PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

APPLICATION BY NORTH FALLS OFFSHORE WINDFARM LIMITED FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE NORTH FALLS OFFSHORE WINDFARM PROJECT

(REF: EN010119)

DEADLINE 2

WRITTEN REPRESENTATION BY THE PORT OF LONDON AUTHORITY



1 INTRODUCTION

- 1.1 This Written Representation is made on behalf of the Port of London Authority ("PLA") in respect of an application for development consent ("the Application") submitted by North Falls Offshore Wind Farm Limited ("the Applicant") for the North Falls Offshore Wind Farm Project ("NF"). This Written Representation is submitted in pursuance of Rules 8(1)(a), and 10(1), (2) and (4) of the Infrastructure Planning (Examination Procedure) Rules 2010.
- 1.2 The PLA is currently engaging in the Examination of the adjacent Five Estuaries Offshore Wind Farm Project ("VE") which has raised similar issues to those set out in this representation. The PLA and VE have made substantial progress to resolve many of these issues although some points of disagreement on exactly how these are secured remain. Therefore, these representations and recommendations for the way forward are consistent with the approach taken to VE and have evolved since the PLA's Relevant Representations for this project (RR-272).
- 1.3 The structure of this Written Representation is as follows:
 - Section 1 Introduction;
 - Section 2 The Port of London Authority and the Port of London;
 - Section 3 Port Development;
 - Section 4 Policy;
 - Section 5 Permanent impacts because of the NF Cable Depths;
 - Section 6 Temporary impacts from cable laying and repair;
 - Section 7 Permanent impacts from interaction with third party schemes cable crossings;
 - Section 8 Temporary impacts from Pre and Post Construction Surveys and activities;
 - Section 9 Temporary impacts from interaction with third party schemes (simultaneous operations);
 - Section 10 Temporary and permanent impacts from dredging;
 - Section 11 Temporary impacts on the PLA's onshore navigation equipment;
 - Section 12 Mitigating potential impacts to shipping and navigation;
 - Section 13 Comments on the dDCO;
 - Section 14 Protective Provisions; and
 - Section 15 Concluding Remarks.

2 THE PORT OF LONDON AUTHORITY AND THE PORT OF LONDON

- 2.1 The PLA is the statutory harbour authority for the tidal Thames ("**the River**"). The River covers approximately 95 miles from Teddington to the North Sea between Clacton in Essex and Margate in Kent. The PLA's statutory functions include responsibility for conservancy, including dredging and improvement of the River; managing public navigation and ensuring navigational safety and controlling vessel movements. The PLA's functions include the promotion of the use of the River for freight and passengers as an important and sustainable transport corridor and access to the River is therefore a key concern for the PLA.
- 2.2 Its consent is required for the construction or carrying out of all works in the River, which includes dredging of the River. The PLA's area of jurisdiction and regulatory powers are found primarily in the Port of London Act 1968 (the "1968 Act"). Figure 1 "Schematic of the Thames Estuary" is provided for context and shows the PLA's Jurisdictional Limits. This is shown towards the East of the plan running north west to south east from Gunfleet Lighthouse towards North Foreland. The PLA's Jurisdictional Limit is then shown on Figure 2 "Northern approaches to the Port of London" by a red line running in the same orientation from Gunfleet Lighthouse.

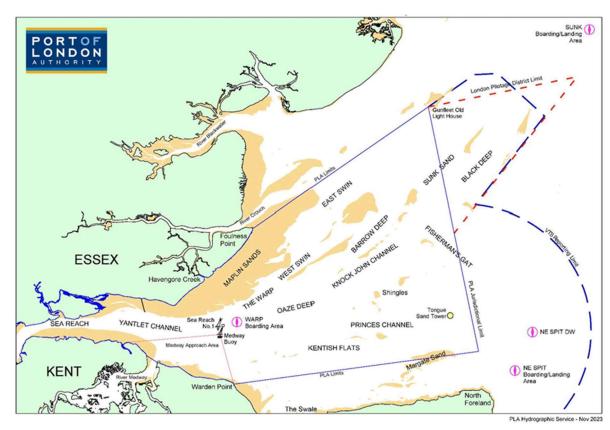
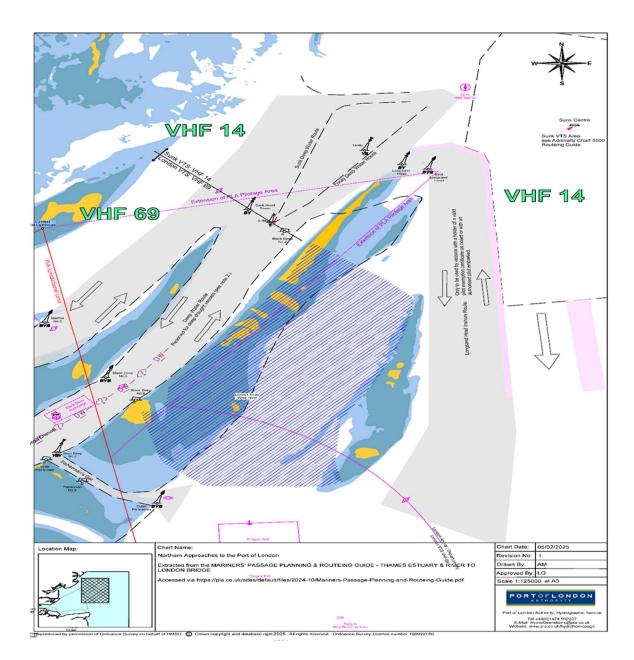


Figure 1: Schematic of the Thames Estuary

Figure 2 – Northern Approaches to the Port of London



- 2.3 The proposed wind farm lies outside of the PLA's landownership and limits under the 1968 Act, including its licensing area but the offshore cable corridor (the "OCC") crosses the Sunk and Trinity deep water routes (the "DWRs") the main DWRs into the Port of London and the OCC also includes the Sunk Pilot Diamond (as shown in the Outline Navigation and Installation Plan ("oNIP")) (APP-259). Pilotage is compulsory for large vessels within the London Pilotage District and its approaches and boarding and landing of pilots takes place in the general vicinity of the Sunk Pilot Diamond rather than at a specific point.
- 2.4 As Harbour Authority, the PLA is responsible for navigational safety both within its jurisdictional limits and in respect of the approaches to the limits. In compliance with the requirements of the Port Marine Safety Code, as harbour authority the PLA has to discharge its general and specific statutory duties in respect of the conservancy of the harbour and its seaward approaches. The PLA considers the area between the Sunk Pilot Diamond and

the PLA's Jurisdictional Limits to be the northern seaward approaches to the Port of London. These are the waters of navigational significance outside of and adjacent to the PLA's jurisdiction limits which deeper draughted vessels must pass through to get into the Port of London. For context when referring to deeper draughted vessels the port currently handles vessels up to 16.1m draught and, the minimum charted water depths are 18m (Trinity) and 16m (Sunk) below Chart Datum ("CD") where the OCC would cross the DWRs.

- 2.5 For the avoidance of doubt, other approaches to the Port of London are available for use by shallower draughted vessels, but these would not be impacted by the NF project and are therefore not included in Figure 2.
- 2.6 The River is home to the Port of London which is the country's biggest port and its contribution to international trade is critical, handling over 50 million tonnes of goods each year. The range of cargoes includes oil products, construction materials (including aggregates and cement), metals and forest products, vehicles, food products and all manner of containerised/trailered goods with worldwide cargo, origins and destinations.
- 2.7 Unlike many other large ports, the Port is spread over 70 separate independently run terminals. Facilities in the Port include nationally significant fuel and container terminals, Europe's largest sugar refinery and the UK's largest grain terminal. Figure 3 shows the terminal locations. Over 48,000 jobs depend on the Port and this figure rises to in excess of 140,000 jobs across port and other operations, tourism and recreation. The Port generates more than £6 billion in economic value added annually. It is therefore imperative that the existing and future capacity and operation of the Port of London and access to the River are not compromised during construction and operation of NF and that over the lifetime of the project the port can adapt to changing vessel sizes and accommodate deeper draught vessels.

