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1 INTRODUCTION

- 1.1 This memorandum accompanies an application for development consent ("the Application") by Galloper Wind Farm Limited ("GWFL") to construct and operate Galloper Wind Farm ("GWF"). The memorandum explains the purpose and effect of each article of, and Schedule to, the draft Galloper Wind Farm Order ("the Order" or "DCO") (Document 3.1), as required by Regulation 5(2)(c) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.
- 1.2 It also highlights and explains the purpose and effect of any departures from the Infrastructure Planning (Model Provisions) (England and Wales) Order 2009 (the "model clauses"), as recommended by IPC Advice Note 13 "Preparing the draft order and explanatory memorandum".
- 1.3 The Order is based upon the model provisions but departs from those clauses and where appropriate draws from the drafting used in Orders for similar development made under the Transport and Works Act 1992 and Acts authorising development. IPC Advice Note 13 explains that the model provisions are intended as a guide for applicants in drafting orders, rather than a rigid structure. The preparation of the draft Order and this Explanatory Memorandum has taken into account the advice in Advice Note 13, though it is noted that this advice is not formal guidance to which regard must be had under section 50 of the Planning Act 2008.
- 1.4 A detailed description and explanation of the authorised development is set out in Chapter 5 of the Environmental Statement (Document 5.2.5) which accompanies the application.
- 1.5 As the Order seeks to apply and modify statutory provisions concerning the compulsory acquisition of land and the treatment of certain requirements as planning conditions, in accordance with sections 117(4) and 120(5) of the Planning Act 2008 (the "2008 Act"), it has been drafted as a statutory instrument.

1.6 The drafting of the Order also reflects the current uncertainty as to whether the decision-maker will be the IPC or the Secretary of State. The position at the time of making the application is that the IPC is the decision maker, as the relevant Energy Policy Statements have been designated. However, the provisions of the Localism Act 2011 will mean that the IPC is abolished and decision making powers transferred to the Secretary of State. The Government has stated that it intends to do this on 6 April 2012. Assuming this takes place, it will be necessary to amend the relevant provisions to reflect the up to date position at that time.

2 THE PURPOSE OF THE ORDER

2.1 In overview, the purpose of the Order is to grant GWFL development consent for two linked Nationally Significant Infrastructure Projects ("NSIPs"), namely an offshore generating station of up to 504MW and new overhead lines of 400kV, together with associated development. The proposed generating station lies partly within English territorial waters, and mostly within the adjacent Renewable Energy Zone, with a cable corridor to Sizewell, within the area of Suffolk Coastal District Council. The new overhead lines are situated near Sizewell.

2.2 The generating station NSIP includes up to three meteorological masts, up to one collection platform and up to one accommodation platform, together with intra and inter array cabling. The associated development linked to the generating station comprises principally:

- (a) up to three offshore substations (there will be a maximum of four offshore platforms altogether),
- (b) a subsea grid connection between and from those offshore substations to a landfall at Sizewell;
- (c) an underground connection to a new substation compound at Sizewell Wents (with a short underground connection to the other new substation compound referred to below); and
- (d) a new screening landform adjacent to the compound, in one of two variations.

- 2.3 The overhead line NSIP comprises new 400kV downlines from six of the cross arms of two existing pylons (whose cross arms are to be extended) to gantries in two new sealing end compounds, with six new sets of electrical conductors, next to those pylons. The associated development linked to the NSIP comprise principally underground cabling from the sealing end compounds to a new substation compound next to the new compound for the generating station NSIP.
- 2.4 **Nationally Significant Infrastructure Project: offshore generating station**
- 2.5 Pursuant to sections 14(1)(a) and 15(3) of the Planning Act 2008 (the "2008 Act"), an offshore generating station in England or Wales which is expected to have a capacity (when constructed or extended) of more than 100MW is a nationally significant infrastructure project ("NSIP").
- 2.6 Section 31 of the 2008 Act provides that a development consent order is required under that Act to the extent that a proposed development is or forms part of a NSIP. As the proposed generating station is proposed to have a capacity of up to 504MW it qualifies as an NSIP in its own right.
- 2.7 It should also be noted that the project can be regarded as an extension to the existing Greater Gabbard Offshore Wind Farm ("GGOWF"). GGOWF is under construction, with all of the turbine foundations installed, and most of the turbines. It will have a capacity of 504MW. Given that the capacity of GGOWF exceeds 100MW, any extension to it is automatically an NSIP under section 15 of the 2008 Act. No formal guidance has been issued as to what comprises an extension for the purposes of section 15(3) of the 2008 Act, but it would appear that GWF would be an extension due to its immediately proximate location, shared ownership and other factors.
- 2.8 Pursuant to section 115 of the 2008 Act, development consent can be granted for the NSIP and associated development. The Secretary of State for Communities and Local Government has issued guidance on

associated development¹ which sets out its defining characteristics and illustrates the types of development that may qualify. Associated development must not be an aim in itself. In most cases it is of a type normally brought forward with the primary development and must be subordinate to and necessary for the effective operation of the NSIP, and may include measures necessary to mitigate the effects of the primary development². It should be of a proportionate scale to the primary development. Examples given in the Guidance include grid connections (underground or overhead lines)³.

2.9 Work No. 1 in Part 1 of Schedule 1 of the Order specifies the generating station, which comprises the wind turbine generators, up to three offshore platforms and a network of connecting cables.

2.10 Work Nos. 2 to 8 in Part 1 of Schedule 1 of the Order specify associated development for which consent is sought as part of the generating station NSIP. These works comprise the offshore substation platforms, subsea and onshore underground cables from those stations to an onshore substation compound, via transition bays (where the offshore cables connect to the onshore cables), a screening landform around the substation compound (in two variations) and various miscellaneous matters. It is considered that all these elements clearly fit within the definition of associated development in that they are not an aim in themselves but are required to receive and export the electricity generated by the generation station, with suitable electrical transformation at both the offshore substations and the onshore substation compound. This is reinforced by the fact that these elements will, after construction, be transferred to a new Offshore Transmission Operator (“OFTO”) under The Electricity (Competitive Tenders for Offshore Transmission Licences) Regulations 2010 (SI 2010/1903). After such transfer the works will be owned and operated completely separately from the generating station

¹ "Guidance on associated development; Applications to the Infrastructure Planning Commission".

² Guidance paragraph 10.

³ Guidance Annex A.

under a transmission licence issued under section 6 of the Electricity Act 1989.

Nationally Significant Infrastructure Project: overhead lines

- 2.11 Section 14(1)(b) and section 16 of the 2008 Act provide that "the installation of an electric line above ground" which is expected to be at or above 132kV, and does not fall within certain exclusions, is an NSIP. GWFL has concluded that the installation of new electric lines to connect the development to an existing 400kV overhead grid connection running past Sizewell Wents cannot be ruled out as qualifying as an NSIP in its own right. Accordingly, it has been treated as such. The overhead lines involved will simply connect two new sealing end compounds on the ground to two existing pylons, six of whose arms will be extended to receive the six new electric lines.
- 2.12 GWFL has carefully considered the various exclusions under section 16 of the 2008 Act. One of these exclusions, under section 16(3), is potentially applicable. This exclusion applies to "the installation of an electric line above ground ... to the extent that (when installed) the line will be within premises in the occupation or control of the person responsible for its installation". Premises, under section 16(4) means "any land, building or structure".
- 2.13 In practice, the installation will either be carried out by GWFL or National Grid Electricity Transmission ("NGET"), with whom GWFL has a signed grid connection agreement. This point has been discussed with NGET, and it has been concluded that it is not certain that the exclusion will apply. Accordingly, as noted, the DCO treats the new overhead lines, including the sealing end compounds, as an NSIP. It is possible that the position may become more certain during the Examination, in which case suitable amendments to the Order may be proposed, to reclassify the works specified in paragraph 2 of Part 1 of Schedule 1 as further associated works within paragraph 1 of Part 1 of Schedule 1.
- 2.14 Work Nos. 9A and 9B (which constitute the overhead lines NSIP) will ultimately be owned by NGET and operated pursuant to a transmission

licence under section 6 of the Electricity Act 1989. In addition, Work Nos. 10A/B, 11 and 12 will also be owned by NGET and operated on the same basis. Work Nos. 10A and 10B comprise underground cabling and Work No. 11 comprises a second compound of the onshore substation. In addition Work No. 12 comprises two cable routes necessary for the GWF connection, which link into the existing connection arrangements for GGOWF.

- 2.15 Taken together, Works 9A, 9B, 10A, 10B, 11 and 12 (all to be owned and operated by NGET) are necessary to connect the offshore/onshore transmission works (to be owned and operated by the OFTO and which comprise Work Nos. 2, 3A, 3B, 4, 5, 6 and 7 or 8) to the existing national onshore transmission network, owned and operated by NGET.
- 2.16 All of the authorised development (save for the generating station itself) is necessary for and dedicated to the need to connect the generating station to the existing onshore transmission network and do not include any works which serve a wider purpose.
- 2.17 Applying the tests summarised above for associated development, Work Nos. 9A, 9B, 10A, 10B and 12, and the other elements specified in paragraph 2 of Part 1 of Schedule 1, clearly represent associated development connected to the overhead lines NSIP. They are necessary to effect the connection to the onshore transmission network, but are not an aim in their own right.
- 2.18 If there were certainty that the exclusion referred to at paragraph 2.12 did apply to Work Nos. 9A and 9B then, in the alternative, it would be just as clear that Works 9A/B to 12 inclusive would all be associated development connected to the generating station NSIP. In other words, the arguments for Work Nos. 2 to 8 would apply equally in that circumstance to Work Nos. 9A, 9B, 10A, 10B, 11 and 12.
- 2.19 The two NSIPs have been included in a single order in accordance with policy and guidance. Communities and Local Government Guidance on Associated Development states at paragraph 12 that “a single application can cover more than one NSIP. As far as possible we would wish to

encourage applicants to make a single application where NSIPs are clearly linked". A similar point is made at paragraph 4.9.2 of the Overarching National Policy Statement for Energy ("EN-1") in relation to the inclusion of grid infrastructure in a single application: "The Government therefore envisages that wherever possible, applications for new generating stations and related infrastructure should be contained in a single application to the IPC or in separate applications submitted in tandem which have been prepared in an integrated way."

