MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS

National Policy Statement Tracker

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Prepared by:

RPS

Prepared for:

Morgan Offshore Wind Limited,
Morecambe Offshore Windfarm Ltd

Executive summary

This National Policy Statement (NPS) tracker has been prepared on behalf of Morgan Offshore Wind Limited (OWL) and Morecambe OWL (referred to hereafter as the Applicants) and accompanies a Development Consent Order application under section 37 of the Planning Act 2008 for the Morgan and Morecambe Offshore Wind Farms: Transmission Assets (referred to hereafter as the 'Transmission Assets'). The NPS tracker has been prepared following a direction issued under section 35 of the Planning Act 2008 from the Secretary of State, which confirmed that the Transmission Assets should be treated as a 'development for which development consent is required'.

On this basis, NPS EN-1 paragraph 1.3.10 is applicable to Transmission Assets, which confirms that EN-1, in conjunction with any other relevant NPS, will be the primary policy for Secretary of State decision making on projects in the field of energy for which a direction has been given under section 35.

NPSs describe the national case and establish the need for certain types of infrastructure development including energy. Section 104(3) of the Planning Act 2008 outlines that the Secretary of State should decide applications in accordance with relevant NPSs with the fundamental test to be applied in the decision-making process being whether, on balance, the project is in accordance with the relevant NPSs and whether any specific exceptions apply. This may include considering whether the policies set out in the NPSs for delivery of renewable energy are outweighed by any adverse impacts that have been identified, noting the presumption is in favour of applications which accord with any relevant NPSs.

The following relevant NPSs have been discussed throughout the proceeding NPS tracker, the Planning Statement (document reference J28) and Environmental Statement (document references F1 – F4).

- Overarching NPS for Energy (NPS EN-1) which sets out the UK Government's policy for the delivery of major energy infrastructure (Department for Energy Security & Net Zero 2023a).
- NPS for Renewable Energy Infrastructure (NPS EN-3) (Department for Energy Security & Net Zero 2023b).
- NPS for Electricity Networks Infrastructure (NPS EN-5) (Department for Energy Security & Net Zero 2023c).

A full Environmental Impact Assessment (EIA) has been undertaken and reported in the Environmental Statement (ES) that accompanies the application (document references F1 – F4). The scope of assessment work undertaken as part of the EIA process, reported under the policy sections of the topic-specific Environmental Statement chapters were undertaken in line with the relevant issues identified in NPS EN-1, EN-3 and EN-5. The ES provides information proportionate to the scale of the Transmission Assets that is sufficient to meet the requirements of the EIA Regulations.

A Planning Statement (document reference J28) has been produced as part of the Transmission Assets application, providing an overview of the scheme's compliance with relevant policy and to assist the Examining Authority and Secretary of State in their review of the application. The Planning Statement sets out the need for the scheme in the context of the NPSs, as well as a planning assessment considering the relationship between the Transmission Assets and the relevant NPS policies. The Planning Statement concludes

that under section 104 of the Planning Act 2008, the project would be in accordance with the relevant NPSs, considering:

- The Transmission Assets, as an energy transmission Critical National Priority (CNP) infrastructure project, will make a beneficial contribution to global efforts to reduce the effects of climate change and would represent a meaningful contribution to achieving security of UK energy supplies by unlocking almost 2GW of new offshore wind generation. As such, the Transmission Assets will make a material contribution to reducing the UK's current shortfall in meeting the policy ambition of 50GW of offshore wind electricity generation by 2030.
- Although the Transmission Assets would result in some degree of harm to the Green Belt, in particular within Fylde Borough Council's administrative boundary, the starting point for decision making by the Secretary of State is that CNP infrastructure is to be treated as if it has met any tests which are set out within the NPSs, or any other planning policy, which requires a clear outweighing of harm, exceptionality or 'very special circumstances', providing the mitigation hierarchy requirements of NPS EN-1 have been met. This includes development within the Green Belt. Sections 1.3, 1.4 and 1.5 of the Green Belt Technical Note (REP4-092) demonstrate how the Applicants have applied the mitigation hierarchy to avoid, minimise and mitigate impacts and harm to the Green Belt as far as practicable. As such, the starting point for determination should be that the test for very special circumstances has been met. Notwithstanding this approach, very special circumstances do exist which justify and outweigh the harms to be caused to the Green Belt, by reason of inappropriateness and any other harms (Section 1.7 of REP4-092).
- NPS EN-1 confirms that in terms of any Habitats Regulations Assessment or Marine Conservation Zones residual impacts, energy security and decarbonising the power sector to combat climate change are capable of amounting to imperative reasons of overriding public interest, with the benefit to the public being capable of outweighing the risk of environmental damage and evidence is provided as part of the submitted Habitats Regulations Assessment and ISAA that there would be no residual impacts on these matters as to result in risk of environmental damage. The Applicants do not consider that this policy is engaged – there is no identified adverse effect on the integrity of a protected site or species, and in respect of the MCZ although the Applicants do not consider it necessary, a Stage 2 assessment and measures of equivalent environmental benefit have been provided on a 'without prejudice' basis.
- In relation to potential impacts on aviation in relation to bird strike, the Applicants maintain that the design of the Transmission Assets combined with the robust risk assessment and the mitigation measures (secured under Requirement 27 of Schedules 2A and 2B of the draft DCO as updated at Deadline 6 (document reference C1/F09) ensure that both Blackpool Airport and Warton Aerodrome can continue to operate uninterrupted and in a safe and efficient manner. This position has been agreed with Blackpool Airport as recorded in the Joint Policy Statement submitted by the Applicants and Blackpool Airport at Deadline 6 (S_D6_7) which confirms that the parties consider that the Secretary of State can be satisfied that the Transmission Assets do not present any risks in respect of national security or physical safety in relation to the Airport and that consent may be granted in accordance with paragraph 5.5.60 of NPS EN-1. Blackpool Airport have since withdrawn their objection. Whilst the same requirement has been agreed with Warton Aerodrome, they have not removed their objection. However, the Applicants' position is that the agreed Requirement

allows for any further engagement to be carried out post-consent by the way of approval of the detailed Wildlife Hazard Management Plan (which will be in accordance with the outline Wildlife Hazard Management Plan submitted at Deadline 3, document reference S_D3_8 F03) and that taking this into account, the Secretary of State can safely conclude that the Transmission Assets would not impede or compromise the safe and effective use of Warton Aerodrome and that the test in paragraph 5.5.60 of NPS EN-1 has been met.

