

# Hornsea Offshore Wind Farm

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Project Two

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## Draft DCO Explanatory Memorandum

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January 2015

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## Hornsea Offshore Wind Farm

### Project Two – Application for Development Consent

Draft DCO Explanatory Memorandum

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## **INFRASTRUCTURE PLANNING**

### **THE INFRASTRUCTURE PLANNING (APPLICATIONS: PRESCRIBED FORMS AND PROCEDURE) REGULATIONS 2009**

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#### **THE PROPOSED HORNSEA TWO OFFSHORE WIND FARM ORDER**

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### **EXPLANATORY MEMORANDUM**

#### **TABLE OF CONTENTS**

Introduction	1
Preliminary (articles 1 to 5)	6
Principal powers (articles 6 to 8)	9
Streets (articles 9 to 14)	10
Supplemental powers (articles 15 to 17)	12
Powers of acquisition (articles 18 to 29)	13
Operations (articles 30 to 31)	19
Miscellaneous and general (articles 32 to 42)	20
Schedules (A to L)	23

**INFRASTRUCTURE PLANNING**

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**THE PROPOSED HORNSEA TWO OFFSHORE WIND FARM ORDER**

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**EXPLANATORY MEMORANDUM**

**INTRODUCTION**

- 1.1 This explanatory memorandum accompanies an application for development consent by Optimus Wind Limited (“Optimus Wind”) and Breesea Limited (“Breesea”) to construct and operate the second project within the Hornsea Zone (“Hornsea Project Two”). It explains the purpose and effect of each article of, and Schedule to, the draft Hornsea Two Offshore Wind Farm Order (“the Order”) in accordance with the requirement in regulation 5(2)(c) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009<sup>1</sup> (“the Applications Rules”).
- 1.2 The Order is based on the model provisions set out in Schedule 1 to the Infrastructure Planning (Provisions) (England and Wales) Order 2009 (“the Model Provisions”). In accordance with section 38 of the Planning Act 2008 (“the Planning Act”), the former Infrastructure Planning Commission (IPC) was required to have regard to these provisions when exercising its power to make an Order granting development consent. However, the Localism Act 2011 repealed section 38 and removed the need for the decision maker to have regard to the prescribed Model Provisions in deciding an application. Planning Inspectorate advice note thirteen “Preparing the draft Order and explanatory memorandum, April 2012” explains that the Model Provisions were intended as a guide for developers in drafting Orders, rather than a rigid structure, but aided consistency and assisted developers to draft a comprehensive set of lawful provisions.
- 1.3 Advice note thirteen suggests that provisions used in “predecessor” regimes such as for Transport and Works Act (“TWA”) Orders or Harbour Empowerment Orders may also be helpful in the drafting. This explanatory memorandum includes an explanation in relation to each provision as to whether the particular provision is based on the Model Provisions or a relevant precedent and differences between the articles in the Order and Model Provisions are explained.
- 1.4 Since the Order seeks to apply and modify statutory provisions under section 120(5) of the Planning Act concerning the compulsory acquisition of land, it has been drafted as a statutory instrument as required under section 117(4) of the Planning Act.

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<sup>1</sup> S.I. 2009/2264

## **PURPOSE OF ORDER**

- 1.5 The purpose of the Order is to grant development consent for a project which includes a nationally significant infrastructure project (“NSIP”), consisting of the construction of up to two generating stations within a Renewable Energy Zone designated by virtue of the Renewable Energy Zone (Designation of Area) Order 2004<sup>1</sup>, with a capacity of more than 100 megawatts and therefore falling within the scope of sections 14 and 15 of the Planning Act. This Order authorises offshore wind farm development in the Hornsea Zone which is located in the southern North Sea commencing approximately 31 kilometres to the east of the East Riding of Yorkshire coast. The development of the Hornsea Zone will take place in several phases of which this is the second. The generating stations for Hornsea Project Two will be located within the centre of the Hornsea Zone in an area known as Subzone 2, the western boundary of which is 89 kilometres from the coast of the East Riding of Yorkshire.
- 1.6 The Order envisages the possibility that there will be a maximum of two generating stations, each the responsibility of a separate undertaker, comprising up to a maximum combined total of 360 wind turbine generators.
- 1.7 The project includes infrastructure necessary to connect the offshore generating stations to the onshore National Grid, most of which will be situated in the Renewable Energy Zone, some of which will be within English territorial waters and some of which will be onshore. This additional infrastructure as provided for in Part 1 of Schedule A is “associated development” under section 115 of the Planning Act.
- 1.8 The Order also authorises ancillary works within the Order limits.

### **Nationally Significant Infrastructure – The Generating Stations**

- 1.9 Pursuant to sections 14(1)(a) and 15(3) of the Planning Act, the construction of an offshore electricity generating station in England or Wales having a capacity of more than 100 MW is a NSIP. Section 31 of the Planning Act provides that development consent is required under the Act for development that is or forms part of a NSIP. As the proposed generating stations are proposed to have a total capacity of up to 1,800 MW they qualify as a NSIP.
- 1.10 The Order authorises two offshore wind farms: Project A and Project B together with the associated development and grid connection for each project. Both wind farms have the same connection point into the National Grid and follow the same cable route.
- 1.11 Project A and Project B are likely to be constructed by different operators: Optimus Wind in the case of Project A and Breesea in the case of Project B. Both Optimus Wind and Breesea are

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<sup>1</sup> S.I. 2004/2668

named as an undertaker within the Order. For the sake of clarity and transparency for stakeholders, the areas over which each undertaker will have control both offshore and onshore are shown on the works plans through the use of different Work Nos. (for example, Optimus Wind is the undertaker in relation to Work Nos. 1A, 2A, 3A, 4A, 5A, 6A, 7A, 8A and 9A and Breesea is the undertaker in relation to Work Nos. 1B, 2B, 3B, 4B, 5B, 6B, 7B, 8B and 9B). There are also shared works comprised in Work No. 10 (improvements to access road) which may be constructed by either Optimus Wind or Breesea. Work No. 10 constitutes “shared works” because they are located in areas where equal access to the sites will be required for both projects.

### **Associated Development**

1.12 Section 115 of the Planning Act provides that, in addition to the NSIP for which development consent is required, consent may also be granted for associated development. Associated development is defined in the Planning Act as development which is associated with the NSIP or any part of it.

1.13 Guidance on associated development has been issued by the Secretary of State for Communities and Local Government<sup>1</sup> (“Associated Development Guidance”), which describes types of development that may qualify as associated development. This guidance states that:

*“It is for the Secretary of State to decide on a case by case basis whether or not development should be treated as associated development. In making this decision the Secretary of State will take into account the following core principles:*

*(i) The definition of associated development... requires a direct relationship between associated development and the principal development. Associated development should therefore either support the construction or operation of the principal development, or help address its impacts.*

*(ii) Associated development should not be an aim in itself but should be subordinate to the principal development.*

*(iii) Development should not be treated as associated development if it is only necessary as a source of additional revenue for the applicant, in order to cross-subsidise the cost of the principal development. This does not mean that the applicant cannot cross-subsidise, but if part of a proposal is only necessary as a means of cross-subsidising the principal development then that part should not be treated as associated development.*

*(iv) Associated development should be proportionate to the nature and scale of the principal development. However, this core principle should not be read as excluding associated*

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<sup>1</sup> Planning Act 2008: Guidance on associated development applications for major infrastructure projects, April 2013

*infrastructure development (such as a network connection) that is on a larger scale than is necessary to serve the principal development if that associated infrastructure provides capacity that is likely to be required for another proposed major infrastructure project. When deciding whether it is appropriate for infrastructure which is on a larger scale than is necessary to serve a project to be treated as associated development, each application will have to be assessed on its own merits. For example, the Secretary of State will have regard to all relevant matters including whether a future application is proposed to be made by the same or related developer as the current application, the degree of physical proximity of the proposed application to the current application, and the time period in which a future application is proposed to be submitted.”*

