Hornsea Project Four

Position Statement between Hornsea Project Four and National Grid Interconnector Holdings

Deadline 2, Date: 29th March 2022
Document reference: G1.11
Revision: 02

Prepared Francesca De Vita (January 2022)
Checked Bridgit Hartland-Johnson (January 2022)
Accepted Aparna Majmudar (January 2022)
Approved Jamie Baldwin (January 2022)

Doc reference: G1.11 Revision 02
Ver. no. A

Revision Summary

Rev	*Date*	*Prepared by*	*Checked by*	*Approved by*
01	24/01/2022	Francesca De Vita	Bridgit Hartland-Johnson, January, 2022	Jamie Baldwin
02	23/03/2022	Bridgit Hartland-Johnson, March 2022	Thomas Watts, March 2022	Jamie Baldwin

Revision Change Log

Rev	*Page*	*Section*	*Description*
01	1-4	Joint Position Statement	Submitted at Deadline 1
02	5-12	Annex 1	OTNR Coordination Annex now included

Hornsea Project Four and NGIHL -Continental Link Statement

The Hornsea Four transmission infrastructure design has evolved over the last four years in line with the current regulatory framework in the UK. This has resulted in a traditional “point to point” connection, with offshore substations located proximate to the turbine array and export cables routeing from the offshore substation(s) to an onshore project substation located near to the National Grid connection point at Creyke Beck substation (plus a connection between the two).

Orsted Hornsea Project Four Limited (the Applicant) is aware of the ongoing Offshore Transmission Network Review (OTNR) being carried out by BEIS, Ofgem and NGESO. The Applicant recognises the objective of the OTNR which is to encourage developers to work together to co-ordinate and develop transmission infrastructure without frustrating timely delivery of inflight projects. The Applicant is also aware of the draft National Policy Statements (NPS), which encourage coordinated transmission systems.

Mindful of the direction of policy and the government and sector ambition for greater coordination, discussions have taken place between the Applicant and National Grid Interconnector Holdings (NGIHL) to explore and understand coordination opportunities between our two projects in this geography; Hornsea 4 and NGIHL’s Continental Link project.

The Continental Link Multi-Purpose Interconnector (MPI) is a proposed high voltage direct current (“HVDC”) electricity link between the British and Norwegian transmission systems with 1800MW capacity to be connected to the National Transmission System (“NTS”) at Creyke Beck substation near Cottingham, East Yorkshire. In addition to providing an electricity link between the British and Norwegian transmission systems, NGIHL is developing the MPI to be capable of connecting offshore windfarm(s) to the NTS in each country via the interconnector. On 18th August 2021, Secretary of State for Business, Energy and Industrial Strategy (BEIS) endorsed NGIHL’s request under s35 of the Planning Act for Continental Link to be considered as a DCO.

Discussions between Orsted and NGIHL are at present focussing on activities related to coordination of respective onshore transmission infrastructure of the Orsted and NGIHL projects, (for example, use of near shore cable routes, landfalls, onshore cable routes and substation / converter station sites), inclusive of development and delivery aspects of these matters.

Given the ongoing regulatory uncertainties associated with coordinated transmission, it is vital that the Applicant continues with its own transmission option in the Hornsea Four DCO application to ensure that the project can contribute to the urgent need for renewable energy capacity within the 2020s.

The Applicant and NGIHL will provide an update on the progress of their discussions as the examination of the Hornsea Four DCO application progresses.

Signed on behalf of Orsted Hornsea Project Four Limited

[redacted]

Jamie Baldwin, Development Project Director - Orsted

Signed on behalf of National Grid Interconnector Holdings Limited

[redacted] …….

Date: 24 January 2022

Hornsea Project Four

Position Statement between Hornsea Project Four and National Grid Interconnector Holdings

Deadline 2, Date: 29th March 2022
Document reference: G1.11 Rev 02
Annex 1: OTNR Coordination
Revision: 02

Revision Summary				
Rev	*Date*	*Prepared by*	*Checked by*	*Approved by*
02	24/03/2022	Bridgit Hartland-Johnson	Tom Watts	Jamie Baldwin

Revision Change Log			
Rev	*Page*	*Section*	*Description*
02	5-12	Annex 1	OTNR Coordination Annex added

1 Disclaimer

1.1.1.1 This document is work in progress and will be updated as and when new information or opportunities arise from the ongoing coordination efforts between Ørsted and National Grid Interconnector Holdings Limited (NGIHL).

1.1.1.2 Due to project timings and regulatory constraints. it is considered unlikely collaboration will be secured during the examination and will be post-consent.

