

Vattenfall Wind Power Ltd

Thanet Extension Offshore Wind Farm

Appendix 13 to Deadline 2 Submission: Explanatory Memorandum

Relevant Examination Deadline: 2

Submitted by Vattenfall Wind Power Ltd

Date: February 2019

Revision B

| | |
|-------------------|-----------------------|
| Drafted By: | Womble Bond Dickinson |
| Approved By: | Daniel Bates |
| Date of Approval: | February 2019 |
| Revision: | B |

| | |
|------------|---|
| Revision A | Original Document submitted in the Application |
| Revision B | Revised document submitted to the Examining Authority |
| N/A | |
| N/A | |

Copyright © 2019 Vattenfall Wind Power Ltd
 All pre-existing rights retained

Vattenfall Wind Power Ltd

Thanet Extension Offshore Wind Farm

Explanatory Memorandum

| | |
|--------------------|--------------------------------|
| Document Reference | 3.2 |
| APFP Regulation | 5(2)(c) |
| Author | Womble Bond Dickinson (UK) LLP |
| Date | June 2018 |

THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (APPLICATIONS: PRESCRIBED FORMS AND PROCEDURE) REGULATIONS 2009 REGULATION 5(2)(c)

THE PROPOSED THANET EXTENSION OFFSHORE WIND FARM ORDER

EXPLANATORY MEMORANDUM

1 Introduction

- 1.1 This memorandum accompanies an application for development consent (the **Application**) by Vattenfall Wind Power Ltd (the **Applicant**) to construct and operate the Thanet Extension Offshore Wind Farm (the **Project**). The memorandum explains the purpose and effect of each Article of, and Schedule to, the draft Thanet Extension Offshore Wind Farm Order (the **Order**), as required by Regulation 5(2)(c) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.
- 1.2 It also highlights and explains the purpose and effect of any departures from the Infrastructure Planning (Model Provisions) (England and Wales) Order 2009 (**model provisions**). The draft Order is based on the model provisions but occasionally departs from those clauses and where appropriate draws from the drafting used in Orders for similar development made under the Planning Act 2008 (the **2008 Act**), the Transport and Works Act 1992 and other Acts authorising development. A table has been included at **Schedule 1** to summarise the basis of the drafting used in the case of each Article of the draft DCO. We note that PINS Advice Note 15, published in July 2018, states that a tracked changed draft of the DCO showing any departures from the model provisions is no longer required. Therefore, at Deadline 2, the Applicant removed the tracked changed comparison of the Articles within the Order, which was previously provided at Schedule 4 of this document.
- 1.3 A detailed explanation of the authorised development is set out in the Environmental Statement (Document 6) which accompanies the Application.
- 1.4 As the Order seeks to apply and modify statutory provisions concerning the compulsory acquisition of land and the treatment of certain requirements as planning conditions, in accordance with sections 117(4) and 120(5) of the Planning Act 2008 (**2008 Act**) it has been drafted as a statutory instrument.

2 The purpose of the Order

- 2.1 In overview, the purpose of the Order is to grant the Applicant development consent for a Nationally Significant Infrastructure Project (**NSIP**), namely:
- 2.1.1 An extension to the existing Thanet offshore wind farm off the coast of Thanet, Kent of up to 340 MW, to be located approximately 8km offshore (at the closest point);
 - 2.1.2 Up to one meteorological mast;
 - 2.1.3 Up to one offshore substation;
 - 2.1.4 Up to one Floating Lidar Device (FLD) and up to one wave buoy; and
 - 2.1.5 A network of subsea cables.
- 2.2 The Order also includes associated development linked to the NSIP, namely:
- 2.2.1 A subsea electrical connection between the offshore substation, and from that substation to a landfall at Pegwell Bay in the district of Thanet;

- 2.2.2 Up to four transition joint bays at the landfall at Pegwell Bay Country Park;
 - 2.2.3 An underground electrical connection comprising up to four cables;
 - 2.2.4 A new onshore substation housing the principal electrical equipment located at Richborough Port, including a new vehicular access track; and
 - 2.2.5 Onshore underground connection works, consisting of up to two cable circuits and communications cables, to the National Grid 400kV substation at Richborough Energy Park.
- 2.3 The Order also contains two deemed marine licences under section 66(1) of the Marine and Coastal Access Act 2009 (the **2009 Act**). In addition, the Order contains powers to acquire land, or rights, compulsorily for the construction and operation of the Project.

3 Nationally Significant Infrastructure Project – offshore generating station

- 3.1 Pursuant to sections 14(1)(a) and 15(3) of the 2008 Act, an offshore generating station in England or Wales having a capacity of more than 100 MW is an NSIP.
- 3.2 Section 31 of the 2008 Act provides that development consent is required under that Act to the extent that a development is or forms part of an NSIP. As the proposed generating station is proposed to have a capacity of up to 340 MW it qualifies as an NSIP in its own right.
- 3.3 The detailed elements which comprise the generating station, and its associated development, are considered separately below.

4 The need for flexibility in the Order

Phasing

- 4.1 Flexibility is sought and required in relation to phasing for the construction of the Project. Onshore construction works will be undertaken in one continuous construction period but will be phased to allow for the laying of ducts separately to the pull through of cables and the construction of the onshore project substation. A single phase of duct installation works is proposed.
- 4.2 It is important to note that the Environmental Statement has assessed the worst case parameters from the phasing of construction on a case-by-case basis. The Order has therefore been drafted to reflect this approach, particularly with regard to maximum parameters. The entirety of the onshore construction works, which anticipates any delay or "stop/start" in the construction programme, will be undertaken over a maximum period of 30 months.
- 4.3 Requirement 8 (*Stages of authorised development onshore*) has been included in relation to phasing and this is explained further below.

Structure of deemed marine licences

- 4.4 The Applicant's proposed approach to allow for a transfer of a marine licence for the export cable assets to an Offshore Transmission Owner (**OFTO**) under The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010 (SI 2010/1903) or to a distribution network operator (**DNO**) under (such a licence as granted under section 6(1)(c) of the Electricity Act 1989) is to create separate deemed marine licences in the Order for the generation assets and export cable assets.
- 4.5 This approach has been adopted on a number of offshore wind farms consented under the 2008 Act, including the East Anglia THREE offshore wind farm.
- 4.6 In addition, the Applicant does not know, at this stage, whether the deemed marine licence will be held by an OFTO for the purpose of operating the export cables. The Order has been drafted as such to afford the Applicant the necessary flexibility to decide whether to obtain and transfer the deemed marine licence to an OFTO if required.
- 4.7 Whilst Schedule 1 of the Order specifies the maximum capacity of the wind farm as being 340MW (with up to 34 turbines), the Environmental Statement has assessed the Project as being constructed in one phase.

Offshore flexibility

- 4.8 The Order defines the generating station in paragraph 1 of Schedule 1, Part 1 (*Authorised development*). It is limited by the 340 MW generating capacity, which is expressed to be a maximum i.e. “up to 340 MW”.
- 4.9 The constituent elements of the generating station are specified in Work No. 1, together with offshore associated development in Work Nos. 2 and 3 which are expressly limited to the Order limits seaward of Mean High Water Springs (**MHWS**). Work No. 3 has been split into three separate works (Work Nos. 3, 3A and 3B). Work No. 3 allows for four offshore subsea export cables to export electricity and transmit electronic communications to the shore; however Work Nos. 3A and 3B relate solely to the intertidal area. This enables the separation of works within the MMO and Thanet District Council's jurisdiction. At the intertidal area, both the MMO and Thanet District Council have jurisdiction. Works No. 4 to 16 specify the onshore associated development linked to the NSIP within the Order limits landward of Mean Low Water Springs (**MLWS**) and Part 2 of Schedule 1 specifies the ancillary works.
- 4.10 Within the Order, flexibility has been provided in relation to the Work No. 16 (the generating station and linked associated development), and in the view of the Applicant this flexibility, which has hitherto been critical to the development of offshore wind farms in the UK, is fundamental to ensure the Order is fit for purpose.
- 4.11 The reason for this principally relates to the need to manage and drive down the cost of offshore wind developments to justify equity investment and access debt funding in a competitive international market. This includes the need to maintain competitive tension in the procurement process driving down costs; the need to take advantage of new developments and emerging products in the market for offshore wind turbine generators and other equipment; and the need to drive down the cost of energy for the purposes of tendering for Contracts for Difference.
- 4.12 The final design of a wind farm depends on a number of factors which include the size, height and capacity of the chosen turbine type; electrical design; length of cables; areas where development is constrained; the outcomes of site investigations, and ongoing wind monitoring results. All these are considered post-consent at the stage of detailed design and optimisation when the final number and type of turbines and their location will be decided as a function of site constraints and viable layout. This final design will be approved under the provisions of the deemed marine licences.

Onshore flexibility

- 4.13 Similar flexibility is required for the onshore elements of the development. With regard to the onshore substation, the optimal design will be determined through the contracting process. Each tenderer will offer different technologies, designs and layouts for the onshore substation within the parameters of any consent obtained, which enables the optimal design solution to be chosen. Final detailed design of the onshore substation will not be settled until after the appointment of a contractor.
- 4.14 As a result, flexibility within the Order, both onshore and offshore, is needed to optimise the Project in the light of variable costs and supply chain availability; to accommodate technology development in turbines and other equipment; and to allow for optimal detailed design and procurement within the parameters of consents.
- 4.15 There are two landfall options within Work No. 3B, as follows:
- 4.15.1 **Option 1:** Locate the TJBs below ground within the Country Park and cross the sea wall by Horizontal Directional Drilling (HDD). This Option requires a larger onshore temporary works area to house the HDD rig and associated equipment but does not require excavation and reinstatement of the sea wall. Under this Option HDD would be undertaken from land to sea, with an initial bore undertaken prior to a wider drill profile and installation of ducts to house the cables. The HDD ducts would be installed from the TJB location, out to a punch-out location at least 100 m seaward of the sea wall. As a result of the uncertainty associated with the contents of the landfill there may be a need to control the HDD works in order to prevent the introduction of a pathway for the contaminants present. Whilst the detailed design will be subject to the outcomes of the SI works, and any additional SI works that may be required post-consent, there are a number of methods that could be applied to control the release of contaminants from the landfill. This may include excavating down through the landfill and lining

it with plastic or other material (depending on depth), or installation of casing through the first section of the HDD bore (within the initial landfill area) to seal it (disposing of the excavated material appropriately) before continuing the bore out to the punch out/receptor pit in clean ground.

- 4.15.2 **Option 2:** A now removed option to install TJBs and cables above ground with an associated permanent extension to the sea wall.
- 4.15.3 **Option 3:** Locate the TJBs below ground within the Country Park before trenching the remainder of the route. This requires installation of a temporary cofferdam before excavating through from the upper intertidal, through the existing sea wall. For this Option the cofferdam is required to ensure no release of contaminants from the landfall into the marine environment. The offshore cables would be trenched from the intertidal area through this cofferdam and seawall area onshore into the TJB area. The cofferdam would be removed, and the seawall reinstated.
- 4.16 The Project envelope initially contained an additional landfall option, which required the installation of a temporary cofferdam within the upper intertidal/saltmarsh area before extending the existing sea wall to allow for buried offshore cables to transition to TJBs located above ground within a permanent berm. This Option was removed from the Project envelope at Deadline 2 during the Examination process. The reasons for this decision are detailed within Appendix 45 to Deadline 1 submission: Removal of Landfall Option 2.
- 4.17 Within Richborough Energy Park, three different potential routes for the cable are sought in order to connect the cables to the existing National Grid substation in Plot 02/130. Richborough Energy Park and the National Grid 400 kV substation are currently under construction, and as such the final configuration of this site is sufficiently uncertain as to require three route options to be retained.
- 4.18 Critically, National Grid has not yet confirmed the location of the connection point within its substation compound that the Thanet Extension cables will connect into. The Applicant accordingly requires flexibility to allow a connection to the east or the west of the National Grid compound.
- 4.19 Following detailed design work and further consultation with the landowner, National Grid, and other infrastructure owners, the Applicant will identify a single cable route. All route options would enter Richborough Energy Park using HDD under the A256 from the onshore substation. The location of the HDD entry or exit pits within Richborough Energy Park will be determined by the final cable route, local constraints, and discussions with the landowner and other utilities including National Grid, Nemo Link and UKPN.
- 4.20 Option 1 comprises a route south of the existing UKPN 132 kV substation compound, going north along the road along the western boundary of the site to a connection point in the west of the NGET compound. There is a proposal for National Grid to install 132 kV cables within this road, connecting to the UKPN substation. This would significantly constrain this route option, particularly at the point between the south western corner of the UKPN compound and the retaining wall on the western boundary of REP.
- 4.21 Option 2 passes through the corridor between the Thanet Offshore Wind Farm (**TOWF**) substation and the Nemo Link converter station, before following the same alignment as option 1 along the road on the western boundary of the Richborough Energy Park site within Plots 02/120, 02/125, 02/135 and 02/140. This would require a connection point in the west of the NGET compound. This option avoids the pinch point identified for option 1, but will only be confirmed as a viable option following further investigation of the final HDD location, the buried infrastructure in this area and the final layout of any access road along this corridor.
- 4.22 Option 3 facilitates a connection point in the east of the NGET substation compound. The route runs to east of the Nemo converter station with cables either in the road or within the verge. There are other below-surface utilities on this route but these do not present significant constraints.
- 4.23 All plots within Richborough Energy Park that are, at this stage, optional and may not feature in the final made Order. They have been clearly indicated as contingent in the Land Plans and Book of Reference.