- 1.14 The Order seeks authorisation for associated development comprising up to six offshore high voltage alternating current (“HVAC”) collector substations required to gather power from the wind turbines. In the event that the mode of transmission is high voltage direct current (“HVDC”) it also includes up to two offshore HVDC converter substations. If the mode of transmission is HVAC the associated development will also include up to two offshore reactive compensation substations which will be built to limit electrical losses. The Order provides for the transmission of electricity by HVAC and/or HVDC.
- 1.15 The infrastructure will consist of subsea electrical circuits (comprising a maximum of eight cables in the case of HVAC and a maximum of four cables in the case of HVDC) which will be brought onshore in ducts. Once onshore, the cables will enter transition joint bays where they will connect to onshore electrical circuits. The circuits will comprise up to twenty-four cables in the case of HVAC and up to four cables in the case of HVDC. The cables will proceed to up to two onshore electrical transmission stations, where if necessary, the current will be converted from direct to alternating current. Hence the cables will connect the offshore HVDC converter substations or offshore HVAC reactive substations and the offshore HVAC collector substations and the wind turbine generators to the National Grid. All onshore development is associated development.
- 1.16 Associated development required to support this project also includes scour protection, dredging, cable protection measures, the disposal of material, works to alter the position of apparatus, works to alter the course of non-navigable rivers, streams or watercourses, landscaping works, works for the benefit of land, working sites during construction, works to secure means of access, surface water drainage systems, private roads and hardstanding, link and/or earthing boxes, jointing pits, temporary haul road, temporary access track and works to enable utility services to be run through specified land. The examples of possible associated development in the Order are not exhaustive and other works falling within the scope of associated development may be carried out provided they are within the scope of the environmental impact assessment.
- 1.17 The development has been designed so that the onshore cable corridor sits parallel, and wherever feasible, adjacent to the cable corridor for ‘Hornsea Project One’ authorised by the Hornsea One

Offshore Wind Farm Order 2014<sup>1</sup> (“the Hornsea Project One Order”). By designing the project in this way, the impacts are reduced as a number of the temporary construction compounds and access areas can be used for both projects and the land take required will be reduced compared to the situation where the corridors are not parallel or adjacent to one another. However, this design means that, in the event of a simultaneous or overlapping construction programme with Hornsea Project One or in the event that Hornsea Project Two construction has completed prior to the commencement of the Hornsea Project One construction, access to and use of some of the temporary construction compounds and work areas authorised by the Hornsea Project One Order will be prevented or restricted by the construction, or operation (where the cable for Project Two is installed directly beneath temporary construction compounds authorised by the Hornsea Project One Order), of Hornsea Project Two. In order to reduce the impacts to Hornsea Project One in these circumstances, the Order contains some temporary construction working sites (referred to in the Order as “compensation compounds”) and means of access to those compensation compounds which are intended for temporary use by the Hornsea Project One undertaker to compensate Hornsea Project One and reduce the impacts of Hornsea Project Two on Hornsea Project One.

- 1.18 In the event that compensation compounds are required, the relevant powers under the Order will be transferred to the Hornsea Project One undertaker in accordance with Article 35 of the Order to enable the Hornsea Project One undertaker to use the temporary construction working sites and means of access.
- 1.19 It is submitted that these compensation compounds will constitute associated development as they comply with the core principles set out in the Associated Development Guidance and noted above at paragraph 1.13. Firstly, there is a direct relationship between the compensation compounds and Hornsea Project Two as the compensation compounds help address the impacts of Hornsea Project Two on Hornsea Project One. The temporary compensation compounds are not an aim in themselves but are required as a result of Hornsea Project Two in certain circumstances. Construction compounds are already permitted under the Hornsea Project One Order but in the circumstances described above cannot be located or used as anticipated in that Order whilst also giving effect to the powers authorised under this Order. The compensation compounds are not required as a source of additional revenue for the undertaker in order to cross-subsidise the cost of Hornsea Project Two. And finally, the compensation compounds are proportionate to the nature and scale of Hornsea Project Two given that they are necessary to ensure delivery of another proposed major infrastructure project, namely Hornsea Project One. The final core principle has been complied with when considered in light of the note accompanying this core principle which states that it “*should not be read as excluding associated infrastructure development (such as a network connection) that is on a larger scale than is necessary to serve the principal development*”

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<sup>1</sup> S.I. 2014/3331



*if that associated infrastructure provides capacity that is likely to be required for another proposed major infrastructure project”.*

- 1.20 There is precedent in the Network Rail (Ipswich Chord) Order 2012 for accommodating the apparatus of a statutory undertaker under the DCO of another undertaker. In that order the associated development included the diversion of a surface water sewer belonging to Anglian Water thus supporting the position that an order can include works for the benefit of another statutory undertaker. In addition, the East Anglia One Offshore Wind Farm Order 2014 makes provision for additional cable ducts to be laid during the construction of East Anglia One to reduce the onshore impacts of future projects within the East Anglia Zone (i.e. East Anglia Three and East Anglia Four) despite the ducts not being necessary for the East Anglia One Project itself.

## **PRELIMINARY**

### *Article 1 (Citation and commencement)*

- 2.1 This article, which does not appear in the Model Provisions, provides for the commencement and citation of the Order.

### *Article 2 (Interpretation)*

- 3.1 This article contains provisions for the interpretation of words and phrases used in the Order.
- 3.2 A number of definitions are included (e.g. “gravity base foundation” and “monopile foundation”) which do not appear in the Model Provisions, but which relate to the specific project and are self-explanatory. In common with many development consent orders, we have included a definition of the Environmental Statement.
- 3.3 The definition of “maintain” which is included is based on the definition that appears in the Walney Extension Offshore Wind Farm Order 2014. The scope of the definition is restricted by Article 7 (Maintenance of authorised project) which limits maintenance works to those that have been assessed (where assessment is required under the EIA Regulations) unless otherwise approved by the MMO or the relevant planning authority. Such approval may only be given in relation to immaterial changes unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement.
- 3.4 A definition of “compensation compounds” is provided in the Order. This term refers to temporary construction working sites forming part of the associated development authorised by the Order which are intended for temporary use by the Hornsea Project One undertaker for

the purpose of compensating the Hornsea Project One undertaker in the event that the use by the Hornsea Project One undertaker of temporary construction compounds forming part of the Hornsea Project One Order is restricted or prevented by the undertaker carrying out the works authorised by this Order. The circumstances in which the temporary compensation compounds may be required are set out in paragraph 1.18 above.

3.5 “Order land” is defined as meaning land shown on the land plans which is within the limits of land to be acquired or used. Unlike the definition in the Model Provisions, it includes land subject to temporary possession for construction of the authorised project.

3.6 The term “undertaker” is capable of referring to two bodies, i.e. the two applicant project companies, Optimus Wind and Breesea. Optimus Wind is the relevant undertaker in relation to the Project A Works whilst Breesea is the relevant undertaker for the Project B Works. The shared works can be carried out by Optimus Wind or Breesea and any restrictions, liabilities and obligations arising in relation to any shared works apply to the undertaker exercising the powers under this Order in relation to such shared works.

3.7 A new paragraph (5) provides that “References in this Order to points identified by letters, with or without numbers, are to be construed as references to points so lettered on the works plans.” This is not unusual in Transport and Works Act Orders and is intended to enhance the clarity of the Order provisions and works plans.

3.8 Paragraph (6) provides that “References in this Order to numbered works are references to the scheduled works as numbered in Part 1 of Schedule A.” Again, this is intended to enhance the clarity of the Order provisions and works plans.

*Article 3 (Disapplication of legislative provisions)*

4.1 This article provides (in reliance on section 120(5)(a) of the Planning Act (what may be included in order granting development consent)) for the disapplication of certain requirements which would otherwise apply under public legislation. That sub-section provides that an Order granting development consent may apply, modify or exclude a statutory provision which relates to any matter for which provision may be made in the Order.

4.2 Article 3 disapplies the requirement for various additional consents which would otherwise be required from the Environment Agency, internal drainage boards or lead local flood

authorities under the Water Resources Act 1991 and the Land Drainage Act 1991<sup>1</sup>. These are the requirements for consents to place structures on or over rivers, under the Water Resources Act, the requirements for approval under flood defence and land drainage byelaws made or deemed to be made under the Water Resources Act, the prohibition on placing obstructions in waterways which are not main rivers under the Land Drainage Act and byelaws made under the Land Drainage Act regulating the use and obstruction of watercourses. These are consents for activities which may be a necessary part of the project. In order to provide certainty that the project can proceed, the Order disapplies the requirement for consent, but instead provides for approval of detailed plans in the protective provisions for the Environment Agency and the relevant drainage authorities in Schedule L.