- Residual impacts identified onshore in terms of partial loss of a Biological Heritage Site, permanent loss of best and most versatile agricultural land, temporary and permanent impacts on users of public rights of way and users near to the Morgan and Morecambe onshore substation sites are not considered to represent an unacceptable risk, in particular when these are balanced with the significant benefits that would arise from the proposal.

The accordance of the Transmission Assets with the three relevant NPSs is outlined within the Planning Statement and Environmental Statement. In addition, this NPS tracker provides a detailed assessment regarding the Transmission Assets' accordance with the relevant NPSs in order to assist the Examining Authority in making its recommendation, and the Secretary of State in making its determination on the application. As such, it has been shown that pursuant to section 104 of the Planning Act 2008, the Transmission Assets align with and satisfy the requirements of all relevant NPSs.

As detailed in the Planning Statement Addendum submitted for Deadline 2 (document reference S_D2_9), between 24 April and 29 May 2025, the Department for Energy Security and Net Zero (DESNZ) published a consultation on revisions to NPS EN-1, NPS EN-3 and NPS EN-5 which aimed to strengthen the Government's commitment to deliver more renewable energy infrastructure across England and Wales.

The changes proposed do not affect the application in any material way. They reinforce the messaging in the Clean Power 2030 Action Plan by bringing this within National Policy and reinforce the very strong support for offshore wind power and therefore the Transmission Assets needed to deliver that new renewable capacity.

The draft NPSs are subject to transitional arrangements and Section 1.6 of NPS EN-1 makes it clear that the January 2024 NPSs remain the relevant government policy in regard to the determination of the Transmission Assets.

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Glossary

Term	Meaning
400 kV grid connection cable corridor	The corridor within which the 400 kV grid connection cables will be located.
400 kV grid connection cables	Cables that will connect the proposed onshore substations to the existing National Grid Penwortham substation.
Access Land	The Countryside and Rights of Way Act 2000 gives a public right of access to land mapped as 'open country' (mountain, moor, heath and down) or registered common land. These areas are known as ‘access land'.
Applicants	Morgan Offshore Wind Limited (Morgan OWL) and Morecambe Offshore Windfarm Ltd (Morecambe OWL).
Baseline	The status of the environment without the Transmission Assets in place.
Best and Most Versatile	Agricultural land that is the best and most versatile for growing crops.
Biodiversity benefit	An approach to development that leaves biodiversity in a better state than before. Where a development has an impact on biodiversity, developers are encouraged to provide an increase in appropriate natural habitat and ecological features over and above that being affected. For the Transmission Assets, biodiversity benefit will be delivered within identified biodiversity benefit areas within the Onshore Order Limits. Further qualitative benefits to biodiversity are proposed via potential collaboration with stakeholders and local groups, contributing to existing plans and programmes, both within and outside the Order Limits.
Biological Heritage Site	A local non-statutory conservation designation identifying areas of significant ecological value. These sites are recognised for their important habitats and species, contributing to local biodiversity. The designation and management of BHSs are guided by specific criteria and are overseen by local authorities and conservation organisations.
Climate change	A change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.
Climate resilience	The capacity of social, economic and ecosystems to cope with a hazardous event or trend or disturbance.
Code of Construction Practice	A document detailing the overarching principles of construction, contractor protocols, construction-related environmental management measures, pollution prevention measures, the selection of appropriate construction techniques and monitoring processes.
Collision	The act or process of colliding (crashing) between two moving objects.
Commitment	This term is used interchangeably with mitigation and enhancement measures. The purpose of commitments is to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. Primary and tertiary commitments are taken into account and embedded within the assessment set out in this Environmental Statement. Secondary commitments are incorporated to reduce effects to environmentally acceptable levels following initial assessment.

Term	Meaning
Construction Traffic Management Plan	A document detailing the construction traffic routes for heavy goods vehicles and personnel travel, protocols for delivery of Abnormal Indivisible Loads to site, measures for road cleaning and sustainable site travel measures.
Cumulative Effects	The combined effect of the Transmission Assets in combination with the effects from other proposed developments, on the same receptor or resource.
Current	Current is the rate at which electrons flow past a point in a complete electrical circuit.
Design envelope	A description of the range of possible elements and parameters that make up the Transmission Assets options under consideration, as set out in detail in Volume 1, Chapter 3: Project Description. This envelope is used to define the Transmission Assets for EIA purposes when the exact engineering parameters are not yet known. This is also referred to as the Maximum Design Scenario or Rochdale Envelope approach.
Development Consent Order	An order made under the Planning Act 2008, as amended, granting development consent.
Direct pipe	A cable installation technique which involves the use of a mini (or micro) tunnel boring machine and a hydraulic (or other) thruster rig to directly install a steel pipe between two points.
Duration (of impact)	The time over which an impact occurs. An impact may be described as short, medium or long-term and permanent or temporary.
Dust	Solid particles suspended in air or settled out onto a surface after having been suspended in air, as defined by the Institute of Air Quality Management.
Effect	The term used to express the consequence of an impact. The significance of effect is determined by correlating magnitude of the impact with the importance, or sensitivity, of the receptor or resource in accordance with defined significance criteria.
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.
European sites	Designated nature conservation sites which include the National Site Network (designated within the UK) and Natura 2000 sites (designated in any European Union country). This includes Sites of Community Importance, Special Areas of Conservation and Special Protection Areas.
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.
Expert Working Group	A forum for targeted engagement with regulators and interested stakeholders through the Evidence Plan process.
Export cable corridor	The specific corridor of seabed (seaward of Mean High Water Springs and land (landward of Mean High Water Springs) from the Generation Assets to the National Grid Penwortham substation.

