MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS

Marine Enhancement Statement

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Term	Meaning
Applicants	Morgan Offshore Wind Limited (Morgan OWL) and Morecambe Offshore Windfarm Ltd (Morecambe OWL).
Development Consent Order	An order made under the Planning Act 2008, as amended, granting development consent.
Environmental Impact Assessment	The process of identifying and assessing the significant effects likely to arise from a project. This requires consideration of the likely changes to the environment, where these arise as a consequence of a project, through comparison with the existing and projected future baseline conditions.
Environmental Statement	The document presenting the results of the Environmental Impact Assessment process.
Evidence Plan Process	A voluntary consultation process with specialist stakeholders to agree the approach to, and information to support, the EIA and Habitats Regulations Assessment processes for certain topics.
Generation Assets	The generation assets associated with the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm include the offshore wind turbines, inter-array cables, offshore substation platforms and platform link (interconnector) cables to connect offshore substations.
Intertidal area	The area between Mean High Water Springs and Mean Low Water Springs.
Landfall	The area in which the offshore export cables make landfall (come on shore) and the transitional area between the offshore cabling and the onshore cabling. This term applies to the entire landfall area at Lytham St. Annes between Mean Low Water Springs and the transition joint bay inclusive of all construction works, including the offshore and onshore cable routes, intertidal working area and landfall compound(s).
Marine licence	The Marine and Coastal Access Act 2009 requires a marine licence to be obtained for licensable marine activities. Section 149A of the Planning Act 2008 allows an applicant for to apply for 'deemed marine licences' in English waters as part of the development consent process.
Mean High Water Spring	The height of mean high water during spring tides in a year.
Mean Low Water Spring	The height of mean low water during spring tides in a year.
Morgan and Morecambe Offshore Wind Farms: Transmission Assets	The offshore and onshore infrastructure connecting the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm to the national grid. This includes the offshore export cables, landfall site, onshore export cables, onshore substations, 400 kV grid connection cables and associated grid connection infrastructure such as circuit breaker compounds. Also referred to in this report as the Transmission Assets, for ease of reading.
Morecambe Offshore Windfarm: Generation Assets	The offshore generation assets and associated activities for the Morecambe Offshore Windfarm.
Morecambe Offshore Windfarm: Transmission Assets	The offshore export cables, landfall and onshore infrastructure required to connect the Morecambe Offshore Windfarm to the National Grid.

Term	Meaning
Morecambe OWL	Morecambe Offshore Windfarm Ltd is a joint venture between Zero-E Offshore Wind S.L.U. (Spain) (a Cobra group company) (Cobra) and Flotation Energy Ltd.
Morgan Offshore Wind Project: Generation Assets	The offshore generation assets and associated activities for the Morgan Offshore Wind Project.
Morgan Offshore Wind Project: Transmission Assets	The offshore export cables, landfall and onshore infrastructure required to connect the Morgan Offshore Wind Project to the National Grid.
Morgan OWL	Morgan Offshore Wind Limited is a joint venture between bp Alternative Energy investments Ltd. and Energie Baden-Württemberg AG (EnBW).
Offshore export cables	The cables which would bring electricity from the Generation Assets to the landfall.
Offshore Permanent Infrastructure Area	The area within the Transmission Assets Offshore Order Limits (seaward of MLWS) where the permanent offshore electrical infrastructure (i.e. offshore export cables) will be located.
Offshore Wind Leasing Round 4	The Crown Estate auction process which allocated developers preferred bidder status on areas of the seabed within Welsh and English waters and ends when the Agreements for Lease are signed.
Substation	Part of an electrical transmission and distribution system. Substations transform voltage from high to low, or the reverse by means of electrical transformers.
Sandwave	A sedimentary structure that forms transverse to the direction of tidal flow.
Transmission Assets	See Morgan and Morecambe Offshore Wind Farms: Transmission Assets (above).
Transmission Assets Order Limits	The area within which all components of the Transmission Assets will be located, including areas required on a temporary basis during construction and/or decommissioning (such as construction compounds).