2 Background

2.1.1.1 Ørsted Power (UK) Limited (Ørsted) is the parent company of Hornsea Project Four.

2.1.1.2 For offshore wind, the UK is one of the most mature markets globally and as part of its legally binding Net Zero commitment the UK Government has committed to support the build out of 40GW by 2030 and 50GW by 2050. Energy security, affordability and decarbonisation also drive the UK Government's aim of at least 18GW of interconnection capacity by 2030.

2.1.1.3 These commitments highlighted a need to investigate whether the current UK Electricity Market design was fit to deliver these commitments. In particular, the ability to integrate the increasing levels of renewable energy has been in focus for several UK Government initiatives. Ørsted is working not only with the Government department on these initiatives, but also with regulators and industry. The Offshore Transmission Network Review (OTNR)[1] has been launched and will examine how a coordinated approach to how we can better build and utilise the electricity transmission system to enable the connection of 50GW of offshore wind by 2050. The OTNR includes a specific workstream for considering the potential for facilitating offshore wind with Multi-Purpose-Interconnectors. The Early Opportunities workstream of the OTNR aims to facilitate coordination for in-flight projects by making changes within the current overall regulatory framework. In August 2020, BEIS and Ofgem published a joint Open Letter which invited stakeholders to propose potential pathfinder projects and identify perceived barriers to coordination.

2.1.1.4 The intention of the OTNR Early Opportunity pathfinder[2] to provide an avenue for offshore developers to consider opportunities for these projects to work together to determine whether there is a more coordinated option available than that previously identified through the traditional CION (Connection Infrastructure Options Note)[3] approach.

2.1.1.5 Hornsea Four is an offshore wind farm which Orsted Hornsea Project Four Limited (the Applicant) is proposing to develop in the North Sea, approximately 69km off the Yorkshire Coast. with an offshore area of up to 468 km^2 where up to 180 wind turbines could be located. The Continental Link Multi-Purpose Interconnector (MPI) is a high voltage direct

[1] Offshore transmission network review - GOV.UK (www.gov.uk)
[2] Offshore Coordination Project | National Grid ESO
[3] https://www.nationalgrideso.com/document/45791/download

current (HVDC) electricity link between the British and Norwegian transmission systems and offshore windfarm(s), connecting to the National Transmission System (NTS) via the Creyke Beck substation near Cottingham, East Yorkshire.

2.1.1.6 Whilst the OTNR pathway to 2030 and the development of a Holistic Network Design (HND) would apply mainly to projects that have secured seabed leases under the Crown Estate leasing round 4 (LR4) as well as interconnectors and Oil and Gas assets seeking to connect to shore, Hornsea project 4 is advanced in its development timeline as it has already passed CION and had its DCO application accepted by the Secretary of State. The project is currently in its Examination phase with a consent decision due in February 2023. This level of maturity means that a grid connection point has been allocated and the vast majority of significant agreements with landowners for the landfall and cable route sites are in place. The Continental Link MPI DCO application is anticipated for submission in Q3 2023.

2.1.1.7 Despite Hornsea Four being more advanced in terms of development and consenting, i.e., being post CION (Connection and Infrastructure Options Note) and potentially receiving a consent decision in February 2023, Continental Link MPI is anticipated to make progress such that there would be an overlap in the timing of deployment and construction activities onshore and offshore.

2.1.1.8 **Figure 1** and **Figure 2** show the proposed developments.