Term	Meaning
Flood Risk Assessment	A flood risk assessment is an assessment of the risk of flooding from all flood mechanisms, including the identification of flood mitigation measures, in order to satisfy the requirements of the National Planning Policy Framework and Planning Practice Guidance.
Frequency (of impact)	The number of times an impact occurs across the relevant phase/lifetime of a project.
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.
Greenhouse gas	A gas that absorbs and emits radiant energy within the thermal infrared range, causing the greenhouse effect. Examples include carbon dioxide and methane.
Habitats Regulations	The Conservation of Habitats and Species Regulations 2017 (as amended) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended)
Heritage Asset	A building, monument, site, place, area or landscape identified as having a degree of heritage significance meriting consideration in planning decisions, because of its heritage interest.
Heritage significance	The value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.
Horizontal directional drilling	A trenchless technique for installing cables and cable ducts involving drilling in an arc between two points.
Impact	Change that is caused by an action/proposed development, e.g., land clearing (action) during construction which results in habitat loss (impact).
Inter-related Effects	Inter-related effects arise where an impact acts on a receptor repeatedly over time to produce a potential additive effect or where a number of separate impacts, such as noise and habitat loss, affect a single receptor.
Intertidal area	The area between Mean High Water Springs and Mean Low Water Springs.
Intertidal Infrastructure Area	The temporary and permanent areas between MLWS and MHWS.
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 bays inclusive of all construction works, including the offshore and onshore cable routes, intertidal working area and landfall compound(s).
Listed building	A building or structure placed on a statutory 'List' of Buildings of Special Architectural or Historic Interest. There are three grades of listing, which are: • Grade I (these are of exceptional interest); • Grade II* (these are particularly important); and • Grade II (these are of special interest).

Term	Meaning
Local Authority	A body empowered by law to exercise various statutory functions for a particular area of the United Kingdom. This includes County Councils, District Councils and County Borough Councils.
Local Planning Authority	The local government body (e.g., Borough Council, District Council, etc.) responsible for determining planning applications within a specific area.
Marine Conservation Zone	A national statutory conservation designation established under the Marine and Coastal Access Act 2009. These zones are designated to protect nationally important, rare, or threatened marine habitats and species. The legislation empowers authorities to manage and conserve these areas, ensuring the protection of marine biodiversity and geological features.
Marine Guidance Note	A system of guidance notes issued by the Maritime and Coastguard Agency which provide significant advice relating to the improvement of the safety of shipping and of life at sea, and to prevent or minimise pollution from shipping.
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.
Maximum Design Scenario	The realistic worst case scenario, selected on a topic-specific and impact specific basis, from a range of potential parameters for the Transmission Assets.
Mean High Water Springs	The height of mean high water during spring tides in a year.
Mean Low Water Springs	The height of mean low water during spring tides in a year.
Mitigation measures	This term is used interchangeably with Commitments. The purpose of such measures is to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects.
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.
Morecambe OWL	Morecambe Offshore Windfarm Limited is owned by Copenhagen Infrastructure Partners' (CIP) fifth flagship fund, Copenhagen Infrastructure V (CI V).
Morgan and Morecambe Offshore Wind Farms: Transmission Assets	The offshore export cables, landfall, and onshore infrastructure for the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm. 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.
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 generation assets and associated activities for the Morgan Offshore Wind Project to the National Grid.

Term	Meaning
Morgan OWL	Morgan Offshore Wind Limited is a joint venture between JERA Nex bp (JNbp) and Energie Baden-Württemberg AG (EnBW).
National Grid Penwortham substation	The existing National Grid substation at Penwortham, Lancashire.
National Policy Statement(s)	The current national policy statements published by the Department for Energy Security and Net Zero in 2023 and adopted in 2024.
Offshore export cable corridor	The corridor within which the offshore export cables will be located.
Offshore export cables	The cables which would bring electricity from the Generation Assets to the landfall.
Offshore Order Limits	See Transmission Assets Order Limits: Offshore (below).
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.
Onshore export cable corridor	The corridor within which the onshore export cables will be located.
Onshore export cables	The cables which would bring electricity from the landfall to the onshore substations.
Onshore Infrastructure Area	The area within the Transmission Assets Order Limits landward of Mean High Water Springs. Comprising the offshore export cables from Mean High Water Springs to the transition joint bays, onshore export cables, onshore substations and 400 kV grid connection cables , and associated temporary and permanent infrastructure including temporary and permanent compound areas and accesses. Those parts of the Transmission Assets Order Limits proposed only for ecological mitigation/biodiversity benefit are excluded from this area.
Onshore Order Limits	See Transmission Assets Order Limits: Onshore (below).
Onshore substations	The onshore substations will include a substation for the Morgan Offshore Wind Project: Transmission Assets and a substation for the Morecambe Offshore Windfarm: Transmission Assets. These will each comprise a compound containing the electrical components for transforming the power supplied from the generation assets to 400 kV and to adjust the power quality and power factor, as required to meet the UK Grid Code for supply to the National Grid.
Order limits	The limits within which the Transmission Assets may be carried out.
Ordinary Watercourses	Watercourses (such as a river, stream, ditch, cut, sluice, dyke or non-public sewer) that are not designated a Main River under the Water Resources Act (1991). Responsibility for management lies with the Lead Local Flood Authority, or Internal Drainage Board for some watercourses where there is an Internal Drainage District.
Particulate matter	Microscopic solid or liquid airborne particles that are categorised as having either an aerodynamic diameter less than 10 microns (PM_{10}) or less than 2.5 microns ($PM_{2.5}$).
Photomontages	A sequence of photographs taken from representative viewpoints which illustrate the location, size, degree of visibility or appearance of a development.
Planning Inspectorate	The agency responsible for operating the planning process for applications for development consent under the Planning Act 2008.

Term	Meaning
Point of Interconnection	The point where an offshore wind farm connects to the National Grid.
Policy	A set of decisions by governments and other political actors to influence, change, or frame a problem or issue that has been recognized as in the political realm by policy makers and/or the wider public.
Potential Special Protection Areas	A site identified as potentially qualifying for Special Protection Area classification and for which a decision to classify has yet to be taken pending consultation.
Preliminary Environmental Information Report	A report that provides preliminary environmental information in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. This is information that enables consultees to understand the likely significant environmental effects of a project and which helps to inform consultation responses.
Protected species	A species of animal or plant which it is forbidden by law to harm or destroy.
Ramsar sites	Wetlands of international importance that have been designated under the criteria of the Ramsar Convention. In combination with Special Protection Areas and Special Areas of Conservation, these sites contribute to the national site network.
Renewable energy	Energy from a source that is not depleted when used, such as wind or solar power.
Runoff	Runoff occurs when there is more water than land can absorb. The excess liquid flows across the surface of the land.
Safety zones	An area around a structure or vessel which should be avoided.
Scheduled Monument	An archaeological site given legal protection by being placed on a 'Schedule' of monuments.
Scoping Opinion	Sets out the Planning Inspectorate's response (on behalf of the Secretary of State) to the Scoping Report prepared by the Applicants. The Scoping Opinion contains the range of issues that the Planning Inspectorate, in consultation with statutory stakeholders, has identified should be considered within the Environmental Impact Assessment process.
Scour protection	Protective materials to avoid sediment being eroded away from the base of the foundations due to the flow of water.
Setting of a heritage asset	The setting of a heritage asset includes the surroundings in which it is understood, experienced and appreciated embracing present and past relationships to the surrounding landscape. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the heritage significance of an asset, may affect the ability to appreciate that heritage significance or may be neutral.
Site of Special Scientific Interest	A national statutory conservation designation in the UK, recognizing areas of significant ecological or geological value. These sites are legally protected under the Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006. This legislation empowers Natural England to designate and manage SSSIs, ensuring their protection and conservation.
Spatial extent	Geographical area over which the impact may occur.