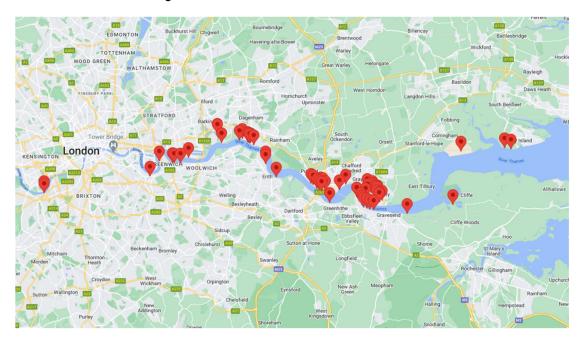


Figure 3 - Port of London Terminal locations

3 PORT DEVELOPMENT

3.1 The PLA's Thames Vision 2050 sets out the future development and ambitions for the Port and the river, including the specific priority to enable future growth of the Port as a net zero hub. The long-term port trade forecast (Future Trade Through the Port of London Alternative Decarbonisation and Growth Pathways which was commissioned by the PLA to underpin the Thames Vision and was undertaken by Oxford Economics) sets out that between now

and 2050 trade will continue to rise to meet growing demand and that by 2050 between 70 - 90m tonnes will be handled at the Port annually, around a 30-60% increase on 2022 levels. Current investments and developments underline this growth expectation. An Economic Impact Study carried out in spring 2020 by SQW on behalf of the PLA showed that 72% of port sector businesses interviewed anticipated growth over the next five years and almost £950m of investment was planned over the same five year period.

- 3.2 London Gateway and the Port of Tilbury London Limited ("PoTLL") together handle over 50% of trade in the Port and their continued investment in port infrastructure is significant. In October 2024 DP World announced a £1 billion expansion of London Gateway to make the facility the largest container port in Britain within five years and PoTLL will be expanding its operations and plans, with around £1 billion of investment in the coming years.
- 3.3 In 2021, the government designated the area stretching from and including the Ford plant at Dagenham to and including London Gateway as Thames Freeport. This emphasises further the importance of ports and river-based trade as a hub for UK trade and a conduit for economic growth. It is anticipated that the Thames Freeport will create 21,000 new jobs, result in £400 million in port investment, contribute £2.6 billion additional gross value added and result in over £4.5bn in new public and private investment.
- In light of the above, it is therefore critical that the existing and future capacity and operation of the Port are not compromised during construction and operation of NF. For the reasons highlighted throughout this document, the PLA is concerned that NF may cause economic disbenefits to the Port and disagrees with the Applicant's conclusion in Chapter 31 of the Environmental Statement ("ES") Socio Economics (AS-011) that the potential economic impacts of the project will be concentrated of Felixstowe and Harwich with all other ports being scoped out of the assessment. To accommodate existing and predicted future vessel sizes, the PLA needs to safeguard access via the DWRs for vessels with a draught of 20m. In the event that is it not possible for vessels of this size to enter the port via the DWRs, it will limit the quantum of trade within the Port. The impact of this restriction could be significant, detrimentally impacting the future of the UK's largest port.

4 POLICY

Ports policy

4.1 The National Policy Statement for Ports ("NPS-Ports") (January 2012) sets out the essential role of ports in the UK economy – with ports in England and Wales handling 95% of the total volume of UK trade and 75% of its value (para 3.1.3). The NPS-Ports recognises that "shipping will continue to provide the only effective way to move the vast majority of freight in and out of the UK, and the provision of sufficient sea port capacity will remain an essential element in ensuring sustainable growth in the UK economy" (para 3.1.4). The promotion of successful major port developments is encouraged because they are recognised as being essential for trade and economic growth long-term. In March 2023 it was announced that a review of the NPS-Ports is to be undertaken and that the existing NPS-Ports will remain in full effect during the period of the review.

Energy policy

- 4.2 The overarching National Policy Statement for Energy (EN-1) (January 2024) with the National Policy Statement for Renewable Energy Infrastructure (EN-3) (January 2024) provide the primary policy for decisions by the Secretary of State on applications for nationally significant renewable energy infrastructure. This includes offshore wind.
- 4.3 EN-1 sets out national policy for major energy infrastructure. It includes at chapter 4 the assessment principles with marine consideration set out at section 4.5. Applicants "must take account of any relevant Marine Plans and are expected to complete a Marine Plan assessment as part of their project development" (para 4.5.8). The Secretary of State is

required to "have regard to any appropriate marine policy documents when making a decision on an application for a Development Consent Order where an NPS has effect. This will include any Marine Plan which is in effect for the relevant area, or areas where the project crosses the boundary between plan areas" (para. 4.5.10).

- 4.4 EN-3 covers, amongst other things, offshore wind (>100MW in England). It states at section 2.8 in relation to offshore wind impacts: navigation and shipping:
 - (a) "it is inevitable that there will be an impact on navigation in and around the area of the site" (para. 2.8.178);
 - (b) applicants "should reduce risks to navigational safety to as low as reasonably practicable" (para. 2.8.179);
 - (c) "Impacts on navigation can arise from the wind farm of other infrastructure and equipment creating a physical barrier during construction and operation" (para. 2.8.182); and
 - (d) "Engagement should seek solutions that allow offshore wind farms, offshore transmission, and navigation and shipping users of the sea to co-exist successfully" (para. 2.8.185).
- 4.5 In relation to Secretary of State decision making, EN-3 goes on to state (emphasis added):
 - (a) "The Secretary of State should not grant development consent in relation to the construction or extension of an offshore wind farm if it considers that interference with the use of recognised sea lanes essential to international navigation is likely to be caused by the development." (para. 2.8.326);
 - (b) "The Secretary of State should be satisfied that the site selection has been made with a view to avoiding or minimising disruption or economic loss to the shipping and navigation industries, with particular regard to approaches to ports and to strategic routes essential to regional, national and international trade, lifeline ferries and recreational users of the sea." (para. 2.8.328);
 - (c) "Where after carrying out a site selection, a proposed development is likely adversely to affect major commercial navigation routes, for instance by causing appreciably longer transit times, the Secretary of State should give these adverse effects substantial weight in its decision making" (para. 2.8.329);
 - (d) "The Secretary of State should be satisfied that risk to navigational safety is as low as reasonably practicable (ALARP). It is government policy that wind farms and all types of offshore transmission should not be consented where they would pose unacceptable risks to navigational safety after mitigation measures have been adopted" (para. 2.8.331); and
 - (e) "The Secretary of State should have regard to the extent and nature of any obstruction of or danger to navigation which (without amounting to interference with the use of such sea lanes) is likely to be caused by the development in determining whether to grant consent for the construction, or extension, of an offshore wind farm, and what requirements to include in such a consent" (para. 2.8.335).

Marine Policy Statement and Marine Plans

4.6 Regard must also be had to the UK Marine Policy Statement ("the MPS") (March 2011), the framework for preparing Marine Plans and taking decisions affecting the marine environment, as provided for in the Marine and Coastal Assess Act 2009. The MPS provides the high level policy context within which national and sub-national Marine Plans are

developed. There are eleven marine plan areas in England. The relevant Marine Plan for the river Thames is the South East Inshore Marine Plan ("the SEIMP") (June 2021). The East Inshore and East Offshore Marine Plans ("the East Plans") are also of relevance given the location of the proposed development.

