

Vattenfall Wind Power Ltd

Thanet Extension Offshore Wind Farm

Appendix 4 of Deadline 4C Submission – Offshore
Project Description Assessed in the Environmental
Statement

Relevant Examination Deadline: 4C

Submitted by Vattenfall Wind Power Ltd

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Revision C

| | |
|-------------------|----------------------|
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|------------|--|
| Revision A | Original Document submitted to the Examining Authority |
| Revision B | Revised document submitted to the Examining Authority following consultation |
| Revision C | Revised document submitted to the Examining Authority following consultation |
| N/A | |

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1 Maximum Design Parameters

- 1 Volume 2, Chapter 1: Project Description (Offshore) (PINS Ref APP-042/ Application Ref 6.2.1) presented the proposed design envelope for the Thanet Extension Offshore Wind Farm (Thanet Extension). This clarification note should read in conjunction with PINS Ref APP-042/ Application Ref 6.2.1; and seeks to provide the maximum design envelope for the proposed Thanet Extension.
- 2 This document should be read in conjunction with the “Project Description Transcription into the Environmental Statement” clarification note (PINS Ref REP-003), in particular for the areas highlighted in the footnotes of this document.
- 3 Table 1 presents the maximum design parameters presented within the chapter and have been assessed by the Applicant within the Environmental Statement (ES). Table 1 also provides any assumptions applied within the ES such as design parameters of met mast foundations.
- 4 Table 1 presents design parameters from landfall Options 1 and 3 only following the removal of Option 2 from the project design envelope.
- 5 For ease of reference the calculated maximum total values assessed within the ES of their constituent parameters are presented in Table 2 to Table 14.

Table 1: Maximum design parameters assessed within the Thanet Extension Environmental Statement

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---------------------------------|--|--|
| Table 1.1 | Development located in the North Sea approximately | 8km |
| Paragraph 1.3.2 | Electrical output capacity | Up to 340 MW |
| Paragraph 1.1.1 | Wind Turbine Generators (WTGs) | Up to 34 Wind Turbine Generators |
| Paragraph 1.1.1 | Meteorological mast (met mast) fixed to the seabed | up to one Meteorological Mast |
| Paragraph 1.1.1 | Floating Lidar Device (FLD) and wave buoys fixed to the seabed | Up to one LIDAR device and up to one wave buoy |
| Paragraph 1.1.1 | Offshore substation fixed to the seabed | Up to one Offshore Substation |
| Paragraph 1.1.1 | Offshore subsea export cables and fibre optic cables | Up to four offshore export cables |

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---|--|---|
| Table 1.1 | Total offshore site area (Order Limits) (km ²) | 68.8 |
| N/A | Total array area (Order Limits – Structure Exclusion Zone) | 59.5 |
| N/A | Total area of Structure Exclusion Zone (km ²) | 9.3 |
| Table 1.1 | Total export cable site area (Order Limits) (km ²) | 32.2 |
| N/A | Total Cable Exclusion Area (CEA) area (km ²) | 1.6 |
| N/A | Total OECC area (km ²) (Order Limits – CEA) | 30.6 |
| Table 1.1 | Maximum WTG Size | 12 MW+ |
| Paragraph 1.4.15 | Minimum WTG spacing | 716 m x 480 m ⁱ |
| Provided in PINS Ref REP4-019 ⁱⁱ . | Disposal | The disposal of inert material of natural origin. |
| Maximum design envelope for WTGs | | |
| Table 1.2 | Minimum height of lowest blade tip above MHWS (m) | 22 |
| Table 1.2 | Maximum blade tip height above HAT (m) | 250 |
| Table 1.2 | Maximum rotor blade diameter (m) | 220 |
| Provided in PINS Ref APP-053/ Application Ref 6.2.12 | Maximum hub height above HAT (m) | 140 |
| Indicative maximum requirements for these oils and fluids for a single WTG | | |
| Table 1.3 | Grease (l) | 2000 |
| Table 1.3 | Synthetic oil/ hydraulic oil (l) | 2000 |
| Table 1.3 | Nitrogen (l) | 200 |
| Table 1.3 | Transformer silicone oil (kg) | 2000 |
| Table 1.3 | Sulphur hexafluoride (SF6) (kg) | 100 |
| Table 1.3 | Water/ glycerol (l) | 2000 |
| Maximum design envelope for WTG monopile foundations | | |
| Table 1.4 | Diameter of monopile (top) (m) | 7.5 |

ⁱ See the project description transcription clarification note (PINS Ref REP3-003) for how this has been assessed within the application.

ⁱⁱ Which supersedes PINS Ref APP-148/ Application Ref 8.14.

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---|--|-----------------------|
| Table 1.4 | Diameter of monopile (bottom) (m) | 10 |
| Table 1.4 | Diameter of transition piece (top diameter at TP-tower interface) (m) | 7.5 |
| Table 1.4 | Diameter of transition piece (bottom diameter at MP-TP interface) (m) | 10 |
| Table 1.4 | Embedment depth (below seabed) (m) | 75 |
| Table 1.4 | Drill diameter (m) | 7.5 |
| Table 1.4 | Volume of drill arisings per pile (m ³) | 1,325 |
| Table 1.4 | Locations requiring drilling (%) | 50 |
| Table 1.4 | Locations potentially installed by driven piling (%) | 100 |
| Table 1.4 | Total drill arisings for WTG monopiles (m ³) | 19,627 ⁱⁱⁱ |
| Table 1.4 | Grout volume per foundation (m ³) | 120 |
| Table 1.4 | Hammer energy (kJ) | 5,000 |
| Table 1.4 | Number of blows per foundation | 8,000 |
| Table 1.4 | Piling time per foundation (assuming issues such as low blow rate, refusal etc.) (hours) | 6 |
| Maximum design envelope for WTG quadropod jacket foundations | | |
| Table 1.5 | Number of legs per foundation | 4 |
| Table 1.5 | Separation of adjacent legs at seabed level (m) | 40 |
| Table 1.5 | Separation of adjacent legs at Mean Sea Level (MSL) (m) | 20 |
| Table 1.5 | Height of main access platform above HAT (m) | 20 |
| Table 1.5 | Leg diameter (m) | 3.5 |
| Table 1.5 | Embedment depth (below seabed) (m) | 70 |
| Table 1.5 | Volume of drill arisings per foundation (four pin-piles) (m ³) | 1,400 |
| Table 1.5 | Locations requiring drilling (%) | 50 |
| Table 1.5 | Locations potentially installed by driven piling (%) | 100 |
| Table 1.5 | Total drill arisings (m ³) | 17,802 |
| Table 1.5 | Grout volume per foundation (piles) (m ³) | 60 |
| Table 1.5 | Grout volume per foundation (screw piles) (m ³) | 85 |

ⁱⁱⁱ See the project description transcription clarification note (PINS Ref REP3-003) for how this has been assessed within the application.