Acronyms

Acronym	Meaning
CBRA	Cable Burial Risk Assessment
CSIP	Outline Offshore Cable Specification and Installation Plan(s)
DCO	Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
EIA	Environmental Impact Assessment
EPP	Evidence Plan Process
ES	Environmental Statement
GES	Good Environmental Status
JNCC	Joint Nature Conservation Committee
MCZ	Marine Conservation Zone
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
MMO	Marine Management Organisation
MPA	Marine Protected Area
MSFD	Marine Strategy Framework Directive
NPS	National Policy Statement
NSIPs	National Significant Infrastructure Projects
NWMP	North West Marine Plan
OTNR	Offshore Transmission Network Review
OWL	Offshore Wind Limited
SAC	Special Area of Conservation
SPA	Special Protection Area
VTMP	Vessel Traffic Management Plan
UK	United Kingdom

1 Marine Enhancement Statement

1.1 Introduction

1.1.1.1 This document forms the Marine Enhancement Statement which has been produced as part of a Development Consent Order (DCO) for the Morgan and Morecambe Offshore Wind Farms: Transmission Assets (referred to hereafter as 'the Transmission Assets').

1.1.2 Project Overview

1.1.2.1 Morgan Offshore Wind Limited (Morgan OWL), a joint venture between bp Alternative Energy Investments Ltd. (bp) and Energie Baden-Württemberg AG (EnBW), is developing the Morgan Offshore Wind Project.

1.1.2.2 Morecambe Offshore Windfarm Ltd (Morecambe OWL), a joint venture between Zero-E Offshore Wind S.L.U. (Spain) (a Cobra group company) (Cobra) and Flotation Energy Ltd., is developing the Morecambe Offshore Windfarm.

1.1.2.3 Both the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm were scoped into the 'Pathways to 2030' workstream under the Offshore Transmission Network Review (OTNR). The OTNR aims to consider, simplify, and wherever possible facilitate a collaborative approach to offshore wind projects connecting to the National Grid.

1.1.2.4 Under the OTNR, the National Grid Electricity System Operator (NGESO) is responsible for assessing options to improve the coordination of offshore wind generation connections and transmission networks and has undertaken a Holistic Network Design Review (HNDR). In July 2022, the UK Government published the 'Pathway to 2030 Holistic Network Design' documents, which set out the approach to connecting 50 GW of offshore wind to the National Grid (NGESO, 2022). A key output of the HNDR process was the recommendation that the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm should work collaboratively in consenting the connections of the offshore two wind farms to the National Grid electricity transmission network at Penwortham in Lancashire.

1.1.2.5 Morgan OWL and Morecambe OWL (the Applicants) are jointly seeking a single consent for their electrically separate transmission assets comprising aligned offshore export cable corridors to landfall and aligned onshore export cable corridors to separate onshore substation(s), and onward connection to the National Grid at Penwortham, Lancashire.

1.1.2.6 The Applicants have each submitted separate DCO applications for the Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm: Generation Assets covering the offshore wind turbines, inter-array cables, offshore substation platforms and interconnector.

1.1.2.7 The key offshore component of the Transmission Assets is the offshore export cables (up to six offshore export cables: four for the Morgan Offshore Wind Project and two for the Morecambe Offshore Windfarm). Full details of

the activities and infrastructure associated with the Transmission Assets are set out in Volume 1, Chapter 3: Project Description of the Environmental Statement (ES).

1.1.3 Purpose of the Marine Enhancement Statement

1.1.3.1 This Marine Enhancement Statement outlines the policy relating to the provision of marine enhancement across the Transmission Assets. The Marine Enhancement Statement then describes how the Applicants will seek to enhance biodiversity in the marine enhancement.

1.1.3.2 This document should be read in conjunction with the following documents:

- Volume 2, Chapter 1: Physical processes of the ES (document reference F.2.1)
- Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES (document reference F.2.2)
- Volume 2, Chapter 3: Fish and shellfish ecology of the ES (document reference F.2.3)
- Volume 2, Chapter 4: Marine mammals of the ES (document reference F.2.4)
- Volume 2, Chapter 5: Offshore ornithology of the ES (document reference F.2.5).

