

Hornsea Project Three
Offshore Wind Farm



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Covering Letter
PINS Document Reference: A1.1
APFP Regulation 5(2)(q)

Date: May 2018

Hornsea 3
Offshore Wind Farm

Orsted

Application Form

Covering Letter

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This report is also downloadable from the Hornsea Project Three offshore wind farm website at:
www.hornseaproject3.co.uk

Ørsted

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Front cover picture: Kite surfer near a UK offshore wind farm © Orsted Hornsea Project Three (UK) Ltd., 2018.

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National Infrastructure Directorate
The Planning Inspectorate
Temple Quay House
Temple Quay
Bristol
BS1 6PN

Dear Sirs,

**Planning Act 2008 – Application for Development Consent
Orsted Hornsea Project Three (UK) Ltd
The proposed Hornsea Project Three Offshore Wind Farm Order (“the Order”)
Application ref: EN010080**

We are pleased to enclose an application from Orsted Hornsea Project Three (UK) Ltd (“the Applicant”) for an Order granting development consent (“the Application”) pursuant to section 37 of the Planning Act 2008 (“the 2008 Act”) for the proposed Hornsea Project Three Offshore Wind Farm (hereafter referred to as “Hornsea Three”).

1. Subject of the Application

- 1.1. The Application is for development consent to construct, operate and maintain Hornsea Three. Hornsea Three is the third development proposed within the former Hornsea Zone, and it comprises up to 300 wind turbine generators together with associated offshore and onshore infrastructure and all associated development.
- 1.2. Hornsea Three is located within the former Hornsea Zone, to the east of Hornsea Project One and Hornsea Project Two. It is located 121 km off the Norfolk coast and 160 km off the Yorkshire coast, and covers an area of approximately 696 km².
- 1.3. Development consent is required to the extent that development is or forms part of a Nationally Significant Infrastructure Project (NSIP) pursuant to section 14(1)(a) and 15(3) of the 2008 Act. As Hornsea Three is expected to have a capacity of greater than 100 MW it is an NSIP for the purposes of the 2008 Act. It is for this reason that the Project falls within the remit of the Secretary of State.

2. Documentation enclosed and application fee

- 2.1. We enclose two hard copies of:
 - The completed and signed application form;
 - The Environmental Statement (ES); and

- Each of the other documents listed in the schedule provided as Application Document Reference A1.2.
- 2.2. We also enclose 10 USB Memory Sticks containing the documentation at 2.1.1 -2.1.3 above. In addition, we enclose 2 USB Memory Sticks containing the documentation at 2.1.1-2.1.3 above with any necessary redactions and minus any confidential documents, to assist with document upload to the Planning Inspectorate webpage.
- 2.3. A fee in the sum of £6,939 has been submitted by BACS transfer to the account of the Planning Inspectorate (PINS).

3. Application formalities

- 3.1. The Application is made in the form required by Section 37(3)(b) of the 2008 Act. The Application documentation complies with the overall requirements of Section 37 and the requirements set out in:
- The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the APFP Regulations);
 - The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009;
 - The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017; and
 - The published Communities and Local Government (CLG) Guidance (March 2015) and PINS' Advice Note 6 on the preparation and submission of application documentation (February 2016).
- 3.2. With regards to Question 22 of the Application Form (Application Document Reference A1.4), the response 'Construction or extension of an offshore generating station (Reg. 6 (1a))' has been selected, where the Applicant understands APFP Regulation 6(1b) should apply. The Applicant has confirmed with the Planning Inspectorate on 17 April 2018 that this will not affect acceptance of the Application.
- 3.3. The Applicant confirms that the Planning Inspectorate will be able to publish the Application (with any necessary redactions and minus any confidential documents (2.2)) on the Planning Inspectorate webpage at the point of submission.

4. Description of the Project

- 4.1. The Application seeks consent for the development outlined in paragraph 1.1 above and described in full in Schedule 1 to the draft Order (Application Document Reference A3.1) and in volume 1, chapter 3: Project Description of the Environmental Statement (Application Document Reference A6.1.3). The development, which is the subject of the Application, also contains associated development under Section 115 of the 2008 Act, including the infrastructure necessary to connect Hornsea Three to the National Grid. The proposed DCO will, among other things, licence and authorise:

- The construction and operation of up to 300 offshore wind turbines and their foundations;
- The construction of up to 12 offshore collector substations, up to four offshore HVDC converter substations, up to three offshore accommodation platforms and up to four surface offshore HVAC booster stations or six subsea HVAC booster stations (or a combination thereof) and their foundations;
- The construction of a network of subsea electrical circuits connecting the wind turbines, offshore collector substations, offshore HVDC converter stations and offshore accommodation platforms;
- The construction of a marine connection to the shore, the mode of transmission of which may be HVAC or HVDC, running in a south-westerly direction from the southern boundary of Hornsea Three to the proposed landfall at Weybourne in North Norfolk, including cable and pipeline crossing works, consisting of up to six subsea electrical circuits which may connect with the offshore HVAC booster station(s);
- The construction of a foreshore connection consisting of an extension of the electrical circuits comprising the marine connection to the shore, crossing the beach and terminating at the electrical circuit transition joint bays;
- The construction of up to six underground electrical circuit transition joint bays in the vicinity of Weybourne in the county of Norfolk, housing the connections between the offshore and the onshore electrical circuits;
- The construction of up to six underground transmission electrical circuits, running in a southerly direction for approximately 55 km, connecting the underground electrical circuit transition joint bays in the vicinity of Weybourne to the onshore HVDC converter/HVAC substation;
- The construction of an onshore HVAC booster station in the vicinity of Little Barningham;
- The construction of an onshore HVDC converter/HVAC substation and associated facilities in the vicinity of Swardeston; and
- The construction of a connection consisting of up to two underground electrical circuits between the onshore substation and the Norwich Main National Grid substation, including a connection within the National Grid substation.

4.2. The application includes the option to construct Hornsea Three in one or more phases.

4.3. The application includes the option for two different electrical solutions. The options are either to use a High Voltage Direct Current (HVDC) electrical solution or a High Voltage Alternating Current (HVAC) electrical solution. Both transmission solutions have a range of relative benefits and drawbacks in terms of stage of technological development, costs and impacts, and at this stage of development it is not appropriate to commit to either technology.

- In the HVAC solution, an offshore HVAC booster station and/or onshore HVAC booster station would potentially be required in order to mitigate transmission losses over the cable corridor.
- In the HVDC solution neither onshore nor offshore HVAC booster stations would be required.
- Offshore wind farms have traditionally used HVAC connections; however HVDC connections become more viable at far from shore projects and are used on a number of projects in Germany.

- To date HVDC technology has been used to transmit electricity from one grid to another in the form of an interconnector, and has yet to be applied to any UK offshore wind farms. The increased complexity of offshore HVDC systems compared to those used for interconnectors, as well as less experience in the technology, could lead to transmission reliability issues.
- At present there are very few suppliers with the capability to produce and supply HVDC transmission technology suitable for a project of this size, which could result in comparatively longer lead times.
- Due to these uncertainties, a decision on which transmission system (HVDC or HVAC) to adopt will not be made until post consent after extensive engagement with potential systems suppliers has taken place. For this reason, both technologies have been maintained within the design envelope for which Hornsea Three is seeking consent.
- Further details of this approach are set out in the Statement of Reasons (Application Document Reference A4.2) and the Environmental Statement volume 1, chapter 3: Project Description (Application Document Reference A6.1.3).

5. Consent Flexibility – Rochdale Envelope

- 5.1. The draft Order provides for flexibility in relation to the generating stations and their associated development. The Applicant has given careful consideration to the guidance in the National Policy Statements and PINS' Advice Note 9 "Rochdale Envelope" together with pre-application discussions with PINS. In the Applicant's view, the inclusion of the flexibility provided for in the draft Order is fundamental to whether or not the Order is fit for purpose, and therefore whether or not Hornsea Three will proceed.
- 5.2. An example of the flexibility sought within the Order is with regard to phasing of Hornsea Three construction, as set out above (paragraph 4.2).
- 5.3. The environmental impact assessment (EIA) which has been carried out in support of Hornsea Three has been careful to take account of the flexibility sought in the draft Order. This matter is addressed in the Environmental Statement and in all cases the maximum design parameters referred in the draft Order have been adopted in the Environmental Statement.
- 5.4. Further explanation on the Applicant's approach to the Rochdale Envelope (i.e. assessment against maximum design parameters) is contained within Environmental Statement volume 1, chapter 5: Environmental Impact Assessment Methodology (Application Document Reference A6.1.5).

6. Deemed Marine Licences

- 6.1. Included within the draft Order at Schedules 11 and 12 are deemed marine licences as provided for in section 149A of the 2008 Act. Where possible the Applicant has sought to take account of lessons learnt through the consent and subsequent construction of other Ørsted offshore wind farms in the documents submitted. The Applicant expects to discuss these documents with key statutory stakeholders to refine some aspects of the detail of the Order and deemed licences after acceptance, as has taken place with other accepted NSIP applications.
- 6.2. Plans are submitted to show the potential interactions and the spatial extents of the two deemed marine licences and associated Work No.s in the draft Order (Application Document Reference A2.12.1 and A2.12.2).