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---|--|------------------------|
| Table 1.5 | Hammer energy (kJ) | 2,700 |
| Table 1.5 | Piling time per foundation (four pinpiles) (assuming issues such as low blow rate, refusal etc.) (hours) | 10 |
| Maximum design envelope for suction caisson jacket WTG foundations | | |
| Table 1.6 | Number of legs | 4 |
| Table 1.6 | Separation of adjacent legs at seabed level (m) | 40 |
| Table 1.6 | Separation of adjacent legs at Mean Sea Level (MSL) (m) | 20 |
| Table 1.6 | Height of platform above HAT (m) | 20 |
| Table 1.6 | Leg diameter (m) | 3.5 |
| Table 1.6 | Suction buckets per foundation | 4 |
| Table 1.6 | Suction bucket diameter (m) | 20 |
| N/A | Suction bucket footprint (m ²) | 1,256.6 |
| Table 1.6 | Bucket penetration depth (below seabed) (m) | 20 |
| Table 1.6 | Grout volume per foundation (m ³) | 105 |
| Table 1.6 | Depth of seabed preparation (m) | 3 |
| Table 1.6 | Area of seabed preparation per foundation (m ²) | 3,200 |
| Table 1.6 | Volume per foundation for seabed preparation work (m ³) | 9,600 |
| Table 1.6 | Volume for seabed preparation works (for WTG foundations only) (m ³) | 268,800 ^{iv} |
| Maximum design envelope for scour protection (based on suction caisson jacket foundations which represent the greatest scour protection requirement) | | |
| Table 1.7 | Median rock diameter (mm) | 200 |
| Table 1.7 | Scour protection depth (rock) (m) | 5 |
| Table 1.7 | Total scour protection area (WTG foundations only) (m ²) | 219,912 |
| Table 1.7 | Scour protection diameter | 5 x pile diameter |
| Table 1.7 | Scour protection volume per foundation (m ³) | 39,269.90 ^v |
| Table 1.7 | Scour protection total volume (WTG foundations only) (m ³) | 1,112,647.40 |

^{iv} See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) for how this has been assessed within the application.

^v See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) for how this has been assessed within the application.

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---|--|--|
| Paragraphs 1.4.52 to 1.4.55 | Scour protection types | Rock placement, rock armour, frond mat systems |
| Maximum design envelope for the inter-array cables | | |
| Table 1.8 | System voltage (kV) | 66 |
| Table 1.8 | External cable diameter (mm) | 300 |
| Table 1.8 | Total length of inter-array cables (km) | 64 |
| Table 1.8 | Maximum burial depth (m) | 3 |
| Table 1.8 | Minimum burial depth (m) | 0 |
| Table 1.8 | Trench width (m) | 1 |
| Paragraph 1.4.60 | Pre-lay grapnel runs | Pre-Lay Grapnel Runs (PLGR) will be conducted to remove seabed surface debris along a 1 – 2 m wide area. The grapnel typically penetrates the seabed to 0.5 m depth and is selected and configured in accordance with the seabed conditions. |
| Maximum design envelope for inter-array cable installation | | |
| Table 1.9 | Burial technique | Jetting/ Ploughing/ Trenching/ Cutting/ Mass Flow Excavation/ Pre-sweeping (dredging) |
| Table 1.9 | Length of inter-array cables (km) | 64 |
| Table 1.9 | Maximum burial depth (m) | 3 |
| Table 1.9 | Minimum burial depth (m) | 0 |
| Table 1.9 | Percentage cable requiring additional protection (%) | 25 |
| Table 1.9 | Length of cable requiring additional protection (m) | 16,000 |
| Table 1.9 | Indicative trench width (m) | 1 |
| Table 1.9 | Width of disturbance from jetting (m) | 5 |
| Table 1.9 | Area of disturbance from jetting (km ²) | 0.3 |

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|--|---|---|
| Table 1.9 | Width of disturbance from ploughing (m) | 10 |
| Table 1.9 | Area of disturbance from ploughing (km ²) ^{vi} | 0.064 |
| Table 1.9 | Width of rock berm protection (m) | 5 |
| Table 1.9 | Area of cable protection excluding crossings (m ²) | 80,000 |
| Table 1.9 | Height of rock berm protection (m) | 0.5 |
| Table 1.9 | Volume of surface protection per km (based on a 0.5 x 5, trapezoid) (m ³ km ⁻¹) | 1,250 |
| Table 1.9 | Length of exposed cable approaching WTG foundation requiring rock dumping/ remedial protection (m) | 50 |
| Table 1.9 | Total area of WTG foundations requiring rock dumping/ remedial protection (m ²) (34 WTG and one OSS foundation) | 17,500 ^{vii} |
| Maximum design envelope for inter-array cable crossing protection | | |
| Table 1.10 | Crossing technique | Rock dumping/ concrete mattresses/ steel bridging/ concrete bridging |
| Table 1.10 | Number of cable crossings | 12 |
| Table 1.10 | Length of crossings (m) | 100 |
| Table 1.10 | Width of crossings (m) | 10 |
| Table 1.10 | Volume of post-lay rock berm protection per cable crossing (m ³) | 500 |
| Table 1.10 | Number of concrete mattresses (6 x 3 x 0.3 m) per crossing | 24 |
| Table 1.10 | Area of post-lay rock berm protection per cable crossing (m ²) | 1,000 |
| Table 1.10 | Total area of rock berm protection for crossings (m ²) | 12,000 |
| Table 1.10 | Total volume of rock berm protection for crossings (m ³) | 6,000 |
| Maximum design envelope for the OSS | | |
| Table 1.11 | Topside weight (tonnes) | 2,500 |
| Table 1.11 | Topside length (m) | 70 |

^{vi} This was presented in the project description chapter as 0.06 km² as a rounding error. Please see Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) .