1.2 Policy Requirements and Legislation

1.2.1 Marine enhancement policy and legislation

1.2.1.1 There is currently no legislative requirement to deliver marine enhancement in the offshore environment and no clear policy basis or guidance to do so. There is developing policy and legislation for the provision of marine enhancement, and this section sets out the emerging planning policy and legislation relevant to the evolving context of marine enhancement which may provide a future mechanism to explore and deliver potential marine enhancement.

1.2.2 National Policy Statement EN-1

1.2.2.1 Overarching National Policy Statement (NPS) for Energy (EN-1) sets out the UK Government's policy for the delivery of major energy infrastructure (Department for Energy Security & Net Zero, 2024). The need for marine enhancement is set out in NPS EN-1, section 4.6 states:

"Environmental net gain is an approach to development that aims to leave the natural environment in a measurably better state than beforehand. Projects should therefore not only avoid, mitigate and compensate harms, following the mitigation hierarchy, but also consider whether there are opportunities for enhancements.

Biodiversity net gain is an essential component of environmental net gain. Projects in England should consider and seek to incorporate improvements in natural capital, ecosystem services and the benefits they deliver when planning how to deliver biodiversity net gain.

Currently biodiversity net gain policy in England only applies to terrestrial and intertidal components of projects. Principles for Marine Net Gain are currently being rolled out by the Government, who will provide guidance in due course. There are provisions in the Environment Act 2021 to allow Marine Net Gain to be made mandatory for NSIPs in the future… …Energy NSIP proposals, whether onshore or offshore, should seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity, and the wider environment where possible.

1.2.2.2 Paragraph 5.4.19 requires applicants to:

"show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological interests."

1.2.2.3 National Policy Statement (NPS) for Energy (EN-1) also reflects nature inclusive design within the policies and requires consideration of marine enhancement opportunities that can be embedded in the project design. Paragraph 5.4.21 states that:

"The design process should embed opportunities for nature inclusive design. Energy infrastructure projects have the potential to deliver significant benefits and enhancements beyond Biodiversity Net Gain, which result in wider environmental gains. The scope of potential gains will be dependent on the type, scale, and location of each project."

1.2.2.4 Paragraph 5.4.33 specifies that:

"Applicants should consider any reasonable opportunities to maximise the restoration, creation, and enhancement of wider biodiversity, and the protection and restoration of the ability of habitats to store or sequester carbon."

1.2.3 Action Plan for National Significant Infrastructure Projects (NSIPs)

1.2.3.1 The Nationally Significant Infrastructure: action plan for reforms to the planning process (Department for Levelling Up, Housing and Communities, 2023), which was published in February 2023, sets a target to incorporate onshore biodiversity net gain requirements for all terrestrial NSIPs, from December 2025. However, until this comes into force, the position for NSIPs in England remains unchanged with no current requirements to quantify onshore biodiversity losses and gains through use of a metric.

1.2.3.2 A complementary marine enhancement requirement is under development with Defra having consulted on the principles of marine enhancement in English waters in 2022 (Defra, 2022). The consultation responses confirmed strong support from a wide range of stakeholders for the principles of marine enhancement, and Defra has confirmed that it will continue to develop the details of the relevant policy required (Defra, 2023a). Defra will be required to

consult again before any policy can be implemented. It is unlikely that there will be any formalisation of the requirement for the delivery of marine enhancement within the DCO determination timeframe of the Transmission Assets.

1.2.4 Environment Act 2021

1.2.4.1 The Environment Act 2021 sets out targets, plans and policies for environmental protection.

1.2.4.2 Schedule 15 of the Environment Act (Biodiversity gain in nationally significant infrastructure projects), which is not currently in force, sets out provisions for biodiversity net gain for NSIPs and amends the Planning Act 2008. This includes the requirement to produce biodiversity net gain statements for NSIPs. The stated intention is for the requirements of the Environment Act in relation to biodiversity to be implemented no later than 2025.

1.2.4.3 It is noted that the requirement would not initially apply to elements of projects which are in the marine environment (such as those taking place entirely below the low-water mark) (Defra, 2022).

