



# Hornsea Offshore Wind Farm Project One

## 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 ONE OFFSHORE WIND FARM ORDER**

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### **EXPLANATORY MEMORANDUM**

#### **TABLE OF CONTENTS**

Introduction	1
Preliminary (articles 1 to 5)	3
Principal powers (articles 6 to 8)	5
Streets (articles 9 to 14)	6
Supplemental powers (articles 15 to 16)	8
Powers of acquisition (articles 17 to 28)	9
Operations (articles 29 to 30)	14
Miscellaneous and general (articles 31 to 41)	15
Schedules (A to I)	17

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**EXPLANATORY MEMORANDUM**

**INTRODUCTION**

- 1.1 This explanatory memorandum accompanies an application for development consent by Heron Wind Limited, Njord Limited and Vi Aura Limited to construct and operate the first phase within the Hornsea Zone. It explains the purpose and effect of each article of, and Schedule to, the draft Hornsea One 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 Clauses”). Differences between the articles in the Order and Model Provisions are explained.
- 1.3 Since the Order seeks to apply and modify statutory provisions under section 120(5) of the Planning Act 2008 (“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.

**PURPOSE OF ORDER**

- 1.4 The purpose of the Order is to grant development consent for a project which includes a nationally significant infrastructure project, consisting of the construction of up to three generating stations within a Renewable Energy Zone designated by virtue of the Renewable Energy Zone (Designation of Area) Order 2004<sup>2</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 Zone will take place in several phases of which this is the first, and will be

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

<sup>2</sup> S.I. 2004/2668

located in an area of the Hornsea Zone known as Subzone 1 in the centre of the Zone with its western boundary 103 kilometres from the coast of the East Riding of Yorkshire.

- 1.5 The Order envisages the possibility that there will be a maximum of three generating stations, each the responsibility of a separate undertaker, or company. The Order contemplates the possibility that only two undertakers will construct two generating stations, in which case they will share what would otherwise have formed the third generating station.
- 1.6 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. As DCLG guidance on associated development puts it: “Associated development should not be an aim in itself but should be subordinate to and necessary for the development and effective operation ... of the NSIP that is the subject of the application”.
- 1.7 The associated development includes up to five 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 2 converter substations. If the mode of transmission is HVAC the associated development will also include an offshore reactive compensation substation which will be built to limit electrical losses. Two of the generating stations will additionally contain an offshore accommodation platform. The Order provides for the transmission of electricity either by HVAC or HVDC. The infrastructure will consist of subsea electrical circuits (comprised in a maximum of four cables) which will be brought onshore in up to four ducts. Once onshore, the cables will enter transition joint bays where they will connect to onshore electrical circuits. The circuits will comprise up to twelve cables in the case of HVAC and up to four cables in the case of HVDC. The cables will proceed to a substation, where if necessary, the current will be converted from direct to alternating current. Hence the cables will connect the offshore HVDC converter stations or HVAC reactive substation and the collector stations and the wind turbine generators to the National Grid. All onshore development is associated development.
- 1.8 Associated development required to support this project also includes scour protection, 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, jointing pits, temporary haul road, a 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.

- 1.9 The Order also authorises ancillary works within the Order limits.

## **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 foundations” and “monopile foundations”) 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 railway model provisions, but with an enlarged scope to cover refurbishment and decommissioning and, subject to requirement 20, reconstruction and replacement. The enlarged scope was accepted in the case of the Rookery South (Resource Recovery Facility) Order 2011.
- 3.4 Requirement 20 in Part 3 of Schedule A has been drafted in order to address concerns about the scope of the power to maintain. This requirement would mean that the power to reconstruct and replace can only be exercised in the case of offshore works after Secretary of State approval (following consultation with the MMO) and in the case of onshore works after local planning authority approval. The requirement for approval triggers the potential for environmental impact assessment procedures under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 which enable representations to be considered. The requirement does not apply to the replacement of individual structures or parts of the electrical circuits which are replaced as part of ongoing maintenance. This requirement balances the interests of the undertaker in avoiding the need to repeat all elements of the development consent order powers when the project needs substantial rebuilding with the need to ensure that the works are fully assessed for environmental purposes.