4.3 As these provisions (other than byelaws made under section 66 of the Land Drainage Act) are prescribed under section 150 of the Planning Act, the consent of the Environment Agency and of the relevant drainage authorities for the purpose of the Land Drainage Act 1991 is needed and these have been sought. Consent to the disapplication of the legislation has been received from North East Lindsey Drainage Board, Lindsey Marsh Drainage Board, North Lincolnshire Council Lead Local Flood Authority (LLFA) and North East Lincolnshire Council LLFA. Consent to the disapplication of legislation was received from Lincolnshire County Council LLFA based on an earlier version of the protective provisions. It is expected that a new letter of consent will be received from Lincolnshire County Council LLFA based on the updated protective provisions in the coming days.

4.4 Consent to the disapplication of legislation has been discussed with the Environment Agency which has issued a letter of comfort stating that based on the information provided to the Environment Agency to date the protective provisions are acceptable in principle and that the Environment Agency hopes to be in a position to give formal consent under section 150 of the Planning Act to the disapplication of the legislation following the submission of the application.

*Article 4 (Guarantees in respect of payment of compensation)*

5.1 This article, which does not appear in the Model Provisions, but is based on article 8 of the Rookery South (Resource Recovery Facility) Order 2011, precludes the compulsory acquisition powers from being exercised before appropriate security arrangements in respect of payment of compensation are in place and are approved by the Secretary of State. In an addition to the Rookery South precedent, the guarantee or alternative form of security need only be in place for a maximum period of 20 years. This provision has precedent in the Hornsea Project One Order.

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<sup>1</sup> 1991 c.57 and 1991 c.59

*Article 5 (Defence to proceedings in respect of statutory nuisance)*

- 6.1 This article, which follows article 7 of the Model Provisions and has precedent in the Hornsea Project One Order, provides the undertaker with a defence to a claim in statutory nuisance in respect of noise brought under section 82(1) of the Environmental Protection Act 1990<sup>1</sup> if it can show that works are being carried out in accordance with a notice served under section 60, or a consent given under section 61 or 65 of the Control of Pollution Act 1974<sup>2</sup>; or that the nuisance complained of is a consequence of the construction, use or maintenance of the authorised project and that it cannot reasonably be avoided.

**PRINCIPAL POWERS**

*Article 6 (Development consent etc. granted by the Order)*

- 7.1 This article (following Model Provision 2) provides development consent for the authorised development and consent for the ancillary works within the Order limits thereby authorising the construction of the authorised project.
- 7.2 The power to carry out the works is subject to any requirements attached to the Order as set out in Part 3 of Schedule A. The requirements correspond to planning conditions that would be imposed on the planning permission for development.
- 7.3 Paragraph (2) provides for limits within which the undertaker can deviate in the construction of the works numbered in the Schedule.

*Article 7 (Maintenance of authorised project)*

- 8.1 This article provides the undertaker with a general power to maintain the authorised project, subject to any contradictory provision in the Order or in an agreement made under the Order. This power is restricted to maintenance works that have been assessed (where assessment is required under the EIA Regulations) unless otherwise approved by the MMO or the relevant planning authority. Under paragraph (2) such approval may only be given in relation to immaterial changes unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement. This provision largely follows Article 4 of the Walney Extension Offshore Wind Farm Order 2014.

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<sup>1</sup> 1990 c.43

<sup>2</sup> 1974 c.40

*Article 8 (Operation of electricity generating stations)*

- 9.1 This is not a Model Provision, but is included specifically to authorise the operation of the authorised project in accordance with the provisions of the Order or an agreement made under this Order. It is included pursuant to section 140 (operation of generating stations) of the Planning Act.

**STREETS**

*Article 9 (Street works)*

- 10.1 This article authorises the undertaker to break up streets specified in Schedule B and carry out work in connection with the placing, maintaining or moving of apparatus affected by the project and has precedent in the Hornsea Project One Order.
- 10.2 Paragraphs (2) and (3) of Model Provision 8 have not been included on the grounds that they are unnecessary and add nothing to the provision.
- 10.3 Paragraph (2) of Model Provision 8 provides that the authority given by paragraph (1) is a “statutory right” for the purpose of the New Roads and Street Works Act 1991 (“NRSWA”). Since a statutory right for the purposes of the NRSWA is defined as including any right under subordinate legislation, this must include a development consent order and so a deeming provision of this kind is unnecessary. Paragraph (3) would apply sections 54 to 106 of the NRSWA to any street works authority. It is assumed the intention behind this provision was to ensure that relevant provisions of the NRSWA that apply to NRSWA street works (i.e. works to apparatus) apply also to other works in streets authorised by this article. As drafted in the Model Provisions, however, it goes too far and causes confusion. It seems more sensible to extend article 10 (application of the 1991 Act), which applies selected provisions of the NRSWA to temporary stoppings up, to “street works” that are not NRSWA street works.

*Article 10 (Application of the 1991 Act)*

11.1 This article departs from the Model Provisions to provide that relevant provisions of the NRSWA which apply to the carrying out of street works within the meaning of that Act, are to apply to a temporary stopping up of a street, and to the carrying out of street works under article 9 even if no street works within the meaning of that Act are being carried out. This would, for example, require the undertaker to make arrangements, so far as practicable, for utilities to gain access to their apparatus. This provision follows article 7 of the Hornsea Project One Order.

*Article 11 (Temporary stopping up of streets)*

12.1 This article is adapted from Model Provision 11, but paragraph (2) empowers the undertaker to use any street temporarily stopped up under the Order powers which is within Order limits as a temporary working site. This is associated development which is described in general terms in Part 1 of Schedule A. Such provision has precedent in article 16 of the Network Rail (Thameslink 2000) Order 2006<sup>1</sup> and in article 8 of the Hornsea Project One Order.

12.2 Where the street is specified in Schedule C (Streets to be temporarily stopped up), the undertaker is obliged only to consult the relevant street authority. This is on the basis that such stoppings up will have already been considered in the application for this Order. The consent of the street authority is, however, required where the street to be stopped up is not specifically identified in Schedule C. The street authority may attach reasonable conditions to any such consent. Given that the Model Provision does not provide for consent from the street authority not to be unreasonably withheld, paragraph (5)(b) inserts such a requirement, and paragraph (7) provides a time limit of 28 days after which a street authority which fails to respond to an application for consent is deemed to have given its consent. This has precedent in recent TWA Orders, in article 11 of the Network Rail (Ipswich Chord) Order 2012 and in article 8 of the Hornsea Project One Order. The addition of this requirement allows a refusal to be referred to arbitration under article 42. Without it there would be no appeal mechanism against a decision of the street authority.

*Article 12 (Access to works)*

13.1 Article 12 confers powers for the purposes of the authorised project to provide or improve accesses in the locations specified in Schedule D (access to works) or at other locations

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<sup>1</sup> S.I. 2006/3117

within the Order limits, provided the planning authority (following consultation with the highway authority) has given its consent. In addition to the text taken from Model Provision 12, article 12 provides that if the local planning authority has failed to make a decision within 28 days of the undertaker's application, consent will be deemed to have been granted. This reflects wording included in relation to consents required from highway authorities on other Orders (e.g. article 15 of the Network Rail (Ipswich Chord) Order 2012 and article 9 of the Hornsea Project One Order).

*Article 13 (Agreements with street authorities)*

14.1 This article provides for the undertaker to enter into agreements with street authorities relating to the construction of new streets, works in or affecting streets and the stopping up, alteration and diversion of streets.

*Article 14 (Highway improvements)*

15.1 This article, which is not in the Model Provisions but has precedent in the Hornsea Project One Order, enables the undertaker to carry out highway improvements to a specified part of Tetney Lock Road. The improvements will be subject to highway authority approval, such approval not to be unreasonably withheld.