- 4.24 This is considered a proportionate approach, and will provide the Project with no greater powers than it requires to facilitate the Project.

Policy support for flexibility

- 4.25 The use of flexibility in project details within an Order is expressly endorsed by National Policy Statements EN-1 (at paragraphs 4.2.7 to 4.2.10) and EN-3 (at paragraphs 2.6.42 to 2.6.45), provided the resulting variables are fully assessed in terms of worst case effects. Paragraph 4.2.9 of EN-1 explains that where flexibility is sought, it will be necessary to include appropriate requirements within the Order to ensure that the Project "envelope" is limited to that which has been assessed in the Environmental Statement.
- 4.26 This approach, known as the "Rochdale Envelope", has been followed numerous times in relation to large scale offshore wind farms consented under section 36 of the Electricity Act 1989 and the 2008 Act, and it is an approach which is well known and adopted by statutory consultees. Relevant statutory consultees have all been made aware of the parameters used in the Environmental Impact Assessment (EIA) and the Order.
- 4.27 PINS has issued an Advice Note (Advice Note 9) which suggests (page 10) that a practical way forward in the use of the Rochdale Envelope would be for the Order application to "set out specified maximum and minimum" parameters, and gives possible examples, for offshore wind farms, of maximum/minimum turbine numbers; hub height and blade tip heights; minimum clearance above mean sea level; and separation distances between turbines. While these examples are not intended to be exhaustive for use by promoters, many of the fundamental parameters which define the majority of likely significant effects are included in the Advice Note, and each is considered further below, with reasoning provided for including, or not including, each parameter within the Order, or including parameters which are not included in the Advice Note.

Parameters in the Order

- 4.28 The overall result of the wording in Part 1 of Schedule 1 (i.e. paragraph 1 and Work Nos. 1 to 3B) and Requirement 2 (*Detailed offshore design parameters*) in Part 3 is to allow similar flexibility. In particular, the undertaker will have freedom, within the specified parameters, as to the number of wind turbines installed, the size of turbines, the resulting capacity of the generating station up to 340 MW, the extent to which the area within the Order limits is used, the precise layout of turbines, meteorological mast, offshore substation, and the arrangement of cabling between the turbines, meteorological mast and offshore substation. It will also allow for different electrical solutions to be adopted.
- 4.29 Similarly, Work No.13 and Requirement 9 (*Detailed design parameters onshore*) dictate the site of the onshore substation and its maximum height and footprint. Requirement 9 also requires detailed approval of the layout, scale and external appearance of the onshore substation and requires the final details to be approved in accordance with the principles of the design and access statement.
- 4.30 The parameters included in the Order are set out in **Schedule 3** to this Explanatory Memorandum for ease of reference.

Maximum MW capacity and maximum number of turbines

- 4.31 The maximum capacity of the Project of 340 MW therefore comprises the over-arching project description, and the other parameters are defined by that description. The total MW controls the maximum number of turbines that can be installed at any given turbine capacity, with an absolute maximum number of turbines for the Project set at 34.

Minimum number of turbines

- 4.32 Advice Note 9 suggests a minimum number of turbines should be specified. It is not considered that this would be a workable or appropriate parameter for the Applicant.
- 4.33 It is not necessary to impose a minimum to ensure that the Project exceeds the NSIP threshold of 100 MW as that threshold turns on what the capacity of the scheme is expected to be at the point of application and consent. This is not in doubt – the expected capacity is 340 MW. While a lower figure may in fact be constructed once the turbine size or capacity has been decided and the scheme design optimised after the grant of consent, there is no reasonable basis to expect that the capacity constructed would be less than 100 MW.

- 4.34 Whether setting a minimum number of turbines as a parameter would either be reasonable or enforceable must be open to doubt. An offshore wind farm consent is a valuable asset, and if a developer chooses only to utilise part of it, there will invariably be very good commercial and technical reasons for this. The flexibility sought in a modern large scale development consent for a large offshore wind farm is fundamental to whether or not the project will be constructed at all, and goes to the heart of whether the consent is fit for purpose to permit a buildable, economically viable project. This may not be the case for other types of, development, particularly onshore developments, but it is the case for offshore wind farms.
- 4.35 There can be no EIA justification for seeking to impose a minimum turbine requirement, since the fewer the number of turbines, the lesser the impact.
- 4.36 To seek to impose a minimum number of turbines would also cut across a long-standing principle of consents for development; namely, that it is lawful for less than the full extent of the consent to be constructed, as long as what is constructed is in accordance with the requirements of the consent.
- 4.37 The other issue which arises is whether a minimum number of turbines is needed to address the point in the Advice Note that the project parameters should not be "*so wide ranging as to represent effectively different schemes*". The project is fundamentally defined by the Order limits, the nature of the development (an offshore wind farm) and the maximum 340 MW capacity. It is inherent in this type of project that there will be variations in turbine numbers and scheme layout, as already explained, and it cannot properly be regarded as giving rise to "*effectively different schemes*" to the extent that an Order in these terms cannot lawfully be granted. Numerous large scale consents on an equivalent basis have already been granted under the Electricity Act 1989 for offshore wind farms without a minimum number of turbines being specified.

Maximum and minimum hub height

- 4.38 It is accepted by the Applicant that maximum hub height is a parameter which is appropriate for inclusion in the Order. The maximum hub height is 250m. The maximum height serves to fix the Environmental Statement assessments and confirms the maximum height at which static (rather than rotating) elements of each turbine would be seen. However, a minimum hub height is not necessary as this is inherently defined by the minimum blade clearance distance to MHWS.

Maximum and minimum blade tip height and clearance to mean sea level

- 4.39 The maximum blade tip height is a fundamental parameter and has been fixed at 250 metres above Highest Astronomical Tide (**HAT**). The minimum blade clearance to MHWS is set at 22 metres to reflect the long-standing position of the Royal Yachting Association and the inclusion of this parameter in previous offshore wind farm consents.
- 4.40 A minimum blade tip height (i.e. the lowest level at which the highest blade could pass) is not referred to in any of the assessments and is inherently fixed by the minimum blade clearance. It is not therefore included as a proposed parameter.

Minimum separation distances between turbines

- 4.41 A minimum separation distance of 480m in each row and 716m between rows has been adopted. The separation in both axes is to allow time for the energy in the wind to recover, although the greater distance is afforded to the axis of the prevailing wind direction. This approach of applying minimum separation distances has been commonly used for Electricity Act 1989 and 2008 Act consents. The minimum separation distances identified for Thanet Extension are the same as the existing TOWF. Whilst the proposed turbines for Thanet Extension are taller than those currently installed, the narrower spacing allows the siting of any two turbines in alignment with the grid arrangement of TOWF in order to meet navigational safety requirements. However the strong likelihood is that they will be spaced much further apart and, given the irregular site boundaries of Thanet Extension, it would be highly unlikely for all turbines to be placed in a regular grid layout akin to TOWF.
- 4.42 The number of variables affecting the final optimised layout, including the extent to which the area within the Order limits is used or not used, mean that a condition governing scheme layout which goes beyond the specified minimum separation distances is not appropriate. Whilst in practice most offshore wind farms have been built on a broad grid arrangement, there needs to be flexibility on this issue in the Order, to allow for detailed design and optimisation.

Maximum rotor diameters

- 4.43 The maximum rotor diameter is limited to 220 metres by the wording of Requirement 2 (*Detailed offshore design parameters*). Whilst not mentioned as a parameter in the Advice Note, the Applicant considers that a parameter on maximum rotor diameter is necessary to ensure a robust EIA. The total blade swept area of the turbines is a key factor in different assessments.

Foundation parameters

- 4.44 It is fundamental to the Project that there should be flexibility to use different foundation types. Three different foundation types are provided for: monopile, three legged jacket (piled or suction caisson), four legged jacket (piled or suction caisson). The choice of foundations will be influenced by a variety of factors, including anticipated changes in available technology and pending greater understanding of ground conditions following detailed pre-construction site investigations, as explained in Volume 2, Chapter 1 of the Environmental Statement. In terms of the Order, the Applicant has considered which design parameters for each type of foundation are important to ensure a complete and robust EIA, and these have been included in the Order.

Offshore substations, meteorological masts and buoys

- 4.45 The number of meteorological masts and offshore substations will not exceed one. The number of Floating Lidar Devices (FLD) and wave buoys fixed to the seabed will not exceed one of each. The type of meteorological mast or offshore substation will be determined as part of the post consent detailed design and optimisation process and will depend on the final layout and electrical design considerations. For the reasons given above, the precise design of the meteorological mast and offshore substation cannot be fixed at this time. Accordingly, parameters limiting their dimensions and foundation arrangements (where relevant) are included in the Order. Their final location within the Order limits will depend on post consent detailed design and optimisation.

Inter-array and export cables

- 4.46 The precise number, layout and total length of the inter-array and export cables cannot be fixed until post consent design optimisation. The key factor for assessment purposes is the total cable length, based on the maximum number of turbines and a worst-case layout for cabling, and the maximum length has been included as a parameter in the Order.

Offshore Order Limits and offshore plans

- 4.47 The final parameter is the Order limits. The nature of the flexibility sought necessarily means that the offshore Works Plan is simplistic. It is not possible to provide a more detailed plan, for the reasons given above.

- 4.48 It is important to bear in mind that under the deemed marine licences contained in Schedules 11 and 12 of the Order, the undertaker must submit final construction details for approval by the MMO before construction. The MMO must ensure that final construction details conform with the description of Works Nos. 1 to 3B and comply with the design parameters in Part 4, Condition 1 in the deemed marine licences for the generation and export cable system assets. Those submitted details will specify the number, dimensions and layout of the WTGs, meteorological mast, offshore substation and the network of cables. Hence, there will be a further stage of regulatory control of the final form of the development prior to construction.

5 Associated development

DCLG Guidance on associated development

- 5.1 Pursuant to section 115 of the 2008 Act, development consent can be granted for the NSIP and associated development. The Secretary of State for Communities and Local Government has issued guidance on associated development¹ (the Guidance) which sets out its defining characteristics and illustrates the types of development that may qualify. Associated development must not be an aim in itself. In most cases, it is of a type normally brought forward with the primary development² and must be subordinate to and necessary for the effective operation of the NSIP, and may include measures necessary to mitigate the effects of the

¹ Planning Act 2008: associated development applications for major infrastructure projects (Published by Department for Communities and Local Government, April 2013)

² Guidance para. 5

primary development. It should be of a proportionate scale to the primary development. Examples given in the Guidance include grid connections (underground or overhead lines)³.

- 5.2 Part 1 of Schedule 1 of the Order includes associated development for which consent is sought as part of the generating station NSIP. These works comprise the offshore substation (Work No. 2), subsea cables (Work No.1) and onshore underground cables from the offshore substation to the onshore substation, via jointing bays (where the offshore cables connect to the onshore cables) and associated accesses and the onshore substation and associated landscaping and grid connection (Work Nos. 3 to 16) together with various miscellaneous matters.
- 5.3 All these elements clearly fit within the definition of associated development in that they are not an aim in themselves but are required to receive and export the electricity generated by the generating station, with suitable electrical transformation at both the offshore substations and the onshore substation. This is reinforced by the fact that these elements will, after construction, be transferred to an OFTO or DNO. After such transfer the works will be owned and operated completely separately from the generating station under a transmission licence issued under section 6 of the Electricity Act 1989 or a distribution licence.
- 5.4 The works are required to be within the Order limits but the detailed design of the associated development will be a matter for the Applicant. The number of meteorological masts is not fixed at this stage, but is limited to a maximum of one by the wording of Work No. 1 and by Requirement 2. (*Detailed offshore design parameters*). There number of offshore substations is not fixed at this stage, but it limited to a maximum of one by the wording of Work No. 2 and by Requirement 2 (*Detailed offshore design parameters*).
- 5.5 Similarly, in terms of the onshore associated development, Work Nos. 3A to 16 (inclusive) and Requirement 9 (*Detailed design parameters onshore*) control the parameters for the onshore substation infrastructure. Work No. 13 dictates the site of the onshore project substation. The precise nature and layout of the equipment in the compound will depend on the turbine(s) selected, the electrical design and other matters. Requirement 9 requires detailed approval of the landscaping in relation to onshore project substation, which are to be in accordance with the principles of the design and access statement, and limits the maximum height of the onshore project substation. It also limits the extent of the fenced compound area for the onshore project substation. Detailed approval for the onshore project substation must be sought under Requirement 12 (*Provision of landscaping*).
- 5.6 There are a number of Requirements relating to various plans and strategies that properly control the development throughout the construction and operation of the Project. This includes, an access management strategy (Requirement 11), implementation and maintenance of landscaping (Requirement 13), highways access (Requirement 14), Construction and Environment Management Plan (Requirement 15), Code of Construction Practice (Requirement 16), surface water and drainage management plan (Requirement 18), contaminated land and groundwater plan (Requirement 19), construction noise and vibration management plan (Requirement 20), construction traffic management plan (Requirement 21), archaeological written scheme of investigation (Requirement 22) and Landscape and Ecological Mitigation plan (Requirement 23).