2.20 In the light of the extremely minor nature of the new overhead lines it was considered inappropriate to include reference to overhead lines in the title of the Order.

3 OTHER POWERS

3.1 The Order seeks powers to acquire land or rights compulsorily in accordance with section 120(4) of the 2008 Act. The powers sought are for the compulsory acquisition of a combination of freehold ownership, permanent rights (such as rights of access) and temporary rights. It also seeks powers for the imposition of restrictive covenants to protect underground infrastructure. The justification for seeking these powers is addressed in the Statement of Reasons (Document 4.1).

3.2 The Order also contains power for the grant of a deemed marine licence under section 66(1) of the Marine and Coastal Access Act 2009 ("the 2009 Act"). In this Memorandum, Schedule 6 is referred to as the "licence" or the "marine licence", and the rest of the Order is referred to as the "Order" or the "DCO". It is important to appreciate that the deemed marine licence will operate alongside and complement the DCO, and this point is drawn out at various points in the rest of this Memorandum.

4 KEY DRAFTING FEATURES OF THE DCO

4.1 The Commission has emphasised in pre-application discussions with GWFL the need to fully understand the reasoning behind certain aspects

of the DCO, particularly the justification for, and operation of, those provisions which provide for flexibility in relation to the works constructed.

The need for flexibility in the DCO

- 4.2 The DCO provides for considerable flexibility in relation to the generating station and offshore associated development. It also provides flexibility in relation to the onshore NSIP and the onshore associated development linked to both NSIPs, though this is very constrained, in terms of location and lateral/vertical variations. This section considers the overall need for flexibility in the DCO. The guidance in the National Policy Statements, and the IPC's Advice Note "Use of the Rochdale envelope" are considered at paragraph 4.12 onwards. The reasons behind the particular parameters which constrain the DCO flexibility are considered at paragraph 4.20 onwards. The precise terms of the relevant provisions of the DCO are considered at section 8.
- 4.3 In GWFL's view, for the reasons summarised below, the inclusion of the flexibility provided for in the draft DCO is fundamental to whether or not the DCO is fit for purpose, and therefore whether or not the scheme will proceed. This type of consent flexibility has been critical to the successful deployment of large scale offshore wind farms in the UK, which currently has the largest offshore generating capacity, and development pipeline, of any country in the world.
- 4.4 The scale of Round 2, Round 1 and 2 extensions (like GWF) and Round 3 is such that investment is required at a level equivalent to other large scale energy generating projects, inevitably exceeding £1bn in capital expenditure. At this scale of investment the UK's energy portfolio is competing in a European and world market to attract finance to ensure that projects are continued through to delivery. SSE Renewables Developments UK Limited and RWE Npower Renewables Limited, the joint owners of GWFL, are two of the leading offshore wind developers in the UK, with substantial experience of the challenges of delivering these major projects.

- 4.5 Fundamental commercial implications aside, the final design of a wind farm is dependent on many factors, including, but not limited to:
- (a) Size, height and nameplate capacity of the chosen turbine type(s);
 - (b) Cable lengths and final electrical design;
 - (c) Undevelopable areas, which may also be influenced by ground conditions or foundation type;
 - (d) Final commercial agreements with cable suppliers;
 - (e) Outcomes of pre-construction site investigation; and
 - (f) Final results from ongoing wind monitoring and subsequent energy capture calculations.
- 4.6 The above aspects are considered post-consent, in a detailed design and optimisation process, in which the final number and type of turbines and their layout is a function of site constraints, such as those examples above, combined with a decision on the most commercially viable layout, taking into account various supply chain constraints.
- 4.7 At the application stage it is impossible for the promoter of a large offshore wind farm to confirm that the optimised solution will result, for example, in the full nameplate capacity of the proposed installation (in this case 504MW). Nor can the promoter predict the most appropriate turbine in the market at the time of procurement, or the optimised layout. For example, it is entirely feasible for a 450MW scheme to generate more energy over a given period than a 500MW scheme, as energy capture is a function of rotor diameter, spacing, location with the wind farm, impact of wake effects and other factors. A lower MW scheme might also prove sufficiently commercially viable at construction stage, whilst the maximum MW installation may not. Furthermore, the selection of turbine(s) and other offshore equipment has a direct impact on the nature of the equipment needed within the onshore project substation compound (Work No. 6), due to electrical design considerations.

- 4.8 With this backdrop the flexibility, included with the DCO, is needed to achieve the following:
- (a) The ability to optimise projects to address short term variation in costs and availability associated with turbines, foundations, substations and construction plant;
 - (b) The maintenance of competitive market behaviour in key supply chain areas; and
 - (c) The potential to accommodate technology developments, where there is a steady stream of major new market entrants in turbine supply and other equipment sectors.
- 4.9 The need for optimisation contains two important dependent requirements:
- (a) The ability to avoid fundamental supply chain constraints that could prevent delivery of the project;
 - (b) The ability to maximise “energy capture”, not just focussing on total megawatt (MW) capacity, and to positively influence project economics.
- 4.10 The UK Government has placed a heavy emphasis on the role of offshore wind in delivering the UK’s 2020 target of 15% of total energy from renewable sources. In doing so, the Government has recognised in the "UK Renewable Energy Roadmap" (July 2011) that driving down the cost of delivery of offshore wind projects is critical to the success of the sector. One of the commitments in the Roadmap is to "[e]stablish an industry Task Force to set out a path and action plan to reduce the costs of offshore wind to £100/MWh by 2020. Provide up to £30m of direct Government support for offshore wind cost reduction over the next 4 years" (Executive Summary). Charles Hendry, the Energy Minister, announced the members of the Task Force on 12 October 2011. The DECC announcement of that date quoted the Minister as referring to "this vital work to drive down the costs of delivering our offshore wind ambitions".

4.11 It is GWFL's view that consent flexibility is at the heart of reducing cost, de-risking supply chain issues, optimising energy yield and maximising the overall financial attractiveness of projects to secure the very large scale finance needed for delivery of this type of project. GWFL is aware that this view is widely held by offshore wind developers in the UK.

Advice on flexibility of project details

4.12 National Policy Statements EN-1 and EN-3 endorse the use, where appropriate, of the inclusion of flexibility in the project details within a DCO, as long as a robust environmental statement assesses the resulting variables in terms of their worst case effects. EN-1 addresses this issue for all energy NSIPs at paragraphs 4.2.7 to 4.2.10. EN-3 addresses it at paragraphs 2.6.42 to 2.6.45 in relation to offshore and onshore infrastructure and at paragraph 2.6.38 in relation to onshore grid infrastructure. EN-1 specifically cites, in footnote 78, to the *Rochdale* case which laid the legal foundation for the so-called Rochdale envelope approach to outline planning permissions which require environmental impact assessment. While the NPSs do not specifically say so, this is an approach the Department for Energy and Climate Change ("DECC"), and its predecessors, have repeatedly endorsed in the granting of consent for large scale Round 2 offshore wind farms under the Electricity Act 1989.

4.13 The DCO for GWF is inextricably linked to the project details set out in Chapter 5 of the Environmental Statement (ES). Taken together, the DCO, this Explanatory Memorandum and Chapter 5 of the ES, provide a detailed explanation of the maximum extent of the proposed authorised development, and the flexibility sought, as required by paragraph 4.2.7 of EN-1. The reasons for this flexibility are those set out in this Explanatory Memorandum, as also required by paragraph 4.2.7. There is a more detailed explanation of some issues in Chapter 5 of the ES.

4.14 Paragraph 4.2.9 of EN-1 explains that where flexibility is sought, it will be necessary to include appropriate requirements within the DCO to ensure that the project "envelope" approved is limited to that which has been assessed in the ES. As is explained below, the draft DCO contains

detailed requirements for exactly that purpose. Furthermore, these have been repeated in tables within Chapter 5 of the ES to emphasise that the nature of these constraints, and the flexibility they permit, have been fully taken into account in the environmental impact assessment recorded in the ES. In addition, each relevant topic chapter in the ES gives express consideration to relevant DCO requirements when identifying and assessing the realistic worst case effects.

- 4.15 All of the requirements in the DCO which relate to works seaward of mean high water springs are repeated in the deemed marine licence at Schedule 6. There are additional controls in the marine licence, which requires a range of detailed approvals of the works, and the method of construction of those works, to be obtained. The existence of these controls is also highlighted in the tables in Chapter 5 of the DCO. The marine licence is discussed further in section 5 of this Memorandum.
- 4.16 IPC Advice Note 9 “Rochdale Envelope” (February 2011) contains specific discussion of the use of the Rochdale envelope for offshore wind farm DCO applications. This type of Advice Note does not have any statutory force behind it, and is not advice which promoters must have regard to under section 50 of the Planning Act 2008. Nevertheless, GWFL have given careful consideration to its contents and to the various discussions which GWFL has had with the IPC on these issues, including comments received on earlier drafts of the DCO.
- 4.17 Advice Note 9 covers three main themes in connection with the use of the Rochdale envelope, namely the effectiveness of consultation, the range and nature of the DCO parameters and the robustness and clarity of the environmental impact assessment.