4.7 The MPS recognises the importance of offshore wind in meeting renewable energy and carbon emission targets. It also emphasises the importance of ports and shipping in the marine environment and their essential role in the UK economy including for the transport of goods and people (section 3.4). The SEIMP highlights how the plan area has:

"many important activities competing for a small amount of space. This includes shipping activity of international significance and important shipping lanes to Europe that lie in close proximity to offshore wind installations" and "is home to the highest number of ports and harbours in England, contributing the greatest amount of gross value added to the national economy of all the English marine plan areas from ports and shipping. These include the Port of London, with high volumes of traffic [...] Associated activities such as dredging of ports, harbours and approaches are essential to ensure safety of navigation, ensuring the viability of ports and harbours, along with the ability to compete in the global maritime sector."

4.8 The SEIMP has three main objectives: (i) a sustainable marine economy; (ii) ensuring a strong, healthy and just society; and (iii) living within environmental limits. The SEIMP's policies support delivery of the SEIMP objectives and whilst it is clear that individual marine policies must not be read in isolation, policy SE-PS-1 is of note due to its support for sustainable port and harbour development. It states:

"Only proposals demonstrating compatibility with current port and harbour activities will be supported. Proposals within statutory harbour authority areas or their approaches that detrimentally and materially affect safety of navigation, or the compliance by statutory harbour authorities with the Open Port Duty or the Port Marine Safety Code, will not be authorised unless there are exceptional circumstances.

Proposals that may have a significant adverse impact upon future opportunity for sustainable expansion of port and harbour activities, must demonstrate that they will, in order of preference:

- Avoid
- Minimise
- Mitigate

adverse impacts so they are no longer significant.

If it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding."

- 4.9 Other SEIMP policies of relevance are set out in the table at Appendix 1 to this Written Representation.
- 4.10 There are eleven objectives in the East Plans which are supported by detailed policies. The East Plans recognise that the plan areas contain "the majority of both Round 2 and Round 3 offshore wind energy sites…and as such are crucial to the deliver of national policy relating to offshore wind" (para. 68).
- 4.11 Due to the important contribution offshore wind farms make to energy and carbon reduction objectives, policy WIND2 supports "Proposals for Offshore Wind Farms inside Round 3 zones, including relevant supporting projects and infrastructure." However, the East Plans

- highlight at paragraph 313 that "Other policies should be taken into account when applying the support outlined in WIND2."
- 4.12 Policies relating to ports and shipping are set out in section 3.12 which emphasise, "how the ports and shipping are critical to the effective movement of cargo and people, and form an essential part of the United Kingdom and global economies" (para. 342) and "In the East marine plan areas there are increasing levels of activity encroaching on navigable space (for example, offshore wind farms), making it ever more important to indicate the area essential for navigation" (para. 344).
- 4.13 Whilst the East Plans policies should not be read in isolation, of particular relevance are policies PS1, PS2, PS3 and CAB1 and these are set out in Appendix 1 to this Written Representation.
- 4.14 The Applicant's assessment of the Application against planning policy (APP-017) includes information on marine policy but provides no commentary on policies PS1, PS2, PS3 in the East Plans in Table 3.3 and with regards to CAB1 concludes that:
 - "NFOW has committed to burying all onshore cables and burial of offshore cables where practicable."
- 4.15 The Applicant's Marine Plan Assessment (APP-240) sets out various policies within the SEIMP and East Plans that it considers the application is compliant with. The Applicant concludes that the scheme is compliant with PS1, PS2, PS3 and CAB1 in the East Plans.
- 4.16 The PLA is unable to agree with this policy conclusion as it has not been demonstrated that the DWRs into the Port of London have been safeguarded now and into the future and that the cables, cable protection and cable crossings would ensure vessels of 20m draught could enter the Port. The PLA considers that it should be possible to do this, but the dDCO and the application documents do not at this time sufficiently reassure the PLA. Currently decisions made by others at the detailed design stage could significantly and detrimentally impact the future of the Port.

5 PERMANENT IMPACTS BECAUSE OF THE NORTH FALLS CABLE DEPTHS

- 5.1 The OCC is shown as Work No. 3, on the Works Plans (APP-202). The OCC includes the Sunk and Trinity DWRs and the Sunk Pilot Diamond Area as shown in Figure 2.1 of the oNIP (APP-259). The DWRs are used for entry and exit of vessels into/from the Port of London.
- 5.2 The depth of the NF cables where they cross the DWRs is therefore critical. The PLA requires future access for vessels with a draught of 20m at the DWR and accounting for 10% under keel clearance this means that a water depth of 22m below Chart Datum ("CD") must be maintained by NF. There must be certainty in the NF application that this requirement will be met because if it is not, then it will limit the quantum of trade within the Port. The impact of this would be significant, detrimentally impacting the future of the UK's largest port.
- 5.3 CD rather than Lowest Astronomical Tide is the plane below which all depths are published on a navigational chart and a level so low that the tide will not frequently fall below it as determined by the UK Hydrographic Office from time to time.
- Zero tide has been used in the calculation of the future channel depth because deep draught vessels will be in the DWRs around low water so they can make their berth at high water. A zero low water rather than a level of Mean Low Water Springs has also been used as there are regular negative surges or cuts in the tide due to meteorological effects so higher levels cannot be relied upon.
- 5.5 The depth of the NF cables where they cross the DWRs; the approach to cable laying and repair; cable protection and cable crossings are therefore all critical if the DWRs into the Port

of London are not going to be impacted by NF. There are areas of the OCC where certainty is required at this stage on cable burial depths, cable protection and cable crossings to ensure that there will be no significant effects on shipping and navigation arising from the OCC, in isolation or cumulatively with other projects, during construction, operation, maintenance and decommissioning.

- 5.6 The range of impacts vary from vessel displacement and delays to placing a constraint on the size of vessel that can enter the Port and therefore the capacity of the Port of London. The NF application needs to provide clarity and confidence that long term access/egress to the Port of London would be maintained and that short term impacts during construction and maintenance would be kept to a minimum. This is discussed in more depth in section 6.
- 5.7 The DWRs are not currently dredged channel in the same way as the Harwich Deep Water Channel is (i.e. cut into the seabed), and any dredging which has occurred under the London Gateway Harbour Empowerment Order 2008 is merely trimming the tops off existing sandwaves. Therefore, there has been some flexibility for re-routing the DWRs to take account of the natural migration of the seabed and to account for changing shipping patterns (i.e., to minimise conflict between Harwich and London traffic). Re-routing is an established practice utilised by the Maritime and Coastguard Agency, General Lighthouse Authorities and Harbour Authorities and is inferred by the conservancy duty in the Port Marine Safety Code. Therefore, in terms of spatial extent that the OCC would need to facilitate a future channel of 22m below CD, a sufficiently wider corridor needs to be established to allow for re-routing as has already been agreed with VE and other interested parties.
- 5.8 The PLA seeks to secure an agreed position in relation to the DWRs and for the agreed position to be clear and consistent within the application documents and within the DCO. There needs to be a specific requirement relating to the cables where they cross the DWR (see para 13.4 below for wording); the PLA requires protective provisions which set out amongst other things what happens if cable depths are not achieved, and an outline cable specification and installation plan ("oCSIP") needs to be produced and submitted to the examination which sets out information in relation to cable installation and maintenance, cable crossings, cable protection and temporary works such as boulder relocation and archaeological finds. The oCSIP and CSIP will essentially provide a technical specification of offshore cables, including a desk-based assessment of cable burial depth in accordance with good industry practice. It should also include a detailed cable laying plan for the DWRs which demonstrates how cable installation and maintenance will ensure that the DWRs can be dredged to 22m below CD. The application documents, dDCO and the Deemed Marine Licence need to be clear and consistent regarding what is required at the DWRs and what might be possible in other locations - for example, currently there are references to a 5% reduction in water depths, but this would not be appropriate at the DWRs.
- Table 19.1 of the Navigational Risk Assessment ("**NRA**") (APP-106) Embedded Mitigation Measures Relevant to Shipping and Navigation places significant weight on documents that are yet to be produced and they do not provide the certainty in relation to the DWRs that is required. For example:
 - (a) The mitigations as presented in Table 19.1 include compliance with MGN 654 and its annexes including in relation to reductions of no more than 5% in under keel clearance. As will be evident from the paragraphs above, there can be no reductions in under keel clearance at the DWR if these routes are to be dredged in the future to 22m below CD.
 - (b) Whilst Table 19.1 of the NRA includes the embedded mitigation of a CBRA it states it will "include consideration of the DW routes used by deeper draught vessels locally", the PLA consider that the DWR need to be explicitly considered in the CBRA and specifically the need for them to be dredged to 22m below CD.