^{vii} See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) for how this has been assessed within the application.

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---|---|--|
| Table 1.11 | Topside width (m) | 50 |
| Table 1.11 | Topside height (excluding crane and helideck) (m) | 30 |
| Table 1.11 | Topside height above HAT (excluding crane and helideck) (m) | 55 |
| Table 1.11 | Topside height above HAT (including crane) (m) | 80 |
| Table 1.11 | Annual O&M time (weeks) | 2 |
| Table 1.11 | Diesel fuel (l) | 200,000 |
| Table 1.11 | Gray water (m ³) | 1,000 |
| Table 1.11 | Black water (m ³) | 1,000 |
| Table 1.11 | Transformer coolant oil (kg) | 600,000 |
| Table 1.11 | UPS Batteries (l) | 10 |
| Table 1.11 | Fire suppression systems (l) | 20,000 |
| Table 1.11 | Sulphur hexafluoride (SF6) (kg) | 1,500 |
| Table 1.11 | Engine oil (m ³) | 5 |
| Table 1.11 | HVAC coolant (glycol) (m ³) | 5 |
| Maximum design envelope for the installation of the OSS using driven monopiles | | |
| Table 1.12 | Pile diameter (m) | 10 |
| Table 1.12 | Pile penetration depth (m) | 50 |
| Table 1.12 | Hammer energy (kJ) | 5,000 |
| Table 1.12 | Piling time per foundation (hr) | 6 |
| Table 1.12 | Foundations by driven piling (%) | 100 |
| Table 1.12 | Foundations installed by drilling (%) | 50 |
| Table 1.12 | Drill diameter (m) | 6 |
| Table 1.12 | Volume of risings per pile (m ³) | 1,000 ^{viii} |
| Table 1.12 | Grout volume per foundation (m ³) | 160 |
| Table 1.12 | Scour protection options ^{ix} | Rock placement, rock armour, frond mat systems |
| Table 1.12 | Scour protection depth (m) | 5 |

^{viii} See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) for how this has been assessed within the application.

^{ix} In project description chapter states to be the same as WTG foundations. It has been repeated in this table for clarity.

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---|--|--|
| Table 1.12 | Scour protection area (excluding structure footprint (m ²)) | 1,964 ^x |
| Table 1.12 | Topside indicative installation time excluding cable installation (from arrival on site) (weeks) | 1 |
| Maximum design envelope for the installation of the OSS using driven tripod jacket | | |
| Table 1.12 | Pile diameter (m) | 3 |
| Table 1.12 | Pile penetration depth (m) | 70 |
| Table 1.12 | Width of jacket at seabed (m) | 36 |
| Table 1.12 | Width of jacket at MSL (m) | 28 |
| Table 1.12 | Jacket leg spacing (m) | 34 |
| Table 1.12 | Hammer energy (kJ) | 2,700 |
| Table 1.12 | Piling time per foundation (hr) | 6 |
| Table 1.12 | Foundations by driven piling (%) | 100 |
| Table 1.12 | Foundations installed by drilling (%) | 100 |
| Table 1.12 | Drill diameter (m) | 4 |
| Table 1.12 | Volume of risings per pile (m ³) | 200 |
| Table 1.12 | Volume of risings per OSS foundation (m ³) | 450 |
| Table 1.12 | Grout volume per foundation (m ³) | 100 |
| Table 1.12 | Scour protection options ^{xi} | Rock placement, rock armour, frond mat systems |
| Table 1.12 | Scour protection depth (m) | 5 |
| Table 1.12 | Scour protection area (excluding structure footprint (m ²)) | 2,025 |
| Table 1.12 | Topside indicative installation time excluding cable installation (from arrival on site) (weeks) | 1 |
| Maximum design envelope for the installation of the OSS using a suction caisson jacket | | |
| Table 1.13 | Suction bucket foundation leg diameter above sea surface (m) | 3 |
| Table 1.13 | Suction bucket diameter (m) (Note: for tripod foundation) | 20 |
| N/A | Suction bucket footprint (m ²) | 942.5 |

^x See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) for how this has been assessed within the application.

^{xi} In project description chapter states to be the same as WTG foundations. It has been repeated in this table for clarity.

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|--|--|---|
| Table 1.13 | Bucket penetration depth (m) | 15 |
| Table 1.13 | Grout volume per foundation (m ³) | 200 |
| Table 1.13 | Total grout volume for OSS (m ³) | 800 |
| Table 1.13 | Scour protection options ^{xi} | Rock placement, rock armour, frond mat systems |
| Table 1.13 | Scour protection depth (rock) (m) | 5 |
| Table 1.13 | Scour protection area (including structure footprint) (m ²) | 7,854 |
| Maximum design envelope for the offshore Meteorological Mast (Met Mast) | | |
| Table 1.14 | Maximum elevation (mHAT) | 140 (Maximum hub height of WTGs) |
| Table 1.14 | Met Mast spacing | The Met Mast follows the minimum spacing of the 716 m x 480 m. |
| Table 1.14 | Hazardous materials (litres) | 0 |
| Table 1.14 | Indicative number of yearly O&M visits | 15 |
| Table 1.14 | Indicative instruments | Anemometers and wind vanes at a minimum of three measurement heights. |
| Additional assumptions applied within the ES for the Met Mast – Monopile foundation | | |
| Assumptions taken from monopile WTG foundations – Table 1.6 | Diameter of monopile (bottom) (m) | Max 10 |
| | Volume of drill arisings per pile (m ³) | 1,325 ^{xii} |
| | Locations requiring drilling (%) | 100 |
| | Locations potentially installed by driven piling (%) | 100 |
| | Hammer energy (kJ) | 5,000 |
| | Number of blows per foundation | 8,000 |
| | Piling time per foundation (assuming issues such as low blow rate, refusal etc.) (hours) | 6 |
| Additional assumptions applied within the ES for the Met Mast –Suction Caisson foundation | | |
| Assumptions taken from | Number of legs | 4 |
| | Suction bucket diameter (m) | 20 |

^{xii} See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) for how this has been assessed within the application.