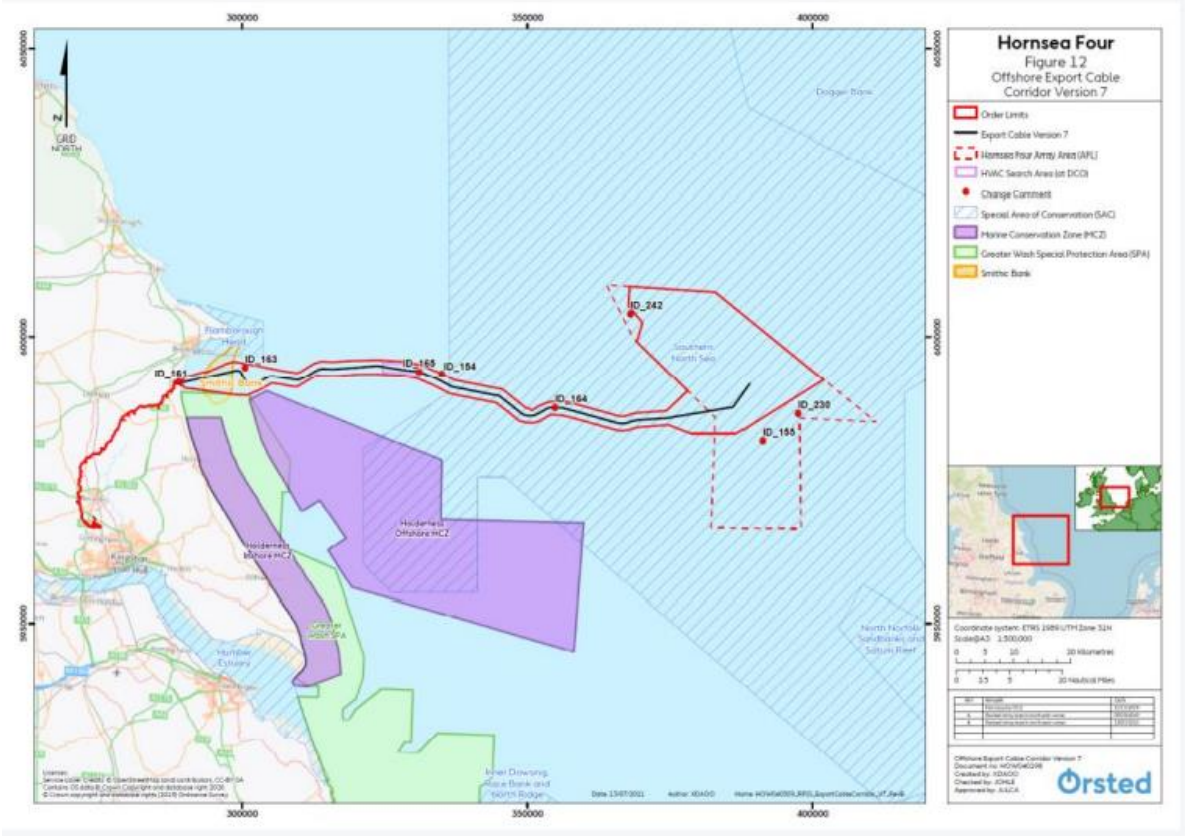

Figure 1: Hornsea Project 4

Figure 2: Continental Link

2.1.2 Electricity Transmission and East Riding

2.1.2.1 Considering the estimated operational date of the Continental Link as stated in the Interconnector Register[4], it appears that there is an opportunity for the projects to coordinate construction efforts.

2.1.2.2 The Applicant has specifically referred to the National Grid Continental Link project in the Cumulative Effects Assessment (CEA) part of the Environmental Statement (ES)[5] but clarified that whilst there is an intention to coordinate, currently these is not enough information to assess the project

2.1.2.3 Paragraph 5.2.2.5 says *"Furthermore, whilst the National Grid Continental Link project has not been assessed as part of the CEA (as the project is at an early stage of development and location unconfirmed), the Applicant has been in regular engagement with National Grid to discuss opportunities to collaborate."*

[4] https://data.nationalgrideso.com/connection-registers/interconnector-register
[5] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010098/EN010098-000745-A4.5.5%20ES%20Volume%20A4%20Annex%205.5%20Onshore%20Cumulative%20Effects.pdf

3 NGIHL Relevant Representation to Hornsea Project 4 DCO Examination Process

NGIHL submitted the following Relevant Representation:

"This is a Relevant Representation submitted by National Grid Interconnector Holdings Limited (NGIHL), requesting that NGIHL is treated as an Interested Party throughout the Examination process of the Development Consent Order (DCO) application for the Hornsea Four Offshore Wind Farm (Generating Stations) Project (PINS ref: EN010098) (Hornsea Four Project). National Grid Interconnector Holdings Limited (NGIHL), as part of National Grid Ventures (NGV), is a division of National Grid plc, responsible for both developing and operating businesses in our UK and US territories. NGIHL has entered into a connection agreement with National Grid Electricity System Operator Limited (ESO) for a 1.8 GW interconnector connection, currently known as the Continental Link Multi-Purpose Interconnector.

CONTINENTAL LINK MULTI_PURPOSE INTERCONNECTOR

The Continental Link Multi-Purpose Interconnector is a high voltage direct current (HVDC) electricity interconnector that can connect Great Britain to other European markets, to be connected to the British National Transmission System (NTS) via the Creyke Beck substation near Cottingham, East Yorkshire. In addition, as a multi-purpose interconnector, Continental Link would also have the potential to deliver benefits from combining offshore transmission with market-to-market interconnection – enabling reduced curtailment of offshore wind, reducing landfall points and capital expenditure.