Term	Meaning
Special Areas of Conservation	A site designation specified in the Conservation of Habitats and Species Regulations 2017. Each site is designated for one or more of the habitats and species listed in the Regulations. The legislation requires a management plan to be prepared and implemented for each SAC to ensure the favourable conservation status of the habitats or species for which it was designated. In combination with Special Protection Areas and Ramsar sites, these sites contribute to the national site network.
Special Protection Areas	A site designation specified in the Conservation of Habitats and Species Regulations 2017, classified for rare and vulnerable birds, and for regularly occurring migratory species. Special Protection Areas contribute to the national site network.
Statutory consultee	Organisations that are required to be consulted by an applicant pursuant to section 42 of the Planning Act 2008 in relation to an application for development consent. Not all consultees will be statutory consultees.
Study area	This is an area which is defined for each environmental topic which includes the Transmission Assets Order Limits as well as potential spatial and temporal considerations of the impacts on relevant receptors. The study area for each topic is intended to cover the area within which an impact can be reasonably expected.
Substation	Part of an electrical transmission and distribution system. Substations transform voltage from high to low, or the reverse by means of electrical transformers.
Survey area	The area within which each survey has been undertaken. This may differ from the Study Area as a Survey Area will be based on species or survey-specific guidance on the extent of survey required, which may be limited by, for example, habitat conditions, or be defined in terms of buffer areas around an area of potential impact.
The Secretary of State for Energy Security and Net Zero	The decision maker with regards to the application for development consent for the Transmission Assets.
Traffic Flows	Traffic flow describes the number of vehicles passing a reference point per unit of time (e.g., vehicles per hour).
Traffic Separation Scheme	A traffic-management route-system ruled by the International Maritime Organization. The traffic-lanes (or clearways) indicate the general direction of the vessels in that zone; vessels navigating within a Traffic separation Scheme all sail in the same direction or they cross the lane in an angle as close to 90 degrees as possible.
Transboundary effects	Effects from a project within one state that affect the environment of another state(s).
Transition joint bays	The transition joint bays consist of concrete slab floor excavations into which the offshore and onshore export cables are pulled before the cables are jointed together.
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

Term	Meaning
Transmission Assets Order Limits: Offshore	The area within which all components of the Transmission Assets seaward of Mean Low Water Springs will be located, including areas required on a temporary basis during construction and/or decommissioning. Also referred to in this report as the Offshore Order Limits, for ease of reading.
Transmission Assets Order Limits: Onshore	The area within which all components of the Transmission Assets landward of Mean High Water Springs will be located, including areas required on a temporary basis during construction and/or decommissioning (such as construction compounds). Also referred to in this report as the Onshore Order Limits, for ease of reading.
Voltage	Voltage is the pressure from an electrical circuit's power source that pushes charged electrons (current) through a conducting loop.

Acronyms

Acronym	Meaning
AIL	Abnormal Indivisible Load
BHS	Biological Heritage Site
BPM	Best Practicable Means
CNP	Critical National Priority
CoCP	Code of Construction Practice
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
EfW	Energy from Waste
EWG	Expert Working Group
GHG	Greenhouse Gas
HAMP	Highways Access Management Plan
HRA	Habitats Regulations Assessment
IEMA	Institute of Environmental Management and Assessment
MCA	Maritime and Coastguard Agency
MCAA	Marine and Coastal Access Act 2009
MCZ	Marine Conservation Zone
MEEB	Measures of Equivalent Environmental Benefit
MMO	Marine Management Organisation
NRW	National Resources Wales
OTNR	Offshore Transmission Network Review
PRoW	Public Right(s) of Way
SIP	Site Integrity Plan
SSSI	Site of Special Scientific Interest
SWMP	Site Waste Management Plan
TA	Transport Assessment