1.2.5 The Convention on Biological Diversity

1.2.5.1 The Convention on Biological Diversity is an international legal instrument ratified by the UK in 1994 and which has the following three main objectives:

- the conservation of biological diversity;
- the sustainable use of the components of biological diversity; and
- the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

1.2.5.2 The overall objective is to encourage actions that will lead to a sustainable future. The Secretariat of the Convention is based in Montreal in Canada and aims to assist governments to implement the Convention and its programmes of work.

1.2.6 The Marine Strategy Framework Directive

1.2.6.1 The EU Marine Strategy Framework Directive (MSFD) aims to protect more effectively the marine environment across Europe. The MSFD's high level descriptors of Good Environmental Status (GES) relevant to marine ecology and biodiversity include:

- Descriptor 1: Biological diversity:

  Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions.

- Descriptor 4: Elements of marine food webs:

  All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring

the long term abundance of the species and the retention of their full reproductive capacity.

1.2.7 A Green Future: Our 25 Year Plan to Improve the Environment

1.2.7.1 The Government's 25 Year Plan to Improve the Environment was published in 2018 and sets out the government action to be taken to help the natural world regain and retain good health (Defra, 2018). It aims to deliver cleaner air and water, protect threatened species and provide richer wildlife habitats. Recovering nature and securing clean, healthy, productive and biologically diverse seas and oceans are two of the key policies identified by the Government to focus action to protect and enhance the environment. The 25 Year Plan states:

"We will achieve a growing and resilient network of land, water and sea that is richer in plants and wildlife. At sea, we will do this by:

- *Reversing the loss of marine biodiversity and, where practicable, restoring it.*
- *Increasing the proportion of protected and well-managed seas, and better managing existing protected sites.*
- *Making sure populations of key species are sustainable with appropriate age structures.*
- *Ensuring seafloor habitats are productive and sufficiently extensive to support healthy, sustainable ecosystems."*

1.2.8 Environmental Improvement Plan 2023

1.2.8.1 The Environmental Improvement Plan is the first review of the 25 Year Environment Plan and sets out the Government's plan to deliver (Defra, 2023b). The apex goal of the Environmental Improvement Plan 2023 is to improve nature: *"We will halt the decline in our biodiversity so we can achieve thriving plants and wildlife".*

1.2.8.2 One of the objectives included in the Plan is to:

"Increase the resilience of our natural environment by restoring degraded habitats and habitat creation."

1.2.9 North West Marine Plan

1.2.9.1 The North West Marine Plan (NWMP) was formally adopted by Defra in 2021. The NWMP provides a framework to inform decisions over how the marine environment is developed, protected and improved until 2041 (Defra, 2021). The plan forms part of the policy framework that guides public authority decision-making in the north west marine plan areas. The public authority (SoS) 'must have regard' to the NWMP alongside any relevant National Policy Statements when making decisions in relation to Nationally Significant Infrastructure Projects. Biodiversity conservation, enhancement and restoration forms part of the vision for the NWMP.

1.2.9.2 In regards to net gain, the North West Marine Plan (Defra, 2021) states:

"Government has committed to the development of net gain under the 25 Year Environment Plan, and biodiversity net gain in land-based (terrestrial) situations has been developed to the mean low water mark (intertidal).

Work to consider how net gain might be delivered in the marine area is in progress but not sufficiently well advanced to include in this marine plan at this time."

1.2.9.3 With reference to biodiversity enhancement, policy NW-BIO-1 of the NWMP (Biodiversity) has the following aim:

"Maintaining the distribution of priority habitats and priority species in the north west marine plan areas is important as it reduces habitat fragmentation, species isolation and supports strong, biodiverse communities which in turn provide ecosystem services. NW-BIO-1 encourages and supports proposals that enhance the distribution of priority habitats and priority species. NW-BIO-1 seeks to maintain the distribution of priority habitats and priority species through the management of significant adverse impacts. Proposals that cannot avoid, minimise and mitigate or, as a last resort, compensate for significant adverse impacts, will not be supported."