- 3.5 “Order land” is defined as meaning land shown on the land plan 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 three bodies, i.e. the three applicant project companies, one of which, Heron Wind Limited, will also hold the grid related assets including property which it will acquire by virtue of the land acquisition powers conferred by the Order. The construction of the definition makes it clear in each of the operative powers which definition of undertaker applies. Accordingly, the powers of compulsory acquisition are only conferred on Heron Wind Limited.
- 3.7 A new paragraph (5) provides that “References in this Order to points identified by letters, with or without numbers, shall 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 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 provides for the disapplication of 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

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

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 disappplies the requirement for in-principle consent, but instead provides for approval of detailed plans in the protective provisions for the Environment Agency and the relevant drainage authorities in Schedule I.

- 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. This article and the protective provisions are being discussed with the Environment Agency and the drainage authorities and are not yet agreed by all parties.

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

- 5.1 This article, which does not appear in 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, 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.

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

- 6.1 This article, which follows article 7 of the model provisions, 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.

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

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

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 follows Model Provision 3 and 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.

*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 Heron Wind Limited 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.

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 DCO 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.

*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>.

12.2 Where the street is specified in Schedule C (Streets to be temporarily stopped up), Heron Wind Limited 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. As the development consent order model provision does not provide for consent temporarily to stop up etc a street which is not specified in Schedule C 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 and in article 11 of the Network Rail Ipswich Chord Order 2012. The addition of this requirement allows a refusal to be referred to arbitration under article 41. Without it there would be no appeal mechanism against a decision of the highway authority.

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

*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 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 the model provision, 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).

*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, 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.

## **SUPPLEMENTAL POWERS**

*Article 15 (Discharge of water)*

- 16.1 This article enables Heron Wind Limited 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. 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 (Authority to survey and investigate the land)*

17.1 This article generally follows Model Provision 16 and confers upon the undertaker power upon notice to survey and investigate any land within the limits within which the Order authorises works 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 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, as noted above, it provides for deemed consent from the relevant planning authority where the trial holes are in a street. There is provision for the payment of compensation and those entering the land will be required to show their authority.

## **POWERS OF ACQUISITION**

*Article 17 (Compulsory acquisition of land)*

18.1 This article confers on Heron Wind Limited powers of compulsory acquisition over land required for the authorised project or to facilitate it, or which is incidental to it. Paragraph (1) differs from Model Provision 18 by not conferring a power to acquire the Order land. This approach is appropriate given the small number of plots which are earmarked for outright compulsory acquisition.

18.2 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 20 (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

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

allows for the possibility that certain rights will not be extinguished and contains a saving for statutory undertakers.

18.3 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 20 accordingly applies to all private rights.

*Article 18 (Compulsory acquisition of rights)*

19.1 This article enables Heron Wind Limited to acquire rights by the creation of new rights. It departs significantly from Model Provision 21. It makes no reference to existing rights since their acquisition will follow automatically from the acquisition of the land to which they are attached.

19.2 Paragraph (1) 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 acquire compulsorily such new rights 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. 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.

19.3 Paragraph (2) provides that where the undertaker needs only to acquire rights over land, it shall not be obliged to acquire any greater interest in that land.

19.4 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. Accordingly a new Schedule F (modification of compensation and compulsory purchase enactments for creation of new rights), 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

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

paragraph (3). 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.

19.5 Paragraphs (4) and (5) are based on provisions found in the Crossrail Act 2008 and some recent TWA Orders. They provide for the acquisition of rights by statutory undertakers in circumstances where Order land is required for the diversion or relocation of their apparatus and the Secretary of State gives consent. The issue here is that the dominant tenement to be benefitted by such rights is the statutory undertaking of that undertaker rather than Heron Wind Limited's land, and it is therefore necessary for them, rather than for Heron Wind Limited, to acquire the rights. The costs incurred by statutory undertakers in exercising these powers will be met by Heron Wind Limited in accordance with the protective provisions set out in Schedule I.

*Article 19 (Time limit for exercise of authority to acquire land compulsorily)*

20.1 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.

*Article 20 (Private rights)*

21.1 Model Provision 22 is amended, as explained in relation to article 17, 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.

*Article 21 (Application of the Compulsory Purchase (Vesting Declarations) Act 1981)*

22.1 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 22 (Acquisition of subsoil or airspace only)*

23.1 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 22 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> and the Network Rail (Ipswich Chord) Order 2012.