6 Preliminary Provisions

Articles 1 and 2 of the Order contain preliminary provisions in Part 1.

Article 1 (*Citation and commencement*) provides for the commencement and citation of the Order. It includes the date on which the Order comes into force, which may or may not be the date on which the Order is made.

Article 2 (*Interpretation*) provides for the interpretation of the Order. Amongst other things, the definition of Order limits includes cross reference to the works plan and to the grid coordinates for the offshore Order limits contained in Schedule 1 of the Order. The Article also defines the offshore substation and foundations and other structures such as wind turbine generators and the meteorological mast. Some of the key definitions in the interpretation

³ Guidance Annex B

section to note are explained below:

Commencement and Pre-Commencement: A specific definition of commencement has been included for activities seaward of MHWS and all other works taking place onshore. This is:

(a) in relation to works seaward of MHWS, the first carrying out of any licensed marine activities authorised by the deemed marine licences, save for pre-construction surveys, including archaeological investigations, and monitoring approved under the deemed marine licences; or

(b) in respect of any other works comprised in the authorised project, the first carrying out of any material operation (as defined in section 155 of the 2008 Act) forming part of the authorised project other than operations consisting of site clearance, demolition work, environmental surveys, investigations for the purpose of assessing ground conditions, remedial work in respect of any contamination or other adverse ground conditions, diversion and laying of services, temporary structures or hard standing, and the temporary display of site notices or advertisements.

This list has been carefully compiled upon both a review of previous offshore wind farm DCOs (such as The East Anglia THREE Offshore Wind Farm Order 2017) and through the implementation experience of our consultant team. It is compiled on the basis that these are specific works that must be undertaken prior to any commencement date in order to facilitate a safe working environment, ensure practicable construction, and with regards surveys and clearance works of relevance to ecological receptors are often required well in advance of construction to ensure that sensitive receptors are not present within the construction area.

There are certain pre-commencement works that are necessary for the purposes of efficiently implementing the Project, which are controlled by Requirements. Specifically, for this particular development, archaeological investigations (Requirement 23), remedial work in respect of contamination (Requirement 20), and the erection of any fencing or temporary means of enclosure (Requirement 18) all must be undertaken prior to commencement of development. It is therefore necessary to allow for drafting within the Order to ensure that these works can be undertaken but are still necessarily controlled, and approved, by the relevant planning authority. In order to effect this "pre-commencement works" have been defined separately to include these three necessary works. The requirements then "carve out" those pre-commencement works and they are subject to separate plans to be submitted to the relevant planning authority for approval prior to those works commencing. This ensures that any works considered necessary to be controlled by requirement do not fall out with the scope of such control. For the same reasons, seabed preparation and clearance is included in the definition of "pre-commencement works" within the deemed marine licenses and is controlled by Condition 20, which requires a method statement to be submitted to the MMO for approval prior to those works commencing

The deemed marine licences have been defined as "deemed export cable system marine licence". Consequently, "export" has then been defined in the interpretation section as "the flow of electricity from a wind turbine generator or offshore substation into a distribution network or transmission system for Great Britain, and "export" also includes the conveying of, or importing of, electricity between the distribution network or transmission system for Great Britain and a wind turbine generator or offshore substation." This drafting has been undertaken for two important reasons. The first is that it is possible that the deemed marine licence relating to the cabling of the Project (i.e. not the generation licence) could be transferred to an OFTO, or a DNO. As a result, naming the licence a "transmission" licence would be factually incorrect.

Secondly, all wind farms do not only "export" electricity. Whilst for many years the drafting has been such in a DCO that it simply states "export", the Applicant considered that it would be more accurately described as including the "conveying" and "importing" of electricity. The cables will of course be importing electricity at short intervals periodically, in order to power the wind turbine generators and equipment when wind speeds ebb.

7 Operative Provisions

Articles 3 to 41 of the Order contain provisions for and relating to the authorised project, and miscellaneous and general provisions.

Part 2. Principal Powers

Article 3 (*Development consent etc. granted by the Order*) would grant development consent for the authorised development within the Order limits, thereby authorising the construction of the main development, associated development and ancillary works. The authorised development means the development described in Part 1 of Schedule 1 (*Authorised development*). This includes further works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised project and which fall within the scope of the work assessed by the environmental statement.

Part 2 describes the ancillary works. These are defined together as the authorised project. In identifying the development authorised by this Order, Article 3 also makes provision for the offshore and onshore works authorised by the Order to be constructed within the Order limits. All the authorised development must be carried out in accordance with the requirements set out in Part 3 of Schedule 1 (*Requirements*). Article 3 is based on the Model Provisions and follows the approach taken for The East Anglia THREE Offshore Wind Farm Order 2017.

Article 4 (*Power to construct and maintain authorised project*) provides for the construction, operation, use and maintenance of the authorised project. It broadly follows the model provisions, bar the addition of "operation" and "use". It was considered prudent, and more robust, to allow the undertaker to operate and utilise the project for its constructed purpose, as "maintenance" carries with it a separately defined meaning with the Order.

Article 5 (*Benefit of the Order*) provides for the transfer of the whole of the benefit of the Order with the consent of the Secretary of State (**SoS**), subject to certain exceptions. It also provides for the transfer of any of the deemed marine licences with the consent of the SoS. The wording of this Article is based on the East Anglia THREE Offshore Wind Farm Order 2017. The requirement to obtain the SoS consent is unnecessary in the circumstances referred to in sub paragraph 8 of the Article. These circumstances include where the transferee or lessee is a holder of the Electricity Act 1989 and where the time limits for claims of compensation in respect of the acquisition of land or effects upon land as a consequence of the Order has elapsed.

Article 5 includes a procedure to be adopted when making an application to the SoS for consent. The essential elements of this procedure are as follows:

- a) before any application is made to the SoS the Undertaker must consult with the SoS and the SoS will provide a response within four weeks of receipt of the notice;

- b) the SoS may not provide consent before consulting the MMO;
- c) the SoS must determine an application for consent under this article within eight weeks commencing on the date the application is received. This period can be extended where agreed in writing with the Undertaker;
- d) where the SoS is minded to refuse any application or fails to determine an application within eight weeks of receipt then the Undertaker may refer the matter for determination under article 36 (*arbitration*); and
- e) prior to any transfer or grant taking effect the Undertaker is required to notify in writing the SoS and so far as relevant the MMO and the relevant planning authorities. Sub paragraphs 14 to 16 of the Article stipulate the notification requirements that apply. In particular the notice must be received by the recipient a minimum of five days prior to the transfer taking effect.

The wording of Article 5 is based on a number of offshore wind development consent orders including the most recent East Anglia THREE Offshore Wind Farm Order 2017. However, in relation to the procedure for the SoS consent, the drafting follows the approach taken for the draft Hornsea Three Offshore Wind Farm Order. In the absence of any other statutory procedure, the Applicant considers it is necessary to provide certainty on the procedure for the SoS's consent.

Article 6

(*Application and modification of legislative provisions*) provides for the modification of Regulation 6(1)(j) of the Hedgerows Regulations 1997 to provide that removal of any hedgerow to which the Regulations apply is permitted for carrying out or maintenance of development which has been authorised by a development consent order made pursuant to the 2008 Act. This approach was taken on The East Anglia THREE Offshore Wind Farm Order 2017 in relation to the carrying out of development. However, Article 6(1) has been further amended to clarify that removal of hedgerows is also permitted for maintenance activities.

Article 6(3) dis-applies provisions of the Neighbourhood Planning Act 2017 (NPA 2017). This disapplication makes it clear that the temporary possession provisions in that enactment would not take effect at the expense of the temporary possession provisions contained in the Order. The Applicant notes that the provisions relating to temporary possession in the NPA 2017 have not yet come into force and that regulations required to provide more detail on the operation of the regime have not yet been made. Because of the uncertainty in relation to the detail around that regime, the Applicant has consulted on the long-standing process available under the Planning Act 2008. The Applicant additionally considers that if Parliament wished to apply NPA 2017 temporary possession regime to DCO projects it could have done so by effecting amendments to Part VII of the Planning Act 2008. It has not done so, and in the absence of the clarity this would provide, the Applicant proposes to proceed under the existing Planning Act 2008 procedure.

Article 7

(*Defence to proceedings in respect of statutory nuisance*) reflects model provision 7 and provides that no-one shall be able to bring statutory nuisance proceedings under the Environmental Protection Act 1990 in respect of noise, if the noise is created in the course of carrying out or maintenance of the authorised project and for which notice has been given under section 60 or consent obtained under section 61 or 65 of the Control of Pollution Act 1974 or if the noise is

unavoidable. As stated in the Statement of Engagement submitted with the Application (Document 5.3), it is not considered that any properties will be affected beyond statutory nuisance thresholds, as mitigation measures will be used to control noise emissions. However, the Applicant considers that this Article should be included in the event that proceedings are brought under Section 82 of the Environmental Protection Act 1990. This approach follows the Model Provisions and has been accepted in a number of offshore wind farm development consent orders including, most recently, The East Anglia THREE Offshore Wind Farm Order 2017. The Project comprises nationally significant infrastructure and as a result it is appropriate that the Project is protected.

Part 3, Streets

- Article 8* (*Street works*) confers authority on the undertaker to place and maintain works under the streets specified in Schedule 2 (*Streets subject to street works*) within the Order limits and for the purposes of the authorised project. The authority given by this right is a statutory right for the purposes of sections 48(3) (streets, streets works and undertakers) and 51(1) (prohibition of unauthorised street works) of the New Roads and Street Works Act 1991. The powers conferred by this Article also extend beyond the land within the Order limits, subject to approval of the relevant street authority. The undertaker needs the power to remove or use earth and materials in or under the streets in order to lay the cables for authorised project under the streets. This approach follows the Model Provisions and a similar approach has been taken on a number of offshore wind farm development consent orders, including The East Anglia ONE Offshore Wind Farm Order 2014. The Article closely follows the drafting of the more recent National Grid (Richborough Connection Project) Development Consent Order 2017.
- Article 9* (*Temporary stopping up of public rights of way*) allows the temporary stopping up of public rights of way during the construction of the onshore part of the authorised development. It refers to Schedule 3 (*Public rights of way to be temporarily stopped up*) which lists those rights of way which may be stopped up temporarily. This is not based on the Model Provisions but does follow the approach taken in a number of offshore wind farm development consent orders, most recently in The East Anglia THREE Offshore Wind Farm Order 2017.
- Article 10* (*Temporary stopping up of streets*) provides for the temporary stopping up, diversion or alteration of streets, subject to the consent of the local highway authority concerned which may attach reasonable conditions to any such consent.
- In addition, Article 10 allows for the stopping up, alteration or diversion of any other street for the purposes of carrying out the authorised project, subject to the consent of the street authority which may attach reasonable conditions to any such consent. This Article broadly follows the approach taken in the Model Provisions, but more closely follows the approach taken in The East Anglia THREE Offshore Wind Farm Order 2017 and the Hornsea Two Offshore Wind Farm Order 2016.
- Article 11* (*Access to works*) authorises accesses to and from public highways to be created at locations specified in Schedule 4 (*Access to works*) and for any other access, with the approval of the planning authority after consulting the highway authority. The approval of the highway authority is required for the form and laying out of the means of

access. It therefore streamlines matters for the undertaker to require only one approval from the relevant authority. This Article broadly follows the approach taken in the Model Provisions, but more closely follows the approach taken in The East Anglia THREE Offshore Wind Farm Order 2017 and the Hornsea Two Offshore Wind Farm Order 2016.