1.2.9.4 Policy NW-BIO-2 sets out the policy aim regarding native habitat and species adaptation and connectivity in the marine environment:

"Competition for space, increased levels of development, and predicted effects of climate change can affect the connectivity, adaptive ability and migration of habitats and species in the north west marine plan areas. NW-BIO-2 supports and encourages proposals that enhance or facilitate native species or habitat adaptation or connectivity, or native species migration. NW-BIO-2 requires proposals to manage negative effects which may significantly adversely impact the functioning of healthy, resilient and adaptable marine ecosystems."

1.2.10 Summary

1.2.10.1 The policies summarised above set out that there is currently no statutory obligation nor implementation guidance for DCO applications on the requirement for or delivery of marine enhancement. However, the policies provide guidance on what should be considered in developing projects as future policies emerge regarding marine enhancement. These include:

- Evidence that the project has sought to minimise impacts to ecological receptors;
- Facilitate native species and habitat diversity and connected ecological networks to support healthy, sustainable ecosystems; and
- Show how the project has considered opportunities to conserve and enhance biodiversity.

1.3 Delivering Marine Enhancement

1.3.1.1 Whilst there is currently no requirement for marine enhancement, the Applicants will seek to enhance biodiversity in the marine environment.

1.3.1.2 The Applicants have employed ecological specialists to undertake baseline ecology surveys, impact assessments, and identification of mitigation measures, whilst engaging with stakeholders on enhancement opportunities.

1.3.1.3 Throughout the pre-application process, the Applicants have engaged with Natural England, the Joint Nature Conservation Committee (JNCC), the Marine Management Organisation (MMO) and other relevant stakeholders through the Evidence Plan Process (EPP). The Applicants have requested advice on potential marine enhancement opportunities and sought feedback on the approach to mitigation throughout the Environmental Impact Assessment (EIA) process.

1.3.2 A step-wise approach

1.3.2.1 National Policy Statement EN-1 and the North West Marine Plan require applicants to apply a 'step-wise' approach to maintaining and enhancing biodiversity following the mitigation hierarchy. **Table 1** outlines how the Applicants have applied the step-wise approach during the development of the Transmission Assets EIA.

Table 1: Transmission Assets step-wise approach to marine enhancement

Step	How the Transmission Assets considered the step	Further information
Step 1 – avoid	The site selection process aimed to avoid statutory designated sites and protected species and habitats where possible. Sites avoided through the site selection process include: • Shell Flat and Lune Deep Special Area of Conservation (SAC) • West of Walney Marine Conservation Zone (MCZ) • West of Copeland MCZ.	Full details of the site selection process can be found in Volume 1 Chapter 4: Site Selection and Consideration of Alternatives of the ES (document reference F.1.4).
Step 2 – minimise	In avoidance of the designations in Step 1, the Transmission Assets will need to traverse through the Liverpool Bay SPA and Fylde Marine Conservation Zone (MCZ). Potential impacts on these designated sites, habitats and species have been reduced as far as possible. Examples of commitments made by the Transmission Assets (CoTs) to minimise potential impacts are presented below with full details of all CoTs provided in the Commitment Register (F1.5.3) that accompanies the ES. • CoT45: The Outline Offshore Cable Specification and Installation Plan (CSIP) for the Fylde MCZ includes: details of cable burial depths, cable protection, and cable monitoring. The Outline CSIP also includes an Outline Cable Burial Risk Assessment (CBRA). Detailed CSIP(s) and CBRA(s) will be prepared by the Applicants covering the full extent of their respective offshore export cable corridors. Detailed CSIPs will be developed in accordance with the Outline CSIP and will ensure safe navigation is not compromised including consideration of under keel clearance. No more than 5% reduction in water depth (referenced to Chart Datum) will occur at any point on the offshore export cable corridor route without prior written approval from the MCA. • CoT47: The Outline Offshore Cable Specification and Installation Plan (CSIP) includes measures to limit the extent of cable protection to 3% of the offshore export cable route within the Fylde (Marine Conservation Zone) MCZ (excluding cable crossings). Within the Fylde MCZ, external cable protection will only be used where deemed to be essential, e.g. for cable crossings or in the instance that adequate burial / reburial is not possible for any section of the route through the Fylde MCZ. The Outline CSIP also includes measures to limit sandwave clearance to up to 5% of the offshore export cable corridor route within the Fylde MCZ. Material arising from sandwave clearance in the Fylde MCZ will be deposited within the Fylde MCZ.	Further details are available in: • Volume 1 Chapter 3: Project Description of the ES (document reference F.1.3) • Volume 1, Chapter 4: Site Selection and Consideration of Alternatives of the ES (document reference F.1.4) • Volume 2, Chapter 1: Physical processes of the ES (document reference F.2.1), • Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES (document reference F.2.2), • Volume 2, Chapter 3: Fish and shellfish ecology of the ES (document reference F.2.3), • Volume 2, Chapter 4: Marine mammals of the ES (document reference F.2.4), • Volume 2 and Chapter 5: Offshore ornithology of the ES (document reference F.2.5), • Outline Cable Burial Risk Assessment (document reference J14), • Outline Offshore CSIP (document reference J15), • Outline MMMP (document reference J18),

