in the maximum adverse scenario assessed (noting that the SEZ boundary results in an increase in distance to the SAC from 6.32km to 7.28km and therefore any change would be a reduction in impact)
Margate and Long Sands SAC	Screened out - no increase in the maximum adverse scenario assessed (noting that the SEZ boundary results in an increase in distance to the SAC from 5.05km to 6.46km and therefore any change would be a reduction in impact)
Thanet Coast and Sandwich Bay SPA	Screened out - no increase in the maximum adverse scenario assessed (noting that the SEZ boundary results in an increase in distance to the SAC from 7.92km to 8.7km and therefore any change would be a reduction in impact)
Thanet Coast and Sandwich Bay Ramsar	Screened out - no increase in the maximum adverse scenario assessed (noting that the SEZ boundary results in an increase in distance to the SAC from 7.92km to 8.7km and therefore any change would be a reduction in impact)
Southern North Sea SCI	Screened out - no increase in the maximum adverse scenario assessed (no change in the range, remaining 0km)
Bancs de Flandres SCI	Screened out - no increase in the maximum adverse scenario assessed (no change in the range, remaining 23.41km)
Outer Thames Estuary SPA	Screened in – increase in the minimum range from the SEZ boundary (increased from 6.15km to 7.65km) with potential for a reduction in impact

¹ Noting that ranges are from the array RLB (or SEZ as appropriate) and not the cable corridor

Designated Site	Screened in/out of consideration
Foulness SPA	Screened out - no increase in the maximum adverse scenario assessed (small increase in range from 38.245km to 39.43km)
Alde-Ore Estuary SPA	Screened out - no increase in the maximum adverse scenario assessed (small increase in range from 60.57km to 60.82km)
Alde-Ore Estuary Ramsar	Screened out - no increase in the maximum adverse scenario assessed (small increase in range from 60.57km to 60.82km)
Flamborough and Filey Coast SPA	Screened out - no increase in the maximum adverse scenario assessed (small increase in range from 311.47km to 312.07km)
St Abbs Head to Fast Castle SPA	Screened out - no increase in the maximum adverse scenario assessed (small increase in range from 549.27km to 549.99km)
Northumberland Marine SPA	Screened out - no increase in the maximum adverse scenario assessed (small increase in range from 542.1km to 542.8km)
Farne Island SPA	Screened out - no increase in the maximum adverse scenario assessed (small increase in range from 507.7km to 508.37km)
Baie de Canche et couloir des trois estuaires SCI	Screened out - no increase in the maximum adverse scenario assessed (no change in the range, remaining 88.85km)
Vlakte van de Raan SCI	Screened out - no increase in the maximum adverse scenario assessed (no change in the range, remaining 100.93km)
Voordelta SCI	Screened out - no increase in the maximum adverse scenario assessed (no change in the range, remaining 107.23km)
Estuaires et littoral picards (baies de Somme et d'Authie) SCI	Screened out - no increase in the maximum adverse scenario assessed (no change in the range, remaining 110.17km)

Designated Site	Screened in/out of consideration
Recifs Gris-Nez Blanc-Nez SCI	Screened out - no increase in the maximum adverse scenario assessed (no change in the range, remaining 42.55km)
Vlaamse Banken SCI	Screened out - no increase in the maximum adverse scenario assessed (no change in the range, remaining 39.39km)
SBZ 1 SCI	Screened out - no increase in the maximum adverse scenario assessed (no change in the range, remaining 60.35km)
SBZ 2 SCI	Screened out - no increase in the maximum adverse scenario assessed (no change in the range, remaining 75.23km)
SBZ 3 SCI	Screened out - no increase in the maximum adverse scenario assessed (no change in the range, remaining 93.84km)
Ridens et dunes hydrauliques SCI	Screened out - no increase in the maximum adverse scenario assessed (small increase in range, from 49.67km to 49.73km)

2 Rochdale envelope

- 8 The Thanet Extension Environmental Impact Assessment (EIA) and RIAA, in line with the PINS Advice Note Nine: Rochdale Envelope, was based on identifying the ‘worst-case’ scenario, referred to throughout the EIA and RIAA as the ‘maximum design scenario’, for the impact assessment for each topic area. This approach ensured that the scenario that would have the greatest impact (i.e. largest footprint, longest exposure, or tallest dimensions - depending on the topic) was assessed; it can then be assumed that any other (lesser) scenarios will have an impact that is no greater than that assessed.
- 9 The design information included in the project design envelope was based on the best available information and the parameters outlined in onshore and offshore Project Description chapters (Chapter 1 of Volumes 2 and 3 (PINS Refs APP-042 and APP-057/ Application Refs 6.2.1 and 6.3.1) are realistic yet conservative estimations of future design parameters. Therefore, each ES chapter and each RIAA designated site assessment considered the ‘realistic worst-case’ scenario for each of the identified potential impacts.
- 10 The maximum adverse scenario for each topic/ designated site and the assessment of potential impacts was derived from the options for each parameter/ methodology outlined in the onshore and offshore Project Description chapters (PINS Refs APP-042 and APP-057/ Application Refs 6.2.1 and 6.3.1) respectively). The use of existing data and site-specific survey enabled an adequate characterisation of the receiving environment to enable a robust assessment to be undertaken against a realistic worst-case ‘Rochdale Envelope’ approach to project design. Post-consent, further survey work will be required to inform the final detailed design pre-construction.