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---|--|---|
| suction caisson WTG foundations – Table 1.6 | Depth of seabed preparation (m) | 3 |
| | Area of seabed preparation per foundation (m ²) | 3,200 |
| | Volume per foundation for seabed preparation work (m ³) | 9,600 |
| Assumptions taken from suction caisson WTG foundations – Table 1.7 | Scour protection depth (rock) (m) | 5 |
| | Scour protection diameter | 5 x pile diameter |
| | Scour protection area ^{xiii} | 7,854 |
| | Scour protection volume per foundation (m ³) | 39,269.90 |
| | Scour protection types | Rock placement, rock armour, frond mat systems |
| Additional assumptions applied within the ES for the Met Mast –Jacket foundation | | |
| Assumptions taken from jacket WTG foundations – Table 1.5 | Number of legs per foundation | 4 |
| | Separation of adjacent legs at seabed level (m) | 40 |
| | Leg diameter (m) | 3.5 |
| | Embedment depth (below seabed) (m) | 70 |
| | Volume of drill arisings per foundation (four pin-piles) (m ³) | 1,400 |
| | Locations requiring drilling (%) | 100 |
| | Locations potentially installed by driven piling (%) | 100 |
| | Total drill arisings (m ³) | 1,400 |
| | Grout volume per foundation (piles) (m ³) | 60 |
| | Grout volume per foundation (screw piles) (m ³) | 85 |
| | Hammer energy (kJ) | 2,700 |
| | Piling time per foundation (four pinpiles) (assuming issues such as low blow rate, refusal etc.) (hours) | 10 |
| Maximum design envelope for offshore export cables | | |
| Table 1.15 | Cable specification | 3-core XLPE (Cross-linked Polyethylene) or similar. |
| Table 1.15 | Cable voltage (kV) | 220 kV |
| Table 1.15 | Indicative external cable diameter (mm) | 300 |

^{xiii} Not presented within the project description but used within assessments. See Table 3 for further clarification.

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---|--|---------------------------------------|
| Table 1.15 | Length of cables (km) | 30 per cable |
| Table 1.15 | Total length of cables (km) | 120 |
| Table 1.15 | Indicative expected duration of installation activities (days) | 30 days per cable |
| Table 1.15 | Indicative spacing between cables if unbundled (m) | 50 m within pair; 120 m between pairs |
| Table 1.15 | Spacing between adjacent cables if multiple cables (m) | 250 |
| Table 1.15 | Trench width per cable (jetting) (m) | 10 |
| Maximum design envelope for offshore export cable installation | | |
| Table 1.16 | Maximum Burial depth (m) | 3 below mean seabed depth |
| Table 1.16 | Minimum Burial depth (m) | 0 |
| Table 1.16 | Indicative trench width from jetting (m) | 10 |
| Table 1.16 | Width of disturbance from jetting (m) | 10 |
| Table 1.16 | Total area of disturbance from jetting (km ²) | 1.2 (0.3 km ² per cable) |
| Table 1.16 | Width of disturbance from ploughing (m) | 12 |
| Table 1.16 | Area of disturbance from ploughing (km ²) | 1.4 |
| Table 1.16 | Pre-sweeping (sand wave clearance) length (dredging) (km) ^{xiv} | 24 (6 km per cable) |
| Table 1.16 | Pre-sweeping (sand wave clearance) width of dredging corridor (m) | 20 |
| Table 1.16 | Pre-sweeping (sand wave clearance) area of dredging corridor (km ²) | 0.48 (24 km x 20 m) |
| Table 1.16 | Pre-sweeping (sand wave clearance) volume of dredging corridor (m ³) | 1,440,000 |
| Table 1.16 | Pre-lay grapnel run width (m) | 20 |
| Table 1.16 | Pre-lay grapnel run area (km ²) | 2.4 |
| Table 1.16 | Width of cable protection per cable (m) | 7 |
| Table 1.16 | Percentage of each cable requiring protection (%) | 25 |
| Table 1.16 | Length of cable protection (m) | 7,500 |
| Table 1.16 | Area of cable protection per export cable (m ²) | 52,500 |
| Table 1.16 | Total area of cable protection (excluding cable crossings) (m ²) | 210,000 |

^{xiv} See Table 3 for further details of the proposed disposal locations of the material generated from sand wave clearance.

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|--|---|--------------------|
| Maximum design envelope for cable crossings for the offshore export cables | | |
| Table 1.17 | Number of crossing | 20 |
| Table 1.17 | Total number of crossings Assuming a four-cable scenario | 80 |
| Table 1.17 | Length of crossings (m) | 100 |
| Table 1.17 | Width of crossings (m) | 10 |
| Table 1.17 | Post-lay berm height (m) | 0.5 |
| Table 1.17 | Volume of post-lay rock berm protection per crossing (m ³) | 500 |
| Table 1.17 | Number of concrete mattresses (6.0 x 3.0 x 0.3 m) per crossing | 50 |
| Table 1.17 | Area of post-lay rock berm protection per cable crossing (m ²) | 1000 |
| Not presented in the project description as a total but calculated from the parameters outlined above from Table 1.17. | Total area of protection from export cable crossings (m ²) | 80,000 |
| Maximum design envelope for open trenching within the intertidal area | | |
| Table 1.18 | Open trench length per cable circuit (km) | 2 |
| Table 1.18 | Open trench depth (m) | 3 |
| Paragraph 1.4.95 and Figure 1.16 | Trench separation and associated temporary route tracks (m) | 5 |
| Table 1.18 | Width of cable route (based on 4 cable circuits, temporary route tracks and sediment storage) (m) | 40 |
| Table 1.18 | Area of disturbance (m ²) for four cable circuits | 80,000 |
| Maximum design envelope for HDD landfall option (Option 1) | | |
| Table 1.19 | Temporary works compound area (m) | 60 x 50 |
| Table 1.19 | Onshore cofferdam area (m ²) | 704 |
| Table 1.19 | Excavated material from landfall/ TJBs (HDD) (m ³) | 1,408 |