Step	How the Transmission Assets considered the step	Further information
	The requirements for cable protection and sandwave clearance will be informed through the undertaking of survey works pre-construction. Detailed CSIP(s) will be developed in accordance with the Outline CSIP. • CoT49: Construction Method Statement(s) (CMSs) including Offshore Cable Specification and Installation Plan(s), will be produced and implemented prior to construction. These will contain: – details of cable installation and methodology; and – details of foundation installation methodology covering scour protection and the deposition of material arising from drilling, dredging, and/or sandwave clearance. • CoT54: An Outline Offshore Cable Specification and Installation Plan (CSIP) includes for cable burial to be the preferred option for cable protection, where practicable. Detailed CSIP(s) will be developed in accordance with the Outline CSIP. • CoT64: Detailed Marine Mammal Mitigation Protocols (MMMPs) will be developed and implemented in accordance with the Outline MMMP, to reduce the risk of injury to marine mammals. The Detailed MMMP(s) will include measures to apply in advance of and during surveys and UXO clearance. The Detailed MMMP(s) will include for the use of low order techniques, where possible, as the primary mitigation measure alongside other measures. The detailed MMMP(s) will be approved by Marine Management Organisation, in consultation with Natural England. • CoT65: Offshore Environmental Management Plan(s) (EMPs) will be developed and will include details of: – a marine pollution contingency plan to address the risks, methods and procedures to deal with any spills and collision incidents during construction and operation of the authorised scheme for activities carried out below MHWS; – a chemical risk review to include information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance; – waste management and disposal arrangements; – the appointment and responsibilities of a fisheries liaison officer; – a fisheries liaison and coexistence plan (which accords with the outline fisheries liaison and co-existence plan) to ensure relevant fishing fleets are notified of	• Outline Fisheries Liaison and Co-existence Plan (document reference J13); • Measures to minimise disturbance to marine mammals and rafting birds from vessels (document reference J16) • Outline VTMP (document reference J21), and • Dredging and disposal – site characterisation plan (document reference J22).

Step	How the Transmission Assets considered the step	Further information
	commencement of licensed activities pursuant to condition and to address the interaction of the licensed activities with fishing activities; – measures to minimise disturbance to marine mammals and rafting birds from vessels; and – measures to minimise the potential spread of invasive non-native species, including adherence to IMO ballast water management guidelines. • CoT69: Vessel Traffic Management Plan(s) (VTMP) will be developed pre-construction in line with legislation, guidance and industry best practice which will: - determine vessel routing to and from construction areas and ports; - include vessel standards and a code of conduct for vessel operators; and - minimise, as far as reasonably practicable, encounters with marine mammals and basking sharks. These plans will be developed in accordance with the Outline VTMP prepared and submitted with the application for development consent. • CoT108: The Outline Offshore Cable Specification and Installation Plan (CSIP) submitted as part of the application for development consent, includes for all external cable protection used within the Fylde MCZ to be designed to be removable on decommissioning. Detailed CSIP(s) will be developed in accordance with the Outline CSIP. • CoT110: Construction activities associated with the offshore cable pull in for the Morgan Offshore Wind Project and Morecambe Offshore Windfarm Limited will be undertaken in accordance with the Outline Offshore Cable Specification and Installation Plan (CSIP). This will restrict the Applicants to completing one cable pull in (a maximum of five weeks) per wintering season (i.e. during the months of November – February, inclusive), unless otherwise agreed with the MMO, in consultation with Natural England. Detailed CSIP(s) will be developed in accordance with the Outline CSIP. • CoT111: The total number of vessels for both the Morgan Offshore Wind Project and Morecambe Offshore Windfarm Limited actively working within the Liverpool Bay/Bae Lerpwl SPA during construction or during operation and maintenance phase will be limited to a maximum of five vessels at any one time in the wintering period, i.e. between November and February (inclusive). This will be included within the Offshore Environmental Management Plan(s)'s measures to minimise disturbance to marine mammals and rafting birds from vessels.	