- (c) The Shipping and Navigation Chapter of the ES (APP-029) commits on page 23 to not reducing depths over the Sunk or Trinity DWRs. However, this appears to only commit to existing depths rather than the required future dredge depth of 22m below CD. The PLA notes that page 25 discusses being compliant with MGN 654 with cables likely to be buried in water depths of at least 19m in the areas that intersect the OCC. It assumes no reduction in water depth associated with the OCC over the Sunk and Trinity, however the PLA requires dredging to 22m below CD at the Sunk and Trinity to be safeguarded.
- (d) The Cable Statement (APP-262) states at para 21 "Following discussions with stakeholders, the project is undertaking the feasibility of routing the cables within the southern half of the cable corridor between KP28 and KP42, shown in Figure 2-2. This will be subject to the results of the Geotech surveys, and will include discussions with the affected stakeholders to minimise overall impacts of time and location." The PLA are supportive of this but there is currently no robust mechanism to secure this other than reducing the red line boundary.

6 TEMPORARY IMPACTS FROM CABLE LAYING AND REPAIR

- 6.1 As well as crossing the DWRs, the OCC is located in close proximity to the Sunk Pilot Diamond as shown on Figure 2.1 of the oNIP (APP-259). Pilotage is compulsory for large vessels within the London Pilotage District and its approaches and boarding and landing of pilots takes place in the general vicinity of the Sunk Pilot Diamond, rather than at that specific point shown on Figure 2.1. The actual location will be based on a number of factors, including traffic density, wind strength and direction and tidal conditions.
- 6.2 Construction and maintenance vessels must not hinder access into the Port nor the ability to board or land pilots. Deep drafted vessels to terminals within the Port of London are tidally constrained, so a small deviation to their schedule could result in them not having enough water for their passage to the berth, thus delaying them until the next tide approximately 12 hours later as explained further below.
- 6.3 With the continued development of London Gateway to six berths there will be greater need to ensure vessels can arrive and depart at all states of the tide, in order for the terminal and the wider port to operate efficiently. For example, if a vessel leaving London Gateway was tidally constrained at the Sunk and missed her deadline for leaving the berth, the vessel may have to remain alongside for a number of hours until there was sufficient water again, which would also impact any inbound vessel planned for the same berth.
- 6.4 The largest, deepest vessels into and out of the port tend to manoeuvre off the berths towards high water, when there is more available deep water for swinging. Their passages between the container or tanker berths and the Sunk can be up to five hours, which is a significant proportion of the approximately 6hr tidal window between high water and low water. This means they are usually planned to be in the vicinity of the Sunk at the lower end of the tide.
- 6.5 If the tidal window at the Sunk was restricted due to lack of safe water, the safety and efficiency of vessel movements could be compromised. For example, a vessel which was planned to be at the Sunk before low water, could, if delayed, find itself unable to complete its passage out of the Thames. The vessel would have to either slow down or try and anchor to await the rising tide, both of which could create a hazard to itself and other vessels. Alternatively, if delayed at the berth the vessel would not be permitted to sail until the tide had risen sufficiently, causing further delay to that vessel and any vessel due to take its berth. Large vessels navigating to and from London Gateway are required to have some separation for safety reasons, so with berths operating in the future it will be necessary for more than one vessel to be navigating on any tide. Avoiding the low water period at the Sunk would make it difficult to achieve multiple vessels safely navigating in and out of the port with

the required separation on each tidal cycle, leading, once again to vessel delays and potentially compromising navigational safety.

Where the cables are crossing over or are adjacent to the DWRs the most effective method of cable laying in terms of speed and ability to achieve the required cable burial depth should therefore be used. The oNIP (APP-259) section 3.1.5 discusses the approach to cable laying. Table 3.5 Indicative details for cable lay/ burial activities does not provide commitments regarding the installation of cables at the DWRs and the oNIP simply states in table 3.5 that the speed when undertaking cable lay/burial activities would be between 150 to 450m per hour.

7 PERMANENT IMPACTS FROM INTERACTION WITH THIRD PARTY SCHEMES - CABLE CROSSINGS

- 7.1 As shown on Table 18.11 of the Infrastructure and Other Users Chapter of the ES (APP-032) there are a number of existing and proposed cables in the vicinity of NF. These include VE, SeaLink, Neuconnect, and the Tarchon, Nautilus and Lion Link cables. The latter three cables are in the early planning stage and the routes are unknown. Parties need to work together wherever possible to minimise impacts and to maximise the potential for other projects to come forward in the future. This is critical for the above projects which may all cross or be crossed by NF in the Sunk Inner and Sunk Outer Precautionary Areas.
- 7.2 The realistic worst case scenario assessed as set out in the Shipping and Navigation Chapter of the ES (APP-029) Table 15.2 is an "indicative height of protection for export cables of 1.4m (locations determined via cable burial risk assessment)." The realistic worst case scenarios impacts and parameters are identified in Table 15.2 but the PLA would assert that a worst case scenario consequence could be vessels being unable to access the Port because the required under keel clearance is not available with the associated economic impacts that would flow from this. The mitigations set out in table 15.3 include compliance with MGN 654 but as highlighted earlier, up to 5% reduction in water depths at the DWRs may not be achievable in the DWR section of the OCC as this would prevent vessels with a draught of up to 20m from entering the Port. The Infrastructure and Other Users Chapter of the ES (APP-032) does not appear to consider impacts on marine users from the cables or cable crossing if there is a reduction in water depth.
- 7.3 The PLA must have confidence that where NF crosses existing cables such as Neuconnect that the required water depth of 22m below CD will be maintained and that the NF cable will be buried at sufficient depth or placed in areas of deeper water so that any cables that cross NF in the future also maintain the required water depth of 22m below CD.

8 TEMPORARY IMPACTS FROM PRE AND POST CONSTRUCTION SURVEYS AND ACTIVITIES

- As is common with the installation of cables, a number of pre-construction activities including pre-construction surveys and monitoring may need to be carried out in order to obtain more information to inform for example, the final cable route and burial depth or to allow for the installation of the cable on the chosen route (e.g. boulder clearance, unexploded ordnance "UXO" clearance etc).
- 8.2 Monitoring for shipping and navigation is addressed in the Offshore In Principle Monitoring Plan (APP-245). Paragraph 21 refers to engineering related monitoring including geophysical and geotechnical surveys, cable burial and preconstruction UXO surveys.
- 8.3 Paragraph 24 states "Pre-construction monitoring and surveys are secured through Condition of the DMLs in the Draft DCO (Document Reference: 6.1)". The MMO would approve these documents through the DMLs.

8.4 The PLA would want to be consulted on any surveys or monitoring or pre-construction activities that could affect the DWRs because a survey vessel may pass slowly over the DWRs or even stop to place/remove monitoring equipment which could affect shipping. Equally, restrictions may need to be placed on how the pre-construction activity can be undertaken e.g. a boulder or archaeological find cannot be relocated to or within a DWR but must instead be removed. This would accord with the PLA's protective provisions for VE. VE has also committed in their oCSIP to any relocation of boulders, UXO or archaeological finds being carried out outside the DWRs and for there to be no wet storage within the DWRs.