Consultation

- 4.18 The issues related to consultation are dealt with in the Consultation Report and Appendices (Documents 6.2, 6.2.1 and 6.2.2). In summary, no concerns were raised by statutory or other consultees in relation to understanding the concept of consent flexibility generally or understanding its proposed use for GWF as set out in the Preliminary

Environmental Report used as part of the section 42 consultation. Some concerns were expressed about the use of the Rochdale envelope approach in relation to the onshore works by Suffolk Coastal District Council and Suffolk County Council in particular, but these have since been resolved. It is clear that the concept of the Rochdale envelope was well understood by consultees, and it did not in any way undermine the effectiveness of the consultation.

Environmental Statement

- 4.19 A very particular effort has been made by GWFL to ensure the robustness and clarity of the ES, in the light of the views expressed by the IPC in meetings and correspondence, and the content of the Advice Note. As already explained, the DCO parameters feature throughout the ES, and the assessment of the flexibility they allow, individually and collectively, has been at the heart of its preparation. The inclusion of the parameters in Chapter 5 and the topic chapters is intended to give the clearest possible explanation of how the ES has fully taken account of the development envelope allowed by the DCO parameters, and identified and assessed the likely significant effects using the realistic worst case approach endorsed by the *Rochdale* case, among others, and the NPSs.

Reasoning behind offshore DCO parameters

- 4.20 In terms of the DCO parameters themselves, these have been given careful consideration by GWFL. There is an indicative, non-exhaustive list of possible offshore parameters in paragraph 2.6.42 of EN-3 and in IPC Advice Note Nine. Whilst it is acknowledged that the IPC did not intend its list to be a specific or exhaustive list for promoters to use, it does comprise most of the fundamental parameters which define the majority of likely significant effects. Each of the parameters in the Advice Note is considered in turn below, with reasoning provided for including or not including each parameter within the draft DCO. In addition, the reasons for including parameters not in the Advice Note list are given.

Maximum MW capacity and maximum number of turbines

- 4.21 Whilst not included in the IPC's list of parameters, the total MW capacity of a scheme provides the single most important defining characteristic of an offshore wind project, in addition to the project boundary. The Planning Act 2008, like the Electricity Act 1989, uses total expected MW as the key determinant of the size of a project.
- 4.22 This means that the GWF maximum capacity of 504MW provides the overarching project description, to which all other parameters are, in effect, subordinate. In particular, the total MW controls the maximum number of turbines. For GWF, this has been set at 140 to reflect the fact that the smallest capacity turbine which GWFL will consider for the project is 3.6MW. (The neighbouring GGOWF is being constructed with 140 Siemens 3.6MW turbines, giving a total capacity of 504MW.)
- 4.23 It is important to understand that, as well as the individual nameplate capacity of a turbine, a wind farm developer will also consider the rotor diameter of the turbine. For example, Siemens has offered 3.6MW turbines with two different rotor diameters. The blade swept area of the rotor is a critical factor for energy yield, depending on the wind conditions in a particular location, as well as being important in the potential environmental effects of the turbine, particularly on birds. Despite the Siemens example just given, it is usually the case that a larger rotor diameter is closely linked to a larger nameplate turbine capacity.
- 4.24 As already explained, it is commercially critical that GWFL has the ability to choose from a range of turbine nameplate capacities, and rotor diameters, within the overarching 504MW constraint. If a turbine with a larger individual nameplate capacity is chosen than 3.6MW (and, in practice, more than one turbine type may be selected), this inevitably brings the maximum number of turbines below 140.
- 4.25 For the purposes of the application and the environmental impact assessment, GWFL has assumed that the *maximum* number of turbines will range between 72 (at 164 metres rotor diameter) and 140 (at 107 metres rotor diameter), with numerous potential permutations in between. Whilst this is a large range in terms of turbine numbers, it is a necessary

and fundamental feature of the project, which goes to the root of its commercial viability, and the fitness for purpose of the consent.

Minimum number of turbines

- 4.26 The Advice Note suggests a minimum number of turbines be specified. It is not considered that this would be a workable or appropriate parameter for GWF.
- 4.27 It is not necessary to impose a minimum to ensure that the project exceeds the NSIP threshold of 100MW as that threshold turns on what the capacity of the scheme is expected to be at the point of application and consent. This is not in doubt - the expected capacity is 504MW. While a lower figure may be in fact be constructed once the turbine nameplate capacity has been decided and the scheme design optimised after the grant of consent there is no reasonable basis to expect the capacity constructed would be less than 100MW. As already noted, this is probably a moot point in the case of GWF, as it can also be regarded as an extension to GGOWF, which will be 504MW when operational. As already noted, any increase over that 504MW in an extension is regarded as an NSIP in any event.
- 4.28 There must be fundamental doubt as to the reasonableness and practicability of the enforceability of setting a minimum number of turbines as a parameter. An offshore wind farm consent is a highly valuable asset. If a developer chooses only to utilise part of it, there will invariably be a very good set of commercial and/or technical reasons for this. This has been the exception to date in the UK, as almost all the constructed schemes have been built out in full, including the neighbouring GGOWF. If such commercial considerations led to a decision to construct less than the given minimum number, if one were imposed, the considerable capital costs involved in increasing the size of the scheme would mean that, in practice, seeking to enforce the parameter would be pointless and ineffective, and therefore unreasonable.
- 4.29 There is no EIA justification for seeking to impose a minimum turbine requirement. Unsurprisingly, the fewer the number of turbines, the lesser

the impact. Multiple layout scenarios have been considered as part of the EIA. None of the conclusions of impact above minor in the ES, give rise to a concern that the impact would be greater if there were fewer than more turbines.

4.30 To seek to impose a minimum number of turbines would cut across a long standing principle of consents for development, namely that it is lawful for less than the full extent of the consent to be constructed, as long as what is constructed is in accordance with the requirements of the consent.

4.31 The only remaining issue is whether a minimum number of turbines is needed to address the point in the Advice Note that the project parameters are not "so wide ranging as to represent effectively different schemes". The project offshore is fundamentally defined by the Order limits, the nature of the development (i.e. an offshore wind farm with associated grid connection infrastructure) and the maximum 504MW capacity. While it is correct that there are potentially significant variations in turbine numbers, for a variety of reasons, and scheme layout, this is inherent to this type of project, for reasons already explained, and it cannot properly be regarded as giving rise to "effectively different schemes" such that a DCO in these terms could not lawfully be granted. As already explained, numerous large scale consents have already been granted on an equivalent basis under the Electricity Act 1989, without a minimum number of turbines specified.

Maximum and minimum nacelle height

4.32 GWFL accepts that maximum nacelle height is a parameter appropriate for inclusion in the DCO. The maximum height serves to fix the ES assessments and confirms the maximum height at which static (rather than rotating) elements of each turbine would be seen. However, a minimum nacelle height is not necessary as this is inherently defined by a combination of the minimum blade clearance distance to mean high water springs and minimum rotor diameter, both considered below.

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

- 4.33 The maximum blade tip height is a fundamental parameter and has been fixed at 195m above Lowest Astronomical Tide (LAT). The minimum blade clearance to mean high water springs ("MHWS") is set at 22 metres to reflect the long standing position of the Royal Yachting Association, and the inclusion of this parameter in previous offshore wind farm consents, including that for GGOWF.
- 4.34 A minimum blade tip height i.e. the lowest level at which the highest blade tip could pass does not feature in any of the assessments and is inherently fixed by the minimum clearance and minimum rotor diameter. It is therefore not included as a proposed parameter.

Minimum separation distances between turbines

- 4.35 These have been fixed by reference to the rotor diameter of the smallest rotor diameter permitted, namely 107 metres. For energy yield purposes, it is normal practice for developers to work on a rule of thumb of a separation distance in line with the prevailing wind of 8 times the rotor diameter, and perpendicular to the prevailing wind of 6 times the rotor diameter. The greater distance is to allow time for the energy in the wind to recover. It is this approach which gives rise to the minimum separation distances specified in the DCO of 856 metres and 642 metres for the smallest rotor diameter. This approach of applying minimum separation distances has been commonly used for Electricity Act consents, including GGOWF.
- 4.36 The number of variables affecting the final optimised layout, including the extent to which the different parts of the array areas defined in the DCO are used or not used, mean that a condition governing scheme layout which goes beyond the specified minimum separation distances is not appropriate. Whilst in practice most offshore wind farms have been built on a broad grid arrangement, there needs to be flexibility on this issue in the DCO, to allow for design optimisation.

Maximum and minimum rotor diameters

4.37 Whilst not mentioned as parameters in the Advice Note, GWF considers that parameters on maximum and minimum rotor diameter are necessary to ensure a robust EIA. As already mentioned, the total blade swept area of the turbines is a key factor in different assessments. This approach also provides an indirect control over the nameplate capacity of turbines, though the 504MW maximum limit means that an individual limit on nameplate capacity is not necessary, as it has no bearing *per se* on the assessments in the ES.

Foundation parameters

4.38 The flexibility to use different foundation types is an important aspect of the project. Four different foundation types are provided for: monopole, gravity base, space frame and suction monopod. The choice of foundations will be influenced by a variety of factors as explained in Section 5 of the ES. In terms of the DCO, GWFL has considered which design parameters are important to ensure a complete and robust EIA, and these have been included in the DCO.

Offshore platforms

4.39 The number of offshore substations cannot be fixed in advance, but will not exceed three. The number will be determined as part of the post-consent design optimisation process, and will depend on the final layout and electrical considerations.