On 18th August 2021, the Secretary of State for Business, Energy and Industrial Strategy (BEIS) endorsed NGIHL's request under s35 of the Planning Act 20086 for Continental Link to be considered as development for which development consent is required. Continental Link is in the pre-application stage, with stakeholder engagement due to commence in 2022; including dialogue with the Planning Inspectorate over the potential form and content of its future Development Consent Order application which will be inclusive of the terrestrial and marine environments to the Exclusive Economic Zone (EEZ).

NGIHL'S INTEREST IN THE HORNSEA FOUR PROJECT

NGIHL is aware of and is actively participating in the ongoing Offshore Transmission Network Review (OTNR) being carried out by BEIS, Ofgem and NGESO. NGIHL recognises the objective of the OTNR which is to encourage developers to work together to co-ordinate and develop transmission infrastructure, understanding the ability to optimise the delivery of inflight projects and minimising impacts on local communities and stakeholders.

NGIHL has also responded to the draft energy National Policy Statements (NPS) consultation, which encourages co-ordinated transmission systems. Mindful of the direction of policy and the government and sector ambition for greater co-ordination, discussions have taken place between NGIHL and Ørsted to explore and understand co-ordination opportunities between our two projects in this geography; a signed Position Statement to this affect is in place and will be submitted to the ExA.

[6] https://www.gov.uk/government/publications/national-grid-ventures-ngv-continental-link-multi-purpose-interconnector-section-35-direction-planning-act-2008

Discussions between Ørsted and NGIHL are at present focussing on activities related to co-ordination of respective transmission infrastructure of the Ørsted and NGV projects, (for example, use of nearshore cable routes, landfalls, onshore cable routes and substation / converter station sites), inclusive of development and delivery aspects of these matters. NGIHL would be happy to conclude a Statement of Common Ground with the Applicant. We trust that this relevant representation is of assistance and look forward, where appropriate, to participating in the forthcoming examination process".

4 Position Statement

4.1.1.1 The Applicant and NGIHL agreed the following statement:

The Hornsea Four transmission infrastructure design has evolved over the last four years in line with the current regulatory framework in the UK. This has resulted in a traditional "point to point" connection, with offshore substations located proximate to the turbine array and export cables routeing from the offshore substation(s) to an onshore project substation located near to the National Grid connection point at Creyke Beck substation (plus a connection between the two).

The Applicant is aware of the ongoing Offshore Transmission Network Review (OTNR) being carried out by BEIS, Ofgem and NGESO. The Applicant recognises the objective of the OTNR which is to encourage developers to work together to co-ordinate and develop transmission infrastructure without frustrating timely delivery of inflight projects.

The Applicant is also aware of the draft National Policy Statements (NPS), which encourage coordinated transmission systems. Mindful of the direction of policy and the government and sector ambition for greater coordination, discussions have taken place between the Applicant and National Grid Ventures (NGV) to explore and understand coordination opportunities between our two projects in this geography: Hornsea Four and NGV's Continental Link project.

The Continental Link Multi-Purpose Interconnector (MPI) is a proposed high voltage direct current ("HVDC") electricity link between the British and Norwegian transmission systems with 1800MW capacity to be connected to the National Transmission System ("NTS") at Creyke Beck substation near Cottingham, East Yorkshire. In addition to providing an electricity link between the British and Norwegian transmission systems, NGV is developing the MPI to be capable of connecting offshore windfarm(s) to the NTS in each country via the interconnector.

On 18th August 2021, Secretary of State for Business, Energy and Industrial Strategy (BEIS) endorsed NGV's request under s35 of the Planning Act for Continental Link to be considered as a DCO. Discussions between Ørsted and NGV are at present focussing on activities related to coordination of respective onshore transmission infrastructure of the Ørsted and NGV projects, (for example, use of near shore cable routes, landfalls, onshore cable routes and substation / converter station sites), inclusive of development and delivery aspects of these matters.

Given the ongoing regulatory uncertainties associated with coordinated transmission, it is vital that the Applicant continues with its own transmission option in the Hornsea Four DCO application to ensure that the project can contribute to the urgent need for renewable energy capacity within the

2020s. The Applicant and NGV will provide an update on the progress of their discussions as the examination of the Hornsea Four DCO application progresses.

5 Specific Areas being Investigated

5.1.1.1 Both organisations have participated in workshops and follow up focus meetings to investigate collaboration opportunities.

5.1.1.2 So far, the following areas have been highlighted as areas to explore in more detail.