Article 12 (*Agreements with street authorities*) authorises street authorities and the undertaker to enter into agreements relating to any temporary stopping up, alteration or diversion of a street authorised by the Order, or the carrying out of works in the streets referred to in Article 8 (*Street works*). This Article broadly follows the approach taken in the Model Provisions, but more closely follows the approach taken in The East Anglia THREE Offshore Wind Farm Order 2017 and the Hornsea Two Offshore Wind Farm Order 2016.

Article 13 (*Application of the 1991 Act*) provides that some provisions of the New Roads and Street Works Act 1991 apply to the carrying out of street works under Article 8 (*street works*) and the temporary stopping up, diversion or alteration of a street under Article 10 (*temporary stopping up of streets*). The relevant provisions are listed in sub-paragraph 2 of the article. Although this is not a Model Provision, comparable provisions are commonly included in Transport and Works Act Orders and have also been consented in the Hornsea Two Offshore Wind Farm Order 2016 and the Hornsea One Offshore Wind Farm Order 2014.

Part Four, Supplemental Powers

Article 14 (*Discharge of water and works to watercourses*) enables the undertaker to discharge water into any watercourse, public sewer or drain in connection with the construction and maintenance of the authorised project with the approval and superintendence (if provided) of the authority to which the watercourse, public sewer or drain belongs (such approval not to be unreasonably withheld) and subject to other conditions. This element of the Article follows the Model Provisions and The East Anglia THREE Offshore Wind Farm Order 2017.

The Article has been further modified to make it clear that the undertaker will have powers to alter watercourses, with the consent of the Environment Agency or the Internal Drainage Board or Kent County Council as appropriate.

Article 15 (*Authority to survey and investigate the land onshore*) confers upon the undertaker a power to survey and investigate land, including the ability to make trial holes, to use and leave apparatus on the land in question and to enter onto land. The Article also makes provision in relation to the payment of compensation and the notice period that must be given to owners and occupiers of land ahead of any surveys. In addition, the purpose for which a survey or investigation might be carried out has been clarified to include purposes required by the assessment carried out in the Environmental Statement for the authorised project.

The Article follows the Model Provisions but with modifications which follow the approach taken in the East Anglia THREE Offshore Wind Farm Order 2017.

Article 16 (*Public rights of navigation*) enables the suspending the public rights of navigation where any of the permanent structures (wind turbine

generators, meteorological mast or offshore substation) are located, As there will be a physical obstruction in the marine environment there will no practical ability to navigate through these specific locations and the approach to extinguish public rights of navigation formalises this situation. The final locations of structures including WTG foundations, the offshore substation and meteorological mast (where required) will be submitted for approval under the condition 12 of the Deemed Marine Licence (DML).

Implementation of the extinguishment to public rights of navigation fourteen days after giving notice to the SoS, Trinity House, the MMO and the MCA is appropriate to allow construction to commence as soon as reasonable following consultation and approval of the locations of structures under condition 12 of the DML. The MMO, the MCA and Trinity House as the key marine stakeholders for public rights of navigation will have been involved in the process of finalising the design of wind farm in accordance with condition 12 and will therefore already be aware of the locations of these structures. In addition, this notice period is greater than that required for formal notices to mariners and the period required by the UKHO to make all necessary amendments to nautical charts as set out in dML condition 6 (*Notifications and inspections*). This period has been accepted on other DCOs including Kentish Flats Extension Offshore Wind Farm Order 2013 and Walney Extension Offshore Wind Farm Order 2014.

Article 17 (*Compulsory acquisition of land*) confers on the undertaker powers of compulsory acquisition of so much of the Order land as is required for the authorised project or to facilitate it, or is incidental to it. The article provides broad powers. It is considered necessary to make it clear, in the main, operative provision that the whole of the Order land is potentially subject to powers of compulsory acquisition. In practice, however, pursuant to the other Articles, the powers of compulsory acquisition are limited, and for the great majority of the Order land, will be restricted to some combination of the acquisition of specified new rights (Article 19), and specified powers of temporary possession. The Article broadly follows the Model Provisions and follows the approach taken in the more recent East Anglia THREE Offshore Wind Farm Order 2017.

Article 18 (*Time limit for exercise of authority to acquire land compulsorily*) imposes a time limit of five years from the coming into force of the Order for the exercise of powers of compulsory acquisition of land. This follows the Model Provisions.

Article 19 (*Compulsory acquisition of rights*) enables the undertaker to acquire rights over land, including new rights and existing rights if applicable. It also provides for the extinguishment or overriding of existing rights in land subject to the provisions of the Article. The Article is drafted so as to allow the undertaker flexibility to acquire new rights in the Order Land if appropriate rather than outright acquisition under Article 17 (*Compulsory acquisition of land*). This flexibility allows the undertaker, if it is possible so to do, to reduce the areas required for freehold acquisition and rely on new, permanent rights instead if this is appropriate. This flexibility is appropriate to allow for continued negotiations with owners of Order Lands. It broadly follows the Model Provisions and is a provision that is usual in Transport and Works Act Orders and hybrid bills. An example can be found in Article 19 of the Network Rail (Nuneaton North Chord Order) 2010 and Part 3 of Schedule 6 to the Crossrail Act 2008. It was also accepted in the East Anglia THREE Offshore Wind Farm Order 2017.

The Article is subject to Schedule 5 (*Land in which only new rights*

etc. may be acquired), and states that in the case of land scheduled in Column (1) of that Schedule, the new rights that may be acquired are limited to the new rights (and restrictive covenants where relevant) set out in Column (2) of the Schedule. The great majority of the plots in the Order are restricted in this way.

Reference is also made to Schedule 6 (*Modification of compensation and compulsory purchase enactments for creation of new rights*) in the modifications of compulsory purchase legislation to apply appropriate provisions regarding material detriment etc. to the acquisition of new rights.

Further, it is to be noted that the undertaker is seeking to impose new restrictive covenants as scheduled in Schedule 5 to the Order for the protection of the onshore cables, jointing bays and any ducts that will be installed as part of the authorised development. Such protection has been given in Transport and Works Orders (notably relating to Docklands Light Railway) to protect the structure of subterranean development such as tunnels. It was also included in the East Anglia THREE Offshore Wind Farm Order 2017. It is considered that the nature of the authorised development is appropriate for such restrictive covenants and the predominantly agricultural nature of the Order lands would not be unduly burdened by the imposition of restrictive covenants, particularly on the basis that where restrictive covenants are being sought, a right of access for maintenance purposes over the same area is also being sought.

Article 20

(*Private rights*) applies to all private rights over land subject to compulsory acquisition under Article 17 (*Compulsory acquisition of land*) and Article 19 (*Compulsory acquisition of rights*). It provides that where land is compulsorily acquired, such private rights or restrictive covenants are suspended and unenforceable or (where the beneficiaries are notified by the undertaker), extinguished as far as their continuance would be inconsistent with the purpose for which temporary possession is taken for as long as the undertaker remains in lawful possession of the land.

Reference to section 152 of the 2008 Act is included in paragraph (4) to confirm that compensation payable under this Article is in accordance with the principles for the payment of compensation for injurious affection to land that would ordinarily apply to schemes where statutory authority is relied upon and a claim under section 10 of the Compulsory Purchase Act 1965 arises. Such claims instead arise under section 152 of the 2008 Act rather than section 10 of the Compulsory Purchase Act 1965 as a result of the contents of section 152 of the 2008 Act. Paragraphs 6 and 7 allow the undertaker to provide notice to the contrary to the provisions of the Article, allowing the undertaker to confirm to the relevant owner of a dominant tenement that the rights that would by operation of this Article be suspended and unenforceable are not so suspended or unenforceable. The Article follows the Model Provisions and was included in the East Anglia THREE Offshore Wind Farm Order 2017.

Article 21

(*Application of the Compulsory Purchase (Vesting Declarations) Act 1981*) provides for the Order to apply as if it were a compulsory purchase order for the purposes of the Compulsory Purchase (Vesting Declarations) Act 1981 and provides for that Act to have effect subject to certain modifications. It gives the undertaker the option to acquire land by this method rather than through the notice to treat procedure. This Article is based on the Model Provisions and has been updated to reflect the changes brought about by the Housing and Planning Act 2016. It follows the approach taken on the

East Anglia THREE Offshore Wind Farm Order 2017. In addition the Article also reflects recent amendments to the Compulsory Purchase (Vesting Declarations) Act 1981, and provides that where the making of the Order is subject to a statutory challenge, the deadline for the exercise of compulsory acquisition powers under the Compulsory Purchase (Vesting Declarations) Act 1981 is increased by a period equivalent to the period beginning with the day the application is made, and ending on the day it is withdrawn or finally determined (or if shorter, one year).

Article 22

(Application of Part 1 of the Compulsory Purchase Act 1965) applies Part 1 of the Compulsory Purchase Act 1965 to the Order with certain modifications in relation to section 125 of the 2008 Act. This provision reflects recent changes introduced by the Housing and Planning Act 2016. Paragraphs (1) to (3) amend the provisions of the Compulsory Purchase Act 1965 so that they are consistent with the terms of the Order and paragraph (4) makes it clear that the notice periods introduced by the Housing and Planning Act 2016 do not apply to the temporary possession or use of land under articles 25 or 26 of the Order. Whilst this is not a Model Provision, there are precedents for this in, for example, the High Speed Rail (London – West Midlands) Act 2017. This approach is also followed in The Wrexham Gas Fired Generating Station Order 2017. In addition, the Article also reflects recent amendments to the Compulsory Purchase Act 1965 providing that where the making of the Order is subject to a statutory challenge, the deadline for the exercise of compulsory acquisition powers under the Compulsory Purchase Act 1965 is increased by a period equivalent to the period beginning with the day the application is made, and ending on the day it is withdrawn or finally determined (or if shorter, one year).

This Article also clarifies, by applying an amendment for the purposes of the Order to Schedule 2A of the Compulsory Purchase Act 1965, that the counter-notice provisions in that schedule that are available to landowners where part only of land is acquired compulsorily do not apply where the land has only been taken possession of under the temporary possession powers set out in Article 25 or Article 26.

Article 23

(Acquisition of subsoil only) authorises the undertaker to acquire the subsoil in any Order land without acquiring the whole of that land. In certain cases it may be necessary only to acquire a stratum of land below the surface and in the absence of this article the undertaker would be obliged to acquire the whole interest in the land. This is a Model Provision and there are precedents for this in, for example, the Glasgow Airport Rail Link Act 2007.

Article 24

(Rights under or over streets) reflects model provision 27 and provides that the undertaker may use a street within the Order limits for the authorised project without being required to acquire any part of the street or any easement or right in the street. Provision is made for the payment of compensation to an owner or occupier of land where their interest in land is not acquired and who suffers loss as a result. The Article follows the Model Provisions and the approach taken in the East Anglia THREE Offshore Wind Farm Order 2017.

Article 25

(Temporary use of land for carrying out the authorised project) will allow the undertaker to take temporary possession of the land included in Schedule 7 (*Land of which temporary possession may be taken*).

Additionally to the model provisions, the Article also provides for other Order land in respect of which notice of entry has not yet been served

under Section 11 of the Compulsory Purchase Act 1965 and no vesting declaration has been made under the Compulsory Purchase (Vesting Declarations) Act 1981 to be taken possession of and used, temporarily, for certain specified purposes, save for plots identified for freehold compulsory acquisition. It also allows for new rights in land to be acquired compulsorily after temporary possession has been taken; and for permanent works to be constructed whilst temporary possession notices are in place but before permanent rights have been acquired. This broadly follows the Model Provisions but has been modified in line with a number of recent Development Consent Orders, including the East Anglia THREE Offshore Wind Farm Order 2017, and allows greater flexibility in the event that, following further design work, it is either decided by the undertaker or agreed with the relevant landowner that temporary occupation rather than permanent acquisition is appropriate. A benefit of structuring the Order powers in this way is also to limit the amount of land that need be ultimately acquired, or over which new rights are acquired, from landowners. As works may be constructed prior to permanent acquisition of land, permanent land interests for can be acquired for the scheme "as built", with no need to account for uncertainties in as-built construction in terms of land acquired.

Article 25 provides that powers to take possession of land temporarily, if land is specified in Schedule 7 (*Land of which temporary possession may be taken*), may be used only for the specific purposes set out in column 3 of Schedule 7. These temporary powers are "overlaid" onto many of the plots that are also scheduled for the acquisition of permanent new rights.

For plots that are scheduled for temporary possession, Article 25(9)(a) excludes freehold compulsory acquisition, but still permits the acquisition of permanent rights under Article 19 (as set out in Schedule 5). In this way, the power in Article 17 is further limited.