9 TEMPORARY IMPACTS FROM INTERACTION WITH THIRD PARTY SCHEMES (SIMULTANEOUS OPERATIONS)

9.1 As set out above, there are various cables that could cross NF and depending on the timings of each of these projects, there is potential for simultaneous operations occurring during installation and maintenance. For the reasons set out above, construction and maintenance vessels must not hinder access into the port. The oNIP will be the mechanism to deal with this issue.

10 TEMPORARY AND PERMANENT IMPACTS FROM DREDGING

In order to install the cables within the OCC it will be necessary to dredge. The Deemed Marine Licence (Transmission Assets) (Schedule 9) allows for up to 3,019,856 cubic metres of inert material to be deposited within works no.2 to 4A (work no. 3 is the OCC which includes the DWRs). There is a real concern about a lack of controls in relation to the placing of inert material within the OCC and the implications of this for navigable depths at the DWRs. The PLA supports the approach taken at VE where an Outline Sediment Disposal Management Plan ("oSDMP") was produced to ensure that the dredging and drilling material that is created from construction activities will not be disposed of with the DWR section of the OCC or impact the pilot station. The PLA understands from the Applicant's deadline 1 submission (REP1-045) that an oSDMP, setting out the criteria for dredge disposal location(s), will be developed and submitted as soon as possible into Examination

11 TEMPORARY IMPACTS ON THE PLA ONSHORE NAVIGATION EQUIPMENT

11.1 The PLA raised concerns in its Relevant Representation about the potential impacts of the vessels required to undertake the horizontal directional drilling at landfall interfering with the PLA's radio link and lowering its reliability (RR-272). At this stage this matter has not been addressed, and the PLA maintains its position that this matter could be addressed through protective provisions.

12 MITIGATING POTENTIAL IMPACTS TO SHIPPING AND NAVIGATION

- 12.1 To mitigate potential impacts to shipping and navigation, the Applicant places a significant amount of weight on documents, which will be produced post consent. These include:
 - (a) Detailed cable burial risk assessment ("CBRA");
 - (b) Development of, and adherence to, a Cable Specification and Installation Plan ("CSIP"); and
 - (c) Navigation and Installation Plan ("NIP").
- These documents could, alongside protective provisions for the PLA, provide the comfort that the PLA requires that at the detailed design stage, the DWRs into the Port will be protected now and into the future. However, the PLA needs to see the oCSIP as part of the examination. Comments on the oNIP are included below:

(a) Outline Navigation Installation Plan (oNIP) (APP-259) and NIP

The purpose of the document is to manage interactions between NF project vessels and third party vessels in navigationally sensitive areas. It is also stated at paragraph 2 that it is "to reduce the significance of effect associated with shipping and navigation impacts, including vessel displacement, increased third party to third party vessel collision risk, third-party with project vessel collision risk, reduced access to local ports and harbours including pilotage operations, and reduction in under keel clearance to nonsignificant levels" The NIP can be a useful document and a comparable document has been submitted in support of VE. As the document appears to be almost identical to an early version of the NIP submitted for VE, the PLA's comments on the document are the same. It is recommended that a meeting is held between the interested parties to refine the NF NIP including its scope (it should apply to construction and maintenance); consultation and approval of the document by interested parties (and extending the list of interested parties); the procedure for updating the document and what the document is seeking to achieve: allowing the DWRs to be dredged in the future to 22m to allow vessels of 20 draught to enter and exit the port (NB para 30 currently seeks to maintain a minimum 20m water depth - this is not sufficient). Information on cable crossings, the approach to cable jointing/repairs/reburial should also all be provided i.e. that they will not impact the required dredge depth at the DWRs. An amendment is also required to Figure 2.1 as the Trinity DWR does not look correct. It is currently mostly to the west of the Trinity DWR rather than spanning it. It would be helpful if the charts being used included the designated DWR, rather than them being overlayed.

13 COMMENTS ON THE DDCO (REP1-011_

(i)

Article 2 (Interpretation) definition of Commence

In order to amount to commencement under the proposed definition an offshore work needs to be a licensed activity authorised by the deemed marine licences. As noted above, the PLA would want to be consulted about any surveys or monitoring that affect the DWRs in line with the process for the VE surveys and monitoring that affect the DWRs. The PLA will be seeking protective provisions within Schedule 14 as explained below and would note that the definition of commencement would not be appropriate for that part of Schedule 14.

Article 2 (Interpretation) definition of maintenance

13.2 The definition of maintain is broad and includes adjusting and altering. In the context of the export cable works to adjust or alter could result in a change in location and/or depth which would not be acceptable to the PLA for the reasons explained above.

Article 5 (Benefit of the Order)

13.3 The PLA would, in line with the position agreed at VE, expect within its protective provisions to contain a requirement for the undertaker to notify the PLA in writing within 7 days of any sale, agreement or other transaction under Article 5.

Schedule 1 Part 3 Requirements

13.4 Akin with VE and in recognition of multiple interested parties view on the future use of the DWRs, the PLA would wish to see a requirement and associated certified plan to the effect of:

"The undertaker must ensure that in the design, implementation, operation and maintenance of the authorised development and ancillary works, a dredged depth of the Deep Water

Routes to a depth of 22 metres below Chart Datum is not precluded or impeded." ("the Requirement")

Schedule 9 Deemed Marine Licence Transmission Assets

- 13.5 Whilst the PLA would expect its own approvals, the PLA has the following broad comments:
 - (a) PLA contact details need to be listed at paragraph 5;
 - (b) Paragraph 2 allows for disposal of up to 3,019,856 cm² of material within Work Nos. 2 to 4A. This means that it could be disposed within Work No 3 the OCC. This must be coupled with checks and balances to make sure that there is no reduction in water depth over the DWRs.
 - (c) The PLA request that a DWR parameter consistent with the Requirement is an express condition within the Deemed Marine Licence ("DML") for the Transmission Assets (Schedule 9).
 - (d) Part 2 Condition 13 (maintenance of the authorised development) the PLA's comments above regarding maintenance are equally applicable to the dML. There needs to be a requirement when undertaking maintenance to protect water depths that would ensure a vessel of 20m draught could enter the Port of London.
 - (e) Part 2 Condition 16 (Notification and inspections) there is no requirement to notify the PLA of commencement or within subparagraph (11) to notify the PLA if there has been damage to a cable or subparagraph (12) exposure of a cable.
 - (f) Part 2 Condition 22 (Pre construction plans and documents):
 - (i) There are a suite of documents submitted to the MMO but no requirement to consult with the PLA or other port authorities such as Harwich or for the Applicant to demonstrate that they have consulted the PLA on any relevant plans prior to their submission nor a requirement to explain how those comments have been addressed.
 - (ii) In sub-paragraph (1)(iii) of Condition 22 the Applicant has to provide details of length and arrangement but no details are required regarding depth nor the crossing of other cables.
 - (iii) In sub-paragraph (1)(f) of Condition 22 there is no requirement to demonstrate that they have consulted the PLA prior to submission nor a requirement to explain how those comments have been addressed.
 - (iv) In sub paragraph (1)(h) a cable specification and installation plan for the relevant stage must be provided but there is no requirement to demonstrate that they have consulted the PLA prior to submission nor a requirement to explain how those comments have been addressed. The submitted details also refer to exceedance of 5% reduction in navigable depth – as set out elsewhere within this Written Representation there can be no reduction in navigable depth at the DWRs.
 - (v) Sub paragraph (1)(j) requires an offshore monitoring plan for the relevant stage which accords with the principles set out in the outline offshore inprinciple monitoring plan but there is no requirement to demonstrate that they have consulted the PLA prior to submission nor a requirement to explain how those comments have been addressed.