4.40 The need for a collection platform and an accommodation platform cannot be resolved at this stage and will also be determined as part of the post-consent design optimisation. The purpose of these two platforms is explained in Chapter 5 of the ES. None of the offshore platforms will serve GGOWF.

4.41 The precise design of all three platforms cannot be fixed at this time. Accordingly, parameters limiting the dimensions of the platforms, and their foundation arrangements are included in the DCO. The location of the platforms will depend on post-consent design optimisation. The DCO limits the platforms to the array areas.

Offshore cables

- 4.42 The precise number, layout and total length of the intra-array cables cannot be fixed until post consent design optimisation. The key factor for assessment purposes is the total cable length and therefore a parameter limiting the total cable length, based on the maximum number of turbines and a worst case layout for cabling, has been included in the DCO. The overall routes of the inter and intra array cables are constrained within the array areas specified in the DCO.
- 4.43 The precise number of export cables, which will run from the offshore substations to the shore, will depend on post consent design optimisation, though there will not be more than three. Their exact total length cannot be known at this stage and will be influenced by the location of the offshore substations and the overall layout. The routes of the export cables are constrained to offshore Order limits, which include corridors between the three array areas and a corridor from array area A to the landfall at Sizewell. There is a parameter limiting the number of export cables within these corridors to three. There is also a parameter limiting the maximum total length of export cables within the Order limits below MHWS.

Offshore Order limits and offshore plans

- 4.44 For completeness, the final offshore parameter is the Order limits. GWF has three array areas, which have corridors between them and a corridor to the shore.
- 4.45 The nature of the flexibility sought necessarily means that the offshore Works Plan is very simplistic. It is not possible to provide a more detailed plan, for the reasons already explained. The DCO controls what types of development can be constructed in the different Works areas. However, in practice, this amounts to specifying corridors (and one area within array area A) where only cables may be laid, and leaving complete freedom within the array areas.

- 4.46 The detailed control of what is actually constructed is provided for in the deemed marine licence. This is considered further at sections 5 and 6 below.

Reasoning behind onshore DCO parameters

Overhead lines NSIP

- 4.47 The overhead lines NSIP works will ultimately be owned by National Grid Electricity Transmission ("NGET"). Due to its position in the market in England and Wales as the sole transmission licensee owning and operating the entire transmission network it is able to specify the equipment it requires, and suppliers will meet those specifications. Accordingly, it has been possible, in the case of the NGET compound (Work No. 11) which is part of the associated development for the overhead lines NSIP, for NGET to provide detailed plans for approval as part of the Order (Document 2.10), although the Order also allows for alternative details to be approved under requirement 19(1) in Schedule 1, Part 3 of the Order. Document 2.10 expressly provides for a platform level of 8m to 9m AOD. Any alternative details will need to comply with the Height Restriction Plan (Document 2.8), which has been used as a parameter in of the ES assessment, on the basis that the highest permitted platform level is 9m. This is specifically controlled in requirement 19(3).
- 4.48 For the sealing end compounds (Work Nos. 9A and 9B), which are part of the NSIP itself, the constrained nature of the particular locations have meant that a detailed approval is not being sought under the Order, and will await later detailed design. Illustrative plans and elevations are provided (Document 2.13). Detailed approval will be sought under requirement 19(1), including specific approval of the platform level, which will reflect the assessment in the ES. The approved works will also need to comply with the Height Restriction Plan, based on the subsequently approved platform level.
- 4.49 The remainder of the works for the overhead lines NSIP and its associated development are underground (principally cabling) or at

ground level (access route etc). Detailed approval for the land form and surface elements is sought (Document 2.9a or 2.9b), with some specified variation in relation to levels, but also with the ability for these levels to be varied under requirement 19(1). The locations for the cable corridors (for which each have a Works Number) and the other main elements (which also each have a Works Number) are constrained by the location for each work on the Works Plan (Document 2.3a or 2.3b), as well as the General Arrangement Plan (Document 2.7). The full width of all the cable corridors linked to the overhead lines NSIP (i.e. Work Nos. 10A, 10B and 12) is required.

- 4.50 The precise location of underground cables and services within the relevant corridors identified on the plans has not been identified, and will be the subject of subsequent approval under requirement 19(1).

Onshore associated development for generating station NSIP

- 4.51 The details of the GWF compound (Work No. 6), which comprises the largest single element of the onshore associated equipment for the generating station, are not submitted for approval. The precise nature and layout of the equipment in this compound will depend on the turbine(s) selected, the electrical design and other matters. An illustrative layout and elevations have been provided (Documents 2.11 and 2.12). Detailed approval will be sought under requirement 19(1).
- 4.52 The only aspect of the compound which is approved is the platform level of between 8m and 9m AOD, as shown on Document 2.10. The approved details will need to comply with the Height Restriction Plan (Document 2.8), which has been used as a parameter in of the ES assessment, on the basis that the highest permitted platform level is 9m. This is specifically controlled in requirement 19(3).
- 4.53 The compound is surrounded on three sides by a proposed screening landform (Work No. 7 or 8). Two designs of this landform have been developed (Document 2.9a or 2.9b). Work No. 7 is the design which GWFL considers can be justified in terms of compulsory acquisition of the necessary land. Work No. 8 is an enhanced design, which takes up a

greater land area, but which GWFL considers cannot be justified in terms of compulsory acquisition. The compulsory acquisition issues are considered in the Statement of Reasons (Documents 4.1 and 4.2). The DCO seeks approval for both Works on the basis that one must be constructed before the compound can be brought into commercial operation. This is governed by requirement 19(5). Each design has an express approved tolerance of 300mm above and 100mm below the specified top level of the landform. Any variation beyond this to the screening landform will require approval under requirement 19(1). It is hoped that a commercial agreement will be reached with the landowner during the pre-Examination or Examination period so that the DCO can be amended only to provide for Work No. 8 (the larger design) but at this stage it has been drafted to cover all eventualities.

- 4.54 The approach to Work No. 7 and 8 explains why there are two versions of the onshore Works Plan (Document 2.3a and 2.3b) as it was too confusing to show both variations on a single plan, though the General Arrangement Plan (Document 2.7) does do this.
- 4.55 The remainder of the associated development for the generating station NSIP is underground (principally cabling and transition bays) or at ground level (access route etc). Detailed approval for the land form and surface elements is sought, with some specified variation in relation to levels, but also with the ability for these to be varied under requirement 19(1). The precise location of underground cables and services within the identified corridors has not been fixed at this stage, and will be the subject of subsequent approval under requirement 19(1). The locations for the cable corridors (Works No. 3B and 5) and the transition bays (Work No. 4) are constrained by the location for each work on the Works Plan (Document 2.3a or 2.3b), as well as the General Arrangement Plan (Document 2.7). Only 23 metres of the width of these cable corridors (33 metres where drilled) is required permanently, which is controlled by requirement 19(7).

Overview onshore

4.56 As the previous paragraphs have explained, the DCO seeks a combination of detailed consent and outline approval for the onshore works, where the parameters for the outline approval are clearly and tightly controlled. These parameters have formed the basis of the assessment in the ES. This is in complete conformity with the normal approach to onshore developments applying the Rochdale envelope principle.

5 THE MARINE LICENCE

5.1 The model provisions do not provide a draft deemed marine licence, and simply refer to the Food and Environment Protection Act 1985 ("FEPA") and the Coastal Protection Act 1949 ("CPA"). The licensing provisions under this legislation have been superseded by the marine licensing regime under the Marine and Coastal Access Act 2009 (the "2009 Act"). No marine licences have yet been issued for offshore wind farms, and no draft licence has been provided by the MMO. The draft deemed licence has been developed by GWFL in discussion with the MMO, Maritime and Coastguard Agency, Trinity House, Natural England, JNCC and Cefas. None of these organisations should, however, be regarded as having approved the final form of the deemed licence as now submitted.

5.2 The draft licence has been prepared in a structure and style which is intended to mirror the main part of the Order. The licence is deliberately drafted to be a stand alone document. This reflects the fact that it will have a wide distribution to contractors and agents, being an audience that may be confused by cross references to the main Order. Also, it is a document which, based on past experience, is likely to be varied from time to time. Such variations will be much easier to follow if the licence has been prepared on a stand alone basis.

5.3 As a result, there is intentional repetition from the main Order of various definitions and the description of the authorised works below mean high water springs. The subject areas covered by the licence have been closely informed by the approach used under FEPA licence and CPA consents, and the 2009 Act. The structure of many of the conditions is,

however, different from earlier FEPA licences and CPA consents. In particular, the draft licence has a much more consistent approach to requiring the submission of detailed approvals, rather than specifying more detailed matters, in whole or in part, on the face of the licence. This will mean that, in practice, there will be a suite of documents which are approved by the MMO pursuant to the conditions, where most of the substance of the licence will be contained. Licensed activities cannot be commenced until such approvals are commenced and there is a standard condition to comply with such approved documents unless agreed otherwise in writing.

5.4 The documents to be approved under the deemed licence are a construction and monitoring programme, scheme details, a construction method statement, a project environmental management and monitoring plan, a scour protection management plan, a marine mammal mitigation protocol (where appropriate), a cable specification and installation plan and a scheme of archaeological investigation.

5.5 These documents will fix the design of the offshore authorised development once design optimisation has taken place. They will include the number of wind turbine generators, offshore platforms and meteorology masts and their final proposed layout. They will also include final cable laying proposals, including the target depth for cable burial in different parts of the site, to reflect site survey and engineering assessments of what can be achieved. All of these details will have to conform to the offshore limitations and parameters in the Order, which have been repeated in full in the deemed licence.