*Article 23 (Acquisition of part of certain properties)*

24.1 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.

*Article 24 (Rights under or over streets)*

25.1 This article which follows Model Provision 27, empowers Heron Wind Limited 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 25 (Temporary use of land for carrying out the authorised project)*

26.1 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)(ii) 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 recent TWA Orders (e.g. the Midland Metro (Wednesbury to Brierley Hill and Miscellaneous Amendments) Order 2005<sup>2</sup> and the Network Rail (Ipswich Chord) Order 2012). 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. This sub-paragraph is expressly subject to a new paragraph (12) which

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<sup>1</sup> 2007 asp1

<sup>2</sup> S.I. 2005/927

identifies parcels of land within the Order limits where no powers of temporary possession are exercisable.

26.2 Paragraph (2) introduces a novel power enabling the undertaker to occupy access routes temporarily to carry out improvements, while allowing others to exercise rights over them.

26.3 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. It also allows the undertaker to carry out any operations on the land, such as removing animals.

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

27.1 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.

*Article 27 (Statutory undertakers)*

28.1 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.

28.2 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.

28.3 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

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

matters. For this reason, paragraph (1) provides that the powers granted by this article will be subject to the protective provisions in the Schedule.

*Article 28 (Recovery of costs of new connections)*

29.1 This article, which follows Model Provision 33, provides for compensation to owners or occupiers of property where apparatus is removed in accordance with article 27 (statutory undertakers).

## **OPERATIONS**

*Article 29 (Felling or lopping of trees and the removal of hedgerows)*

30.1 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 30 (trees subject to tree preservation orders).

30.2 Article 29 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.

*Article 30 (Trees subject to tree preservation orders)*

31.1 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 orders after the application for a development consent order was prepared.

## MISCELLANEOUS AND GENERAL

### *Article 31 (Operational land for the purposes of the 1990 Act)*

32.1 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 32 (Procedure in relation to approvals etc under requirements)*

33.1 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 32 is not preceded in the model provisions, but follows what was approved in the Rookery South (Resource Recovery Facility) Order 2011.

### *Article 33 (Abatement of offshore works abandoned or decayed)*

34.1 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.

### *Article 34 (Transfer of benefit of Order)*

35.1 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 on-land construction work. In a novel provision, 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.

*Article 35 (Deemed licence under the Marine and Coastal Access Act 2009)*

36.1 This provides for four deemed licences, the terms for each are set out in Schedule H. 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 first and fourth deemed marine licences are intended to be granted to Heron Wind Limited, with Njord Limited and Vi Aura Limited having the benefit of the second and third marine licences respectively

*Article 36 (Disapplication of constraints on works in the Humber)*

37.1 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>.

37.2 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 I.

*Article 37 (Saving for Trinity House)*

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

*Article 38 (Crown rights)*

39.1 This article is taken from other Transport and Works Orders for offshore wind farm developments and 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 39 (Certification of plans etc)*

40.1 This article would require 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 40 (Protection of interests)*

41.1 This article gives effect to the protective provisions in Schedule I.

*Article 41 (Arbitration)*

42.1 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 agreements 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 32.

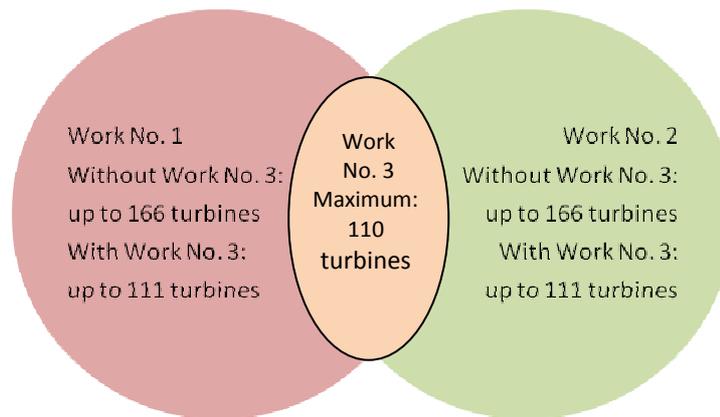
## **SCHEDULES**

*Schedule A – Part 1 (Authorised project)*

43.1 Part 1 of the Schedule describes the authorised development comprising the numbered works. There will be up to three wind farm areas with a total overall capacity of up to 1,200 MW. The location of the wind turbines within the wind farm areas 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. The Planning Inspectorate’s (“PINS”) advice note six “How to submit your application” recommends that plans should not be drawn to a scale smaller than 1:2500, reflecting the requirements of regulation 5(3) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009. Such a “scale” would represent difficulties given the expanse of the offshore works. The offshore works are, however, given detailed limits of deviation specified in co-ordinates which are described in the Order.