## **SUPPLEMENTAL POWERS**

*Article 15 (Discharge of water)*

16.1 This article 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 person to whom it belongs (such approval may be subject to reasonable terms and conditions, but shall not be unreasonably withheld). In a departure from Model Provision 14, and as explained in relation to article 12 above, a person who fails to respond to an application for consent within 28 days of the application being made is deemed to have given consent. This avoids delays to the project and has been included in article 13 of the Network Rail (Ipswich Chord) Order 2012 and article 12 of the Hornsea Project One Order. In paragraph (7) the Model Provision has been updated to refer to the environmental permitting regime introduced by the Environmental Permitting (England and Wales) Regulations 2010<sup>1</sup>.

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<sup>1</sup> S.I. 2010/675

16.2 Section 106 of the Water Industry Act 1991<sup>1</sup> (right to communicate with public sewers) does not apply to discharges authorised by this article but any dispute concerning a connection to or use of a public sewer is to be determined as if it were a dispute under that section.

*Article 16 (Protective work to buildings)*

17.1 This article permits the undertaker to carry out such protective works to buildings within the area specified in that article as it considers necessary or expedient before, during and after construction of the authorised project (up to a period of 5 years after that part of the authorised project is first opened for use). Provision is made for surveys and notice, and for the payment of compensation.

*Article 17 (Authority to survey and investigate the land)*

18.1 This article generally follows Model Provision 16 and confers upon the undertaker power upon notice to survey and investigate any land within the order limits which may be affected by the authorised project and to make trial holes, carry out ecological or archaeological investigations and place on, leave on and remove apparatus. Approval for the making of trial holes (which may not be unreasonably withheld) is, in the case of land located within the highway boundary, to be obtained from the highway authority, or, in the case of a private street, from the street authority. It differs from Model Provision 16 first, in that it is restricted to land within the order limits. The Model Provision applies to any land affected by the works. That wider wording would require referencing and notification of an uncertain wider area and could lead to challenge. Secondly, it provides for deemed consent from the highway authority or street authority, as appropriate. There is provision for the payment of compensation and those entering the land will be required to show their authority. This follows article 13 of the Hornsea Project One Order.

## **POWERS OF ACQUISITION**

*Article 18 (Compulsory acquisition of land)*

19.1 This article confers on Optimus Wind powers of compulsory acquisition, subject to the consent of Breesea, such consent not to be unreasonably withheld, over land required for the Project A works and the shared works or to facilitate, or which is incidental to those works and it confers on Breesea powers of compulsory acquisition, subject to the consent of Optimus Wind, such consent not to be unreasonably withheld, over land required for the Project B works and the shared works or to facilitate, or which is incidental to those works.

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<sup>1</sup> 1991 c.56.



Paragraph (3) provides that if the undertaker has failed to make a decision within 28 days of the undertaker's application, consent will be deemed to have been granted.

19.2 Paragraph (2) of Model Provision 18 has been omitted. It provides for the automatic extinguishment of any rights applying to the Order land when it is vested in the undertaker. This is inconsistent with the provisions of article 21 (private rights), which deals with the extinguishment of private rights of way. Whereas Model Provision 22 provides for extinguishment on the developer's entry onto land, Model Provision 18 provides for extinguishment only on vesting of the land. Vesting of the land may take place after the carrying out of works which conflict with the rights in question. Model Provision 22 also allows for the possibility that certain rights will not be extinguished and contains a saving for statutory undertakers.

19.3 It would seem to make more sense to incorporate this provision into an omnibus article applying to all private rights. This avoids having two identical provisions applying to rights of way (because Model Provision 22(2) includes rights of way). Article 21 accordingly applies to all private rights.

*Article 19 (Compulsory acquisition of rights)*

20.1 This article enables the undertaker to acquire rights by the creation of new rights or the imposition of restrictive covenants. It departs significantly from Model Provision 21. The Model Provisions refer to rights described in the book of reference. It is not considered appropriate to describe such rights in the book of reference. This would not seem consistent with regulation 7(1)(a) of the Applications Rules which requires the land to be identified in the book of reference which it is proposed should be subject to compulsory acquisition or rights to use land.

20.2 Since the limits of deviation for the Project A works and the Project B works overlap, paragraphs (1) and (2) have been drafted to require the consent of the undertaker that is not seeking to acquire rights prior to that power being exercised to ensure that there is a control mechanism in place to prevent one undertaker from acting in a way that compromises the works of the other. The consent of the other undertaker is not to be unreasonably withheld and if the undertaker has failed to make a decision within 28 days of the undertaker's application, consent will be deemed to have been granted

20.3 Paragraph (3) departs from the Model Provisions in providing that, in the case of the Order land specified in Schedule E (land in which only new rights etc. may be acquired), the

undertaker may exercise the powers of compulsory acquisition conferred under articles 18 and 19 to acquire compulsorily such new rights or impose such restrictive covenants as may be required for the purpose specified in relation to that land in column (2) of Schedule E. In relation to such land outright acquisition is not required. Similar provision was included in the Network Rail (Ipswich Chord) Order 2012.

20.4 Paragraph (4) provides that where the undertaker needs only to acquire a right over land, it shall not be obliged to acquire any greater interest in that land.

20.5 It is considered that the compulsory purchase and compensation provisions under general legislation require modification in order to apply to the acquisition of new rights. The language of these provisions is prescribed in terms of the acquisition of an existing interest in land and they do not operate clearly in relation to the creation of a new right or restrictive covenant. Accordingly a new Schedule F (modification of compensation and compulsory purchase enactments for creation of new rights and restrictive covenants), which is modelled on the usual TWA Order equivalent and the provisions of the Local Government (Miscellaneous) Provisions Act 1976<sup>1</sup> which apply in relation to any compulsory purchase order made by local authorities, is introduced in paragraph (5). For the purpose of section 126(2) of the Planning Act, it is considered that the relevant compensation provisions are modified only to the extent necessary to ensure that they apply properly to the acquisition of rights.

20.6 Paragraphs (6) and (7) are based on provisions found in the Crossrail Act 2008 and some recent TWA Orders. They provide that, with the consent of the Secretary of State, the power to acquire rights may be transferred to a statutory undertaker, in circumstances where Order land is required for the diversion or relocation of their apparatus. The dominant tenement to be benefitted by such rights is the statutory undertaking of that statutory undertaker rather than the undertaker's land, and it is therefore necessary for it, rather than for the undertaker, to acquire the rights. The costs incurred by a statutory undertaker in exercising these powers will be met by the undertaker in accordance with the protective provisions set out in Schedule L.

*Article 20 (Time limit for exercise of authority to acquire land compulsorily)*

21.1 This article, following Model Provision 20, imposes a time limit of five years from the coming into force of this Order for the exercise of powers of compulsory acquisition of land.

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<sup>1</sup> 1976 c. 57

*Article 21 (Private rights)*

22.1 Model Provision 22 is amended, as explained in relation to article 18, so as to apply to private rights generally and not just to rights of way. Paragraph (2) envisages that some rights may be acquired voluntarily through the grant of a lease. A reference to section 152 of the Planning Act is inserted into paragraph (4) to make it clear that the compensation payable under this article is not a new right to compensation, but is the compensation payable for injurious affection which would normally arise under section 10 of the Compulsory Purchase Act 1965, but which, in relation to a development consent order (to which section 10 does not apply), arises instead under section 152 of the Planning Act.

22.2 Article 21 provides that private rights over land subject to compulsory acquisition under articles 18 and 19 of the Order are not to have effect to the extent that the continuance of those rights are inconsistent with the exercise of the powers under articles 18 and 19. Paragraph (9) makes it clear that where Optimus Wind or Breesea has exercised powers under articles 18 or 19 prior to the other undertaker exercising powers under those articles in respect of the same land or rights, the rights of the first undertaker that acquired the land or rights shall continue to have effect unless the first undertaker agrees otherwise, acting reasonably.

*Article 22 (Application of the Compulsory Purchase (Vesting Declarations) Act 1981)*

23.1 This article follows Model Provision 23 and gives the undertaker the option to acquire land by this method rather than through the notice to treat procedure.

*Article 23 (Acquisition of subsoil or airspace only)*

24.1 This article departs from the Model Provisions to authorise the undertaker to acquire not only the subsoil in, but also the airspace over, any Order land without acquiring the whole of that land. In certain cases it may be necessary only to acquire a stratum of land above or below the surface and in the absence of article 23 the undertaker would be obliged to acquire the whole interest in the land. It follows the Model Provisions relating to the acquisition of subsoil, but extends this to the acquisition of airspace. There are precedents for this in, for example, the Glasgow Airport Rail Link Act 2007<sup>1</sup> the Network Rail (Ipswich Chord) Order 2012 and the Hornsea Project One Order.