3 Review of the Environmental Statement

3.1 Topic areas for further consideration

- 11 The following topics will be subject to a more detailed review which will be submitted at Deadline 4a. The topic appraisals will be submitted as annexes to a revised version of this document, unless otherwise stated:
- Commercial Fisheries
 - Shipping and Navigation
 - The appraisal will form an addendum to the NRA
 - Seascape, Landscape, Visual Impact Assessment
 - Onshore Archaeology and Cultural Heritage
 - Landscape Visual Impact Assessment
 - Report to Inform Appropriate Assessment
 - Limited to further consideration of the Outer Thames Estuary SPA

4 Conclusions

- 12 For each of the relevant assessments within the ES and RIAA, the inclusion of the SEZ will not result in any additional or greater effects than those considered within the assessment submitted with the Application. In fact, the opposite is true – where a change is apparent, that results in a reduction in impact in most/all cases. A summary of that information is provided in Table 3 below, with greater detail to be provided at Deadline 4a.

Table 3: Summary of conclusions

Chapter	Design refinement implication
Volume 2, Chapter 2: Marine Geology, Oceanography and Physical Processes	Screened out
Volume 2, Chapter 3: Marine Water and Sediment Quality	Screened out
Volume 2, Chapter 4: Offshore Ornithology	Screened out (Noting implications for the RIAA below)
Volume 2, Chapter 5: Benthic Subtidal and Intertidal Ecology	Screened out
Volume 2, Chapter 6: Fish and Shellfish Ecology	Screened out (Noting implications for the commercial fisheries below)
Volume 2, Chapter 7: Marine Mammals	Screened out
Volume 2, Chapter 8: Offshore Designated Sites	Screened out (noting the implications for relevant designated sites within the RIAA – see below)
Volume 2, Chapter 9: Commercial Fisheries	Net benefit, with further detail to be provided at Deadline 4a
Volume 2, Chapter 10: Shipping and Navigation	Net benefit, with further detail to be provided at Deadline 4a
Volume 2, Chapter 11: Infrastructure and Other Users	Screened out

Chapter	Design refinement implication
Volume 2, Chapter 12: Seascape, Landscape Visual Impact Assessment	Net benefit, with further detail to be provided at Deadline 4a
Volume 2, Chapter 13: Offshore Archaeology and Cultural Heritage	Screened out
Volume 3, Chapter 2: Landscape Visual Impact Assessment	Screened out
Volume 3, Chapter 4: Tourism and Recreation	Screened out
Volume 3, Chapter 5: Onshore Biodiversity	Screened out
Volume 3, Chapter 6: Ground Conditions, Flood Risk and Land Use	Screened out
Volume 3, Chapter 7: Historic Environment	Net benefit, with further detail to be provided at Deadline 4a
Volume 3, Chapter 8: Traffic and Access	Screened out
Volume 3, Chapter 9: Air Quality	Screened out
Volume 3, Chapter 10: Noise and Vibration	Screened out
Volume 3, Chapter 11: Aviation and Radar	Screened out
Volume 3, Chapter 12 Public Health	Screened out
Thanet Coast SAC	Screened out
Margate and Long Sands SAC	Screened out
Thanet Coast and Sandwich Bay SPA	Screened out
Thanet Coast and Sandwich Bay Ramsar	Screened out
Southern North Sea SCI	Screened out
Bancs de Flandres SCI	Screened out
Outer Thames Estuary SPA	Net benefit, with further detail to be provided at Deadline 4a

Chapter	Design refinement implication
Foulness SPA	Screened out
Alde-Ore Estuary SPA	Screened out
Alde-Ore Estuary Ramsar	Screened out
Flamborough and Filey Coast SPA	Screened out
St Abbs Head to Fast Castle SPA	Screened out
Northumberland Marine SPA	Screened out
Farne Island SPA	Screened out
Baie de Canche et couloir des trois estuaires SCI	Screened out
Vlakte van de Raan SCI	Screened out
Voordelta SCI	Screened out
Estuaires et littoral picards (baies de Somme et d'Authie) SCI	Screened out
Recifs Gris-Nez Blanc-Nez SCI	Screened out
Vlaamse Banken SCI	Screened out
SBZ 1 SCI	Screened out
SBZ 2 SCI	Screened out
SBZ 3 SCI	Screened out
Ridens et dunes hydrauliques SCI	Screened out

5 References

- Planning Inspectorate (PINS) (2018) 'Advice Note Nine: Rochdale Envelope.', <https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2013/05/Advice-note-9.-Rochdale-envelope-web.pdf> [Accessed: January 2019].