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---|---|---|
| Table 1.19 | Offshore cofferdam area (m ²) | 1,600 (20 m x 20 m per cable with a maximum of 4 cables) |
| Table 1.19 | Minimum punch out distance from sea wall (m) | 100 |
| Table 1.19 | Volume of drilling mud volume to be released to environment (m ³) | (All drilling mud to be captured within cofferdam or other structure) |
| Table 1.19 | Works duration (months) | 18 |
| Maximum cofferdam and trenched cable installation design parameters (Option 3) | | |
| Table 1.20 | Width of cofferdam (m) | 165 |
| Table 1.20 | Depth of cofferdam (m) | 25 |
| Table 1.20 | Temporary works compound area (m) | 40 x 30 |
| Table 1.20 | Construction space required in saltmarsh (m ²) | 3,872 ^{xv} |
| Table 1.20 | Piling Noise level (dBA) | 132 |
| Table 1.20 | Duration of piling (days) | 33 |
| Paragraph 1.4.109 | Maximum distance of TJBs from the existing sea wall (m) | 350 |
| UXO assumptions | | |
| Table 1.21 | Number of UXO | 30 |
| Table 1.21 | Clearance/ Removal date (dependent on final construction programme) | 2020 |
| Table 1.21 | Days to clear (based on 4 per day) | 8 |
| Table 1.21 | Detonations per 24 hr period | 8 |
| Table 1.21 | Minimum charge weight anticipated (kg) | 0.5 |
| Table 1.21 | Maximum charge weight anticipated (kg) | 130 |
| Maximum construction vessel quantities on-site at the same time | | |
| Table 1.22 | Seabed preparation vessels | 3 |
| Table 1.22 | Foundation spreads per project | 1 |
| Table 1.22 | Number of vessels per foundation spread (includes tugs and feeders) | 5 |
| Table 1.22 | Transition piece installation vessels | 2 |
| Table 1.22 | Scour Installation Vessels | 6 |

^{xv} See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) for how this has been assessed within the application.

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---|--|--------------------|
| Table 1.22 | Number of vessels engaged in foundations | 5 |
| Table 1.22 | Wind turbine installation spreads | 3 |
| Table 1.22 | Max vessels per WTG installation spread | 3 |
| Table 1.22 | Total WTG installation vessels | 6 |
| Table 1.22 | Commissioning vessels | 7 |
| Table 1.22 | Accommodation vessels | 1 |
| Table 1.22 | Total IA cable vessels | 4 |
| Table 1.22 | Number of Export Cable spreads per Project | 3 |
| Table 1.22 | Number of vessels per Export Cable spread | 2 |
| Table 1.22 | Total export cable vessels | 6 |
| Table 1.22 | Landfall cable installation vessels | 2 |
| Table 1.22 | Substation/ collector IV | 3 |
| Table 1.22 | Other vessels | 3 |
| Table 1.22 | Total | 48 |
| Construction period I&O Vessels Round Trips to Port for Project over 3 years | | |
| Table 1.23 | Seabed Preparation Vessel | 15 |
| Table 1.23 | Foundation Installation Spread | 60 |
| Table 1.23 | Transition Piece Installation | 30 |
| Table 1.23 | Scour Vessel | 30 |
| Table 1.23 | WTG Installation Spread | 23 |
| Table 1.23 | Commissioning Vessels | 480 |
| Table 1.23 | IA Cable Vessels | 60 |
| Table 1.23 | Export Cable Vessels | 300 |
| Table 1.23 | Landfall Cable Installation Vessels | 30 |
| Table 1.23 | Substation Installation Vessels | 12 |
| Table 1.23 | Other Vessels | 120 |
| Table 1.23 | Total | 1,160 |
| Construction period I&O Vessels Round Trips to Port for Project over 3 years | | |
| Table 1.24 | Foundation Delivery | 30 |
| Table 1.24 | Turbine Delivery | 15 |
| Table 1.24 | Cable Delivery | 30 |

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---------------------------------|---|--------------------|
| Table 1.24 | Scour Delivery | 30 |
| Table 1.24 | Substation Delivery | 3 |
| Table 1.24 | Total | 108 |
| Jack-up Vessels | | |
| Construction | | |
| Table 1.25 | Individual leg diameter (m) | 10 |
| Table 1.25 | Individual leg footprint area (m ²) | 78.54 |
| Table 1.25 | Number of legs | 6 |
| Table 1.25 | Combined leg area (m ²) | 471.24 |
| Table 1.25 | Leg penetration range | 15 |
| Table 1.25 | Jacking Operations per | 2 |
| Table 1.25 | Turbine sites | 34 |
| Table 1.25 | Total JUV visits | 68 |
| O&M | | |
| Table 1.25 | Individual leg diameter (m) | 6 |
| Table 1.25 | Individual leg footprint area (m ²) | 28.27 |
| Table 1.25 | Number of legs | 6 ^{xvi} |
| Table 1.25 | Combined leg area (m ²) | 169.65 |
| Table 1.25 | Leg penetration range | 15 |
| Table 1.25 | Jacking Operations per Turbine | 10 |
| Table 1.25 | Turbine sites | 34 |
| Table 1.25 | Total JUV visits | 340 |
| Decommissioning | | |
| Table 1.25 | Individual leg diameter (m) | 6 |
| Table 1.25 | Individual leg footprint area (m ²) | 28.27 |
| Table 1.25 | Number of legs | 4 |
| Table 1.25 | Combined leg area (m ²) | 113.1 |
| Table 1.25 | Leg penetration range | 15 |
| Table 1.25 | Jacking Operations per Turbine | 1 |

^{xvi} The values were incorrectly presented within the project description chapter for Table 1.25. The values presented in Table 1.34 were however presented correctly. Please see Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003).

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---|--|--------------------|
| Table 1.25 | Turbine sites | 34 |
| Table 1.25 | Total JUV visits | 34 |
| Anchor footprints for construction of Thanet Extension | | |
| Installation of foundations | | |
| Table 1.26 | Number of anchors for assumed construction vessel | 6 |
| Table 1.26 | Individual anchor footprint area for one deployment and recovery (m ²) | 25 |
| Table 1.26 | Indicative anchor penetration depth (m) | 3 |
| Table 1.26 | Impacted anchor area for one deployment (m ²) | 150 |
| Table 1.26 | Assumed number of anchoring operations per installation | 1 |
| Table 1.26 | Total impacted area (m ²) | 150 |
| Table 1.26 | Total impacted volume (m ³) | 450 |
| Installation of topside (WTG and tower) | | |
| Table 1.26 | Number of anchors for assumed construction vessel | 4 |
| Assumptions applied in the ES based upon the installation of foundations in Table 1.26. | Individual anchor footprint area for one deployment and recovery (m ²) | 25 |
| | Indicative anchor penetration depth (m) | 3 |
| | Impacted anchor area for one deployment (m ²) | 150 |
| | Assumed number of anchoring operations per installation | 1 |
| | Total impacted area (m ²) | 150 |
| | Total impacted volume (m ³) | 450 |
| Installation of topside (OSS) | | |
| Table 1.26 | Number of anchors for assumed construction vessel | 6 |
| Table 1.26 | Individual anchor footprint area for one deployment and recovery (m ²) | 25 |
| Table 1.26 | Indicative anchor penetration depth (m) | 3 |
| Table 1.26 | Impacted anchor area for one deployment (m ²) | 150 |
| Table 1.26 | Assumed number of anchoring operations per installation | 1 |
| Table 1.26 | Total impacted area (m ²) | 150 |
| Table 1.26 | Total impacted volume (m ³) | 450 |