7. Habitats regulations

- 7.1. The Application documents include a Habitats Regulations Assessment Report (Application Document Reference A5.2), as required by Regulation 5(2)(g) of the APFP Regulations. This identifies all relevant European sites and provides sufficient information for the competent authority to determine whether Hornsea Three is likely to have an adverse effect on the integrity of any European site. In preparing the Habitats Regulations Assessment report, the Applicant has been mindful throughout of PINS' Advice Note 10 "Habitats Regulations Assessment".
- 7.2. The Applicant is aware of and has given consideration to the recent case of *People over Wind and Sweetman v Coillte Teoranta* in the European Court of Justice dated 12 April 2018 (Case C-323/17) following referral by the Irish High Court. That case focuses on the question of 'whether, or in what circumstances, mitigation measures can be considered when carrying out screening for appropriate assessment under Article 6(3) of the Habitats Directive?'. The Applicant has carried out screening (stage 1) for the purposes of the habitat regulations and concluded that it could not rule out likely significant effects in relation to some European sites and their features. Therefore, it was necessary for the Applicant to proceed to stage 2 of the HRA process and undertake an appropriate assessment in respect of some of the European sites and their features considered in the screening report. The Application is therefore accompanied by a Report to Inform Appropriate Assessment (Application Document Reference A5.2) to inform the appropriate assessment to be undertaken by the Secretary of State. The Applicant considers that its application documentation is complete, complies with Section 55 of the Planning Act 2008, and is of a satisfactory standard to proceed to examination. The Applicant will keep its Report to Inform Appropriate Assessment under review during the pre-examination phase and, in the normal manner, will provide updates to that report and/or other application documents that it considers necessary during the course of examination in light of questions and comments received from the Examining Authority and interested parties.

8. Marine Conservation Zone (MCZ) Assessment

- 8.1. The Application documents include a Marine Conservation Zone (MCZ) Assessment Report (Application Document Reference A6.5.2.3), as required by Section 126 of the Marine and Coastal Access Act 2009. This identifies all relevant MCZs and provides sufficient information for the competent authority to determine whether Hornsea Three is likely to have an adverse effect on the integrity of any MCZ. In preparing the MCZ assessment, the Applicant has been mindful throughout of guidance published by the MMO in 2013 which describes how MCZ assessments should be undertaken in the context of marine licence licensing decisions.

9. Compulsory acquisition

- 9.1. The Applicant is seeking authority within the Order to acquire compulsorily land and interests and other related powers to support the delivery of Hornsea Three, details of which can be found in the Book of Reference (Application Document Reference A4.3) and Statement of Reasons (Application Document Reference A4.2). Adequacy of funding for compensation is dealt with in the Funding Statement (Application Document Reference A4.1).
- 9.2. The Applicant has been granted a Generation Licence under the provisions of the Electricity Act 1989 by OFGEM and is therefore a statutory undertaker for the purposes of compulsory acquisition.
- 9.3. Sections 127 and 132 of the 2008 Act apply. Details of the extent of the proposed works affecting land held by a statutory undertaker or special category land can be found in the Statement of Reasons (Application Document Reference A4.2).

10. Other consents

- 10.1. Details of other consents and licences not forming part of the Order, which the Applicant or others may be seeking in relation to the construction and operation of the proposed generation station and associated development, are set out in the Consents Management Plan (Application Document Reference A7.4).

11. Pre-application consultation

- 11.1. The Applicant has had careful regard to the pre-application consultation requirements of the 2008 Act, the guidance on pre-application consultation issued by the DCLG and PINS, and its pre-application discussions held with PINS, as required by Sections 50 and 55(4) of the 2008 Act.
- 11.2. As required by Section 37(3)(c), the Application is accompanied by a Consultation Report (Application Document Reference A5.1), which provides details of the Applicant's compliance with sections 42, 47, 48 and 49 of the 2008 Act. The responses of statutory and non-statutory consultees

are listed and summarised in the Consultation Report and these have informed the evolution of the Application and Hornsea Three overall.

12. Other matters

- 12.1. Under Regulation 6(b)(i) of the AFPP Regulations, an applicant is required to provide details of the proposed cable route and the method of installation for any cable. This information can be found in the Cable Statement (Application Document Reference A7.2) and in the Works Plans (Application Document Reference A2.4.1 and 2.4.2).
- 12.2. Under Regulation 6(b)(ii) of the AFPP Regulations, an applicant is required to provide a statement in respect of Safety Zones. This information can be found in the Safety Zone Statement (Application Document Reference A7.1).
- 12.3. Under regulation 5(3) of the APFP Regulations, any plans, drawings or sections shall be no larger than A0 size, shall be drawn to an identified scale (no smaller than 1:2500) and, in the case of plans, shall show the direction of North. A number of offshore plans are provided at a scale that is larger than 1:2500 as it is considered that the chosen scale better describes the required information.
- 12.4. Under Regulation 5(2)(l) of the APFP Regulations, an applicant is required to provide a plan of certain nature conservation sites and features and an assessment of any effects on those sites and features likely to be caused by the proposed development. There is an equivalent requirement under Regulation 5(2)(m) in relation to certain historic sites and features. The plans are attached as separate documents (Application Document Reference A2.9.1, A2.9.2, A2.8.1 and A2.8.2) but the assessments are provided in the Environmental Statement and not as stand-alone documents.

We look forward to hearing from you in relation to the formal acceptance of the Application. If we can be of any assistance in that regard, please do not hesitate to contact us using the details below.

Yours faithfully,

Stuart Livesey

Project Development Manager

Hornsea Project Three Offshore Wind Farm