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<sup>1</sup> 2007 asp1

*Article 24 (Acquisition of part of certain properties)*

25.1 This article, which follows Model Provision 26, provides an alternative procedure where the undertaker acquires compulsorily part only of certain types of properties subject to the right of the owner to require the whole of the property to be acquired, if part cannot be taken without material detriment to the remainder. This replaces section 8(1) of the Compulsory Purchase Act 1965 and unlike that provision sets out a process and timescales for dealing with claims of material detriment. Such provisions are usual in TWA Orders containing compulsory powers and are included in article 22 of the Network Rail (Ipswich Chord) Order 2012 and article 21 of the Hornsea Project One Order.

*Article 25 (Rights under or over streets)*

26.1 This article, which follows Model Provision 27, empowers the undertaker to use the subsoil under or airspace above any street within Order limits without being required to acquire any part of the street or any easement or right in it.

*Article 26 (Temporary use of land for carrying out the authorised project)*

27.1 This article enables the undertaker in connection with the carrying out of the authorised project, to take temporary possession of land listed in columns (1) and (2) of Schedule G (land of which temporary possession may be taken). Additionally to the Model Provisions, paragraph (1)(a)(iii) also provides for the powers of temporary possession to apply to any other Order land which is subject to compulsory acquisition under the Order provided the compulsory acquisition process has not begun in relation to it. This follows the approach adopted in a number of TWA Orders (e.g. the Midland Metro (Wednesbury to Brierley Hill and Miscellaneous Amendments) Order 2005<sup>1</sup> and the Network Rail (Ipswich Chord) Order 2012 as well as the Hornsea Project One Order). It allows greater flexibility in the event that following further detailed design of the works it is decided that only temporary occupation rather than permanent acquisition of land is required.

27.2 Paragraphs (2) and (3) introduce a power enabling the undertaker to occupy access routes temporarily to construct the authorised project, to carry out improvements to those access routes, and to access the compensation compounds, while allowing others to exercise rights over them.

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<sup>1</sup> S.I. 2005/927

27.3 The provisions also depart from the Model Provisions in allowing (as well as temporary works), specific works identified in Schedule G and other mitigation works to be constructed and left on the land, without a requirement for these to be removed. This would apply, for example, where mitigation is provided on behalf of the Environment Agency but the undertaker does not need to retain a permanent interest or rights in the land, and has precedent in the Network Rail (Ipswich Chord) Order 2012 and the Hornsea Project One Order. It also allows the undertaker to carry out any operations on the land, such as removing animals.

27.4 Paragraph (13) makes it clear that Optimus Wind may occupy land while Breesea is also in occupation of that land, and vice versa, and that either undertaker may occupy land more than once and at different times to the other undertaker.

*Article 27 (Temporary use of land for maintaining the authorised project)*

28.1 This article, which follows Model Provision 29, allows the undertaker to take temporary possession of land within the Order limits for the purpose of maintaining the authorised project during a 5 year maintenance period.

28.2 Paragraph (12) makes it clear that Optimus Wind may occupy land while Breesea is also in occupation of that land, and vice versa, and that either undertaker may occupy land more than once and at different times to the other undertaker.

*Article 28 (Statutory undertakers)*

29.1 This article 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 and described in the book of reference. Paragraph (a) has adapted paragraph (a) of Model Provision 31 and combined it with paragraph (c) of that same Model Provision.

29.2 It differs from the Model Provisions in two other respects. First, paragraph (b) provides for the extinguishment of rights and the removal or relocation of apparatus belonging to statutory undertakers over or within Order land over which powers of outright compulsory acquisition and the acquisition of rights are exercisable. Thus it is not restricted to specific apparatus which has been shown on the land plans and described in the book of reference. In practice it is impracticable to show and describe all such apparatus.

29.3 Secondly, the power makes it unnecessary to rely on the provisions under sections 271 and 272 of the Town and Country Planning Act 1990<sup>1</sup> for extinguishing rights of statutory undertakers, but means that it is necessary to establish a process for dealing with such matters. For this reason, paragraph (1) provides that the powers granted by this article will be subject to the protective provisions in the Schedule. This article has precedent in the Hornsea Project One Order.

*Article 29 (Recovery of costs of new connections)*

30.1 This article, which follows Model Provision 33, provides for compensation to owners or occupiers of property where apparatus is removed in accordance with article 28 (statutory undertakers).

## **OPERATIONS**

*Article 30 (Felling or lopping of trees and the removal of hedgerows)*

31.1 This article 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. The article contains a number of additional features to the Model Provisions. First, paragraph (1) of Model Provision 39 has been clarified by making it clear that this applies to trees within or overhanging land within the Order limits. The Model Provision has also been amended by the addition of paragraph (4) which makes it clear that this article does not overlap with article 31 (trees subject to tree preservation orders).

31.2 Article 30 also enables the undertaker to remove hedgerows in Order limits and this power is supported by the disapplication of both the notice requirements and the establishment of a criminal offence in the Hedgerows Regulations 1997. These requirements allow a local planning authority to object to and prohibit interference with a hedgerow. The normal exception for development permitted by a planning permission does not apply to development authorised by a development consent order and the purpose of this provision is to ensure that there is no impediment to the permitted development process. This article has precedent in the Hornsea Project One Order.

*Article 31 (Trees subject to tree preservation orders)*

32.1 This article allows the undertaker to fell or lop any tree within the Order limits which is subject to a tree preservation order made after a certain date. The reference to a certain date ensures that the provision will apply to trees that were only made subject to preservation

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<sup>1</sup> 1990 c.8

orders after the application for a development consent order was prepared. This article has precedent in the Hornsea Project One Order.

## MISCELLANEOUS AND GENERAL

### *Article 32 (Operational land for the purposes of the 1990 Act)*

33.1 This article, which follows Model Provision 36, provides that development consent granted by this Order shall be treated as specific planning permission for the purposes of section 264(3)(a) of the Town and Country Planning Act 1990 (cases in which land is to be treated as operational land for the purposes of that Act). The purpose of this is to ensure that permitted development rights under Part 17 of Schedule 2 to the Town and Country Planning (General Permitted Development) Order 1995, will apply in relation to the land used for the purposes of the authorised development.

### *Article 33 (Procedure in relation to approvals etc under requirements)*

34.1 This article provides for an appeal process when further approvals are required from the planning authority under any requirements set out in Part 3 of Schedule A to the Order (there is no appeal for an approval required from the Secretary of State). It ensures that appeals will be determined by the appropriate Secretary of State in accordance with the law as it currently applies to statutory undertakers who benefit from a licence under section 6 of the Electricity Act 1989. Article 33 is not preceded in the Model Provisions, but follows what was approved in the Hornsea Project One Order. The article is sufficiently precise so that it only extends to orders, rules or regulations which make provision in relation to appeals to prevent the situation where other legislation governing how applications are made, the level of consultation to be carried out etc. could apply which may contradict specific legislation made under the Planning Act 2008.

### *Article 34 (Abatement of offshore works abandoned or decayed)*

35.1 This article would authorise the Secretary of State to issue a written notice to the undertaker requiring the repair, restoration or removal of the authorised development where the development has 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. This is the standard provision taken from the harbour model clauses and was also included in Transport and Works Orders for offshore wind farms as well as appearing in the Galloper Wind Farm Order 2013 and the Hornsea Project One Order.

*Article 35 (Transfer of benefit of Order)*

36.1 Section 156 of the Planning Act confers the right to transfer the benefit of the powers and rights of the Order automatically to whoever has for the time being the interests in the relevant land. However, reliance on section 156 is not appropriate in relation to the exercise of compulsory purchase powers for the onshore construction work.