(vi) Sub paragraph (1)(n) requires a navigation and installation plan for the relevant stage which accords with the principles set out in the outline navigation and installation plan. The comments made regarding the oNIP, as cited previously in this Written Representation must be taken into account for this to be acceptable by the PLA.

14 PROTECTIVE PROVISIONS

- 14.1 The dDCO (REP1-011)) does not include any protective provisions for the benefit of the PLA. Protective provisions are required to ensure that the PLA can effectively discharge its general and specific statutory duties as set out in section 2 above.
- 14.2 The PLA has appended the form of the Protective Provisions that have been sought on VE. The form of the Protective Provisions to be included in the dDCO for the benefit of the PLA need to cover the following:
 - (a) Stipulate that matters which the CSIP must cover.
 - (b) Provide for the PLA's approval of the NIP, CSIP and Offshore in principle monitoring plan and any amendments or variations to such plans.
 - (c) Require the undertaker to consult the PLA on the proposed activities and programme for any pre-construction monitoring, construction monitoring, postconstruction monitoring and related reporting within the DWRs before such survey work is programmed to commence. The undertaker must have regard to any request made by the PLA for reasonable amendments.
 - (d) The undertaker must notify the PLA of the final planned programme for any preconstruction monitoring, construction monitoring, postconstruction monitoring within the DWRs.
 - (e) The undertaker must consult the PLA on any application for marine licensing for the clearance of unexploded ordnance within or which may affect the DWRs before such applications are submitted to the MMO. The undertaker must have regard to any request made by the PLA for reasonable amendment to the proposed application,
 - (f) The undertaker must notify the PLA of the final programme for any clearance of unexploded ordnance to be undertaken within the DWRs before such disposal is programmed to begin.
 - (g) The undertaker must consult the PLA on the activities and programme for any specified work to be undertaken under this Order which is not covered by the CSIP and which is within or may affect the DWRs before such specified work is programmed to commence. The undertaker must have regard to any request made by the PLA for reasonable amendment to the activities or programme.
 - (h) The undertaker must notify the PLA of the final method statement and programme for any for any specified work to be undertaken under this Order which is not covered by the CSIP and which is within or may affect the Area of Interest no less than 5 business days before such work is programmed to begin.
 - (i) If following the results of any geophysical surveys carried out it is confirmed that cable exposure or reduction in navigable depth has occurred within the DWRs the undertaker must notify the PLA as soon as reasonably practicable and in any event no later than [2 business days after the undertaker confirms any exposure has occurred].

- (j) Where, following the installation of the cables within the DWRs it is identified by the undertaker or the PLA that the level of cable is such that the Requirement has not been achieved or at any time following installation or maintenance the cable has moved such that the Requirement is no longer being achieved, then, unless otherwise agreed in writing with the PLA, the undertaker should be required to carry out remediation works which are to be specified in the CSIP. The undertaker must re-bury the cables to the required specification to achieve the Requirement; or if necessary relay a new cable pursuant to an updated CSIP approved by the PLA. The updated CSIP must identify and address why the previous cable burial was not successful, how that has been addressed and what measures are to be used in relaying the cable to prevent the failure reoccurring.
- (k) The updated CSIP and updated operation and maintenance plan will be submitted to the PLA for approval and the provisions will apply to that updated CSIP and updated operation and maintenance plan.
- (I) Following the completion of the installation of cables forming Work No. 3 and after any maintenance of the same, the undertaker must provide to the PLA as built drawings to show the position, depth and any cable protection installed as part of Work No 3 in relation to the DWRs.
- (m) A requirement to pay to the PLA its proper and reasonable legal costs, professional fees and disbursements incurred in connection with reviewing the details submitted to the PLA.
- (n) Include an indemnity so that the undertaker is responsible for and must make good to the PLA all financial costs, charges, damages losses or expenses which may be incurred reasonably or suffered by the PLA by reason of—
 - (i) the construction or operation of Work no 3, any specified work or its failure or a failure to adhere to the requirements of the protective provisions;
 - (ii) any act or omission of the undertaker, its employees, contractors or agents or others whilst engaged on the construction or operation of a specified work or Work no 3 or with any failure, and the undertaker must indemnify the PLA from and against all claims and demands arising out of or in connection with a specified work, Work no 3 or any such failure, act or omission or any failure to adhere to the requirements of the protective provisions
- 14.3 Importantly it is not appropriate for others such as the MMO or the MCA to be making decisions on matters that are fundamental to the PLA and the operation of the Port of London/River Thames and the DWRs.

15 CONCLUDING REMARKS

- 15.1 In light of the importance of ports, it is imperative that the existing and future capacity and operation of the Port are not compromised during construction and operation of NF. For the reasons highlighted throughout this document, the PLA is concerned that NF may cause economic disbenefits to the Port.
- 15.2 To accommodate existing and predicted future vessel sizes, the PLA needs to safeguard access via the DWRs for vessels with a draught of 20m. In the event that is it not possible for vessels of this size to enter and exit the port via the DWRs, it will limit the quantum of trade within the Port. The impact of this restriction could be significant, detrimentally impacting the future of the UK's largest port.
- 15.3 The depth of the NF cables where they cross the DWRs; the approach to cable laying and repair; cable protection and cable crossings are therefore all critical if the DWRs into the Port

of London are not going to be impacted by NF. There are areas of the OCC where certainty is required at this stage on cable burial depths, cable protection and cable crossings to ensure that there will be no significant effects on shipping and navigation arising from the OCC, in isolation or cumulatively with other projects, during construction, operation, maintenance and decommissioning.

- 15.4 The NF application needs to provide clarity and confidence that long term access/egress to the Port of London would be maintained and that short term impacts during construction and maintenance would be kept to a minimum. Currently, the mitigations relating to shipping and navigation place significant weight on documents that are yet to be produced, and they do not provide the certainty in relation to the DWRs that is required.
- 15.5 The PLA's concerns need to be addressed through:
 - a) A design requirement to safeguard future depths of 22m below CD at the Sunk and Trinity DWRs on the face of the order and linked to a certified plan showing the spatial extents to which the requirement applies.
 - b) Commitment by the Applicant to not relocate boulders or archaeological finds, dispose of arisings or temporary works, permit any cable crossings or cable protection or any wet storage within the DWRs or in areas which may affect the DWRs secured through the CSIP and SDMP.
 - c) Commitment by the Applicant to use the most expeditious cable laying methodology which achieves cable burial to safeguard the future dredging and use of the DWRs but minimises short term disruption to port within the area of interest secured through the NIP.
 - d) Consultation on and approval of the CSIP (incorporating the CBRA) NIP and offshore monitoring plan, including subsequent updates, through protective provisions in favour of the PLA which address the design, communication, monitoring, remedial action and indemnity as set out in section 14 of this Written Representation.
- 15.6 Importantly, it is not appropriate for others such as the MMO to be making decisions on matters that are fundamental to the PLA and the operation of the Port of London/River Thames and the DWRs.