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|--------------------------------------|--|--------------------|
| Installation of export cables | | |
| Table 1.26 | Number of anchors for assumed construction vessel | 6 |
| Table 1.26 | Individual anchor footprint area for one deployment and recovery (m ²) | 10 |
| Table 1.26 | Indicative anchor penetration depth (m) | 3 |
| Table 1.26 | Impacted anchor area for one deployment (m ²) | 60 |
| Table 1.26 | Assumed number of anchoring operations per cable installation | 120 |
| Table 1.26 | Anchor deployments per asset crossing (per cable) | 4 |
| Table 1.26 | Total anchor deployments for asset crossings (per cable) | 20 |
| Table 1.26 | Anchor deployments per cable and foundation interface (per cable) | 4 |
| Table 1.26 | Total anchor deployments per cable installation | 144 |
| Table 1.26 | Impacted area per cable (m ²) | 8,640 |
| Table 1.26 | Impacted volume per cable (m ³) | 25,920 |
| Table 1.26 | Total impacted area (m ²) | 34,560 |
| Table 1.26 | Total impacted volume per cable (m ³) | 103,680 |
| Installation of array cables | | |
| Table 1.26 | Number of anchors for assumed construction vessel | 6 |
| Table 1.26 | Individual anchor footprint area for one deployment and recovery (m ²) | 10 |
| Table 1.26 | Indicative anchor penetration depth (m) | 3 |
| Table 1.26 | Impacted anchor area for one deployment (m ²) | 60 |
| Table 1.26 | Assumed number of anchoring operations per installation | 15 |
| Table 1.26 | Number of installations | 34 |
| Table 1.26 | Total anchor deployments for inter-array installation | 510 |
| Table 1.26 | Impacted area per cable (m ²) | 900 |
| Table 1.26 | Impacted volume per cable (m ³) | 2,700 |
| Table 1.26 | Total impacted area (m ²) ^{xvii} | 30,600 |

^{xvii} Discrepancies in this value within the ES are accounted for in Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003).

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---|---|--|
| Table 1.26 | Total impacted volume (m ³) | 91,800 |
| Permanent vessel moorings^{xviii} | | |
| Table 1.27 | Number of installations in total | 2 |
| Table 1.27 | Possible foundation types | Concrete Gravity Base or Standard Ground Tackle |
| Table 1.27 | Surface structure | A floating mooring buoy up to 3 m in diameter, and 3 m above sea level. |
| Table 1.27 | Marking & Lighting | Marked and lit as required (assume high-viz yellow colouration, radar reflector, navigation light). AIS beacon may be considered judged valuable (and acceptable to THLS). |
| Indicative construction programme (assuming no breaks to work) | | |
| Table 1.28 | Foundation installation | 6 (includes 1 month weather downtime) |
| Table 1.28 | Cable installation (inter-array and export) | 6 (includes 1 month weather downtime) |
| Table 1.28 | OSS (if required) | 2.5 (includes 2 weeks for foundation installation and weather downtime) |
| Table 1.28 | Met Mast (if required) | 2.5 (includes 2 weeks for foundation installation and weather downtime) |
| Table 1.28 | WTG installation | 6 (includes 1 month weather downtime) |
| Table 1.28 | Scour protection installation | 1 (includes 2 weeks weather downtime) |
| Table 1.28 | Total duration | 28 |
| Maximum O&M vessel quantities per year | | |
| Table 1.29 | Small CTV O&M vessel | 2 |

^{xviii} See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003).

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|---|---|--------------------|
| Table 1.29 | Large O&M Vessel | 1 |
| Table 1.29 | Lift vessels | 1 |
| Table 1.29 | Cable maintenance vessel | 1 |
| Table 1.29 | Auxiliary vessels | 1 |
| O&M Vessel Round Trips to Port per year, per vessel^{xix} | | |
| Table 1.30 | Small CTV O&M vessel | 300 |
| Table 1.30 | Large O&M Vessel | 2 |
| Table 1.30 | Lift vessels | 1 |
| Table 1.30 | Cable maintenance vessel | 1 |
| Table 1.30 | Auxiliary vessels | 3 |
| Table 1.30 | Accommodation O&M | 0 |
| Table 1.30 | Total (including all vessels) | 307 |
| O&M estimations – inter-array cables replacement worst-case estimates^{xx} | | |
| Table 1.31 | Number of inter-array cable failure during lifetime of wind farm | 7 |
| Table 1.31 | Length of replacement (longest inter-array cable) (m) | 2,000 |
| Table 1.31 | Width of seabed being disrupted for replacement of inter-array cable (m) | 10 |
| Table 1.31 | Overall impact area (cable and JUV) per repair (m ²) ^{xxi} | 20,000 |
| Table 1.31 | Total repair area (m ²) ^{xxii} | 140,000 |
| O&M estimations – inter-array cables repair worst-case estimates^{xx} | | |
| Table 1.32 | Cable re-burial - Reburial (total inter-array length) (m) | 64,000 |
| Table 1.32 | Cable re-burial - Frequency (once every 5 years) | 6 |
| Table 1.32 | Cable repair - Total width of disturbance (m) | 10 |
| Table 1.32 | Cable repair - Total area (cable alone) (m ²) | 640,000 |

^{xix} See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) with respect to O&M vessels quantities assessed within the ES.

^{xx} See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) with respect to O&M cable activities assessed within the ES.