Step	How the Transmission Assets considered the step	Further information
	• CoT114: All permanent infrastructure located between Mean Low Water Springs (MLWS) and Mean High Water Springs (MHWS) will be buried to a target depth of 3 metres, subject to further pre-construction surveys to be reported within Detailed Cable Burial Risk Assessments (CBRAs). An Outline CBRA has been prepared and submitted with the application for development consent. • CoT116: Any material arising from sandwave clearance within the Transmission Assets Order Limits will be deposited in close proximity to the works and within the licensed disposal sites within the Order Limits, as detailed in the Dredging and Disposal - Site Characterisation Plan prepared and submitted as part of the application for development consent. • CoT117: The Outline Offshore Cable Specification and Installation Plan (CSIP) includes details for any jack-up vessels used within the Fylde MCZ to be stationary. No walking jack-ups would be used within the Fylde MCZ. Detailed CSIP(s) will be developed in accordance with the Outline CSIP.	
Step 3 – mitigate / restore	As part of the Environmental Impact Assessment process mitigation has been proposed to reduce the potential adverse impacts of the Transmission Assets. Additionally future monitoring to ensure habitat and species are restored, where relevant, as detailed in the Offshore In-Principal Monitoring Plan (IPMP) (document reference J20) with a commitment to monitor the recovery of the Fylde MCZ through which the Transmission Assets passes to reach landfall at Lytham St Annes: • CoT115: An Offshore In-Principal Monitoring Plan (OIPMP) has been prepared and submitted as part of the application for development consent. The OIPMP includes for monitoring of the recovery of sediments and benthic communities within representative areas of the Fylde MCZ potentially impacted by sandwave clearance, cable installation and cable protection, at appropriate temporal intervals as part of the operational asset integrity surveys. Detailed Offshore Monitoring Plans will be produced prior to operation and maintenance phases in accordance with the OIPMP and will be approved in consultation with statutory advisors and regulators. •	Details of proposed mitigation can be found in the following documents: • Volume 2, Chapter 1: Physical processes of the ES (document reference F.2.1), • Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES (document reference F.2.2), • Volume 2, Chapter 3: Fish and shellfish ecology of the ES (document reference F.2.3), • Volume 2, Chapter 4: Marine mammals of the ES (document reference F.2.4), • Volume 2, Chapter 5: Offshore ornithology of the ES (document reference F.2.5), and • Offshore In Principle Monitoring Plan (document reference J20).

Step	How the Transmission Assets considered the step	Further information
Step 4 – biodiversity benefit on site	The Applicants are open to considering (post consent) voluntary on site opportunities for marine biodiversity benefit and will continue to engage with stakeholders to identify possible opportunities.	The suite of potential biodiversity net gain measures is outlined in **section 1.3.3** of this report.
Step 5 – biodiversity benefit off site	The Applicants are open to considering (post consent) voluntary off site opportunities (both within the marine environment and coastal environment where there is connectivity) to provide biodiversity net gain and will continue to engage with stakeholders to identify and refine possible opportunities.	Further information on the suite of potential biodiversity net gain opportunities is provided in **section 1.3.3** of this report.

1.3.3 Marine enhancement

1.3.3.1 Marine enhancement is recognised in policy, but it is not a statutory requirement. The Applicants have engaged with Natural England and other stakeholders on the topic of marine enhancement where there is connectivity through the pre-application phase of the EIA.