6 ROLES OF SECRETARY OF STATE, COMMISSION, MMO AND RELEVANT PLANNING AUTHORITY

6.1 Assuming the Order, with the licence, is granted then the Secretary of State would only have a very limited role in relation to the operation of the Order. Specifically, the Secretary of State has a role under Articles 6 (appeals in relation to onshore requirements from refusal or non-determination of the relevant planning authority of approvals), 7 (transfer

of benefit of the Order), 8 (extinguishment of public rights of navigation), 9 (survey of works), 10 (abatement of works abandoned or decayed), 19 (transfer of power to compulsorily acquire rights) and requirements 14 (colouring of wind turbine generators) and 17 (offshore decommissioning). This closely follows the position under consents for offshore generating stations issued under section 36 of the Electricity Act 1989 (including that for GGOWF) and navigation declarations under section 36A.

- 6.2 The Secretary of State has never had a role in relation to section 36 consents offshore generating stations in approving the discharge of detailed conditions. This role has always been held by the MMO and its predecessor organisations under the FEPA licence for the relevant scheme. The marine licence follows the same approach.
- 6.3 In relation to works landward of mean low water, the Order provides for all detailed approvals to be determined by the relevant planning authority (Suffolk Coastal District Council). This, again, follows the invariable approach of section 36 consents, whether the onshore works in question were the generating station itself or ancillary development under section 90(2) of the Town and Country Planning Act 1990. The subsidiary approvals in this situation have always been governed by a deemed planning permission issued under the same section 90 with the local planning authority as the determining authority.
- 6.4 As already explained, in relation to offshore works, the MMO is given the role of determining detailed approvals, but only under the deemed marine licence. The Secretary of State has a limited role alongside the MMO, as already noted.
- 6.5 In summary, this means that the key roles in determining detailed approvals offshore falls to the MMO and onshore falls to the relevant planning authority. It is these bodies which also have enforcement powers in relation to these matters under the 2008 Act and the 2009 Act respectively.

- 6.6 There is a note at the end of model provision 1 which states that it will be necessary to identify "another appropriate body" as the relevant planning authority for off-shore development. Exactly what is intended by this note is not clear, particularly given that the model clauses give the Commission the classic role of determining the approval of details, both onshore and offshore. The Order does not designate a body as relevant planning authority for the area below mean low water. It is considered that - whatever was intended by the note in the model Order - that the arrangements proposed in the draft DCO and deemed licence ensure that the MMO and the Secretary of State between them will fulfil the equivalent role to that of an onshore planning authority.
- 6.7 In pre-application discussions, the IPC expressed a strong desire for GWFL to obtain written confirmation from the MMO that it understood the role envisaged for it under the marine licence, particularly in the light of the flexibility in the offshore project details. GWFL has obtained a letter, dated 14 October 2011, from the MMO addressing these issues directly and providing the confirmation sought by the IPC. It was provided in the light of the MMO's consideration of an earlier draft of the DCO/marine licence and is included in Appendix AK of the Consultation Report Appendices (Document 6.2.2).
- 6.8 The Commission is not given any kind of role under the Order or licence, once it has been made.

7 PUBLIC RIGHTS OF NAVIGATION IN TERRITORIAL WATERS

- 7.1 The DCO includes, at Article 9, provisions that allow for the extinguishment of rights of navigation over the final positions of any wind turbines, offshore platforms and meteorology masts. This only applies to part of array area C, as this is the only array area within UK territorial waters. There is no legal basis to extinguish navigation rights in the Renewable Energy Zone. This article requires GWFL to notify the Secretary of State of those positions once the final layout of the authorised development has been determined. It requires a suitable plan to be advertised, as required by paragraph 2.6.172 of EN-3.

- 7.2 The extinguishment of rights of navigation for these structures ensures that, notwithstanding any consent granted for the authorised development, that no action can be taken against GWFL for the structures impeding public rights of navigation. Declarations to this effect have been routinely granted by DECC under s36A of the Electricity Act 1989 in conjunction with section 36 consents for offshore wind farms within territorial waters, including the relevant parts of GGOWF.
- 7.3 For offshore wind farms consented by Transport and Works Orders, it was not necessary for such rights to be specifically excluded as this was provided for on the face of the Transport and Works Act 1992 (section 3(1)(b)(i)).
- 7.4 Schedule 5 of the 2008 Act includes the extinguishment of rights of navigation as one of the ancillary matters that can be included within a DCO. Paragraphs 2.6.170 – 173 of EN-3 also consider the extinguishment of rights of navigation in relation to offshore wind farms and provide that such provisions may only be included if an applicant has requested this as part of their application for development consent. There is no requirement for the applicant to provide a particular justification for the inclusion of the provisions.
- 7.5 Given that these are public rights that do not attach to a particular person or class, that they will be extinguished and not acquired, and have been routinely granted for offshore wind farms without any compensation being payable. It is not considered that the inclusion of Article 8 will require any further justification or compensation provisions.

8 THE DRAFT ORDER

Preliminary Provisions

- 8.1 Articles 1 and 2 of the Order contain preliminary provisions.

Article 1 (Citation and commencement)

- 8.2 Provides for the commencement and citation of the Order. It includes the date on which the Order comes into force which may or may not be the date on which the Order is made.

Article 2 (Interpretation)

- 8.3 Provides for the interpretation of the Order. Amongst other things, this article defines maintenance as including maintain, inspect, repair, adjust, alter, remove, clear, refurbish, reconstruct, replace and improve. The definition of "maintain" that is included is based on the definition in Schedule 2 of the model provisions. Although these are proposed as model clauses for railway-related projects where relevant they are applicable to other linear schemes and there is no restriction in the 2008 Act or the model clauses itself that limits their application.
- 8.4 The definition of Order limits includes cross reference to the grid coordinates for that part of the Order limits which are seaward of mean high water springs, contained in paragraph 3 of Part 1 of Schedule 1.

Operative Provisions

- 8.5 Articles 3 to 33 of the Order contain provisions for and relating to the authorised project, powers of compulsory acquisition and miscellaneous and general provisions.

Article 3 (Development consent etc. granted by the Order)

- 8.6 Would grant development consent for the authorised development within the Order limits, thereby authorising the construction of the main development, associated development and ancillary works. The authorised development means the development described in Part 1 of Schedule 1. Part 2 describes the ancillary works. These are defined together as the authorised project. All the authorised development must be carried out in accordance with the requirements set out in Part 3 of Schedule 1. This Article follows the wording of model clause 2.

Article 4 (Maintenance of authorised project)

- 8.7 Would make provision for the maintenance of the authorised project. It follows model provision 3 but adds wording to make it clear that it is a continuing power to maintain.

Article 5 (Operation of electricity generating station and keeping of overhead lines)

8.8 Would authorise specifically the undertaker to operate the authorised project in accordance with the provisions of this Order or an agreement made under this Order. This aspect is included pursuant to section 140 of the 2008 Act. It would also authorise specifically the undertaker to keep new overhead electric lines. This aspect is included pursuant to section 141 of the 2008 Act.

Article 6 (Requirements, Appeals etc)

8.9 Would deem the requirements which relate to works landward of mean low water, and hence within the area of the relevant planning authority, as planning conditions under section 72 of the Town and Country Planning Act 1990, including a modification to the application of that Act to provide for the normal right of appeal in relation to the discharge of a planning condition. This article avoids the need for the Commission to have the role of determining detailed approvals under the relevant onshore requirements, which would otherwise be necessary under the 2008 Act.

Article 7 (Benefit of the Order)

8.10 Would provide for the Order to be personal to GWFL save as transferred in whole or part pursuant to this Article. The wording of this article is based on the model clauses. The definition of “undertaker” is GWFL. Would provide that the Order does not run with the land, and that the consent of the Secretary of State is required to any transfer of the Order, save where the transferee or lessee holds a licence under section 6 of the Electricity Act 1989.

Article 8 (Public rights of navigation)

8.11 Provides for the extinguishment of public rights of navigation within the space to be occupied by any wind turbine generators, offshore platforms or meteorology masts within territorial waters. Provides that details of the precise proposed locations of these structures must be notified to the Secretary of State before the article takes effect and that a plan of these locations must be publicised. The article only applies to that part of the array areas within territorial waters. This area is shown on the

Extinguishment of Rights of Navigation Plan (Document 2.21). This provision is also considered at section 7 above.

Article 9 (Survey of Works)

- 8.12 Would authorise the Secretary of State to order a survey and examination of the authorised development or site if it is considered expedient to do so. The Secretary of State's costs would be recoverable from the undertaker. This is the standard provision taken from the harbour model clause 23 (survey of tidal works) and it was also routinely included in Transport and Works Orders and Electricity Act consents for offshore wind farms. It does, however, appear onerous given its open ended nature and it has been included in square brackets on the basis that the undertaker recognises that it has previously been included in consents, but that it does not appear to be justified and should be omitted from the Order as made.

Article 10 (Abatement of works abandoned or decayed)

- 8.13 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 s. 105(2) of the Energy Act 2004 requiring the submission of a decommissioning scheme. This is the standard provision taken from the harbour model clause 22 and was also included in Transport and Works Orders and Electricity Act consents for offshore wind farms, including that for GGOWF.

Article 10 (Deemed licence under the Marine and Coastal Access Act 2009)

- 8.14 Would provide for a deemed licence, the terms of which are set out in Schedule 6, required for the deposit at sea within the Order limits of the specified substances and articles and the construction of works in or over the sea and/or on or under the seabed.