Article 25(9)(b) permits the acquisition of subsoil rights in any of the land subject to Article 17 or Article 19. This provision could potentially allow the undertaker to acquire additional rights to those set out in Schedule 5, in case a need for a subsoil right becomes apparent that is currently unforeseen. As the great majority of the land to be acquired under the Order comprises new rights for an underground cable and related works, this provision is unlikely to be used, but could be relied on in rare circumstances to assist the delivery of the nationally significant infrastructure project. The Article is based on the Model Provisions but has been modified. This provision was accepted in the East Anglia THREE Offshore Wind Farm Order 2017, and is commonly used on Transport and Works Orders. A similar provision was included in the Network Rail (Ordsall Chord) Order 2015.

The power to temporarily possess "any other Order land" (in respect of which notice of entry has not yet been served under Section 11 of the Compulsory Purchase Act 1965 and no vesting declaration has been made under the Compulsory Purchase (Vesting Declarations) Act 1981), in addition to the land specified in Schedule 7, is unlikely to be exercised for the Project, as all of the Order land, save for the freehold plots (Plots 02/05, 01/06, 01/10, 01/11, 02/55, 02/60, 02/61, 02/65, 02/70, 02/75 and 02/85) is included in Schedule 7 for some purpose (either for access, use for temporary construction compounds, or for purposes of construction of the authorised project). The Article clarifies that unless permanent interests have been acquired in any land that the undertaker has taken temporary possession of, the undertaker must, before ending its possession of the land, remove any temporary works and restore the land to the reasonable satisfaction of the owners of the land, but is not required

to remove certain works such as drainage works or new road surfacing.

In all cases where powers of temporary possession are exercised, compensation must be paid to the landowner and any occupiers for loss or damage arising from their exercise where claimed.

- Article 26* (*Temporary use of land for maintaining authorised project*) provides that the undertaker may take temporary possession of land within the Order limits required for the purpose of maintaining the authorised project, and to construct such temporary works as may be reasonably necessary for that purpose for a period of five years from the date on which that part of the authorised development is first used. Provision is made for notice and compensation. This power does not apply with respect to houses, gardens or any other buildings for the time being occupied. Provision is also made for taking temporary possession without notice, or at a shorter notice than is usually permitted in an emergency. This is based on, but modifies, the Model Provisions but does follow the approach taken on The East Anglia THREE Offshore Wind Farm Order 2017.
- Article 27* (*Statutory undertakers*) authorises the undertaker to acquire land and new rights in land belonging to statutory undertakers as shown on the land plans within the limits of the land to be acquired or used and described in the book of reference. This is a Model Provision which has been modified in accordance with the approach taken on a number of offshore wind farm development consent orders including The East Anglia THREE Offshore Wind Farm Order 2017.
- Article 28* (*Recovery of costs of new connections*) provides for compensation to owners or occupiers of property where apparatus is removed in accordance with Article 27 (Statutory undertakers). This is a Model Provision and has been included on a number of offshore wind farm development consent orders including The East Anglia THREE Offshore Wind Farm Order 2017.
- Article 29* (*Operation of generating station*) authorises specifically the undertaker to operate the authorised project in accordance with the provisions of this Order or an agreement made under this Order. This aspect is included pursuant to section 140 of the 2008 Act. Although not a Model Provision, this Article has been included on a number of offshore wind farm development consent orders including The East Anglia THREE Offshore Wind Farm Order 2017.
- Article 30* (*Deemed licences under the Marine and Coastal Access Act 2009*) adopts the form of model provision 37 but adapted to the provisions of the 2009 Act. It provides for two deemed licences, the terms of which are set out in Part 1 of Schedules 11 and 12, required for the deposit at sea within the Order limits of the specified substances and articles and the construction of works in or over the sea or on or under the seabed. As explained above the approach of splitting the Deemed Marine Licences into two separate licences is to provide for a situation where generation or export cable system assets will be held by different companies (including OFTOs) post-construction. Although not a Model Provision, this Article has been included on a number of offshore wind farm development consent orders including The East Anglia THREE Offshore Wind Farm Order 2017.
- Article 31* (*Application of landlord and tenant law*) overrides the application of landlord and tenant law in so far as it may prejudice the operation of any agreement for leasing the whole or part of the authorised

development or the right to operate the same and any agreement for the construction, maintenance, use or operation of the authorised development or any part of it entered into by the undertaker. This is a Model Provision and has been included on a number of offshore wind farm development consent orders including The East Anglia THREE Offshore Wind Farm Order 2017.

Article 32 (*Operational land for the purposes of the 1990 Act*) has the effect of ensuring that the land on which the Authorised Project is constructed will be "operational land" under section 263 of the 1990 Act. This article provides that for the purposes of section 264(3) of the Town and Country Planning Act 1990 the development consent granted by the Order will be treated as a specific planning permission. This is a Model Provision and has been included on a number of offshore wind farm development consent orders including The East Anglia THREE Offshore Wind Farm Order 2017.

Article 33 (*Felling or lopping of trees and removal of hedgerows*) enables the undertaker to fell or lop trees and shrubs for the purposes of preventing obstruction or interference with the authorised project and danger to the authorised project. Provision is included for the payment of compensation for loss and damage. There are currently no important hedgerows within the Order limits; however, this power has been retained as the undertaker may need to remove hedgerows planted between now and construction at a later date. The Article broadly follows the Model Provisions but more closely follows the approach in The East Anglia THREE Offshore Wind Farm Order 2017.

Article 34 (*Trees subject to tree preservation orders*) enables the undertaker to fell or lop the roots of any tree which is subject to a tree preservation order to prevent it obstructing or interfering with the construction, maintenance or operation of the authorised project. Compensation is payable if loss or damage is caused.

The Article is a Model Provision save that it applies generally to any tree subject to a tree preservation order made before and after the date of the Order coming into effect and either within or overhanging the Order limits. The approach follows that taken on the Hornsea Two Offshore Wind Farm Order 2016.

Article 35 (*Certification of plans etc.*) requires the undertaker to submit copies of the documents, plans and sections referred to in the Order to the decision maker, for certification as true copies following the making of the Order. This is a Model Provision and has been included on a number of offshore wind farm development consent orders including The East Anglia THREE Offshore Wind Farm Order 2017.

Article 36 (*Arbitration*) The draft Hornsea Three Offshore Wind Farm Order has included an arbitration article, which provides for an arbitration process. The Applicant agrees that this approach will provide greater certainty to all parties involved in the process and is preferential to the approach adopted in the model provisions.

The article provides that differences under the Order should be settled by arbitration unless another means of resolving a dispute is provided for in the Order. The arbitrator will be appointed by the parties within 14 days of receipt of a notice of arbitration or failing agreement within this time period then by the SoS following application by one of the parties. If the SoS fails to make an

appointment within 14 days of referral the referring party may refer to the Centre for Effective Dispute Resolution for appointment of an arbitrator.

Where the referral to arbitration relates to a difference with the SoS and the parties cannot agree an arbitrator then either party may refer the matters to the Centre for Effective Dispute Resolution for appointment of an arbitrator.

It applies Schedule 9 of the Order which sets out further detail of the arbitration process. The details of Schedule 9 are set out within this Explanatory Memorandum, below.

Article 37 (*Procedure in relation to certain approvals etc.*) provides a mechanism for securing any consent or approval from a consenting body required by the provisions of the Order. It applies Schedule 10 (*Procedure for discharge of Requirements*), which sets out the procedure for the discharge of requirements contained in Part 3 of Schedule 1. This is not a Model Provision but a similar approach was followed on the Hinkley Point C (Nuclear Generating Station) Order 2013.

Article 37(1) further contains within it a deemed approval mechanism. It is the Applicant's view that it is of paramount importance that a nationally significant infrastructure project is appropriately secured through the Order but is ultimately deliverable in a timely manner and is not subject to undue delay via subsidiary approval mechanisms post consent. There are many instances and provisions whereby deemed approval exists in all DCOs consented by the SoS. In addition, the Government are supportive of introducing "deemed discharge" of conditions in relation to projects consented pursuant to the Town and Country Planning Act 1990 regime, particularly in response to its latest consultation on the draft National Planning Policy Framework and previous introductions of the concept of "deemed discharge" from April 2015.

Article 38 (*Abatement of works abandoned or decayed*) authorises the SoS to issue a written notice to the undertaker requiring the repair, restoration or removal of Work No. 1(a) to (d) or Work No. 2 where they have been abandoned or allowed to fall into decay. This power is stated to be without prejudice to any notice served under section 105(2) of the Energy Act 2004 requiring the submission of a decommissioning scheme. Although not a Model Provision it has been included on a number of offshore wind farm development consent orders including The East Anglia THREE Offshore Wind Farm Order 2017.

Article 39 (*Saving provisions for Trinity House*) is a standard provision taken from the harbour model clauses and was also included in Transport and Works Orders for offshore wind farms, including that for Scarweather Sands. It is intended to provide protection to Trinity House; it is in the Model Provisions for Harbours and has been included on a number of offshore wind farm development consent orders including The East Anglia THREE Offshore Wind Farm Order 2017.

Article 40 (*Crown rights*) protects the Crown's position in relation to its own estates, rights, powers, privileges, authorities and exemptions. The Crown's written consent is required where any land, hereditaments or rights of the Crown are to be taken, used, entered or interfered with as a result of granting of the Order, although there is no conditionality in respect of third party interests in Crown land. This article reflects

recent Orders and has been agreed with The Crown Estate. Although not a Model Provision, the approach taken follows the approach for The East Anglia THREE Offshore Wind Farm Order 2017.

Article 41 (*Protective provisions*) gives effect to the protective provisions in Schedule 8 (*Protective provisions*).

8 Schedules

Schedule 1 (*Authorised project*) Part 1 of Schedule 1 specifies the authorised development comprising the scheduled works. The ancillary works are set out in Part 2.

The Explanatory Memorandum has already explained Works No. 3A and 3B relating to the intertidal area, in addition to the options relating to cable routeing contained within Work No. 16.

In addition, it is important to note the following:

The works plan relating to Work No. 3 contains within it an exclusion area, which is clearly demarcated on that plan. This makes clear that no cable works may take place within this area. Only anchoring and other preparation works may take place there. At Deadline 1, a new condition (18) to secure the cable exclusion was added to the export cable deemed marine license.

Whilst Work No. 4A is onshore, the cables will remain as offshore subsea cables until they interact with the transition joint bays (above or below ground).

A Work No. 9, a temporary works area is required to provide storage and laydown south of Stonelees nature reserve. There is no access to the temporary construction compound in Work No. 14, therefore to reduce vehicle tracking through Stonelees nature reserve and ensure that works through this environmentally sensitive area are undertaken in an efficient and timely manner.

At Work No. 11, a temporary works area is required to facilitate the demolition of the existing football pitch and associated structures for the onshore cable works and access from the Bay Point Club.

Work No. 14 is required to facilitate the construction and operation of the onshore substation.

Part 2 – Ancillary Works

Part 2 describes the ancillary works. These are defined together as the authorised project. In identifying the development authorised by this Order, Article 3 also makes provision for the offshore and onshore works authorised by the Order to be constructed within the Order limits. All the authorised development must be carried out in accordance with the requirements set out in Part 3 of Schedule 1 (*Requirements*).

Part 3 - Requirements

Part 3 sets out certain requirements that the undertaker must meet in relation to the construction and operation of the authorised project. These requirements take a similar form to planning conditions.

With regard to the structure of the onshore requirements, it should be noted that the principles informing the onshore mitigation are largely set out in a number of outline documents submitted with the Application.

Requirement 1 (*Time limits*) specifies the time limit for commencing the authorised development as 5 years from the date of the Order, as

provided for in Regulation 3 of the Infrastructure Planning (Miscellaneous Prescribed Provisions) Regulations 2010.

Requirements 2 to 5 (*Detailed offshore design parameters*) set out the detailed design parameters within which the authorised development must be constructed. Requirement 2 deals with the dimensions and other characteristics of WTGs. Requirement 3 limits the dimensions of the offshore substation and meteorological mast. Requirement 4 limits the total length of export and inter-array cables. Requirement 5 specifies the maximum amount of scour protection. This was amended at Deadline one following additional diligence carried out to cross refer the project description to the draft Order and the Order now states that the total amount of scour protection for the wind turbine generators and meteorological masts forming part of the authorised project must not exceed 1,151,917.3 m³. The total amount of scour protection for the offshore substation must not exceed 39,269.9 m³. The figures provided at **Schedule 3** of this document did not require updating. The purpose of these various restrictions is to ensure that the authorised development is restricted to that which has been assessed in the Environmental Statement.