1.3.3.2 The Applicants intend to explore the opportunities for marine enhancement listed below, and these opportunities will be discussed with Natural England and other stakeholders, where appropriate, as the Transmission Assets progresses into the post consent phase. The Applicants also await future policy updates and guidance from Defra and Natural England which may influence opportunities for wider marine biodiversity benefit opportunities such as the Marine Recover Fund (MRF).

1.3.3.3 The Applicants have identified a number of potential opportunities within the Irish Sea which could deliver additional marine enhancements as part of the Morgan Offshore Wind Project and Morecambe Offshore Windfarm. Discussions are ongoing with stakeholders. Site specific benthic subtidal ecology surveys have been used to identify potential measures within the project design that could provide additional marine enhancement, if feasible and suitable to the area, such as:

- Installing mattresses for cable protection designed to enhance marine biodiversity;
- Biodiversity enhancements which could be introduced as part of cable protection such as reef blocks or cubes, with specific designs/modifications which are appropriate to the surrounding environment, habitats and species; and
- Opportunities to restore fish and shellfish habitats in the offshore environment.

- Existing marine habitat and species restoration projects (and intertidal projects with connectivity) in the Irish Sea are also being explored.

1.3.3.4 Defra is in the process of developing a Marine Recovery Fund (MRF) through the Offshore Wind Environment Improvement Package (OWEIP) within the British Energy Security Strategy (announced in April 2022) to speed up development of offshore wind whilst protecting the marine environment. The introduction of a MRF is primarily to help deliver strategic compensation measures under the Habitats Regulations. However, Defra is also considering the fund for strategic marine enhancement (Defra 2022). The fund would be an efficient mechanism to deliver effective, aligned, strategic enhancement in the marine environment. This would enable efficient allocation of resources which could therefore provide potentially greater ecological benefits than measures delivered by a sole project alone, to enhance the resilience of marine and coastal ecosystems for the long term. At the time of writing, the Transmission Assets is aware of a delay to delivery of the MRF (now expected at the end of 2024), but the Applicants are continuing to keep up to speed on the development of the MRF for strategic marine enhancement and will continue to engage with stakeholders on progress.

1.4 Conclusion

1.4.1.1 Morgan Offshore Wind Limited and Morecambe Offshore Windfarm Ltd have committed to exploring enhancement opportunities within the marine environment.

1.4.1.2 This document presents the current legislative and policy background and emerging developments for marine enhancement. The Marine Enhancement Statement outlines potential measures and opportunities that could be explored and considered post-consent to deliver marine enhancement. The Applicants will continue to explore marine enhancement opportunities, where possible, as the project design matures, in collaboration with stakeholders post-consent.

1.5 References

Department for Energy Security and Net Zero (2024) Overarching National Policy Statement for Energy (EN-1). Available: https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1. Accessed September 2024.

Department for Environment, Food and Rural Affairs (2018) A Green Future: Our 25 Year Plan to Improve the Environment. Available at: 25-year-environment-plan.pdf (publishing.service.gov.uk). Accessed September 2024.

Department for Environment, Food and Rural Affairs (2021) North West Inshore and North West Offshore Marine Plan. Available at: https://assets.publishing.service.gov.uk/media/60f6f5a1d3bf7f56824cc628/FINAL_North_West_Marine_Plan__1_.pdf. Accessed September 2024.

Department for Environment, Food and Rural Affairs (2022) Marine Net Gain. Consultation on the principles of marine net gain. Available at: Consultation on the Principles of Marine Net Gain.pdf (defra.gov.uk). Accessed September 2024.

Department for Environment, Food and Rural Affairs (2023a) Consultation outcome. Summary of responses. Available at: Summary of responses - GOV.UK (www.gov.uk). Accessed September 2024.

Department for Environment, Food and Rural Affairs (2023b) Environmental Improvement Plan 2023 First revision of the 25 Year Environment Plan. Available at: environmental-improvement-plan-2023.pdf (publishing.service.gov.uk). Accessed September 2024.

Department for Levelling Up, Housing and Communities (2023) Nationally Significant Infrastructure: action plan for reforms to the planning process. Available : https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-nsip-reforms-action-plan/nationally-significant-infrastructure-action-plan-for-reforms-to-the-planning-process. Accessed September 2024.