Units

Unit	Description
%	Percentage
km^2	Square kilometres
nm	Nautical mile

1 NPS tracker

1.1 NPS EN-1

Table 1.1: NPS EN-1

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
1.Introduction			
1.3 Scope of the Overarching National Policy Statement for Energy			
1.3 Scope of the Overarching National Policy Statement for Energy	1.3.10	EN-1, in conjunction with any relevant technology specific NPS, will be the primary policy for Secretary of State decision making on projects in the field of energy for which a direction has been given under section 35.	A direction under s35 PA2008 has been given for the Transmission Assets. Therefore, this application has been prepared on the basis that NPS EN-1 is the primary policy for Secretary of State decision making.
3.The need for new nationally significant electricity infrastructure projects			
3.2 Secretary of state decision making			
3.2 Secretary of state decision making	3.2.1	The government's objectives for the energy system are to ensure our supply of energy always remains secure, reliable, affordable, and consistent with net zero emissions in 2050 for a wide range of future scenarios, including through delivery of our carbon budgets and Nationally Determined Contributions.	The Transmission Assets are required to connect the Generation Assets (the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm) to the UK electricity transmission network, contributing promptly to: • the UK Government's ambition to deliver 50 GW of offshore wind by 2030; • net zero emissions by 2050; • delivering much needed investment and securing construction and operations jobs in the UK; • securing our energy supply; and • the UK's response to the climate change crisis. The Generation Assets, together with the Transmission Assets, therefore have an important part to play in securing the timely delivery of the Government's renewable energy strategy and achieving legally binding greenhouse gas emissions reduction targets. The national and international policy commitments described in section 3 of the Planning Statement (document reference J28) demonstrate the need for renewable energy and, specifically, for offshore wind and electricity network improvements, in order to meet climate commitments and contribute to addressing the climate crisis. This application accords with these requirements as a key mechanism for meeting emissions targets in the use of renewables, including offshore wind. Volume 1, Chapter 2: Policy and Legislative Context of the ES (document reference F1.2) also sets out the need and adherence of the Transmission Assets to relevant policy and legislation, and Volume 4, Chapter 1: Climate Change of the ES (document reference F4.1) provides an assessment of the likely impacts and effects of the Transmission Assets on climate change.
	3.2.2	We need a range of different types of energy infrastructure to deliver these objectives. This includes the infrastructure described within this NPS but also more nascent technologies, data, and innovative infrastructure projects consistent with these objectives.	
	3.2.3	It is not the role of the planning system to deliver specific amounts or limit any form of infrastructure covered by this NPS. It is for industry to propose new energy infrastructure projects that they assess to be viable within the strategic framework set by government. This is the nature of a market-based energy system. With the exception of new coal or large-scale oil-fired electricity generation, the government does not consider it appropriate for planning policy to set limits on different technologies but planning policy can be used to support the government's ambitions in energy policy and other policy areas.	
	3.2.4	It is not the government's intention in presenting any of the figures or targets in this NPS to propose limits on any new infrastructure that can be consented in accordance with the energy NPSs. A large number of consented projects can help deliver an affordable electricity system, by driving competition and reducing costs within and amongst different technology and infrastructure types. Consenting new projects also enables projects utilising more advanced technology and greater efficiency to come forward. The delivery of an affordable energy system does not always mean picking the least cost technologies. A diversity of supply can aid in ensuring affordability for the system overall and relative costs can change over time, particularly for new and emerging technologies. It is not the role of the planning system to compare the costs of individual developments or technology types.	
	3.2.6	The Secretary of State should assess all applications for development consent for the types of infrastructure covered by this NPS on the basis that the government has demonstrated that there is a need for those types of infrastructure which is urgent, as described for each of them in this Part.	The national and international policy commitments described in section 3 of the Planning Statement (document reference J28) demonstrate the need for renewable energy and, specifically, for offshore wind and electricity network improvements, in order to meet climate commitments and contribute to addressing the climate crisis. The Transmission Assets, together with the Generation Assets, have an important part to play in securing the timely delivery of the Government's renewable energy strategy and achieving legally binding greenhouse gas
	3.2.8	The Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS.	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
			emissions reduction targets. The need case is set out within section 4 of the Planning Statement (document reference J28). This application accords with these requirements as it seeks to provide a development which has been identified as Critical National Priority (CNP) under Paragraphs 3.3.62 and Section 4.2 of EN-1.
	3.2.11	Where an energy infrastructure project is not covered by sections 15-21 of the Planning Act 2008 but is considered to be nationally significant, there is a power under section 35 of the Planning Act 2008 (which applies in England, English waters, and the Renewable Energy Zone, except any part of the Renewable Energy Zone in relation to which the Scottish Ministers have functions) for the Secretary of State, on request, to give a direction that a development should be treated as a nationally significant infrastructure project for which development consent is required. This could include novel technologies or processes which may emerge during the life of this NPS.	The Transmission Assets have received a direction under s35 of the PA2008 which confirm that the Transmission Assets are to be treated as development for which development consent is required. The Transmission Assets are electricity network infrastructure not covered by sections 15-21 of the Planning Act but have been determined to be of national signficance through the SoS's s35 direction. Therefore. substantial weight to the need of this project has been given in the planning balance, as demonstrated in Section 6 of the Planning Statement which accompanies this draft Development Consent Order (DCO) (document reference J28). The Transmission Assets are required to connect the Generation Assets, which are themselves two separate projects of national significance, covered by section 15.
	3.2.12	In these circumstances any application for development consent would need to be considered in accordance with this NPS. In particular: ... • where the application is for electricity network infrastructure not covered by sections 15-21 of the Planning Act, including underground or offshore infrastructure, the Secretary of State should give substantial weight to the need established at paragraphs 3.3.65 to 3.3.83 of this NPS	
3.3 The need for new nationally significant electricity infrastructure			
3.3 The need for new nationally significant electricity infrastructure	3.3.1	Electricity meets a significant proportion of our overall energy needs and our reliance on it will increase as we transition our energy system to deliver our net zero target. We need to ensure that there is sufficient electricity to always meet demand; with a margin to accommodate unexpectedly high demand and to mitigate risks such as unexpected plant closures and extreme weather events.	The Transmission Assets application accords with this requirement. It will make a significant contribution to the transmission of new renewable energy which will be generated by the Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm: Generation Assets (together referred to hereafter as the Generation Assets) as the Transmission Assets comprise the offshore export cables, landfall and onshore infrastructure required to connect these two offshore wind generating projects to the National Grid. Consent for the Morgan Generation Assets was granted by the Secretary of State on 29 August 2025 and the Morgan Offshore Wind Generation Assets Order 2025 is now in force. Further information regarding meeting demand is set out in Volume 1, Chapter 3 Project Description (document reference F1.3). Volume 1, Chapter 2: Policy and Legislation Context of the ES (document reference F1.2), sets out the need and adherence of the Transmission Assets to policy and legislation and Volume 4, Chapter 1: Climate Change of the ES (document reference F4.1) provides an assessment of the Transmission Assets on climate change.
	3.3.2	The larger the margin, the more resilient the system will be in dealing with unexpected events, and consequently the lower the risk of a supply interruption. This helps to protect businesses and consumers, including vulnerable households, from volatile prices and, eventually, from physical interruptions to supply that might impact on essential services. But a balance must be struck between a margin which ensures a reliable supply of electricity and building unnecessary additional capacity which increases the overall costs of the system.	
	3.3.3	To ensure that there is sufficient electricity to meet demand, new electricity infrastructure will have to be built to replace output from retiring plants and to ensure we can meet increased demand. Our analysis suggests that even with major improvements in overall energy efficiency, and increased flexibility in the energy system, demand for electricity is likely to increase significantly over the coming years and could more than double by 2050 as large parts of transport, heating and industry decarbonise by switching from fossil fuels to low carbon electricity. The Impact Assessment for CB6 shows an illustrative range of 465-515TWh in 2035 and 610-800TWh in 2050.	
The need for different types of electricity infrastructure	3.3.4	There are several different types of electricity infrastructure that are needed to deliver our energy objectives. Additional generating plants, electricity storage, interconnectors and electricity networks all have a role, but none of them will enable us to meet these objectives in isolation.	The Transmission Assets accord with this requirement. As the Transmission Assets comprise the offshore export cables, landfall and onshore infrastructure required to connect the Generation Assets to the National Grid (refer to Volume 1, Chapter 3: Project description of the ES (document reference F1.3) they will make a significant contribution to new renewable generation by connecting two NSIPs.
	3.3.7	Electricity networks are needed to connect the output of other types of electricity infrastructure with consumers and each other. However, they are a means of transporting electricity rather than generating or storing it, so cannot replace those other types of electricity infrastructure in meeting the substantial increase in demand expected over the coming decades.	
Delivering affordable decarbonisation	3.3.13	The Net Zero Strategy sets out the government's ambition for increasing the deployment of low carbon energy infrastructure consistent with delivering our carbon budgets and the 2050 net zero target. This made clear the commitment that the cost of the transition to net zero should be fair and affordable.	The Transmission Assets application accord with this requirement. By connecting the offshore generation from the Morgan and Morecambe offshore wind farms they will make a significant contribution to new renewable generation. In particular, the Transmission Assets will contribute to the mix of new energy generation required in order to deliver a secure, reliable, affordable, and net zero consistent system.
	3.3.14	Value for money assessments are not required on applications for development consent for energy infrastructure projects. However, government will work to ensure there are market frameworks which promote effective competition and deliver an affordable, secure and reliable energy system and	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
		government support for specific technologies and projects will be dependent on clear value for money for consumers and taxpayers.	This application accords with these requirements as a key mechanism for meeting emissions targets is the use of renewables, including offshore wind. Volume 1, Chapter 2: Policy and Legislative Context of the ES (document reference F1.2) sets out the need and adherence of the project to policy and legislation, and Volume 4, Chapter 1: Climate Change of the ES (document reference F4.1) provides an assessment of the likely impacts and effects of the project on climate change. The Planning Statement (document reference J28) also provides a clear explanation on need and why this application should be afforded substantial weight in the planning balance, as well as outlining how the Transmission Assets will contribute to achieving the government's objectives for the energy system.
	3.3.15	Based on our whole-system modelling, by 2050, emissions associated with power could need to drop by 95-98 per cent compared to 2019, down to 1-3 MtCO2e. In the interim, to meet our NDC and CB6 targets, we expect emissions could fall by 70-75 per cent by 2030 and 80-85 per cent by 2035, compared to 2019 levels. These figures are based on an indicative power sector pathway contributing to the whole-economy net zero and interim targets.	
	3.3.16	If demand for electricity doubles by 2050, we will need a fourfold increase in low carbon generation and significant expansion of the networks that transport power to where it is needed. In addition, we committed in the Net Zero Strategy to take action so that by 2035, all our electricity will come from low carbon sources, subject to security of supply, whilst meeting a 40-60 per cent increase in electricity demand. This means that the majority of new generating capacity needs to be low carbon.	
	3.3.19	Given the changing nature of the energy landscape, we need a diverse mix of electricity infrastructure to come forward, so that we can deliver a secure, reliable, affordable, and net zero consistent system during the transition to 2050 for a wide range of demand, decarbonisation, and technology scenarios.	
The role of wind and solar	3.3.20	Wind and solar are the lowest cost ways of generating electricity, helping reduce costs and providing a clean and secure source of electricity supply (as they are not reliant on fuel for generation). Our analysis shows that a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar.	The recognition set out in Paragraph 3.3.20 and 3.3.21 further identifies the important role wind has and will have in achieving net zero by 2050. The Morgan and Morecambe Generation Assets will provide almost 2GW of new offshore wind capacity, thereby making a meaningful contribution to the ambition of the British Energy Security Strategy. Volume 1, Chapter 2: Policy and Legislative Context of the ES (document reference F1.2) and the Planning Statement (document reference J28) set out the need for and adherence of the Transmission Assets to policy and legislation.
	3.3.21	As part of delivering this, UK government announced in the British Energy Security Strategy an ambition to deliver up to 50 gigawatts (GW) of offshore wind by 2030, including up to 5GW of floating wind, and the requirement in the Energy White Paper for sustained growth in the capacity of onshore wind and solar in the next decade.	
The need for electricity generating capacity	3.3.62	Government has concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure. Section 4.2 states which energy generating technologies are low carbon and are therefore CNP infrastructure.	The Transmission Assets are low carbon CNP Infrastructure for the purposes of NPS EN-1. In providing low carbon energy infrastructure, the Transmission Assets will be providing CNP infrastructure for which there is an urgent need. The Statement of Reasons (document reference D2) and the Planning Statement (document reference J28), which set out why there is a compelling case in the public interest to deliver the Transmission Assets, which are identified in National Policy Statement EN-1 as 'critical national priority' infrastructure." As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5). Mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3).
	3.3.63	Subject to any legal requirements, the urgent need for CNP Infrastructure to achieving our energy objectives, together with the national security, economic, commercial, and net zero benefits, will in general outweigh any other residual impacts not capable of being addressed by application of the mitigation hierarchy. Government strongly supports the delivery of CNP Infrastructure and it should be progressed as quickly as possible.	
The need for new electricity networks	3.3.65	There is an urgent need for new electricity network infrastructure to be brought forward at pace to meet our energy objectives.	The Transmission Assets application accords with this requirement as they will make a significant contribution to new renewable generation by connecting two separate NSIPs. The Transmission Assets will contribute to the transfer of almost 2GW into the grid of new renewable energy generation required in order to deliver a secure, reliable, affordable, and net zero consistent system.
	3.3.66	The security and reliability of the UK's current and future energy supply is highly dependent on having an electricity network which will enable new renewable electricity generation, storage, and interconnection infrastructure that our country needs to meet the rapid increase in electricity demand required to transition to net zero while maintaining energy security. The delivery of this important infrastructure also needs to balance cost to consumers, accelerated timelines for delivery and the minimisation of community and environmental impacts.	