Requirement 6 (*Aviation safety*) provides that lighting must be used as determined necessary for aviation safety. It also requires that the lighting, shape, colour, and character are in accordance with the Air Navigation Order 2016 and as are necessary for safety as directed by the relevant air safety bodies.

Requirement 7 (*Offshore decommissioning*) requires a decommissioning programme to be agreed with the SoS prior to the commencement of the offshore works and replicates the wording used on consents for offshore wind farms granted under the Electricity Act 1989 (and now the 2008 Act) following the relevant provisions of the Energy Act 2004 coming into force.

Requirement 8 (*Stages of authorised development onshore*) requires a written scheme setting out all the stages of the onshore connection works to be submitted to the relevant planning authority before commencement of any onshore works. It is not considered necessary to require the relevant planning authority to approve such a plan, particularly given that the phasing of the development is a matter governed by the technical and commercial drivers of the Applicant.

Controls as to how the construction works are carried out are set out in the Code of Construction Practice and outline Landscape and Ecological Management Plan and will be set out in detail to the relevant planning authorities through the various management plans, including a Construction Environmental Management Plan, to be submitted for approval pre-construction. The way that the various plans, requirements and conditions interact with one another in relation to the Project has been included at Schedule 5 to this Memorandum, in the form of several docugrams, in order to assist the Examining Authority and Secretary of State.

Requirement 9 (*Detailed onshore design parameters*) requires approval of details of the proposed works at the onshore substation by the relevant planning authority. It specifies parameters in terms of the maximum size of the equipment and buildings for the onshore substation. Taken together these restrictions ensure that the impact of the onshore works is minimised in line with the assessment and commitments contained in the Application. Those buildings as constructed within Work No. 13 must accord with the Design and Access Statement.

Requirement 10 (*Landfall Works Notification*) provides that the Applicant, prior to construction of the relevant work, must notify the relevant planning authority as to which option it will choose to implement in respect of the

Works described in Work No. 3B, as well as providing details of the timings of the works taking place.

Requirement 11 (*Access Management Strategy*) requires approval by the relevant planning authority of an access management strategy, which must be in accordance with the outline access management strategy (which is a certified document provided as required by Article 35). This document will explain how the Project will be constructed and operated onshore when interacting with public rights of way access (and its associated diversions).

Requirement 12 (*Onshore Substation Landscaping*) requires that permanent above ground structures must not be constructed until a substation landscaping management scheme (which accords with the outline landscape and ecological management plan) has been submitted and approved by the relevant planning authority. The scheme must be implemented as approved. No details relating to landscaping are required for any other part of the Project. There is no requirement to provide any details for the landscaping of the substation prior to above ground structures be constructed because those specific details necessary for the production of that plan scheme may be known prior to the commencement of the initial construction works. Ensuring that the scheme is controlled, however at a later date when it is actually necessary and reasonable to provide it, saves the need to amend a scheme at a later date.

Requirement 13 (*Implementation and maintenance of landscaping*) requires the undertaker to implement the approved landscaping management scheme and to replace trees or shrubs which die along the cable route within five years of planting.

Requirement 14 (*Highway accesses*) requires approval of details (which accord with the outline access management plan) for a stage of connection works of any permanent or temporary means of access to a highway, or any alteration to an existing means of access, by the relevant planning authority in consultation with the relevant highway authority.

Requirement 15 (*Construction Environmental Management Plan*) provides that the relevant stage of the connection works must not commence until a construction environmental management plan for that stage (which accords with the code of construction practice) has been submitted and approved by the relevant planning authority. The plan includes details on matters such as relevant health and safety compliance, local community liaison, site security, biosecurity measures, lighting, soil management, dust control measures, flood risk and waste management. The plan must be implemented as approved.

Requirement 16 (*Code of Construction Practice*) A full code of construction practice has been produced for the DCO application. This document must be complied with in relation to any stage of the connection works. There is the ability to amend the document with the approval of the relevant planning authority.

Requirement 17 (*Temporary Fencing and other means of enclosure*) provides that temporary fencing and other means of enclosure must be approved before that stage of the onshore connection works is commenced, that construction consolidation sites will be securely fenced and that such temporary fencing removed after completion of the works.

As stated above, the DCO provides that for any pre-commencement works relating to that temporary fencing, that will be in accordance with details submitted to and approved by the relevant planning authority.

Requirement 18 (*Onshore substation surface water and drainage management plan*) that construction of any part of Work No. 13 must not commence until a service water and drainage management plan (which

accords with the code of construction practice) has been submitted to and approved by the relevant planning authority, following consultation with the relevant drainage authority. Construction works must be undertaken in accordance with the approved scheme.

Requirement 19 (*Contaminated land and groundwater plan*) requires that the relevant stage of the connection works must not commence until a contaminated land and groundwater plan for that stage (which accords with the code of construction practice) has been submitted to and approved by the relevant planning authority, following consultation with the Environment Agency. The scheme must be implemented as approved.

Requirement 20 (*Construction noise and vibration management plan*) requires that the relevant stage of the connection works must not commence until a scheme for noise and vibration management for that stage (which accords with the code of construction practice) has been submitted to and approved by the relevant planning authority. Construction works must be undertaken in accordance with the approved scheme.

Requirement 21 (*Construction traffic management plan*) requires that the relevant stage of the connection works must not commence until a construction traffic management plan (which accords with the code of construction practice) for that stage have been submitted to and approved by the relevant highway authority. The plans must be implemented on commencement of the relevant stage of connection works.

Requirement 22 (*Archaeological written scheme of investigation*) requires that the relevant stage of the connection works must not commence until a written scheme of archaeological investigation (which accords with the onshore archaeological draft written scheme of investigation) has, for that stage, been submitted to and approved by the relevant planning authority, following consultation with Historic England and Kent County Council. Construction works must be undertaken in accordance with the approved scheme.

As stated above, the DCO provides that for any pre-commencement works relating to archaeological investigations, that will be in accordance with details submitted to and approved by the relevant planning authority.

Requirement 23 (*Landscape and Ecological Mitigation plan*) requires that the relevant stage of the connection works must not commence until a landscape and ecological management plan for that stage (which accords with the outline landscape and ecological management plan) has been approved by the relevant planning authority, following consultation with Natural England. Construction works must be undertaken in accordance with the approved scheme.

Requirement 24 (*Construction hours*) provides for construction hours for the connection works on specified days, with none on Sundays or bank holidays, for the relevant works, with exceptions for certain continuous operations, construction works at the landfall and requiring trenchless installation techniques, fit out works at the onshore project substation, delivery of abnormal loads, daily start up and shut down, electrical installation, works requiring temporary road closures, emergency works and other cases agreed with the relevant planning authority.

Requirement 25 (*Control of noise during operational phase*) requires that operation must not commence for Work No. 13 until an operational noise management plan has been submitted to and approved by the relevant planning authority.

Requirement 26 (*Onshore decommissioning*) provides that upon the cessation of commercial operation of the connection works, an onshore decommissioning plan must be submitted to and approved by the relevant

planning authority. The plan must then be implemented as approved.

Requirement 27 (*Requirement for written approval*) provides that where any requirement requires the approval of the SoS or the relevant planning authority such approval must be in writing.

Requirement 28 (*Amendments to approved details*) provides that any details approved pursuant to any requirement will be taken to include any amended details which are subsequently approved, provided that any amendments to or deviations from the approved details do not give rise to any materially new or materially different environmental effects from those assessed in the environmental statement. This principle of including such wording has been accepted in a number of DCOs at Examination, including the recent (and still draft) Millbrook Power (Gas Fired Power Station) Order.

- Schedule 2* (*Streets subject to street works*) sets out those streets that are to be the subject of street works.
- Schedule 3* (*Public rights of way to be temporarily stopped up*) sets out those public rights of way that are to be temporarily stopped up.
- Schedule 4* (*Access to works*) sets out details of access points to the Works.
- Schedule 5* (*Land in which only new rights etc. may be acquired*) sets out details of such land. It sets out the purposes for acquisition of new rights over specified plots. In accordance with the September 2013 guidance issued by the Secretary of State⁴, it clearly identifies rights that apply to the relevant plots set out in the Book of Reference, and also details, where relevant, the restrictive covenants that apply to the relevant plots to protect the installed cables.
- Schedule 6* (*Modification of compensation and compulsory purchase enactments for creation of new rights*) sets out changes to the operation of the legislation relating to compulsory purchase, principally the material detriment provisions contained in Section A of the Compulsory Purchase Act 1965.
- Schedule 7* (*Land of which temporary possession may be taken*) sets out details of such land that may be occupied under temporary powers.
- Schedule 8* (*Protective provisions*) sets out protective provisions for statutory undertakers affected by the authorised development. The protective provisions are for the benefit of general gas, electricity, water and sewerage undertakers affected by the authorised development (Part 1), National Grid (Part 2) and Operators of Electronic Communications Code Networks (Part 3).
- Schedule 9* (*Arbitration rules*) As explained in relation to article 36 the Applicant has included an arbitration procedure, secured through the DCO.
- Schedule 10* (*Procedure for discharge of requirements*) sets out the process to be followed in relation to applications made to a discharging authority for any agreement or approval required by a requirement in the Order.
- Schedule 11* (*Deemed licence under Marine and Coastal Access Act 2009 – generation assets*) sets out the deemed licence for the generation assets within the authorised project.

Standard provisions and structure for deemed marine licences have been

⁴ Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land (Published by Department for Communities and Local Government, September 2013)

developed and included within Orders granted under the 2008 Act. The draft deemed licences comprise one generation licence and one export cable system licence within this Order and have been developed by the Applicant in discussion with the MMO.

The licences are deliberately drafted to be standalone documents. This reflects the fact that they will have a wide distribution to contractors and agents, being an audience that may be confused by cross references to the main Order. Also, they are documents which, based on past experience, are likely to be varied from time to time. Such variations will be much easier to follow if the licences have been prepared on a standalone basis. As a result, there is intentional repetition from the main Order of various definitions and the description of the authorised works. Where definitions from the main Order are not included, this is because such definitions only relate to the onshore transmission works and are therefore not relevant for the licences.

Unless otherwise stated, the provisions below relate to all of the deemed marine licences, although condition numbering varies between the deemed marine licences for the generation assets and export cable system assets. A table which compares the numbering across the generation and transmission licences is included at Schedule 2 for ease of reference.

Part 1 – Licensed marine activities - Interpretation

Paragraphs 1-4 (*Interpretation*) provide interpretation of certain words and phrases used in the licence and contact details for key organisations relevant to the content of the licence. Many of the definitions (including the different types of foundations and other structures such as wind turbine generators and the meteorological mast) are identical to those used in the main Order.

It is important to note here that, as with the onshore activities outlined within the DCO in Article 1, at the definition of "pre-commencement", there are certain works that will occur offshore pre-commencement, namely seabed preparation and archaeological investigations (offshore).

Part 2 – Licensed Marine Activities – General

Paragraph 1 confirms that the deemed marine licence will remain in force until the scheme has been decommissioned.

Paragraph 2 confirms that section 72(7) (*Variation, suspension, revocation and transfer*) of the 2009 Act is dis-applied in relation to transfer of the deemed marine licences. Section 72(7) permits the licensing authority to transfer a marine licence to another person. Section 72(8) provides that "a licence may not be transferred except in accordance with subsection 7". Article 5 (*Benefit of the Order*) however provides for the transfer to take place in a different way to section 72(7). Since Article 5 is different from the precise wording of section 72(7) of the 2009 Act it is necessary to dis-apply section 72(7) in those limited circumstances to enable Article 5 to operate. Without such a disapplication, Article 5 might be claimed to be inoperative because of adopting a different wording from section 72(7).

Paragraph 3 confirms that where any condition requires the licensed activities be carried out in accordance with the plans, protocols or statements approved under the licence, the approved details, plan or scheme are taken to include any amendments that may subsequently be approved by the MMO.

Paragraph 4 notes that any amendments to approved details must fall within what has been assessed in the Environmental Statement.

Paragraph 5 sets out the substances or articles authorised for deposit at

sea.

Paragraph 6 sets out the grid coordinates for those works within the deemed marine licence.

Part 3 – Details of Licensed Marine Activities

Paragraphs 1-3 (*Details of licensed marine activities*) specify the licensable marine activities that are authorised by the licence in connection with the construction and operation of the generating station (generation assets licences) and offshore associated development export cable system asset licence. The section deliberately repeats in full the description of the relevant works from Part 1 of Schedule 1. Reference is also included to disposal of material as a result of preparation works for construction of the generating station and associated development (as appropriate).