Article 12 (Saving for Trinity House)

- 8.15 This is a standard provision taken from the harbour model clause 53 and was also included in Transport and Works Orders for offshore wind farms, including that for Scarweather Sands (SI 2004 No.3054)

Article 13 (Crown Rights)

- 8.16 Would protect the Crown's position in relation to its own estates, rights, powers, privileges, authorities and exemptions and ensures 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. This article is taken from other Transport and Works Orders for offshore wind farm developments, including Scarweather Sands.

Article 14 (Street works)

- 8.17 Would confer authority on the undertaker to execute works under the streets specified in Schedule 2 (*Streets subject to street works*) within the Order limits and for the purposes of the authorised project. The authority given by this right is a statutory right for the purposes of sections 48(3) (streets, streets works and undertakers) and 51(1) (prohibition of unauthorised street works) of the New Roads and Street Works Act 1991. The scope of this article has deliberately been limited to works under the street as the works in question will use drilling techniques and will not require any street to be broken up from the surface. Otherwise, it follows model provision 8.

Article 15 (Agreements with street authorities)

- 8.18 Would authorise street authorities and the undertaker to enter into agreements relating to the carrying out of works in the street referred to in article 14. Follows model provision 13.

Article 16 (Authority to survey and investigate land)

- 8.19 Would confer upon the undertaker a power to survey and investigate land, including the ability to make trial holes, to use and leave apparatus on the land in question and to enter onto land. The article also makes

provision in relation to the payment of compensation. The article follows the model provision 16, but is restricted to the Order limits.

Article 17 (Compulsory acquisition of land)

8.20 Would confer powers of compulsory acquisition of so much of the Order land as is required for the authorised project or to facilitate it or which is incidental to it. Paragraphs (2) and (3) of model provision 18 have not been followed. Paragraph (2) would have provided for the automatic extinguishment of any rights applying to the Order land as soon as it is vested in the undertaker. This is inconsistent with the provisions of article 20 (private rights) which is based on model provision 22 (private rights of way). Article 20 provides for the extinguishment of rights on the undertaker's entry onto the land concerned, which may take place ahead of the vesting of the land. Vesting of the land could take place after works have been carried out that conflict with the rights in question. Article 20 also provides for rights to be excluded from extinguishment where that is not required. Article 20 has therefore been extended to deal with rights in general and rights have been omitted from this article. Paragraph (3) of the model provision, which would have provided for compensation where a person suffers loss by the extinguishment or suspension of any private right of way, is replaced by a similar provision at paragraph (5) article 20.

Article 18 (Time limit for exercise of authority to acquire land compulsorily)

8.21 Imposes a time limit of five years from the coming into force of the Order for the exercise of powers of compulsory acquisition of land.

Article 19 (Compulsory Acquisition of rights)

8.22 Authorises the acquisition of rights by the creation of new rights. Unlike model provision 21, the article makes no reference to existing rights. There is no need for such rights to be separately acquired since their acquisition will follow automatically from the acquisition of the land to which they are attached. Paragraph (1) provides for such rights to be acquired over land which the undertaker is authorised to acquire under article 17 (*compulsory acquisition of land*). Unlike model provision 21

which would require all rights which the undertaker intends to acquire to be included in the book of reference and shown on a plan accompanying the application for the Order, article 19 provides an essential degree of flexibility so that such new rights may be acquired in the Order land as may be required for any purpose for which that land may be acquired. The revised wording leaves it open, if it is possible to do so, to reduce the area of outright acquisition and rely on rights instead. Without such general power to acquire new rights, this would not be possible. A provision of this kind is usual in TWA Orders and hybrid Bills. For example, such powers are provided by article 19 of the Network Rail (Nuneaton North Chord) Order 2010 (SI 2010 No.1721) and Part 3 of Schedule 6 to the Crossrail Act 2008 (2008 c.18). Paragraph (1) also follows provision included in a number of TWA Orders (e.g. the Docklands Light Railway (Stratford International Extension) Order 2006 (SI 2006 No. 2905)) in authorising the imposition of restrictive covenants affecting land as well as the acquisition of rights. These may include restrictions for the protection of the works or for the purpose of environmental mitigation. The power to impose covenants in this way for the benefit of the Order land again allows for the possibility of reducing the area of outright acquisition and therefore enables a more proportionate exercise of compulsory powers.

- 8.23 Paragraph (2) departs from the model provisions in providing that, in the case of the Order land specified in the related Schedule 3 (land in which only new rights etc. may be acquired), the compulsory powers are not limited to the acquisition of the new rights described in the book of reference and shown on the land plan but rather to the acquisition of such new rights as may be required for the purpose specified in relation to that land in column (2) of the Schedule. In relation to such land the possibility of outright acquisition is not required. Similar provision has been included in the Network Rail (Nuneaton North Chord) Order 2010 (SI 2010 No. 1721). It is not appropriate to describe such rights in the book of reference as it would be inconsistent 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.

8.24 Paragraph (3) provides that where the undertaker needs only to acquire rights over land, it is not obliged to acquire any greater interest in that land.

8.25 It should be noted that it is considered that the compulsory purchase and compensation provisions under general legislation do not require modification in order to apply to the acquisition of new rights. The reason for this is that because the definition of land provided in section 235 of the 2008 Act requires that Part 7 of that Act must be read in accordance with section 159 of the Act. This section states “land” includes any interest in or right over land (section 159 (2)) and acquiring a right over land includes acquiring an existing one or creating a new one (section 159 (3)). Under section 152(3) compensation is payable to any person whose land (which includes rights, in accordance with the definition above) is injuriously affected. In addition, section 125 of the 2008 Act applies Part 1 of the Compulsory Purchase Act 1965 and section 1(3) of that Act provides that land includes anything falling within any definition of that expression in the enactment under which the purchase is authorised. Part 1 of the Compulsory Purchase Act 1965 as applied to the compulsory acquisition of land under the Order by section 125 is therefore made subject to article 2(3) of the Order which provides that the meaning of ‘land’ for the purposes of Part 1 of the 1965 Act as so applied has the meaning given in section 159 of the 2008 Act.

8.26 Paragraph (4) is based on provisions in the Crossrail Act 2008 and recent TWA Orders. They provide for the acquisition of rights by statutory undertakers (rather than by the undertaker) in circumstances where Order land is required for the diversion or relocation of their apparatus and the Secretary of State gives written consent.

Article 20 (Private rights)

8.27 Departs from model provision 22, as explained in relation to article 17 (compulsory acquisition of land) so as to apply to private rights generally

and not just to rights of way. A reference to section 152 of the Planning Act is inserted into paragraph (5) to make it clear that the compensation payable under this article 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 2008 Act.

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

- 8.28 Provides for the Order to apply as if it were a compulsory purchase order for the purposes of the Compulsory Purchase (Vesting Declarations) Act 1981⁴ and provides for that Act to have effect subject to certain modifications. It gives the Company the option to acquire land by this method rather than through the notice to treat procedure.

Article 22 (Acquisition of subsoil only)

- 8.29 Follows model provision 24 and provides that the undertaker may acquire the subsoil in any order land without acquiring the whole of that land allowing the undertaker to acquire a stratum of land below the surface if that is all is required. Without this article, the undertaker would be required to acquire the whole interest in the land. Paragraph 3 of the model provision has not been included since model provision 26 is not incorporated in the Order.

Article 23 (Rights under or over streets)

- 8.30 Follows model provision 27 and provides that the undertaker may use a street within the Order limits for the authorised development without being required to acquire any part of the street or any easement or right in the street, save that references to air space are omitted as no surface street works are proposed. Provision is made for the payment of compensation.

Article 24 (Temporary Use of Land for carrying out the authorised project)

⁴ 1981 c.66

8.31 Follows model clause 28 and enables the undertaker, in connection with carrying out of the authorised project, to take temporary possession of land listed in columns (1) and (2) of Schedule 5 to the Order (land of which temporary possession may be taken). In the case of the land identified in paragraph (2) of article 24, the power to take temporary possession of that land is limited to the airspace over the land for the purpose of oversailing with the jib of a crane. The undertaker may construct temporary works on any land acquired under the article but must remove any such works before giving up possession of the land which (unless the owners of the land agree otherwise) must be within one year of the completion of the work the purpose for which the land has been temporarily acquired. Not less than 14 days before the intended entry on the land, the undertaker is required to serve notice of such intended entry on the owners and occupiers of the land. Provision is made for the payment of compensation. Paragraph (9) provides that the undertaker may not compulsorily acquire the land under the article but the undertaker is not precluded from acquiring rights in the land under article 19 (compulsory acquisition of rights) or article 22 (acquisition of subsoil only). Paragraph (10) restricts the power conferred by paragraph (9) to the airspace only in relation to the land specified in paragraph (2) of article 24.

Article 25 (Temporary Use of Land for maintaining authorised project)

8.32 Follows model clause 29 and enables the undertaker, in connection with carrying out of the authorised project, to take temporary possession of land within the Order limits for the purpose of maintaining the authorised development and to construct such temporary works on the land as may be reasonably necessary for that purpose for a period of five years from the date on which that part of the authorised development is first used. Any temporary works which have been constructed must be removed before giving up possession of the land, Not less than 28 days before the intended entry on the land, the undertaker is required to serve notice of such intended entry on the owners and occupiers of the land. Provision is made for the payment of compensation.

Article 26 (For the protection of specified undertakers)

- 8.33 Gives effect to Schedule 4 for the protection of specified undertakers.