36.2 In a novel provision which has precedent in the Hornsea Project One Order, the consent of the Secretary of State will only be required in the case of a transfer of the offshore electricity generating stations if the transferee is not an undertaker defined in the Order. That is because in that case the Secretary of State will already have approved the transferee as an appropriate body to construct and operate an offshore generating station. Furthermore, in the case of the electricity transmission works, i.e. the remaining offshore apparatus and the onshore connection works, Secretary of State consent is required only where the transferee is not a body licensed under section 6 of the Electricity Act 1989. Again the meaning is that any such body will already have been approved by the Secretary of State as a relevant statutory undertaker. Paragraph (1) makes clear the power to transfer part only of any of the deemed marine licences.

36.3 Paragraph (2) requires the Secretary of State to consult the MMO prior to granting consent to a transfer if such transfer or grant relates to the exercise of powers within the MMO's jurisdiction. Paragraph (6) sets out a procedure to be followed to ensure that the Secretary of State in all cases, and the MMO and local planning authority in cases where a transfer relates to their area of jurisdiction, are notified of transfers pursuant to this article whether or not Secretary of State approval is required. This follows article 34 of the Hornsea Project One Order.

*Article 36 (Deemed licence under the Marine and Coastal Access Act 2009)*

37.1 This article provides for four deemed licences, two for Project A (one for the generating station (deemed marine licence A1) and one for the offshore transmission infrastructure (deemed marine licence A2)) and two for Project B (again, one for the generating station (deemed marine licence B1) and one for the offshore transmission infrastructure (deemed marine licence B2)). The terms for each licence are set out in Schedules H, I, J and K. The licences are required for the deposit at sea within the Order limits of the specified substances and articles and the construction works in or over the sea and/or on or under the seabed. The deemed marine licences for Project A are intended to be granted to Optimus Wind, with Breesea having the benefit of the deemed marine licences for Project B.



37.2 The deemed marine licences have been drafted in a way that allows for maximum flexibility as to whether the development is constructed as one project (i.e. Project A only) or whether the development is built out as two projects. For example, deemed marine licences A1 and A2 permit all of the offshore infrastructure required in the event that the development is to be built out as one project so that the full capacity of 1.8 GW can be achieved as one project and in such circumstances, deemed marine licences B1 and B2 will not be required. In the event that Project A and Project B are both constructed, the deemed marine licences restrict what can be constructed across the two projects to that assessed in the Environmental Statement. In addition, there are overarching controls within Schedule A of the DCO preventing the construction of infrastructure out with what has been assessed in the Environmental Statement and what is permitted by the Order.

*Article 37 (Disapplication of constraints on works in the Humber)*

38.1 Section 9(ii) of the Humber Conservancy Act 1899 and section 6(2) of the Humber Conservancy Act 1905 preclude works being carried out beyond the river lines shown on the Humber Conservancy map. Without the removal of these statutory constraints, the undertaker would be unable to construct cables in the bed of the river. Similar provision is made in the River Humber (Upper Burcom Tidal Stream Generator) Order 2008<sup>1</sup>.

38.2 Section 25 of the Humber Conservancy Act 1852 makes it a criminal offence to deposit, inter alia, stone, rock or other material on the river bed. This would preclude the use of protection for the marine cables. Plans for works will in any case be subject for approval by Associated British Ports under protective provisions in Schedule L.

*Article 38 (Saving for Trinity House)*

39.1 This is a standard provision taken from the harbour model clauses.

*Article 39 (Crown rights)*

40.1 This article, taken from other Transport and Works Orders for offshore wind farm developments and included in the Hornsea Project One Order, is designed to protect the Crown's position in relation to its own estates, rights, powers, privileges, authorities and exemptions and ensure that the Crown's written consent is required where any land, hereditaments or rights are to be taken, used, entered or interfered with as a result of granting of the Order.

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<sup>1</sup> S.I. 2008/969

*Article 40 (Certification of plans etc)*

41.1 This article 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.

*Article 41 (Protection of interests)*

42.1 This article gives effect to the protective provisions in Schedule L.

*Article 42 (Arbitration)*

43.1 This article makes provision for any dispute arising under the provision of the Order, and unless otherwise agreed between the parties, to be settled by arbitration. These will include circumstances where the agreement of the relevant local authority is needed and cannot be reached. It does not apply to approvals under the requirements, which are dealt with separately under article 33 (Procedure in relation to approvals etc under requirements).

## **SCHEDULES**

*Schedule A – Part 1 (Authorised project)*

44.1 Part 1 of the Schedule describes the authorised development comprising the numbered works. There will be one wind farm area with a total overall capacity of up to 1,800 MW. The location of the wind turbines within the wind farm area has not been fixed, but each of them will be constructed in accordance with design parameters which are set out in the requirements in Part 3 and in the Environmental Statement.

44.2 The project parameters are at a level of sufficient detail to enable a proper assessment of the likely environmental effects on a worst-case scenario. This approach is consistent with the “Rochdale Envelope” and the developer has had regard to the Planning Inspectorate’s (“PINS”) advice note nine “Using the Rochdale Envelope”. Flexibility is required so as to ensure that the undertaker can take advantage of new developments and emerging products in the market for offshore wind turbine generators and other equipment. The potential ability to exploit these prospective factors (and take advantage of any cost benefits) makes it easier to attract equity investment and access debt funding in a competitive international market.

44.3 The approach differs from advice note nine in not specifying a minimum number of turbines. A minimum number does not need to be imposed as a requirement to ensure that the project exceeds the nationally significant infrastructure project threshold of more than 100 MW for an offshore generating station since that threshold turns on what the project’s capacity is expected to be at the point of application and consent. While a lower figure may in theory be

constructed once the turbine nameplate capacity has been decided and the scheme design optimised after the grant of consent, there is currently no reasonable basis to suppose that the capacity constructed will be 100 MW or less.

44.4 A minimum number is arguably unreasonable. If a developer chooses to utilise only part of its potential capacity it will do so for commercial and/or technical reasons. There is no reason to impose such a requirement for environmental impact assessment considerations. It would also run counter to the principle that less than the full extent of a consent can lawfully be constructed, provided what is constructed is in accordance with the requirements of the consent.

44.5 The remaining issue is whether a minimum number of turbines is needed to address a concern raised in advice note nine that the project parameters are not “so wide ranging as to represent effectively different schemes.” The project is defined by the Order limits, the nature of the development (i.e. an offshore wind farm with associated grid connection infrastructure) and the maximum 1,800 MW capacity. Whilst there are potentially significant variations in turbine numbers, this is inherent in a project of this type. Numerous large scale consents have been granted under the Electricity Act 1989 without a minimum number of turbines being specified.

44.6 The works are described in such a way as to allow flexibility as to whether they form one or two wind generating stations together with the required associated development, this means that for each of Project A and Project B the Order permits the maximum assessed infrastructure to be constructed in Project A and in Project B within the same limits of deviation so that in the event that only one project is built, the full capacity of 1.8 GW can be achieved within the order limits. This is subject to restrictions that limit the infrastructure that can be constructed in the event that both Projects A and B are built to the maximum parameters assessed in the Environmental Statement.

44.7 Work Nos. 1A and 1B each allow for the construction and operation of up to 360 turbines however this is subject to paragraph 3 which states that the combined total of wind turbines constructed within Work Nos. 1A and 1B must not exceed 360. This therefore permits flexibility in how the development is built out (i.e. if 300 wind turbines are constructed as part of Work No. 1A then Work No. 1B will be limited to constructing a maximum of 60 wind turbines). Work Nos. 1A and 1B also include a combined total of up to two offshore accommodation platforms.