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	3.3.71	The historical approach to connecting offshore wind resulted in individual radial connections developed project-by-project. While this may continue to be the most appropriate approach for some areas with single offshore wind projects that are not located in the proximity of other offshore wind and/or offshore infrastructure, that is planned or foreseen in the near future. For regions with multiple windfarms or offshore transmission projects it is expected that a more coordinated approach will be delivered. For these areas, this approach is likely to reduce the network infrastructure costs as well as the cumulative environmental impacts and impacts on coastal communities by installing a smaller number of larger connections, each taking power from multiple windfarms instead of individual point-to-point connections for each windfarm.	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. 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 transmission network of the two offshore wind farms to the National Grid substation at Penwortham in Lancashire. Morgan OWL and Morecambe OWL (the Applicants), being in agreement with the output from the HNDR, are jointly seeking a single consent for transmission assets comprising aligned offshore export cable corridors to landfall and aligned onshore export cable corridors to separate substations (and associated infrastructure), and onward connection to the National Grid at Penwortham, Lancashire. The projects are therefore delivering on the Government's expectations for coordination, as set out in paragraph 3.3.71. The Transmission Assets adopted a coordinated and aligned site selection process. If each project had proposed a separate and independent radial connection, this would result in two separate disassociated site selection processes with limited awareness of decisions made by the other promoter leading to disparity in constraints considered, different BRAG scoring, and differing definition of land parcels. • The Transmission Assets have aligned their guiding principles for site selection to coordinate the location of infrastructure. If each project proposed its own radial connection for their onshore export cables to independently located onshore substations, the cable routes would be spread across the landscape to their respective onshore substation locations with the onward 400 kV cables both needing to go to Penwortham National Grid substation. There would have been no alignment of guiding principles for siting infrastructure and limited awareness of decisions made by the other project resulting in dis-jointed impacts across a wider area, with more extensive effects on communities. As stated above, each project's infrastructure would be as far as possible from the other to avoid interactions and potential cumulative effects, thereby proliferating infrastructure across a larger area and across multiple communities. • The Applicants have an aligned land strategy for the projects. If each project was being developed separately with the same Point of Interconnection (PoI) at Penwortham and due to the competitive nature of the land process, each developer would likely be seeking to secure larger areas to protect their development from the other, resulting in greater impacts and land take. • There is one DCO application for the Transmission Assets. If not coordinated, each project would have prepared and submitted their own DCO application for its separate radial connection with its own documentation and EIA. This would have resulted in twice the volume of documentation, differing EIA assessment, and differing approaches to mitigation which is likely to overwhelm already constrained local authority / stakeholder resource. • The Applicants, along with the respective Generation Assets, have undertaken a coordinated engagement approach. If uncoordinated, then each project would have separate project engagement with landowners, communities and stakeholders resulting in consultation fatigue and confusion in the local
	3.3.72	Connecting the volume of offshore wind capacity targeted by the government will require not only new offshore transmission infrastructure but also reinforcement to the onshore transmission network, to accommodate the increased power flows to regional demand centres.	
	3.3.74	The strategic approach to network planning, including the Holistic Network Design (HND) for onshore-offshore transmission, planned HND follow-on exercises and the proposed move to Centralised Strategic Network Planning for the onshore-offshore network, allows for clearer identification of needs and includes upfront consideration of environmental and community impacts. Government recognises the work undertaken in these strategic network planning exercises and these should be an important and relevant consideration in the consenting process. This recognition of the network designs seeks to directly support progress of projects identified within the designs as they are brought forward for consent. Further details are provided in Section 2.8 and 2.13 of EN-5.	
	3.3.75	The final Phase 1 report for National Grid ESO's Offshore Coordination Project (published December 2020) found that a more integrated approach to offshore transmission, which included efficient planning of the onshore network, could deliver consumer benefits of up to £6 billion by 2050, depending on how quickly it could be implemented. It also found that the number of new electricity infrastructure assets, including cables and onshore landing points could be reduced by up to 50 per cent over the same period, significantly reducing environmental impacts and impacts on coastal communities.	
	3.3.77	Offshore wind and multi-purpose interconnector projects may have several consenting links: offshore wind and multi-purpose interconnector projects may be consented separately, and it is likely that development consent applications for offshore wind or multi-purpose interconnector projects may not include an application for consent for the full chain of consents (including connection to the grid). However, development consent applications should include details of how connected infrastructure will be consented, how cumulative impacts will be assessed and whether any necessary consents, permits and licences have been obtained	
	3.3.78	Further to the needs case above, it is recognised that the case for a new connection or network reinforcement is demonstrated if the proposed development represents an efficient and economical means of: • connecting a new generating station or storage facility to the network • reinforcing the network to accommodate such connections, or • reinforcing the network to ensure that it is sufficiently resilient and capacious (per any performance standards set by Ofgem) to reliably supply present and/or anticipated future levels of demand. In considering the 'economic and efficient' approach the network project needs to follow good design, avoidance and mitigation principles (and / or biodiversity compensation where needed for transmission in the marine environment), as referenced in EN-5.	
	3.3.79	Moreover, given the crucial role of networks in connecting all of the other kinds of electricity infrastructure described above, it is especially important that the Secretary of State considers network projects as elements of a coherent and strategically necessary system, whether or not they are linked together in specific NSIPs. For instance, when evaluating applications for new electricity networks infrastructure the Secretary of State should have regard to the fact that given, i) the government's strategic commitment to ambitious levels of interconnection capacity and offshore wind generation, and	