Article 27 (Statutory undertakers)

- 8.34 Authorises the undertaker to acquire land and new rights in land belonging to statutory undertakers within the Order land. Paragraphs (a) and (c) of model provision 31 have been combined. In a departure from the model provision, paragraph (b) provides for the extinguishment of rights and the removal or relocation of apparatus belonging to statutory undertakers over or within any Order land shown on the land plan - it is not restricted to apparatus specifically shown on the land plans and described in the Book of Reference. It is impracticable to show and describe all such apparatus and so a general power for the extinguishment of rights and removal or relocation of apparatus belonging to statutory undertakers over or within any Order land is required. As the land where this power may be exercised is shown on the land plans, and described in the Book of Reference, the requirements of regulations 5(2)(i)(iii) and 7(1)(c) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 are satisfied. The power makes it unnecessary to rely on the provisions under Sections 271 and 272 of the Town and Country Planning Act 1990 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 are subject to the provisions of Schedule 4 providing protective provisions for statutory undertakers which is usual in TWA Orders.

Article 28 (Recovery of costs of new connections)

- 8.35 Provides for compensation to owners or occupiers of property where apparatus is removed under article 28 (statutory undertakers). Paragraph 3 of model provision 33 has not been included since model provision 32 to which that paragraph relates has not been incorporated in the Order.

Article 29 (Application of landlord and tenant law)

8.36 Follows model clause 35 and provides that the general law applying to landlords and tenants shall not apply in respect of any agreement for the leasing of the authorised project or the right to operate it or to any agreement for the maintenance, use or operation of the authorised project so far as any such agreement relates to the terms on which any land which is the subject of a lease is to be provided for that persons use.

Article 30 (Operational land for the purposes of the 1990 Act)

8.37 Provides that for the purposes of section 264(3) of the Town and Country Planning Act 1990 the development consent granted by the Order shall be treated as a specific planning permission. Follows model provision 36.

Article 31 (Felling or lopping of trees)

8.38 Would enable the undertaker to fell or lop trees and shrubs for the purposes of preventing obstruction or interference with the authorised project and danger to the authorised project. Provision is included for the payment of compensation for loss and damage. Follows model provision 39.

Article 32 (Certification of plans)

8.39 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. Follows model provision 41.

Article 33 (Arbitration)

8.40 Makes provision for any dispute arising under the provision of the Order and unless otherwise agreed between the parties to be settled by arbitration. Follows model provision 42.

Schedules

Schedule 1 (Authorised Project)

8.41 Part 1 specifies the authorised development. Paragraph 1 sets out details of the works comprising the generating station NSIP and associated development. The description of Work No. 1 includes the

coordinates for the three array areas which comprise the generating station NSIP.

- 8.42 It is within these array areas in which all the WTGs, any accommodation platform, any collection platform, the meteorological masts and the inter and intra array cables (all comprising Work No. 1) will be constructed.
- 8.43 It is also within these array arrays in which all the offshore substation platforms (Work No.2) must be constructed.
- 8.44 Paragraph 3 provides the coordinates for the entire offshore Order limits. This area comprises the three array areas, and three corridors – a very small corridor between array area C and B, a corridor between array area B and A, and a corridor between array area A and the foreshore at Sizewell. The cables connecting the offshore substations and/or passing directly to the foreshore may be placed anywhere within the offshore Order limits.
- 8.45 Paragraph 2 sets out the details of the works comprising the overhead lines NSIP and its associated development.
- 8.46 Part 2 specifies the ancillary works. These are all seaward of mean low water.
- 8.47 Part 3 sets out certain requirements that the undertaker must meet in relation to the construction and operation of the authorised project. These requirements take a similar form to planning conditions in relation to works landward of mean low water, and a similar form to conditions in consents under section 36 of the Electricity Act 1989, in relation to works seaward of mean high water springs.
- 8.48 The requirements are based upon those contained in Schedule 4 of the model provisions. The model requirements are, however, necessarily general, designed for development on land, as opposed to marine developments, and cover a wide range of schemes. Model provisions which are not relevant to the authorised development have been omitted.

8.49 Requirements 2, 35 and 36 apply generally to the authorised development. Requirements 3 to 17 relate to works seaward of mean low water. Requirements 18 to 34 relate to works landward of mean low water. The dividing line is mean low water as this is the boundary of the onshore planning system and the limit of authority of Suffolk Coastal District Council as the relevant planning authority.

Requirement 1 (Interpretation)

8.50 Provides for the interpretation of words and phrases used in Part 3 of Schedule 1. This defines "connection works" and "transmission works" which together comprise all the works landward of mean low water. The connection works are those onshore works forming part of the associated development for the generating station NSIP. The transmission works are the entirety of the overhead lines NSIP and its associated development. These two categories of onshore works may be constructed at different times, and by different organisations.

8.51 Provides a definition of "relevant works" to make it clear that the approval of details of the connection works and the transmission works, and their progress in construction, and their commencement of use shall operate independently of each other.

Requirement 2 (Time limits)

8.52 Specifies the time limit for commencing the authorised development as the standard period of 5 years from the date of the Order as provided for in Regulation 3 of the Infrastructure Planning (Miscellaneous Prescribed Provisions) Regulations 2010, unless the Secretary of State provides in writing for a longer period.

Requirements 3 to 7 (Detailed offshore design parameters)

8.53 Set out the detailed design parameters within which the authorised development seaward of mean low water must be constructed.

8.54 Requirement 3 restricts the dimensions and other characteristics of WTGs.

- 8.55 Requirement 4 prevents the construction of WTGs, platforms and meteorological masts within part of array area A.
- 8.56 Requirement 5 limits the maximum number of offshore platforms, and restricts the dimensions of the platforms and meteorological masts and the number of foundations on which they may rest.
- 8.57 Requirement 6 restricts the number of cables within the corridors between the array areas and array area A and the foreshore. It limits the total length of export cables and intra/inter array cables.
- 8.58 Requirement 7 restricts the dimensions of the different foundation types to be used for different structures in different designs. It limits the maximum water depth (45 metres) in which a particular foundation design (monopile foundation) may be used. It limits the total number of WTGs to 101 where a particular foundation type is used (gravity base foundation) where any single foundation exceeds a particular dimension (base diameter in excess of 35 metres at seabed level).
- 8.59 The purpose of these various restrictions in requirements 3 to 8 is to ensure that, together with the other limitations in the Order, the authorised development is restricted to that which has been assessed in the environmental statement.

Requirement 8 (Offshore safety management)

- 8.60 Requires the agreement of an Active Safety Management System and Emergency Response and Cooperation Plan before commencement of offshore works, to be given effect once approved. This is a standard provision from previous Electricity Act consents for offshore wind farms, including that for GGOWF, though the emergency response wording, which is requested by the Maritime and Coastguard Agency, is new.

Requirements 9 to 14 (Aids to navigation)

- 8.61 Provide for various matters to aid navigation in the vicinity of the authorised development, including the provision of various navigation aids and notices to mariners; the ongoing availability of the aids to navigation; notification of the progress of works to Trinity House and the UK

Hydrographic Office and the colouring of structures. These are all standard provisions from previous Transport and Works Act and Electricity Act consents for offshore wind farms, including the Electricity Act consent for GGOWF.

Requirement 15

- 8.62 Requires lights to be provided in accordance with the requirements of the Air Navigation Order 2009 or as otherwise directed by the Civil Aviation Authority. This is a standard provision from previous Electricity Act consents for offshore wind farms, including that for GGOWF.

Requirement 16 (Provision against danger to navigation)

- 8.63 Requires notification of Trinity House if the authorised development is damaged or decays and requires deployment of safety measures at the direction of Trinity House. This is a standard provision from previous Electricity Act consents for offshore wind farms, including that for GGOWF.

Requirement 17 (Offshore decommissioning)

- 8.64 Requires a decommissioning programme to be agreed with the Secretary of State prior to the commencement of the authorised development and replicates the wording used on consents for offshore wind farms granted under the Electricity Act 1989 following the relevant provisions of the Energy Act 2004 coming into force, including that for GGOWF. The wording allows for the possibility that a notice under section 105(2) of the Energy Act 2004 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.

Requirement 18 (Stages of authorised development onshore)

- 8.65 Requires a written scheme setting out all the stages of the authorised development landward of mean low water, to be approved by the relevant planning authority before commencement of any onshore works. This follows model requirement 3, save that the approval is made by the planning authority rather than the Commission. This is a point which

flows from Article 6 of the Order, and applies to a number of other requirements below.

Requirement 19 and 20 (Detailed design approval onshore)

- 8.66 Follows the model requirements in requiring approval of details of the relevant works by the relevant planning authority, save where those details are already contained in the named plans approved pursuant to requirement 20. Requirement 19 requires that any works approved by the relevant planning authority are in accordance with the principles of the design and access statement, and, for the avoidance of doubt, are within the Order limits. The operation of requirement 19 and the plans to be approved under requirement 20 have already been explained at paragraph 4.47 onwards in connection with the parameters controlling the design flexibility of the authorised development onshore.

Requirement 21 (Provision of landscaping)

- 8.67 Requires a landscaping scheme to be submitted for approval and approved by the relevant planning authority before the relevant works may commence. The landscaping scheme shall be in accordance with the landscaping strategy submitted with the application unless otherwise agreed with the relevant planning authority. Follows model clause 7, save that trees have been included in this requirement and requirement 22 so as to avoid the need to use model requirement 9.

Requirement 22 (Implementation and maintenance of landscaping)

- 8.68 Requires the undertaker to implement the approved landscaping scheme and to replace trees or shrubs which die within 5 years of planting. Follows model requirement 8.

Requirement 23 (Fencing and other means of enclosure)

- 8.69 Provides that temporary and permanent fencing and other means of enclosure shall be approved before the relevant works are commenced, that construction works shall be securely fenced, temporary fencing removed after completion of the works and that the permanent fencing

around Works No. 6 and 11 (the substation compounds) is in place before they are used. Follows model requirement 13.