- 44.8 In addition, the Order makes provision for overlapping limits of deviation for Work Nos. 1A and 1B (i.e. Work Nos. 1A and 1B may be constructed anywhere within the wind farm area).
- 44.9 Within the wind farm area there will also be up to six offshore HVAC collector substations and (if the mode of transmission is HVDC) up to two offshore HVDC converter substations. As with Work Nos. 1A and 1B, the Order makes provision for each of Work Nos. 2A and 2B to include the maximum number of offshore HVAC collector and HVDC converter substations permitted under the order subject to paragraph 6 which limits the combined total number of substations that can be built within the two Work Nos. The limits of deviation for Work Nos. 2A and 2B overlap with Work Nos. 1A and 1B (i.e. the works can be constructed within the wind farm area).
- 44.10 There will also be a network of electrical circuits connecting the structures within the wind farm area with each other so as to be able to ensure maximum flexibility of operation.
- 44.11 The Order provides for two modes of electricity transmission, HVAC and HVDC. The undertaker is not yet in a position to determine which mode should be adopted for each project – both have therefore been assessed for their environmental impact. The choice of technology will affect the infrastructure to be constructed. HVAC technology will require the construction of up to two offshore reactive compensation substations at sea (Work Nos. 3A and 3B) to limit electricity losses which occur during transmission by the HVAC mode. If HVDC technology is adopted the onshore electrical transmission station(s) (i.e. Work Nos. 8A and/or 8B which will be required for the purposes of both modes of technology) will need to include facilities to convert the current for connection to the National Grid.
- 44.12 Work Nos. 4A and 4B consist of the marine connection between either the offshore HVAC collector substations via the offshore reactive compensation substation(s) if the mode of transmission is HVAC, or the offshore HVDC converter substation(s) if the mode of transmission is HVDC, and a foreshore connection (Work Nos. 5A and 5B). The limits of deviation for Work Nos. 4A and 4B overlap with one another to allow for maximum flexibility in the location within the cable route corridor of the electrical transmission circuits required for Project A and Project B. Only the principal co-ordinates have been set out for Work Nos. 4A and 4B. This is because the area of Work Nos. 4A and 4B is a large and complicated area and to list all the co-ordinates for these works in the Order would unacceptably extend the number of pages of the Order. The full co-ordinates are shown on the works plans and the descriptions of Work Nos. 4A and 4B cross refer to these co-ordinates thereby enabling the limits to be identified with accuracy.

- 44.13 Work Nos. 5A and 5B include cable crossing works and crossing works under the existing sea wall. The electrical circuits will then terminate at up to eight underground transition joint bays (Work Nos. 6A and 6B) from which the electricity will be transmitted by underground cables (Work Nos. 7A and 7B) to the electrical transmission station(s) which comprise Work Nos. 8A and 8B. The electricity will then be transmitted to the National Grid (Work Nos. 9A and 9B). The connection is above ground within the National Grid substation, but is below the threshold requiring it to be a nationally significant infrastructure project.
- 44.14 Work No. 10 is construction work to upgrade on a permanent basis an existing access road linking the substation to the public highway.
- 44.15 The Order also includes provision for ancillary works as set out in Part 2 of Schedule A.

*Schedule A – Part 3 (Requirements)*

- 44.16 Part 3 of the Schedule sets out certain requirements that the undertaker must meet in relation to the continuation and operation of the authorised project. These requirements take a similar form to planning conditions. They are based on those contained in Schedule 4 of the Model Provisions, but since these are necessarily general and are not designed to cover marine developments they have been significantly modified. Model provisions which are not relevant to the project have been omitted.

44.17 Requirement 1 (*Time limits*)

Imposes a time constraint of 5 years on the undertaker's ability to begin to construct the works starting from the date of the Order.

44.18 Requirement 2 (*Detailed design parameters*)

Sets out the detailed design parameters within which the authorised development must be constructed. It restricts the dimensions of the onshore and offshore apparatus and provides for cables to be buried. This follows the approach in the Kentish Flats Extension, the Galloper Wind Farm and the Hornsea Project One Orders rather than the Model Provisions.

The offshore parameters are measured from lowest astronomical tide ("LAT") rather than from mean high water springs ("MHWS") in the Order which differs from the approach taken in the Hornsea Project One Order. This is because all surveys and engineering work carried out offshore for Hornsea Project Two reference LAT and for consistency this has been carried into the Environmental Statement and other environmental literature and therefore it

makes sense that LAT is the unit referenced in the Order. The International Hydrographic Office use LAT as the international standard datum for water depths and the UK Hydrographic Office use it as their “chart datum”. LAT is therefore now the industry best practice datum for all water depth data. The use of a single industry standard datum for all water depth information minimises the risk of mistakes being made due to errors in or inconsistencies in conversion between datums or neglecting to correctly convert from one datum to another. The difference between LAT and MHWS varies across the Hornsea Zone: on the western side of the Hornsea Zone MHWS is 5m above LAT, whereas on the eastern side the difference is only 2.5m.

44.19 Requirement 3

Not used.

44.20 Requirement 4 (*Colour and lighting*)

Places restrictions on the colouring of offshore apparatus and requires lighting arrangements to be as prescribed in legislation or as directed by the Civil Aviation Authority or the Secretary of State for Defence. This follows the approach in the Kentish Flats Extension, the Galloper Wind Farm and Hornsea Project One Orders rather than the Model Provisions. The requirement goes further than the Kentish Flats and Galloper Orders in conferring a power of direction on the Defence Secretary which has precedent in the Hornsea Project One Order.

44.21 Requirement 5 (*Foundation method*)

Limits the foundation method which can be used to install offshore apparatus. Requirement 5 also includes foundation parameters applicable to the different types of offshore infrastructure. This requirement is not based on the Model Provisions. The purpose of this requirement is to ensure that the authorised development is within the parameters assessed within the Environmental Statement.

44.22 Requirement 6 (*Archaeology landward of mean low water springs*)

Provides no part of the works above mean low water level shall commence until a scheme of archaeological investigation has been agreed with the relevant local planning authority. Any archaeological works must be carried out in accordance with the approved scheme. This has precedent in the Hornsea Project One Order and broadly follows the Model Provisions with amendments necessary to reflect the abolition of the Infrastructure Planning Commission.

44.23 Requirement 7 (*Ecological management plan landward of mean low water springs*)

Provides that no part of the works above mean low water level shall be carried out until a written ecological management plan for the relevant works based on the outline ecological management plan and reflecting the surveys and mitigation measures in the Environmental Statement has been approved by the relevant planning authority after consultation with the Environment Agency and Natural England and to the extent that the plan relates to the intertidal area, the MMO. The scheme must be implemented as approved. It follows Model Provision 17 and has precedent in the Hornsea Project One Order.

44.24 Requirement 8 (*Code of construction practice*)

Provides that the relevant works shall not commence until a code of construction practice for the works (based on the outline code of construction practice) has been submitted to and approved by the relevant local planning authority. It must be implemented as approved. It is based on Model Provision 18 and has precedent in the Hornsea Project One Order.

44.25 Requirement 9 (*Landscaping*)

Requires a written landscape scheme to be approved by the relevant local planning authority. The scheme must include the relevant landscaping information set out in the outline landscape scheme and management plan as well as including details of certain additional specified matters. Provision is made for variations to the plan to be agreed with the local planning authority although any variations must comply with Requirement 20. It is based on Model Provision 7 and has precedent in the Hornsea Project One Order.

44.26 Requirement 10 (*Implementation and maintenance of landscaping*)

Requires landscaping works to be carried out in accordance with the written landscape scheme provided for in requirement 9. Trees or shrubs which die or are damaged must be replaced in the first available planting season with an equivalent tree or shrub to that originally planted. Requirement 10 is based on a combination of Model Provisions 8 and 9 and has precedent in the Hornsea Project One Order.

44.27 Requirement 11 (*Decommissioning*)

Requires a decommissioning programme to be agreed with the Secretary of State prior to construction of the offshore apparatus. The wording allows for the possibility that a notice under section 105(2) of the Energy Act will be issued at the same time as the Order, which

has been the practice of the Secretary of State in relation to Electricity Act consents. This provision is not based on the Model Provisions, but has precedent in the Hornsea Project One Order.

44.28 Requirement 12 (*Highway accesses*)

Requires approval from the relevant local planning authority for the undertaker's proposals for the design and layout of vehicular means of access covering defined sections of the onshore authorised development. It differs from the equivalent model requirement in that it does not require written details of the siting of accesses to be approved, since article 12 itself does this. It also leaves out provision for an Access Management Scheme on the basis that the highway authority has extensive approval powers for all individual access arrangements rendering a general access management scheme unnecessary and construction traffic routes will be addressed in the Code of Construction Practice. This provision follows Requirement 11 in the Hornsea Project One Order.

44.29 Requirement 13 (*Contaminated land and groundwater*)

Requires the undertaker to prepare a written contamination scheme to be approved by the relevant local planning authority after consultation with the Environment Agency and, to the extent that the plan relates to the intertidal area, the MMO. The scheme must include an investigation and assessment report identifying the extent of contamination and any remedial measures to be taken together with a management plan setting out long-term measures. Trenchless technique operations can only be carried out if the scheme includes a risk assessment demonstrating that they will not cause an unacceptable risk to groundwater quality. Remediation must be carried out in accordance with the scheme. This provision follows Requirement 12 of the Hornsea Project One Order.