43.2 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 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.

- 43.3 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.
- 43.4 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.
- 43.5 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 1,200 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.
- 43.6 The works are described in such a way as to allow flexibility as to whether they form two or three wind generating stations. Works numbers 1 and 2 are described so as to include as a maximum the total number of wind turbines of the whole project (i.e. the construction of 332 turbines) and the limits of deviation for works numbers 1 and 2 overlap with the limits of deviation for work no. 3. This can best be described by reference to a Venn diagram:



- 43.7 Imagining the three works in this way, it can be seen that the third work exactly overlaps with the central intersection between the other two works, which, if this third work is constructed would be restricted to a maximum of 111 turbines. The effect of this is to allow the same maximum number of wind turbines to be constructed by two or three project companies as separate undertakings or in two or three phases.
- 43.8 In the event that the third work is not constructed, the capacity of the two other works would increase commensurately so that they would both comprise between 75 and 166 generators.
- 43.9 Within the wind farm areas there will also be up to 5 offshore HVAC collector substations and (if the mode of transmission is HVDC) up to 2 offshore HVDC converter stations (work no. 4). There will also be a network of electrical circuits connecting the structures within each wind farm area with each other and potentially with the structures in the other wind farms so as to be able to ensure maximum flexibility of operation.
- 43.10 The Order provides for two modes of electricity transmission, HVAC and HVDC. The undertaker is not yet in a position to determine which of the two modes should be adopted – both have therefore been assessed for their environmental impact. The choice of technology will affect the infrastructure to be constructed in each of the wind farm areas. HVAC technology will require the construction of an offshore reactive compensation substation at sea (work no. 5) to limit electricity losses which occur during transmission by the HVAC mode. If HVDC technology is adopted the onshore electrical transmission station (i.e. work no. 10 which is required for the purposes of both modes of technology) will need to include facilities to convert the current for connection to the National Grid.

43.11 Work no. 6 is a marine connection between either the offshore reactive compensation substation if the mode of transmission is HVAC or the offshore HVDC converter station(s) if the mode of transmission is HVDC and a foreshore connection (work no. 7). Work no. 7 includes cable crossing works and crossing works through the existing sea wall. The electrical circuits will then terminate at up to 4 underground transition joint bays (work no. 8) from which the electricity will be transmitted by underground cables (work no. 9) to the electricity substation which comprises work no. 10. The electricity will then be transmitted to the National Grid (work no. 11). The connection is above ground within the National Grid substation, but is below the threshold requiring it to be a nationally significant infrastructure project.

43.12 Work no. 12 is construction work to upgrade on a permanent basis an existing access road linking the substation to the public highway.

The Order also includes provision for ancillary works as set out in Part 2 of Schedule A.

*Schedule A – Part 3 (Requirements)*

43.13 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.

43.14 Requirements 2 – 7 relate to works seaward of mean low water and requirements 8 – 12 apply to works landward of mean low water. The dividing line is mean low water as this is the boundary of the onshore planning regime and the limit of authority of East Lindsey District Council as the relevant planning authority. The remaining requirements are of general application.

43.15 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.

43.16 Requirement 2 (*Detailed design parameters*)

Sets out the detailed design parameters within which the authorised development seaward of mean low water 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 and the Galloper Wind Farm Orders rather than the model provisions.

43.17 Requirement 3 (*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 and the Galloper Wind Farm 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.

43.18 Requirement 4 (*Foundation method*)

Limits the foundation method which can be used to install offshore apparatus to three core types. This requirement is not based on the model provisions. Within the gravity base and jacket foundation types there are different permutations and these are captured in the relevant definitions. Requirement 4 also includes foundation parameters applicable to the different types of offshore infrastructure.