Requirement 24 (Surface and foul water drainage)

- 8.70 Provides that the relevant works shall not be commenced until details of the surface and foul water drainage system have been approved by the relevant planning authority in consultation with the sewerage and drainage authorities. Follows model clause 14. It is not currently intended to include welfare facilities and foul drainage provision. Any such foul drainage would be self contained and not require connection to a sewer or drain.

Requirement 25 (Archaeology)

- 8.71 Provides that the relevant works shall not commence until a scheme of investigation has been agreed with the relevant planning authority, which shall be carried out as approved. Follows model requirement 16 in all important respects, and has additional elements requested by the relevant planning authority.

Requirement 26 (Ecological management plan)

- 8.72 Provides that the relevant works shall not commence until an ecological management plan for the relevant works reflecting the surveys, mitigation and enhancement measures in the environmental statement has been approved by the relevant planning authority. The scheme shall be implemented as approved, unless otherwise agreed. Follows model requirement 17.

Requirement 27 (Construction code of practice)

- 8.73 Provides that the relevant works shall not commence until a construction code of practice for the relevant works has been submitted and approved by the relevant planning authority. The code shall cover all the matters in the draft code submitted with the application and any other matters reasonably required by the relevant planning authority. It shall be implemented as approved, unless otherwise agreed. Follows model

requirement 19. Following the note to requirement 19, the scope of the draft code means that various matters do not need specific requirements.

Requirement 28 (Construction hours)

- 8.74 Provides for construction hours on specified days, with none on Sundays or bank holidays, for the relevant works, with exceptions for certain continuous operations, delivery of abnormal loads, works on the foreshore and other cases agreed with the relevant planning authority. Departs from model requirement 24 to reflect the specific circumstances of the works and the location.

Requirement 29 (Control of noise during operational phase)

- 8.75 Specifies noise limits for noise arising from Work No. 6 and Work No. 11 (the two substation compounds), considered separately, and with three specified locations for measuring the noise. It also restricts standby generator testing, to specified days and hours unless otherwise agreed. Departs from model requirement 25 by providing the detailed noise controls on the face of the Order rather than specifying a mechanism for them to be agreed later.

Requirement 30 (Control of artificial light emissions)

- 8.76 Provides that the relevant works shall not be commenced until a scheme for management and mitigation of artificial light emissions during operations. has been approved for the operation of the relevant works. The approved scheme shall be implemented and observed unless otherwise agreed.

Requirement 31 (European protected species)

- 8.77 Provides that the relevant works shall not be commenced until a final pre-construction survey has been carried out to establish whether there are any European protected species present, or likely to be affected by the works. If so the requirement provides that the relevant part of the works shall not commence until a scheme for protection and mitigation has been approved, which shall be implemented as approved unless otherwise agreed. Follows model requirement 34.

Requirement 32 (Restoration of land used temporarily for construction)

- 8.78 Provides that any land used temporarily as part of the onshore works shall be restored to its prior condition or such other condition as the relevant planning authority shall approve, (save, for the avoidance of doubt, where the land forms part of the approved permanent works or the approved landscape scheme) within a specified period after completion of the onshore works. Based on model requirement 35.

Requirement 33 (Interference with telecommunications)

- 8.79 This not a model provision and has been included at the request of the relevant planning authority. It provides that if the relevant works give rise to interference with telecommunications or television equipment at nearby residential properties the undertaker shall submit a scheme to the relevant planning authority to rectify the position. The approved scheme shall be carried out unless otherwise agreed.

Requirement 34 (Onshore decommissioning)

- 8.80 This not a model provision. It has been included at the request of the relevant planning authority, to reflect the fact that the onshore works are within an Area of Outstanding Natural Beauty. It provides that in the event the relevant works cease commercial operation, the undertaker shall submit a decommissioning scheme to the relevant planning authority for approval. The submitted scheme shall accord with the onshore decommissioning statement that is submitted with the application. The undertaker is required to carry out the approved scheme, unless otherwise agreed.

Requirement 35 (Requirement for written approval)

- 8.81 Provides that where any requirement requires the approval of the Commission/Secretary of State or the relevant planning authority such approval shall be in writing.

Requirement 36 (Amendments to approved details)

- 8.82 Provides that any details approved pursuant to any requirement shall be taken to include any amended details which are subsequently approved.

General

8.83 The authorised development does not affect any public rights of way, involve any surface highway works (as opposed to drilling under two public highways), or involve any new or improved highway accesses. Accordingly, none of the model requirements relating to these matters are required.

Schedule 2 (Streets subject to street works)

8.84 Specifies those streets which are to be the subject of street works.

Schedule 3 (Land in which only new rights etc, may be required)

8.85 Specifies the land in which only new rights etc, may be required.

Schedule 4 (For the protection of specified undertakers)

8.86 Would provide protective provisions for specified undertakers.

Schedule 5 (Land of which temporary possession may be taken)

8.87 Specifies the land of which temporary possession may be taken.

9 SCHEDULE 6: DEEMED MARINE LICENCE UNDER MARINE AND COASTAL ACCESS ACT 2009

9.1 This schedule sets out the deemed licence for the authorised development seaward of mean high water springs.

Part 1 - Licensed marine activities

Paragraph 1 (Intepretation)

9.2 Provides interpretation of certain words and phrases used in the licence and contact details for key organisations relevant to the content of the licence.

9.3 The definition of “authorised scheme” only covers works seaward of mean high water springs, as that is the extent of the ambit of the marine licensing regime.

- 9.4 The definition of “undertaker” cross refers to the DCO and provides that where the DCO is transferred under the provisions of Article 7 that the licence will transfer to the same person. The question of the transfer of the deemed marine licence has been considered in pre-application discussions with the MMO, but is likely to require further consideration.

Paragraph 2 (Details of licensed marine activities)

- 9.5 Specifies the licensable marine activities which are authorised by the licence in connection with the construction and operation of the generating station and offshore associated development. It deliberately repeats in full the description of the works from Part 1 of Schedule 1. The only change is in relation to Work No. 3, where the description has been re-cast to cover works up to mean high water springs, being the limit of the jurisdiction of the marine licence. The equivalent work in relation to Part 1 of Schedule 1 only covers the work up to mean low water, where the onshore planning regime begins. This reflects the fact that there is an overlap in the intertidal area (which is relatively narrow in the case of GWF) between the geographic area of the local planning authority, which will be responsible for enforcing conditions onshore, and the geographic area of the MMO, which is responsible for enforcing licence conditions offshore.

Part 2 – Licence conditions

Conditions 1 to 5 (Design parameters)

- 9.6 Repeats the design parameters from requirements 3 to 7 of Part 1 of Schedule 1 to the DCO. It was normal for FEPA licences to include a condition specifying these types of design limitations, which were repeated from the Electricity Act 1989 consent. It has the effect of putting beyond doubt the fact that when considering approvals under the licence, the details of proposed works must comply with these constraints under the marine licence as well as the DCO.

Condition 6 (Notifications and inspections)

- 9.7 Provides for a system of providing copies of the licence to agents and contractors, restricting the use of contractors and vessels to those notified

to the MMO and publicising commencement and progress of the licensed activities.

Condition 7 (Chemicals, drilling and debris)

- 9.8 Restricts the use of chemicals and other substances, the disposal of certain drilling arisings, and the monitoring of construction materials so as to identify those which may accidentally fall into the sea, which shall then be investigated and, where identified, recovered.

Condition 8 (Force majeure)

- 9.9 Provides for the notification of deposits made in an emergency.

Condition 9 (Pre-construction plans and documentation)

- 9.10 Provides for the submission for approval before the commencement of licensed activities of a construction and monitoring programme, a construction method statement, a project environmental management and monitoring plan, a scour protection management plan, a marine mammal mitigation protocol (where appropriate), a cable specification and installation plan and a scheme of archaeological investigation.

Condition 10

- 9.11 Requires each of the documents for approval under licence condition 7 to be submitted for approval at least 4 months prior to the intended start of construction, and that each approved document be complied with, unless otherwise agreed.

Condition 11 (Seasonal restriction)

- 9.12 Prevents foundation piling during dates in specified array areas each year to avoid adverse effects on herring and sole spawning, unless otherwise agreed with the MMO.

Condition 12 (Reporting of engaged agents, contractors and vessels)

- 9.13 Requires the undertaker to provide to the MMO details of agents and contractors engaged to carry out the licensed activities, and a weekly update as to which vessels are being used during construction.

Condition 13 (Equipment and operation of vessels engaged in licensed activities)

- 9.14 Specifies various equipment and other conditions which vessels used for the licensed activities must be fitted with and comply with.

Condition 14 (Pre-construction monitoring)

- 9.15 Specifies the manner in which the undertaker shall discharge its obligation under licence condition 9(a) to put forward proposals for pre-construction surveys/monitoring, and provides an indicative list of the expected pre-construction surveys, subject to detailed proposals being put forward by the undertaker, for approval.

Condition 15 (Construction monitoring)

- 9.16 Specifies the manner in which the undertaker shall discharge its obligation under licence condition 9(a) to put forward proposals for construction surveys/monitoring, and specifically requires certain noise monitoring. It provides for the MMO to require further noise monitoring depending on the results and allows the MMO to prevent the use of pile installation in certain circumstances.

Condition 16 (Post construction monitoring)

- 9.17 Specifies the manner in which the undertaker shall discharge its obligation under licence condition 9(a) to put forward proposals for post-construction surveys/monitoring, and provides an indicative list of the expected post-construction surveys, subject to detailed proposals being put forward by the undertaker, for approval.