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		ii) the tightly interdependent infrastructure chain linking interconnection and offshore generation with onshore demand centres, delays in the approval of associated new network developments could cause significant economic waste and set back the strategically vital goals of decarbonisation and energy security	community over different developer messages around different projects being promoted at the same time. The Applicants' approach of not seeking independent and separate radial connections and coordinating site selection and location of the onshore substations, has resulted in minimising environmental and community impacts for all the reasons outlined above, and avoided infrastructure proliferation in line with NPS EN-1 and EN-5. As detailed in REP1-039, an alternative route, involving an alternative PoI at or near Stanah has been suggested by some IPs, including the suggestion that the onshore substations should be located at Hillhouse Technology Local Enterprise Zone (LEZ), adjacent to the NGET Stanah substation (which is part of NETS, the transmission network owned by NGET including existing overhead lines). Any form of alternative PoI into the NETS which is proposed, would be a change to the PoI for the Projects, as identified by NESO in the HND and secured in connection agreements with NESO. NGET were engaged in the preparation of the HNDR by NESO and the upgrade works between Stanah and Penwortham are reinforcement works to the NETS (for which NGET have responsibility for); subsequently there was a full understanding of a potential connection at or near Stanah when the HNDR was prepared. Therefore, the Applicants' position is that the PoI for the Transmission Assets (i.e at or around Stanah compared to Penwortham) is primarily a matter for NESO (in consultation with NGET) as part of the HND and subsequent connection offer process. Ultimately a project with a different PoI would be an entirely different project, and one which is not within the gift or control of the Applicants. The Applicants have prepared the outline Design Principles (oDP) (document J3) to demonstrate compliance with best practice and policy guidance on good design. The oDP forms part of the certified suite of documents supporting the DCO application and provides a central, clear, and enforceable framework for post-consent detailed design with the discharging planning authority. The principles of the oDP seek to guide the design process towards design outcomes that ensure that the substation sites would fit sensitively into the local context; mitigate (as far as possible) adverse environmental effects and respect local communities. The Applicants' design approach has been informed by the National Infrastructure Commission's Design Principles for National Infrastructure (2020), updated during Examination to reflect the Project-Level Design Principles (May 2024), alongside lessons learned from recently consented DCO precedent projects. This structured approach ensures that the Transmission Assets respond directly to the key elements of good design set out in NPS EN-1. The Applicants believe that the Transmission Assets application has strongly responded to the criteria for good design, as illustrated by the following: • The Transmission Assets have been designed to be fit for purpose and efficient in delivering their operational role of connecting offshore generation to the national electricity transmission system. The Maximum Design Scenario (MDS), prepared in accordance with Advice Note Nine: Rochdale Envelope, establishes clear parameters that provide sufficient certainty for the EIA process while retaining appropriate flexibility, beneath the parameters set in the MDS, to accommodate final procurement, design and technology selection during post - consent detailed design. Functionality has been embedded from the outset of the Projects as part of the iterative site selection and refinement process, ensuring that the substation sites can be delivered safely, efficiently and with resilience. • The design approach incorporates measures to minimise environmental impacts, as set out in the EIA. Embedded mitigation has been integrated, insofar as possible at this stage of the Projects, into the substation sites and their immediate
	3.3.80	Related to the above and considering the potential for unwarranted and avoidable disruption, inefficiency, and visual impacts along the onshore - offshore boundary, coordination of onshore transmission, offshore transmission, and offshore generation and interconnector developments should be considered at both the strategic and more detailed project design levels. This coordinated approach is likely to provide the highest degree of consumer, environmental, and community benefits.	