Part 4 – Conditions

Conditions 1 to 4 (*Design parameters*) repeat the design parameters from requirements 2 of Part 3 of Schedule 1 up to the offshore substation. This has the effect of putting beyond doubt the fact that when considering approvals under the licence, the details of proposed works must comply with these constraints under the deemed marine licence as well as under the Order.

Condition 5 (*Maintenance of the authorised development*) confirms that the Undertaker may maintain the Authorised Development except where the terms of the licence provides otherwise. All maintenance works must have been assessed in the Environmental Statement.

Condition 6 (*Notifications and inspections*) provides for a system of supplying copies of the licence to agents and contractors, restricting the use of contractors and vessels to those notified to the MMO and publicising commencement and progress of the licensed activities.

Conditions 7 and 8 (*Aids to navigation*) provide for various matters to aid navigation in the vicinity of the authorised scheme, including the provision of various navigation aids and notices to mariners, the ongoing availability of the aids to navigation and notification of the progress of works to Trinity House and the MMO. Condition 8 specifies how the Undertaker must colour all of the structures. These are all standard provisions from previous Transport and Works Act Orders and Electricity Act consents for offshore wind farms and have been incorporated into recently granted Orders under the 2008 Act.

Condition 9 (*Aviation Safety*) provides for the notification to the Defence Infrastructure Organisation Safeguarding, specific details relating to the authorised scheme, including date of commencement of construction, the maximum height of various infrastructure and the grid coordinates for each wind turbine generator.

Condition 10 (*Chemicals, drilling and debris*) restricts the use of chemicals and other substances and provides for the disposal of certain drilling arising and the monitoring of construction materials so as to identify those which may accidentally fall into the sea, which will then be investigated and, where identified, recovered.

Condition 11 (*Force majeure*) provides for the notification of deposits made in an emergency.

Condition 12 (*Pre-construction plans and documentation*) provides for the submission for approval, before the commencement of licensed activities, of a plan showing the proposed location, dimensions and choice of foundation of all elements of the authorised scheme to ensure that the licensed activities conform with the description of Work No. 1 and the design parameters in conditions 1-3. It also provides for submission for

approval of a construction programme and monitoring plan, a construction method statement, a project environmental management plan, a scour and cable protection plan, a marine mammal mitigation protocol (where driven or part driven foundations are proposed), a cable specification, installation and monitoring plan, an offshore draft written scheme of archaeological investigation, a scheme for habitats of principal importance, an offshore operations and maintenance plan, an aids to navigation management plan and a site integrity plan (added at Deadline 2).

The scour and cable protection plan replaces the need for a separate 'scour protection management plan' and 'cable protection plan', as it is standard practice to combine these two plans post grant of consent of the DCO.

Condition 13 requires any archaeological investigations and material operations involving seabed works taking place prior to commencement, must take place in accordance with a scheme of investigation submitted to and approved by the MMO. For archaeological investigations, the MMO must also consult with the relevant statutory historic bodies.

Condition 14 requires the undertaker to provide to the MMO details of each programme, statement, plan or scheme required under conditions 12 and 13 at least four months prior to commencement, unless otherwise agreed with the MMO.

Condition 15 (*Pre-construction monitoring and surveys*) specifies the manner in which the undertaker must discharge its obligation to put forward proposals for pre-construction surveys and monitoring, and provides a list of the required pre-construction surveys.

The applicant proposes to undertake surveys pre-construction for *Sabellaria spinulosa* (or other biogenic reef features) and saltmarsh as these are the two sensitive habitats of principal importance that require mitigation or potential reinstatement. Other benthic habitats present within the development boundary do not represent sensitive habitats of principal importance or receptors in respect of which further information or mitigation is required. Pre-construction monitoring in the form of generic or broad scale monitoring is not therefore considered necessary. The proposed pre-construction will inform micro-siting and the reinstatement and recovery of saltmarsh respectively. The post-construction surveys are proposed to validate the results of the micro-siting in the case of the biogenic reefs, and monitor recovery in the case of the saltmarsh habitats.

Condition 16 (*Construction monitoring*) specifies the manner in which the undertaker must discharge its obligation under Condition 12(b) to put forward proposals for construction surveys and monitoring for noise. It provides for the MMO to require further noise monitoring depending on the results.

Condition 17 (*Post construction*) specifies the manner in which the undertaker must discharge its obligation under Condition 12(b) to put forward proposals for post-construction surveys and monitoring, and provides a list of the required post-construction surveys.

Condition 18 (*Reporting of impact pile driving*) provides that the undertaker must provide information of the expected location, start and end dates of impact pile driving to the MMO.

Condition 19 (*Fisheries liaison and coexistence plan*) specifies that the undertaker must comply with the fisheries liaison and coexistence plan to ensure the relevant fishing fleets are notified of the commencement of licensed activities.

Condition 20 (*Seabed preparation and clearance*) requires that any seabed preparation and clearance works taking place prior to

commencement must take place in accordance with a method statement submitted to and approved by the MMO. This condition was inserted at Deadline 1, in response to representations made by Natural England and the MMO.

Condition 21 (Dredge disposal) provides that the undertaker must notify the MMO within 48 hours upon completing the final authorised disposal. This condition was inserted at Deadline 1 at the request of the MMO.

Condition 22 (Decommissioning) requires the undertaker to submit to the MMO a plan for the carrying out of decommissioning activities at least six months prior to the intended start of these activities. This condition was inserted at Deadline 1 at the request of the MMO.

Schedule 12

(Deemed licence under Marine and Coastal Access Act 2009 – export cable system assets)

This deemed marine licence relates to the export cable and associated assets only and its provisions largely duplicate the generation assets deemed marine licence at Schedule 11 of the Order, save for the following differences, as summarised below. In addition, a table has been produced at Schedule 2 summarising where the key provisions differ.

Condition 15 (c): At the intertidal area Work No. 3B, as also contained within the DCO at Requirement 10, the Applicant will notify the MMO of the engineering option that will be constructed and built out in relation to the Project.

Condition 9 (1)(b): requires that a contamination prevention plan must be submitted to the MMO, which provides a methodology and process confirming that the Works being undertaken within Work No. 3B and near to a disused landfill do not release any contaminants into the marine environment.

Condition 18 (Cable exclusion zone) specifies that the undertaker must not install cables or cable protection works within the cable exclusion zone, and includes the grid references for the cable exclusion zone. This condition was inserted at Deadline at the request of the MMO.

Thanet Extension Offshore Wind Farm

Schedule 1: Comparison Between Model Provisions and draft Order Articles

| Article in DCO | Identical to Model Provision? | Precedence in other DCOs | Differences from model provisions | Cross reference to rationale in main EM |
|---|-------------------------------|--|--|--|
| 1 Citation and commencement | Yes | | | |
| 2 Interpretation | Yes | | | The DCO includes all of the model provision definitions, plus those relevant to the Authorised Project |
| 3 Development consent etc. granted by the Order | No | Yes – the Hornsea Three Offshore Wind Farm draft Order | | Article 3 also makes provision for the offshore and onshore works authorised by the Order to be constructed within the Order limits. |
| 4 Power to construct and maintain authorised project | No | No | In addition to the model provisions, the words "use" and "operate" have been included. | It was considered prudent, and more robust, to allow the undertaker to operate and utilise the project for its constructed purpose, as "maintenance" carries with it a separately defined meaning with the Order. |
| 5 Benefit of the Order | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 and the Hornsea Three Offshore Wind Farm draft Order | This article is drafted partially based on the model provision and partially based on the East Anglia THREE Offshore Wind Farm Order 2017. | The wording of this Article is based on the East Anglia THREE Offshore Wind Farm Order 2017, and in part follows the Benefit of the Order provision set out in the Hornsea Three Offshore Wind Farm draft Development Consent Order. |
| 6 Application and modification of legislative provisions | No | Yes – East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted based on the East Anglia THREE Offshore Wind Farm Order 2017. | This approach was taken on The East Anglia THREE Offshore Wind Farm Order 2017 in relation to the carrying out of development. However, Article 6(1) has been further amended to clarify that |

| Article in DCO | Identical to Model Provision? | Precedence in other DCOs | Differences from model provisions | Cross reference to rationale in main EM |
|--|-------------------------------|---|--|--|
| | | | | removal of hedgerows is also permitted for maintenance activities. |
| 7 Defence to proceedings in respect of statutory nuisance | No | Yes – East Anglia THREE | This approach follows the Model Provisions and has been accepted in a number of offshore wind farm development consent orders including, most recently, The East Anglia THREE Offshore Wind Farm Order 2017. | This approach was accepted in the East Anglia THREE Offshore Wind Farm Order 2017. |
| 8 Street works | No | Yes – the National Grid (Hinkley Point C Connection Project) Order 2016 and the National Grid (Richborough Connection Project) Order 2018 | This article is drafted partially based on the model provision and partially based on the National Grid (Hinkley Point C Connection Project) Order 2016 and the National Grid (Richborough Connection Project) Order 2018. | The undertaker needs the power to remove or use earth and materials in or under the streets in order to lay the cables for authorised project under the streets |
| 9 Temporary stopping up of public rights of way | No | Yes – the Hornsea Three Offshore Wind Farm draft Order | This article is drafted based on the Hornsea Three Offshore Wind Farm draft Order. | This approach was accepted in the East Anglia THREE Offshore Wind Farm Order 2017 |
| 10 Temporary stopping up of streets | No | Yes - the Hornsea Three Offshore Wind Farm draft Order | This article is drafted partially based on the model provision and partially based on the Hornsea Three Offshore Wind Farm draft Order. | This approach was accepted in the East Anglia THREE Offshore Wind Farm Order 2017 and the Hornsea Two Offshore Wind Farm Order 2016. |
| 11 Access to works | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted partially based on the model provision and partially based on the East Anglia THREE Offshore Wind Farm Order 2017 | This approach was accepted in the East Anglia THREE Offshore Wind Farm Order 2017 and the Hornsea Two Offshore Wind Farm Order 2016. It streamlines matters for the undertaker to require only one approval from the relevant authority. |
| 12 Agreements | No | Yes – the East Anglia THREE | This article is drafted partially based on the model provision and | This approach was accepted in the East Anglia THREE Offshore |

| Article in DCO | Identical to Model Provision? | Precedence in other DCOs | Differences from model provisions | Cross reference to rationale in main EM |
|--|--------------------------------------|---|--|--|
| with street authorities | | Offshore Wind Farm Order 2017 | partially based on the East Anglia THREE Offshore Wind Farm Order 2017. | Wind Farm Order 2017 and the Hornsea Two Offshore Wind Farm Order 2016 |
| 13 Application of the 1991 Act | No | Yes – the Hornsea Two Offshore Wind Farm Order 2014 | This article is drafted partially based on the model provision and partially based on the Hornsea Two Offshore Wind Farm Order 2014. | Comparable provisions are commonly included in Transport and Works Act Orders and have also been consented in the Hornsea Two Offshore Wind Farm Order 2016 and the Hornsea One Offshore Wind Farm Order 2014. |
| 14 Discharge of water and works to watercourses | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted partially based on the model provision and partially based on the East Anglia THREE Offshore Wind Farm Order 2017. | The Article has been further modified to make it clear that the undertaker will have powers to alter watercourses, with the consent of the Environment Agency or the Internal Drainage Board or Kent County Council as appropriate. |
| 15 Authority to survey and investigate the land onshore | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted partially based on the model provision and partially based on the East Anglia THREE Offshore Wind Farm Order 2017. | The Article makes provision in relation to the payment of compensation and the notice period that must be given to owners and occupiers of land ahead of any surveys. |
| 16 Public rights of navigation | No | Yes - Kentish Flats Extension Offshore Wind Farm Order 2013 | This article is drafted based on the Kentish Flats Extension Offshore Wind Farm Order 2013 | As there will be a physical obstruction in the marine environment there will no practical ability to navigate through these specific locations and the approach to extinguish public rights of navigation formalises this situation. |
| 17 Compulsory acquisition of land | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted based on the East Anglia THREE Offshore Wind Farm Order 2017. | The Article broadly follows the Model Provisions and follows the approach taken in the more recent East Anglia THREE Offshore Wind Farm |