^{xxi} This value was incorrectly presented in the project description chapter as 140,000. Please see Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003).

^{xxii} This value was incorrectly presented in the project description chapter as 980,000. Please see Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003).

| Project Description Chapter Ref | Parameter description | Maximum parameters |
|--|---|--------------------|
| Table 1.32 | Overall cumulative impact area (cable +JUV) per repair (m ²) | 3,840,000 |
| Export cable repairs/ reburial worst-case estimates ^{xx} | | |
| Table 1.33 | Cable inspection- One failure per cable per 5 years (total repairs in lifetime of project) | 24 |
| Table 1.33 | Cable inspection- Assumed repair length (through removal) (m) | 300 |
| Table 1.33 | Cable burial using surface protection- Total width of disturbance (same method as installation but decreased from 30 to 10 m) (m) | 10 |
| Table 1.33 | Cable re-burial Total area (cable alone) (m ²) | 3,000 |
| Table 1.33 | Additional cable laying- Overall cumulative impact area (cable +JUV) per repair (m ²) | 72,000 |
| WTGs O&M worst-case estimates | | |
| Table 1.34 | Individual leg diameter (m) | 6 |
| Table 1.34 | Individual leg footprint area (m ²) | 28.27 |
| Table 1.34 | Number of legs | 6 |
| Table 1.34 | Combined leg area (m ²) | 169.65 |
| Table 1.34 | Leg penetration range | 15.00 |
| Table 1.34 | Jacking Operations per Turbine (1 visit every 3 years) | 10 |
| Table 1.34 | Turbine sites | 34 |
| Table 1.34 | Total operations | 340 |
| Table 1.34 | Total footprint during operational period (m ²) | 57,680 |
| OSS O&M worst-case estimates | | |
| Table 1.35 | Individual leg diameter (m) | 6 |
| Table 1.35 | Individual leg footprint area (m ²) | 28.27 |
| Table 1.35 | Number of legs | 6 |
| Table 1.35 | Combined leg area (m ²) | 169.65 |
| Table 1.35 | Leg penetration range | 15 |
| Table 1.35 | Jacking Operations (total) (1 visit every 2 years) | 12.5 |
| Table 1.35 | OSS sites | 1 |
| Table 1.35 | Total operations | 13 |
| Table 1.35 | Total footprint during operational period (m ²) | 2,121 |

Table 2: Maximum Disposal Volumes (sand wave and seabed preparation of suction caisson foundations) for Thanet Extension

| Infrastructure | Project Description Chapter Ref | Activity | Maximum Volume (m ³) |
|----------------|--|--|----------------------------------|
| Transmission | Table 1.16 and assumptions of WTGs foundations were applied for the OSS (Table 1.6). Table 1.16 presented the pre-sweeping assumptions for the cable corridors. | Pre-sweeping (sand wave clearance) and seabed preparation for OSS suction caisson foundation | 1,440,000 + 9,600 = 1,449,600 |
| Generation | Table 1.6 and assumptions of WTGs foundations were applied for the met mast (Table 1.6) | Seabed preparation for suction caisson foundations (28 WTGs and a met mast) | 29 x 9,600 = 278,400 |
| Total | | | 1,728,000 |

Table 3: Maximum Disposal Volumes (sand wave and drill arisings for monopile foundations^{xxiii}) for Thanet Extension

| Infrastructure | Project Description Chapter Ref | Activity | Maximum Volume (m ³) |
|----------------|---|---|-----------------------------------|
| Transmission | Tables 1.12 and 1.16 | Pre-sweeping (sand wave clearance) and drill arisings for OSS monopile foundation | 1,440,000 + 1,000 = 1,441,000 |
| Generation | Table 1.4 and assumptions of WTGs foundations were applied for the met mast (Table 1.4) | Drill arisings for monopile foundations (28 WTGs and a met mast) | 19,627 + 1,155 = 20,782 |
| Total | | | 1,461,782 (1,440,000 + 21,782) |

^{xxiii} See Table 9 for details of how the drill arising volumes have been derived.

Table 4: Summary of the total maximum disposal volumes (sand wave and seabed preparation or drill arisings) in the proposed disposal sites (as presented in PINS Ref REP4-019)

| Disposal Site | Total volume to be disposed of in the site from cable sand wave clearance, suction caisson seabed preparation and monopile drill arisings (m ³) |
|--------------------------|--|
| 1 | 590,400 (360,000 + 230,400) in the case of dredging (suction caisson seabed preparation); or 370,891 (360,000 + 10,891) in the case of monopile drilling |
| 2 | 417,600 (360,000 + 57,600) in the case of dredging (suction caisson seabed preparation); or 370,891 (360,000 + 10,891) in the case of monopile drilling |
| 3 | 720,000 (50% of the total) |
| Total (m ³): | 1,728,000 (1,440,000 + 288,000) in the case of dredging ^{xxiv} ; or 1,461,782 (1,440,000 + 21,782) in the case of monopile drilling ^{xxv} . |

Table 5: Maximum scour protection area for Thanet Extension

| Infrastructure | Project Description Chapter Ref | Activity | Maximum Area (m ²) |
|----------------|---|--|--------------------------------|
| Transmission | Table 1.13 | Scour protection for the OSS | 7,854 |
| Generation | Table 1.7 and assumptions of WTGs foundations were applied for the met mast (Table 1.7) | Scour protection for WTGs and the met mast | 219,912 + 7,854 = 227,766 |
| Total | | | 235,620 |

Table 6: Maximum scour protection volume for Thanet Extension

| Infrastructure | Project Description Chapter Ref | Activity | Maximum Volume (m ³) |
|----------------|---|--|--|
| Transmission | The assumptions of WTGs foundations were applied for the OSS (Table 1.7) | Scour protection for OSS | 39,269.9 |
| Generation | Table 1.7 and assumptions of WTGs foundations were applied for the met mast (Table 1.7) | Scour protection for the WTGs and the met mast | 1,112,647.4 + 39,269.9 = 1,151,917.3 |
| Total | | | 1,191,187.2 |

^{xxiv} See Table 2 for details of how the drill arising volumes have been derived.

^{xxv} See Table 3 for details of how the drill arising volumes have been derived.