44.30 Requirement 14 (*Surface water drainage*)

Requires approval from the relevant local planning authority for a surface water scheme before the electrical transmission station can be constructed which follows the Hornsea Project One Order.

44.31 Requirement 15 (*Colour and detailed design approval – electrical transmission stations*)

The onshore electrical transmission stations must be coloured using one or more of six specified colours unless the local planning authority otherwise agrees. More generally, the



provision requires approval of the details of the electrical transmission stations by the local planning authority. The station must then be constructed in accordance with such details. It follows the Model Provisions, but with the additional sub-paragraph covering colour and has precedent in the Hornsea Project One Order.

44.32 Requirement 16 (*Prohibited access*)

This requirement which is included at the request of the Environment Agency makes it clear that the undertaker cannot use the access road across the sea defences during the foreshore and onshore construction works in the vicinity of Horseshoe Point. In addition, the requirement makes provision for a scheme for the protection of the relevant part of the sea defences to be submitted to and approved by the Environment Agency prior to the use of the access road following the construction of the abovementioned works. This requirement largely follows the equivalent requirement in the Hornsea Project One Order.

44.33 Requirement 17 (*Port traffic management plan*)

Requires a traffic management plan for the onshore port-related traffic to and from the selected base port or ports to be submitted and approved by the relevant planning authority in consultation with the relevant highway authority once the base port has been identified. The requirement also makes provision for the relevant planning authority to confirm, in consultation with the relevant highway authority, that no traffic management plan is required. Definitions of “relevant planning authority” and “relevant highway authority” are included within the requirement as the relevant authority will depend on the location of the selected port base and therefore the interpretation of these terms differs from the definition provided in Article 2 of the Order. This requirement largely follows the equivalent requirement in the Hornsea Project One Order.

44.34 Requirement 18 (*Employment and skills plan*)

Provides that the relevant works shall not commence until an employment and skills plan has been submitted to and approved by North Lincolnshire Council in consultation with the Humber Local Enterprise Partnership. The requirement lists the details to be included within the plan and includes a definition of “Humber Local Enterprise Partnership”. This requirement has precedent in the Hornsea Project One Order.

44.35 Requirement 19 (*Requirement for written approval*)

Following the Model Provisions, this requirement provides that where any requirement requires the approval of the Secretary of State or other local planning authority, such approval shall be in writing.

44.36 Requirement 20 (*Amendments to approved details*)

Paragraph (1) provides that any plans, schemes or codes approved pursuant to any requirement shall be taken to include any amended details which are subsequently approved. It follows the Model Provisions. Paragraph (2) requires that amendments to the approved details be in accordance with the environmental statement and that such amendments must be unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement. Paragraph (3) requires any amendments to be approved in consultation with the bodies required to be consulted prior to approval of the original plan, scheme or code. This requirement has precedent in the Hornsea Project One Order.

44.37 Requirement 21 (*Co-operation*)

Makes provision for the undertaker to provide copies of the pre-construction plans and documentation to the other undertaker for comment prior to submission of the plans to the MMO. The undertaker receiving the plans and documentation must provide comments within 14 days. This requirement was inserted at the request of the MMO and Natural England to promote co-operation between Optimus Wind and Breesea given the overlapping limits of deviation for Project A and Project B in the Order.

The requirement also makes provision for Optimus Wind and Breesea to participate in liaison meetings upon request by the MMO. The MMO will chair any such meetings and will determine the matters to be considered at the meeting which must relate to the interaction of the deemed marine licences upon one another. This requirement is based on the same requirement in the Hornsea Project One Order.

44.38 Requirement 22 (*Compensation compounds*)

Limits the circumstances in which the powers under the Order in respect of the compensation compounds, which are shown coloured green on the compensation compounds plan may be exercised stating that such powers may only be exercised where the undertaker requires to

exercise powers in relation to the Order land shown hatched green on the compensation compounds plan (i.e. the land forming part of the Order limits under this Order and overlapping with land to be used as temporary construction compounds under the Hornsea Project One Order) at the relevant time. The “relevant time” is defined as the circumstances where there is a simultaneous or overlapping construction programme with Hornsea Project One in relation to the Order land shown hatched green on the compensation compounds plan or in the event that Hornsea Project Two construction has completed prior to the commencement of the Hornsea Project One construction in respect of the Order land shown hatched green on the compensation compounds plan. The requirement also limits the circumstances in which the powers under the Order in respect of the compensation compound access shown coloured pink and labelled 14-A1c on the compensation compounds plan may be exercised stating that such powers may only be exercised where the undertaker requires to use the compensation compound labelled 14-C3 on the compensation compounds plan.

44.39 Paragraph (3) provides that the powers under the Order in respect of the compensation compounds and the compensation compound access labelled 14-A1c may only be exercised for the benefit of the Hornsea Project One undertaker in connection with the construction of Hornsea Project One.

*Schedule B (Streets subject to street works)*

45.1 This Schedule describes the streets in which street works may be carried out.

*Schedule C (Streets to be temporarily stopped up)*

46.1 This Schedule describes the streets to be temporarily stopped up and the extent of such temporary stopping up.

*Schedule D (Access to works)*

47.1 This Schedule identifies points at which means of access from the highway may be laid out.

*Schedule E (Land in which only new rights etc. may be acquired)*

48.1 This Schedule, which was introduced by article 19(2) (compulsory acquisition of rights), does not form part of the Model Provisions. It identifies, by number on the land plans, the land over which the undertaker’s powers of acquisition are limited to the acquisition of the new rights described in relation to that land in the book of reference.

*Schedule F (Modification of compensation and compulsory purchase enactments for creation of new rights and restrictive covenants)*

49.1 Like Schedule E, this Schedule was introduced by article 19 (compulsory acquisition of rights) and is not a Model Provision. It provides for the usual compensation enactments for the compulsory purchase of land and interests in land to apply with necessary modifications to the compulsory acquisition under this Order of a new right or the imposition of a restrictive covenant. These modifications appear in the same form in the East Anglia One Offshore Wind Farm Order 2014 and the Rampion Offshore Wind Farm Order 2014.

*Schedule G (Land of which temporary possession may be taken)*

50.1 This Schedule identifies, by number on the land plans, the land over which undertakers may exercise powers of temporary possession, the purpose for which it may be taken, and the relevant part of the authorised project. This Schedule identifies in Part 1(b) the land over which temporary possession may be taken for the purpose of compensating Hornsea Project One in the event that some of the construction compounds and work areas authorised by the Hornsea Project One Order will be prevented or restricted by the construction or operation of Hornsea Project Two. This land is also shown in green on the compensation compounds plan.

*Schedules H, I, J and K (Deemed licences under the Marine and Coastal Access Act 2009)*

51.1 These Schedules set out the four deemed marine licences for the authorised development seaward of mean high water springs.

*Schedule L (Protective Provisions)*

52.1 This Schedule sets out protective provisions for statutory undertakers affected by the authorised project. Part 1 provides protection for the Environment Agency and other drainage authorities (see note in paragraph 4.2 of this Memorandum). Part 2 provides protection for Network Rail Infrastructure Limited. Part 3 provides protection for operators of electronic communications code networks. Part 4 provides protection for electricity, gas, water and sewerage undertakers. Part 5 provides protection for Associated British Ports. Part 6 provides protection for Anglian Water Services Limited. Part 7 provides protection for Centrica Plc. Part 8 provides protection for VPI Immingham LLP. Part 9 provides protection for Phillips 66 Limited. Part 10 provides protection for ConocoPhillips (U.K.) Limited.

These are based on provisions commonly agreed with these bodies and included in TWA Orders and Development Consent Orders, which provide effective mechanisms by which the undertaker and the bodies concerned can manage the interface between their respective operations. The nature of such protective provisions means that obligations and restrictions are imposed on both the undertaker (for example, by restraining the compulsory removal of apparatus) and on the statutory undertakers (who may, for example, be required to obtain rights and facilities over third party land for the purpose of diverting apparatus).