APPENDIX 1

SOUTHEAST INSHORE MARINE PLAN

Other Relevant policies

Policy		Policy Aim
SE-CAB-	"Preference should be given to proposals for cable installation where the method of protection is burial. Where burial is not achievable, decisions should take account of protection measures for the cable that may be proposed by the applicant. Where burial or protection measures are not appropriate, proposals should state the case for proceeding without those measures."	encourages cable burial where possible to meet the needs of the sector while enabling co-existence with other users of the south east inshore marine plan area."
SE-DD-1	"In areas of authorised dredging activity, including those subject to navigational dredging, proposals for other activities will not be supported unless they are compatible with the dredging activity."	SE-DD-1 ensures continued safe access by vessels to ports and harbours over the lifetime of the South East Marine Plan. This policy discourages proposals that would cause significant adverse impacts on dredge activities"
SE-PS-2	"Proposals that require static sea surface infrastructure or that significantly reduce under-keel clearance must not be authorised within or encroaching upon International Maritime Organization routeing systems unless there are exceptional circumstances."	"Within the south east inshore marine plan area, there are International Maritime Organization routeing systems that are essential for shipping activity, freedom of navigation and navigational safety. SE-PS-2 confirms that proposals that compromise these important navigation routes should not be authorised. SE-PS-2 enables and supports safe, profitable and efficient marine businesses. SE-PS-2 specifies that developments should not be authorised where the use of International Maritime Organization routeing systems may be compromised. Authorisation of proposals that impact on the use of

Policy		Policy Aim
		International Maritime Organization routeing systems are very rare"
SE-PS-3	"Proposals that require static sea surface infrastructure or that significantly reduce under-keel clearance which encroaches upon high density navigation routes, strategically important navigation routes, or that pose a risk to the viability of passenger services, must not be authorised unless there are exceptional circumstances."	The south east inshore marine plan area is very busy with respect to high-density navigation routes, strategically important navigation routes and passenger services. SE-PS-3 confirms that proposals that pose a risk to safe navigation or the viability of these routes and services should not be authorised. SE-PS-3 aims to protect these routes and services by enabling and promoting safe, profitable and efficient marine businesses. SE-PS-3 focuses on minimising negative impacts on shipping activity, protecting the economic interests of ports, harbours, shipping and the UK economy overall, and affording protection to the areas used by high intensities of traffic (UK Marine Policy Statement, Section 3.4.2). It also gives effect to provisions in the National Planning Policy Framework (Section 37), which aims to encourage sustainable transport."

EAST INSHORE AND EAST OFFSHORE MARINE PLANS

Other Relevant policies

Policy PS1: "Proposals that require static sea surface infrastructure or that significantly reduce

under-keel clearance should not be authorised in International Maritime Organization

designated routes."

Policy PS2: "Proposals that require static sea surface infrastructure that encroaches upon important navigation routes (see figure 18) should not be authorised unless there are exceptional

circumstances. Proposals should:

a) be compatible with the need to maintain space for safe navigation, avoiding adverse economic impact

b) anticipate and provide for future safe navigational requirements where evidence and/or stakeholder input allows and

c) account for impacts upon navigation in-combination with other existing and proposed activities."

Policy PS3: "Proposals should demonstrate, in order of preference:

- a) that they will not interfere with current activity and future opportunity for expansion of ports and harbours
- b) how, if the proposal may interfere with current activity and future opportunities for expansion, they will minimise this
- c) how, if the interference cannot be minimised, it will be mitigated
- d) the case for proceeding if it is not possible to minimise or mitigate the interference."

Supporting paragraph 368 explains the importance of accommodating not only the existing requirements of ports but also their future requirements: "In most cases, ports and harbours are seeking to grow in future in relation to the number of vessels and/or the size of vessels utilising them. Therefore, the need for capacity to accommodate these craft will rise. Ports and shipping growth is responsive to global markets and as such the extent of such growth is difficult to predict. In that context this policy provides clarity on the importance of protecting the economic interest of ports and seeks to prevent encroachment through development or other activities around ports and harbours that may restrict the ability to respond to future growth opportunities." (emphasis added)

Policy CAB1: "Preference should be given to proposals for cable installation where the method of installation is burial. Where burial is not achievable, decisions should take account of protection measures for the cable that may be proposed by the applicant."

APPENDIX 2

FORM OF PROTECTIVE PROVISIONS FOR FIVE ESTUARIES

PART []

For the protection of the Port of London Authority (offshore)

1. In this Part

"Area of Interest" means the areas shown shaded in yellow on the Deep Water Routes Cable Installation Areas (Future Dredging Areas) plan, encompassing the cable corridor crossings of the Deep Water Routes;

"cable specification and installation plan" means the cable specification and installation plan to be approved under condition [13(1)(g)] of the deemed marine licence for the transmission assets in Schedule [11];

"construction" includes execution, placing, altering, replacing, relaying, removal, renewal works of maintenance and decommissioning, in its application to a specified work which includes or comprises any operation, means the carrying out of that operation, and "construct" and "constructed" are to be construed accordingly;

"commencement" for the purpose of this Part [] of Schedule[9] means the carrying out of any authorised development and monitoring activities;

"Deep Water Routes" mean the Sunk and Trinity deep water routes;

"installation" has the same meaning as construction and 'installed' is to be construed accordingly

"operation and maintenance plan" means the operation and maintenance plan to be approved under condition 4 of the deemed marine licence for the transmission assets in Schedule [11];

"maintain" has the same meaning as in Article 2 save that it includes monitoring within the Area of Influence and maintenance shall be construed accordingly;

"navigation and installation plan" means the navigation and installation plan to be approved under condition 13(1)(j) of the deemed marine licence for the transmission assets in Schedule [11];

"specified work" means Work No, 2(c), and any other part of the offshore works forming part of the authorised development including associated development and ancillary works (and which for this purpose includes the maintenance and decommissioning of any part of the authorised development); and "PLA" means the Port of London Authority.

Application

2. The following provisions, unless otherwise agreed in writing between the undertaker and the PLA, have effect, for the protection of the PLA in relation to the construction, operation and maintenance of any specified work.

Consultation and notice

- **3.**(1) The undertaker will, prior to commencement of Work no 2(c), obtain the approval in writing of the PLA on:
 - (a) the cable specification and installation plan (in so far as that plan relates to any specified work within or which may affect the Area of Interest) before any application for approval of that plan may be submitted by the undertaker in compliance with condition [13] of the deemed marine licence for the transmission assets in Schedule [11] and any revisions arising from such application; and
 - (b) a navigation and installation plan (in so far as that plan relates to any specified work within or which may affect the Area of Interest) before any application for approval of that plan may be submitted by the undertaker in compliance with condition [13] of the deemed marine licence for the transmission assets in Schedule [11] and any revisions arising from such application;[and]
 - (c) the operation and maintenance plan (in so far as that plan relates to any specified work within or which may affect the Area of Interest) before any application for approval of that plan may be submitted by the undertaker in compliance with condition [4] of the deemed marine licence for the transmission assets in Schedule [11] and any revisions arising from such application

- (2) The undertaker will consult the PLA on the proposed activities and programme for any pre-construction monitoring, construction monitoring, postconstruction monitoring and related reporting within the Area of Interest no less than 20 business days before such survey work is programmed to commence. The undertaker must have regard to any request made by the PLA for reasonable amendment to the proposed activities or programme, which request must be made to the undertaker within 5 business days of receipt of the details of the proposed activities and programme.
- (3) The undertaker must notify the PLA of the final planned programme for any pre-construction monitoring, construction monitoring, postconstruction monitoring within the Area of Interest no less than 5 business days before such survey work is programmed to begin.
- (4) The undertaker will consult the PLA on any application for marine licensing for the clearance of unexploded ordnance within or which may affect the Area of Interest before such applications are submitted to the MMO. The undertaker must have regard to any request made by the PLA for reasonable amendment to the proposed application, which request must be made to the undertaker within 10 business days of receipt of the details of the proposed application.
- (5) The undertaker must notify the PLA of the final programme for any clearance of unexploded ordnance to be undertaken within the Area of Interest no less than 20 business days before such disposal is programmed to begin.
- (6) The undertaker will consult the PLA on the activities and programme for any specified work to be undertaken under this Order which is not covered by the cable specification and installation plan and which is within or may affect the Area of Interest no less than 20 business days before such specified work is programmed to commence. The undertaker must have regard to any request made by the PLA for reasonable amendment to the activities or programme.
- (7) The undertaker must notify the PLA of the final method statement and programme for any specified work to be undertaken under this Order which is not covered by the cable specification and installation plan and which is within or may affect the Area of Interest no less than 5 business days before such work is programmed to begin.