43.19 Requirement 5 (*Safety management*)

Requires the undertaker to secure Secretary of State approval for an action safety management system and emergency response and co-operation plans before commencement of offshore works. It also provides for notices to mariners. The requirement was a standard provision in Electricity Act consents for offshore wind farms, but is not included in the model provisions.

43.20 Requirement 6 (*Aids to navigation*)

Provides for various matters to aid navigation in the vicinity of the authorised development, including the provision of various navigation aids, the ongoing availability of the aids to navigation, notification of the progress of works to Trinity House and the colouring of structures. These are all standard provisions from previous TWA Orders and Electricity Act consents for offshore wind farms, but are not included in the model provisions.

43.21 Requirement 7 (*Provision against danger to navigation*)

Requires notification to Trinity House if the authorised development is damaged or decays and requires the deployment of safety measures at Trinity House's direction. This is standard provision in Electricity Act consents for offshore wind farms, but is not a model provision.

43.22 Requirement 8 (*Archaeology above mean low water level*)

Provides that the relevant works shall not commence until a scheme of investigation has been agreed with the relevant local planning authority. Any archaeological works must be carried out in accordance with the approved scheme. This broadly follows the model provisions with amendments necessary to reflect the abolition of the Infrastructure Planning Commission.

43.23 Requirement 9 (*Ecological management plan above mean low water level*)

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 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. The scheme must be implemented as approved, unless otherwise agreed. It follows Model Provision 17.

43.24 Requirement 10 (*Code of construction practice*)

Provides that the relevant works shall not commence until a construction code of practice for them (based on a draft code set out in the Environmental Statement) has been submitted to and approved by the relevant local planning authority. It must be implemented as approved, unless the planning authority otherwise agrees. It is based on Model Provision 18.

43.25 Requirement 11 (*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 Environmental Statement as well as including details of certain additional specified matters. It is based on Model Provision 7.

43.26 Requirement 12 (*Implementation and maintenance of landscaping*)

Requires landscaping works to be carried out in accordance with the written landscape scheme provided for in requirement 11. 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 12 is based on a combination of Model Provisions 8 and 9.

43.27 Requirement 13 (*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 follows, with minor modifications, provision in the Galloper Wind Farm Order.

43.28 Requirement 14 (*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.

43.29 Requirement 15 (*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. 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. Horizontal directional drilling 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.

43.30 Requirement 16 (*Surface water drainage*)

Requires approval from the relevant local planning authority for a surface water scheme before the electrical transmission station can be constructed.

43.31 Requirement 17 (*Colour and detailed design approval – electrical transmission station*)

The onshore electrical transmission station 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 station 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.

43.32 Requirement 18 (*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.

43.33 Requirement 19 (*Amendments to approved details*)

Provides that any details approved pursuant to any requirement shall be taken to include any amended details which are subsequently approved. It follows the model provisions.

43.34 Requirement 20 (*Reconstruction, etc*)

The purpose behind this provision (as outlined in greater detail at paragraph 3.4) is to require approval for substantial reconstruction or replacement.

43.35 Requirement 21 (*Prohibited access*)

This article which is included at the request of the Environment Agency makes it clear beyond doubt that the undertaker cannot use the access road across the sea defences during the foreshore and onshore construction works.

*Schedule B (Streets subject to street works)*

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

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

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

*Schedule D (Access to works)*

46.1 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)*

47.1 This Schedule, which was introduced by article 18(2) (compulsory acquisition of rights), does not form part of the model provisions. It identifies, by number on the land plan, 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)*

48.1 Like Schedule E, this Schedule was introduced by article 18 (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. These modifications appear in the same form in the Network Rail (Ipswich Chord) Order 2012 and the Network Rail (North Doncaster Chord) Order 2012.

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

49.1 This Schedule identifies, by number on the land plan, 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.

*Schedule H (Deemed licences under the Marine and Coastal Access Act 2009)*

50.1 This Schedule sets out the four deemed marine licences for the authorised development below mean high water springs.

*Schedule I (Protective Provisions)*

51.1 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 provide protection for Associated British Ports. These are based on provisions commonly agreed with these bodies and included in TWA 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).