| Article in DCO | Identical to Model Provision? | Precedence in other DCOs | Differences from model provisions | Cross reference to rationale in main EM |
|---|-------------------------------|---|--|--|
| | | | | Order 2017. |
| 17 Time limit for exercise of authority to acquire land compulsorily | Yes | | | |
| 19 Compulsory acquisition of rights | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted based on the East Anglia THREE Offshore Wind Farm Order 2017. | This approach can be found in Article 19 of the Network Rail (Nuneaton North Chord Order) 2010 and Part 3 of Schedule 6 to the Crossrail Act 2008. It was also accepted in the East Anglia THREE Offshore Wind Farm Order 2017. |
| 20 Private rights | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted partially based on the model provision and partially based on the East Anglia THREE Offshore Wind Farm Order 2017. | The model provisions are accordingly not followed in full and are adjusted so as to apply to both land and rights over land acquired pursuant to the Order. Paragraphs 6 and 7 allow the undertaker to provide notice to the contrary to the provisions of the Article, allowing the undertaker to confirm to the relevant owner of a dominant tenement that the rights that would by operation of this Article be extinguished or overridden are not so extinguished or overridden. |
| 21 Application of the Compulsory Purchase (Vesting Declarations) Act 1981 | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted based on the East Anglia THREE Offshore Wind Farm Order 2017. | This Article gives the undertaker the option to acquire land by this method rather than through the notice to treat procedure. It is based on the Model Provisions and has been updated to reflect the changes brought about by the Housing and Planning Act 2016. It follows the |

| Article in DCO | Identical to Model Provision? | Precedence in other DCOs | Differences from model provisions | Cross reference to rationale in main EM |
|---|-------------------------------|---|--|---|
| | | | | approach taken on the East Anglia THREE Offshore Wind Farm Order 2017 |
| 22 Application of Part 1 of the Compulsory Purchase Act 1965 | No | Yes- the High Speed Rail (London – West Midlands) Act 2017 and the Wrexham Gas Fired Generating Station Order 2017. | This article is drafted partially based on the model provision and partially based on the High Speed Rail (London – West Midlands) Act 2017. | The Article reflects recent amendments to the Compulsory Purchase Act 1965 providing that where the making of the Order is subject to a statutory challenge, the deadline for the exercise of compulsory acquisition powers under the Compulsory Purchase Act 1965 is increased by a period equivalent to the period beginning with the day the application is made, and ending on the day it is withdrawn or finally determined (or if shorter, one year). |
| 23 Acquisition of subsoil only | No | Yes – the National Grid (North London Reinforcement Project) Order 2014 | This article is drafted partially based on the model provision and partially based on the National Grid (North London Reinforcement Project) Order 2014. | This approach can be found in the Glasgow Airport Rail Link Act 2007 and at Article 28 of the National Grid (North London Reinforcement Project) Order 2014. |
| 24 Rights under or over streets | Yes | | | |
| 25 Temporary use of land for carrying out the authorised project | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted partially based on the model provision and partially based on the East Anglia THREE Offshore Wind Farm Order 2017. | This drafting follows a number of recent Development Consent Orders, including the East Anglia THREE Offshore Wind Farm Order 2017, and the Network Rail (Ordsall Chord) Order 2015. |
| 26 Temporary use of land for maintaining authorised project | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted partially based on the model provision and partially based on the East Anglia THREE Offshore Wind Farm Order 2017. | This is based on, but modifies, the Model Provisions but does follow the approach taken on The East Anglia THREE Offshore Wind Farm Order 2017. Provision is also made |

| Article in DCO | Identical to Model Provision? | Precedence in other DCOs | Differences from model provisions | Cross reference to rationale in main EM |
|---|-------------------------------|---|--|--|
| | | | | for taking temporary possession without notice, or at a shorter notice than is usually permitted in an emergency. |
| 27 Statutory undertakers | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted partially based on the model provision and partially based on the East Anglia THREE Offshore Wind Farm Order 2017. | This is a Model Provision which has been modified in accordance with the approach taken on a number of offshore wind farm development consent orders including The East Anglia THREE Offshore Wind Farm Order 2017. |
| 28 Recovery of costs of new connections | Yes | | | |
| 29 Operation of generating station | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted based on the East Anglia THREE Offshore Wind Farm Order 2017. | This article is included pursuant to section 140 of the 2008 Act. It authorises specifically the undertaker to operate the authorised project in accordance with the provisions of this Order or an agreement made under this Order. |
| 30 Deemed marine licences under the 2009 Act | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted based on the East Anglia THREE Offshore Wind Farm Order 2017. | This article adopts the form of model provision 37 but adapted to the provisions of the 2009 Act. |
| 31 Application of landlord and tenant law | Yes | | | |
| 32 Operational land for purposes of the 1990 Act | Yes | | | |

| Article in DCO | Identical to Model Provision? | Precedence in other DCOs | Differences from model provisions | Cross reference to rationale in main EM |
|--|-------------------------------|---|--|---|
| 33 Felling or lopping of trees and removal of hedgerows | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted partially based on the model provision and partially based on the East Anglia THREE Offshore Wind Farm Order 2017. | There are currently no important hedgerows within the Order limits; however, this power has been retained as the undertaker may need to remove hedgerows planted between now and construction at a later date |
| 34 Trees subject to tree preservation orders | No | Yes - the Hornsea Two Offshore Wind Farm Order 2016. | The Article is a Model Provision save that it applies generally to any tree subject to a tree preservation order made before and after the date of the Order coming into effect and either within or overhanging the Order limits. | This Article enables the undertaker to fell or lop the roots of any tree which is subject to a tree preservation order to prevent it obstructing or interfering with the construction, maintenance or operation of the authorised project. |
| 35 Certification of plans etc. | Yes | | | |
| 36 Arbitration | No | Yes – the Hornsea Three Offshore Wind Farm draft Order | This article is drafted based on the Hornsea Three Offshore Wind Farm draft Order. | The draft Hornsea Three Offshore Wind Farm Order has included an arbitration article, which provides for an arbitration process. The Applicant agrees that this approach will provide greater certainty to all parties involved in the process and is preferential to the approach adopted in the model provisions. |
| 37 Procedure in relation to certain approvals etc. | No | Yes – the Hinkley Point C Nuclear Generating Station Order 2013 | This article is drafted based on the Hinkley Point C (Nuclear Generating Station) Order 2013. | Article 37 provides a mechanism for securing any consent or approval from a consenting body required by the provisions of the Order. A similar approach was followed on the Hinkley Point C (Nuclear Generating Station) Order 2013. Article 37(1) contains a deemed approval |

| Article in DCO | Identical to Model Provision? | Precedence in other DCOs | Differences from model provisions | Cross reference to rationale in main EM |
|---|-------------------------------|---|---|---|
| | | | | <p>mechanism, in order to avoid undue delay via subsidiary approval mechanisms post consent.</p> <p>The Government are supportive of introducing "deemed discharge" of conditions in relation to projects consented pursuant to the Town and Country Planning Act 1990 regime, particularly in response to its latest consultation on the draft National Planning Policy Framework and previous introductions of the concept of "deemed discharge" from April 2015.</p> |
| 38 Abatement of works abandoned or decayed | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted based on the East Anglia THREE Offshore Wind Farm Order 2017. | Although not a Model Provision it has been included on a number of offshore wind farm development consent orders including The East Anglia THREE Offshore Wind Farm Order 2017. |
| 39 Saving provisions for Trinity House | No | Yes - Scarweather Sands Offshore Wind Farm Order 2004 | This article is drafted based on the Scarweather Sands Offshore Wind Farm Order 2004 and the Model Provisions for Harbours. | This Article is intended to provide protection to Trinity House. |
| 40 Crown rights | No | Yes – the National Grid (Hinkley Point C Connection Project) Order 2016 | This article is drafted based on the National Grid (Hinkley Point C Connection Project) Order 2016 | This Article reflects recent Orders and has been agreed with The Crown Estate. |
| 41 Protective provisions | No | Yes – the East Anglia THREE Offshore Wind Farm Order 2017 | This article is drafted based on the East Anglia THREE Offshore Wind Farm Order 2017. | This Article gives effect to the protective provisions in Schedule 8 (Protective provisions). |

Thanet Extension Offshore Wind Farm: Schedule 2
Comparison Table of DML Conditions

| | Generation Assets DML Schedule 11, Part 4 | Export Cable Assets DML Schedule 12, Part 4 |
|--|---|---|
| Design parameters | 1(1)-(2) (wind turbine generator) | 1(1)-(3) (offshore substation) |
| | 2(3)-(4) (meteorological mast) | - |
| | 3(1) (cables) | 2 (cables) |
| | 3(2)-(3) (wind turbine generator foundations) | 3 (scour protection) |
| | 3(2) (meteorological mast foundations) | - |
| | 3(2)-(3) (offshore substation foundations) | - |
| Maintenance of the authorised scheme | 5(1)-(6) | 4(1)-(6) |
| Notifications and inspections | 6(1)-(12) (in respect of Work No. 1) | 5(1)-(12) (in respect of Work No. 2, a second notice is also required advising of the start date for Work Nos. 3, 3A and 3B and route of the sub-sea cables and fibre optic cables) |
| Aids to navigation | 7(1)-(5) | 6(1)-(5) |
| | 8(1)-(2) | 7 (1)-(2) |
| Aviation safety | 9 | 22 |
| Chemicals, drilling and debris | 10(1)-(10) (Condition 10(1) also includes chemical agents placed within any monopile void) | 8(1)-(11) (Additional condition 8(8) relates to obstructions resulting from Work No. 3) |
| Force majeure | 11(1)-(2) | 9(1)-(2) |
| Pre-construction plans and documents | 12(1)(a)-(j) (Condition 12(1)(c)(iii) requires the construction method statement to include details of the cable installation) | 10(1)(a)-(k) |
| | 13(1)-(2) | 11(1)-(2) |
| | 14(1)-(4) | 12(1)-(3) |
| Pre-construction monitoring and surveys | 15(1)-(3) | 13(1)-(3) |
| Construction | 16(1)-(3) | 14(1)-(3) |

| | | |
|---|--|-----------|
| monitoring | (Additional condition 16(3) relates to noise monitoring) | |
| Post construction | 17(1)-(3) | 15(1)-(4) |
| Reporting of impact pile driving | 18(1)-(3) | 16(1)-(3) |
| Notification of Work 3B | - | 17 |
| Cable exclusion zone | - | 18 |
| Fisheries liaison and coexistence plan | 19 | 19 |
| Seabed preparation and clearance | 20 | 20 |
| Dredge disposal | 21 (1)-(2) | 21 |
| Decommissioning | 22 (1)-(3) | 23 |

Thanet Extension Offshore Wind Farm: Schedule 2

Schedule 3: List of Order parameters

| Component | Specifications | Parameters |
|--------------------------------------|------------------------------------|---|
| Wind turbine generators (WTG) | Maximum total installed capacity | 340 MW |
| | Maximum number of WTGs | 34 |
| | Maximum blade tip height from MHWS | 22 metres |
| | Maximum hub height from MHWS | 250 metres |
| | Maximum rotor diameter | 220 metres |
| | Minimum spacing crosswind | 480 metres |
| | Minimum spacing downwind | 716 metres |
| | Foundation types | Piled monopile foundations; Piled quadropod or tripod jacket foundations; and Suction caisson quadropod or tripod jacket foundations. |
| Maximum scour protection | 219,912 m ² | |
| Offshore Substation | Maximum number | 1 |
| | Maximum height from MHWS | 50 metres |
| | Maximum length | 70 metres |
| | Maximum width | 50 metres |
| | Foundation types | Piled monopile foundations; Piled quadropod or tripod jacket foundations; and Suction caisson quadropod or tripod jacket foundations. |
| Maximum scour protection | 7,854 m ² | |
| Meteorological Mast | Maximum number | 1 |

| Component | Specifications | Parameters |
|-----------------------------------|--|---|
| | Maximum height from HAT | Maximum hub height of WTGs |
| | Foundation types | Piled monopile foundations; Piled quadropod or tripod jacket foundations; and Suction caisson quadropod or tripod jacket foundations. |
| Inter-Array Cables | Maximum length | 64 km |
| | Maximum cable protection | 80,000 m ² |
| Export Cables | Maximum length | 120 km |
| | Maximum cable protection | 210, 000 m ² |
| | Maximum number | 4 |
| Monopile Foundation | | |
| <i>Piled</i> | Maximum diameter | 10 metres |
| Jacket Foundation | Maximum width spacing between each leg at seabed level | 40 metres |
| | Maximum number of legs | 4 |
| <i>Piled</i> | Maximum pile diameter | 4 metres |
| | Maximum number of piles per leg | 1 |
| <i>Suction Caisson</i> | Maximum leg diameter | 3.5 metres |
| | Maximum height above HAT | 20 metres |
| | Maximum suction caissons per leg | 4 |
| Licensed Marine Activities | Maximum inert material disposed (generation assets) | 278, 000 m ³ |
| | Maximum inert material disposed (export cable system assets) | 1,449,600 m ³ |
| Onshore Substation | Maximum building height | 14 metres |
| | Maximum equipment height | 12.5 metres |

Thanet Extension Offshore Wind Farm
Schedule 5
Docugram Draft of Plans and Pre-Commencement Conditions Structure