Table 7: Maximum cable protection area for Thanet Extension

| Infrastructure | Project Description Chapter Ref | Activity | Maximum Area (m ²) |
|----------------|---|---|--------------------------------|
| Transmission | Table 1.16 | Export Cable | 210,000 |
| | Table 1.17 | Export Cable crossings | 80 crossings x 1000 = 80,000 |
| | Not presented as a total in the project description | Total for Export Cable | 290,000 |
| Generation | Table 1.9 | Inter-array cables | 80,000 |
| | Table 1.10 | Inter-array cables crossings | 12,000 |
| | Table 1.9 | Total area of WTG foundations requiring rock dumping/ remedial protection (m ²) | 17,500 – 500 = 17,000 |
| | Not presented as a total in the project description | Total for inter-array cables | 109,000 |
| Total | | | 399,000 |

Table 8: Maximum cable protection volume for Thanet Extension

| Infrastructure | Project Description Chapter Ref | Activity | Maximum Area (m ³) |
|----------------|---|---|---|
| Transmission | Table 1.16 | Export Cable | 210,000 m ² x 0.5 m = 105,000 m ³ |
| | Table 1.17 | Export Cable crossings | 80 crossings x 500m ³ = 40,000 m ³ |
| | Not presented as a total in the project description | Total for Export Cable | 145,000 m ³ |
| Generation | Table 1.9 | Total area of WTG foundations requiring rock dumping/ remedial protection (m ²) | 17,500 m ² x 0.5 m = 8,750 m ³ |
| | Table 1.9 | Inter-array cables | 16 km x 1,250 m ³ km ⁻¹ = 20,000 m ³ |
| | Table 1.10 | Inter-array cables crossings | 6,000 |
| | Not presented as a total in the project description | Total for inter-array cables | 34,750 |
| Total | | | 179,750 |

Table 9: Maximum drill arising volume for Thanet Extension

| Infrastructure | Project Description Chapter Ref | Activity | Maximum Volume (m ²) |
|----------------|---|---|----------------------------------|
| Transmission | Table 1.12 | Maximum volume for to drill OSS | 1,000 |
| Generation | Table 1.4 and assumptions of WTGs foundations were applied for the met mast (Table 1.4) | Maximum volume to drill 50% of WTG foundations and one met mast (assuming 10MW) | 19,627 + 1,155 = 20,782 |
| Total | | | 21,782 ^{xxvi} |

Table 10: Maximum disturbance sediment volume for installation of cabling for Thanet Extension (excluding pre-sweeping/ sand wave clearance)

| Infrastructure | Project Description Chapter Ref | Activity | Maximum Volume (m ³) |
|----------------|---------------------------------|--|--|
| Transmission | Table 1.16 | Jetting of export cables (assuming a v-shaped trench and 50% of sediment is liquidised) | 10 m x 3 m x 120 km x 0.5 x 50% = 900,000 ^{xxvii} |
| Generation | Table 1.9 | Jetting of inter-array cables (assuming a v-shaped trench and 50% of sediment is liquidised) | 1 m x 3 m x 64 km x 0.5 x 50% = 48,000 ^{xxviii} |
| Total | | | 948,000 |

Table 11: Maximum disposal volumes from cable related sand wave clearance

| Infrastructure | Project Description Chapter Ref | Activity | Maximum Volume (m ³) |
|----------------|---------------------------------|---|--|
| Transmission | Table 1.16 | Maximum disposal volumes from cable related sand wave clearance | 24 km x 20 m x 60 m ³ /m = 1,440,000 m ³ |
| Generation | N/A | N/A | N/A |
| Total | | | 1,440,000 m ³ |

^{xxvi} See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) for how this has been assessed within the application. This value was not presented as total within the project description chapter.

^{xxvii} See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) for how this has been assessed within the application. This value was not presented as total within the project description chapter.

^{xxviii} See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) for how this has been assessed within the application. This value was not presented as total within the project description chapter.

Table 12: Maximum infrastructure footprint for Thanet Extension Construction activities

| Infrastructure | Project Description Chapter Ref | Activity | Maximum Area (m ²) |
|----------------|-------------------------------------|---|--------------------------------|
| Transmission | Based on parameters from Table 1.13 | One OSS (based on a tripod suction bucket diameter of 20 m) | 942.5 ^{xxix} |
| Generation | Based on parameters from Table 1.6 | 28 x 12 MW WTGs and one met mast with a diameter of 20 m (assuming the same parameters as WTGs) | 1,256.6 x 29 = 36,442.5 |
| Total | | | 37,385 ^{xxx} |

Table 13: Maximum disturbance area for Thanet Extension O&M activities

| Infrastructure | Project Description Chapter Ref | Activity | Maximum Area (m ²) |
|----------------|---------------------------------|--|---------------------------------|
| Transmission | Table 1.33 | Export Cable O&M works | 72,000 |
| | Table 1.35 | JUVs for OSS | 2,121 |
| | N/A | Transmission Total | 74,121 |
| Generation | Tables 1.31 & 1.32 | Inter-array cable O&M replacement and reburial | 140,000 + 3,840,000 = 3,980,000 |
| | Table 1.25 | JUVs for WTGs | 169.65 x 340 = 57,680 |
| | N/A | Generation Total | 4,037,860 |
| Total | | | 4,111,801 ^{xxxi} |

^{xxix} This is based on a tripod OSS as within the project description chapter, however this has been assessed as 1,256 m² within the ES.

^{xxx} Based on the discrepancy between the footprint for the OSS, this has been assessed as 37,680 m² within the ES. Please see Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003).

^{xxxi} See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) for how this has been assessed within the application. This value was not presented as total within the project description chapter.

Table 14: Maximum disturbance volume for Thanet Extension O&M activities

| Infrastructure | Project Description Chapter Ref | Activity | Maximum Area(m ²) |
|----------------|------------------------------------|---|---|
| Transmission | Table 1.33 | Export Cable O&M works | 72,000 m ² x 3m x 0.5 x 50% = 54,000 |
| Generation | Tables 1.31 & 1.32 | Inter-array cable O&M replacement and reburial | 3,980,000 m ² x 3m x 0.5 x 50% = 2,985,000 |
| Total | | | 3,039,000 ^{xxxii} |

^{xxxii} See Annex A to Appendix 1 of the Applicant's Deadline 3 Submission (PINS Ref REP3-003) for how this has been assessed within the application. This value was not presented as total within the project description chapter.