Cable Specification and Installation Plan

- **4.** The cable specification and installation plan referred to in paragraph [3] must be informed by a cable burial risk assessment and set out for Work No.2(c), and in so far as it applies to the Deep Water Routes:
 - (a) [That any part of Work No.2(c), any associated development or ancillary works located within the Sunk and Trinity Deep Water Routes, as shown shaded yellow on the Deep Water Route Cable Installation Area (Future Dredging depths) plan must be installed or placed and thereafter maintained, operated and decommissioned to a level which would not impede the dredging of those parts of the Sunk and Trinity Deep Water Routes:
 - (i) shown shaded in yellow and outlined in a bold black line (and labelled Sunk Area A (22m CD)) to a level of 22 metres below Chart Datum;
 - (ii) shown shaded in yellow and outlined in a blue dotted line (and labelled Trinty (22m CD)) to a level of 22 metres below Chart Datum; and
 - (iii) shown shaded in yellow and cross hatched in orange (and labelled Sunk Area B (19m CD)) to a level of 19 metres below Chart Datum.];
 - (iv) and in all cases (i) to (iii) makes allowance for an 'over-dredge' tolerance of 0.5 metres in addition to the stated depths attributable to standard dredging methodology.
 - (b) The proposed cable installation methods and measures for management of construction risks;
 - (c) Additional cable burial depths required or any other forms of cable protection proposed including type, volume and locations;
 - (d) During construction of the cables and cable protection in the Area of Interest arrangements for the consultation of the PLA in a timely manner, on such matters regarding those works as the PLA may reasonably request including arrangements for providing the PLA with a point of contact for continuing liaison and co-ordination throughout the construction of these works.
 - (e) The proposed programme of work for cable installation and arrangements for notification of any changes to the programme to the PLA;

- (f) The programme and methodologies for monitoring and the arrangements for the results of these surveys or other construction evidence being made available to the PLA within 10 business days of the undertaker receiving reports of the survey results or evidence to demonstrate compliance with the depths referred to in sub paragraph a) of this paragraph
- (g) Methods and timescales to rectify any issues which may compromise the depth referred to in sub paragraph a) of this paragraph 4.
- (h) A requirement for a process (subject to paragraphs 8 and 9) and timescales (both the undertaker and PLA acting reasonably) for cable re-installation should the level that the cable is such that the under keel clearance specified in Outline CSIP cannot be achieved over the lifetime of the authorised development.

Monitoring

- **5.** If following the results of any geophysical surveys carried out using multi-beam echo sounder survey (MBES), it is confirmed that cable exposure or reduction in navigable depth has occurred within the Area of Interest, the undertaker will notify the PLA as soon as reasonably practicable and in any event no later than [2 business days after the undertaker confirms any exposure has occurred].
- **6.** The PLA must notify the undertaker of any potential cable exposure that is identified by the PLA in the relation to the Area of Interest as soon as reasonably practicable.

Remediation

- 7. Where, following the installation of cables forming Work No. 2(c) in relation to the Area of Interest it is identified by the undertaker (who shall notify the PLA as soon as reasonably practicable of this fact and in any effect within [] days) or, following inspection by the PLA, it is identified by the PLA (and the same is notified to the undertaker as soon as reasonably practicable), that the level of cable is such that the requirements of paragraph 4(a) has not been achieved or at any time following installation or maintenance the cable has moved such that the requirements of paragraph 4(a) are no longer being achieved, then, unless otherwise agreed in writing with the PLA, the undertaker is required to carry out remediation works as specified in the cable specification and installation plan subject to paragraph (8) in relation to the Deep Water Routes.
- **8.** Unless otherwise agreed in writing with the PLA, the undertaker will carry out the following arrangements for the carrying out the remediation works:
- (1) the undertaker will re-bury the cables to the required specification to achieve the requirements of paragraph 4(a); and
- (2) Following the completion of the works in sub-paragraph (1), if it is identified by the undertaker or the PLA (following inspection) that the required specification is not achieved, then the undertaker will remove the cable without unreasonable delay and thereafter relay a new cable pursuant to an updated cable specification and installation plan, which updated cable specification and installation plan specifically identifies and addresses why the previous cable burial was not successful, how that has been addressed and what measures are to be used in relaying the cable to prevent the failure reoccurring.
- (3) The updated cable specification and installation plan required under sub-paragraph (2) will be submitted to the PLA for approval under paragraph 3, and the provisions of both this paragraph and paragraph 4 will apply to that updated cable specification and installation plan.
- (4) The steps in this paragraph shall be repeated until the requirement in paragraph 4(a) is achieved or the cable is permanently removed from the Area of Interest.

Provision of as built details

9. As soon as reasonably practicable following the completion of the installation of cables forming Work No. 2(c) and after any maintenance of the same, the undertaker must provide (on a strictly confidential basis) to the PLA as built drawings of Work No. 2(c) in a form and scale to be agreed between the undertaker and the PLA to show the position, depth and any cable protection installed as part of Work No 2(c) in relation to the Deep Water Routes provided that the PLA must not disclose (without the written consent of the

undertaker) any information that has been provided by the undertaker to the PLA on a confidential basis or which is marked as commercially sensitive and must hold such information on a confidential basis only, except that the PLA may provide the information to contractors and agents acting on its behalf (including but not limited to contractors engaged to carry out dredging operations) provided that such agents and contractors are required by the PLA to treat such information as confidential.

Indemnity

- **10.** The undertaker will pay to the PLA its proper and reasonable legal costs, professional fees and disbursements incurred in connection with reviewing the details submitted to the PLA pursuant to this Part 9B of Schedule 9 and Part 9A of Schedule 9.
- (2) The undertaker is responsible for and must make good to the PLA all financial costs, charges, damages losses or expenses which may be incurred reasonably or suffered by the PLA by reason of—
 - (a) the construction or operation of Work no 2(c), any specified work or its failure or a failure to adhere to the requirements of this Part 9B of Schedule 9 or Part 9A of Schedule 9;
 - (b) any act or omission of the undertaker, its employees, contractors or agents or others whilst engaged on the construction or operation of a specified work or Work no 2(c) or with any failure, and the undertaker must indemnify the PLA from and against all claims and demands arising out of or in connection with a specified work, Work no 2(c) or any such failure, act or omission or any failure to adhere to the requirements of the this Part 9B of Schedule 9 or Part 9A of Schedule 9.
 - (3) The fact that any act or thing may have been done—
 - (a) by the PLA on behalf of the undertaker; or
 - (b) by the undertaker, its employees, contractors or agents in accordance with plans or particulars submitted to or modifications or conditions specified by the PLA, or in a manner approved by the PLA, or under its supervision or the supervision of its duly authorised representative, does not (if it was done or required without negligence on the part of the PLA or its duly authorised representative, employee, contractor or agent) excuse the undertaker from liability under the provisions of this paragraph.
- (4) The PLA must give the undertaker reasonable notice of any such claim or demand as is referred to in sub-paragraphs (1) and (2) and no settlement or compromise of it is to be made without the prior consent of the undertaker.

Transfer of the benefit

11 The undertaker must within 7 days after the completion of any sale, agreement or other transaction under article 7 (Benefit of the Order) in relation to which any powers, rights and obligations of the undertaker are transferred to another party, notify the PLA in writing, and the notice must include particulars of the other party to the transaction under article 7, the general nature of the transaction and details of the extent, nature and scope of the works or functions sold, transferred or otherwise dealt with.

Disputes

Any dispute arising between the undertaker and the PLA under this Schedule is to be escalated in the first instance to senior representatives from the PLA and the undertaker, and the PLA and undertaker must seek to resolve the dispute through a meeting between the parties promptly and in any event within 10 business days, Where following escalation the dispute is not resolved, it is to be determined by arbitration as provided in article [48] (arbitration) of this Order.