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			contexts. Both the strategic and project-level design principles, as outlined in the oDP (J3), promote sustainable construction methods and adaptability to technological innovation, thereby supporting the overarching vision for the Transmission Assets and contributing to national decarbonisation objectives. Consideration has also been given to energy efficiency, climate resilience and biodiversity enhancement as part of the iterative design process. • The Applicants are committed to ensuring that the final appearance of the substations is sensitively designed insofar as possible. Through the oDP (J3) and its project - level design principles and codes, discussed and informed by engagement with the local planning authorities, the Applicants are committed to delivering in collaboration with the discharging local authority, designs that reflect and integrate, as far as practicable, the key characteristics of the receiving landscape. Whilst recognising the primarily functional nature of electrical substation infrastructure, the project-level design principles will continue to guide the post-consent detailed design process, ensuring consistency with the principles secured through the DCO, while retaining flexibility to respond to technical and environmental considerations. A degree of flexibility in relation to layout will be explored during detailed design, subject to the appointment of technical partners, with the Applicants' Design Champions providing oversight. Appearance and landscape integration are treated as core design considerations. The illustrative landscape proposals, as documented in the oLMP (J2/F04), incorporate embedded landscape mitigation and proportionate design measures that are responsive to their setting, informed by consultation feedback and environmental constraints. As stated above, the oDP establishes central, clear, and enforceable framework for detailed design of the form, scale and landscape treatment (within the Order Limits), with final detailed designs to be reviewed and approved by the relevant planning authority in accordance with Requirement 4 of the DCO. • The Applicants' consenting strategy has been developed to provide appropriate flexibility in the design of the Transmission Assets, ensuring that the substations remain resilient and adaptable to future requirements. As stated above, the MDS establishes a robust framework for environmental assessment while accommodating the input of technology providers during the detailed design stage. This flexibility might encompass construction methods, final extent and layout, allowing the Transmission Assets to respond to advances in technology and supply chain input without undermining the principles of good design.
	3.3.82 and 3.3.83	Government has committed to reduce GHG emissions by 78 per cent by 2035 under CB6. According to the Net Zero Strategy this means that by 2035, all our electricity will need to come from low carbon sources, subject to security of supply, whilst meeting a 40-60 per cent increase in demand. Given the urgent need for new electricity infrastructure and the time it takes for electricity NSIPs to move from design conception to operation, there is an urgent need for new (and particularly low carbon) electricity NSIPs to be brought forward as soon as possible, given the crucial role of electricity as the UK decarbonises its economy.	The Transmission Assets application accords with this requirement as it will make a significant contribution to to the mix of new renewable energy generation required in order to deliver a secure, reliable, affordable, and net zero consistent system. Evidence is provided in Volume 4, Chapter 1: Climate change of the ES (document reference F4.1), Volume 4, Annex 1.1: Greenhouse gas assessment of the ES (document reference F4.1.1) and the submitted Planning Statement (document reference J28) which demonstrates how the Transmission Assets will make a meaningful contribution to achieving these targets.
4. Assessment principles			
4.1 General policies and considerations			
Weighing impacts and benefits	4.1.5	In considering any proposed development, in particular when weighing its adverse impacts against its benefits, the Secretary of State should take into account: • its potential benefits including its contribution to meeting the need for energy infrastructure, job creation, reduction of geographical disparities, environmental enhancements, and any long-term or wider benefits.	The Environmental Statement (document reference F1 – F4) catalogues the wide and thorough assessment undertaken across environmental, social and economic receptors, which can be used to allow weighing of impacts and benefits in the decision-making process.

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		• its potential adverse impacts, including on the environment, and including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts, following the mitigation hierarchy.	As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5). Mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3). In addition, the Environmental Statement provides an assessment of ecosystem based impacts in Volume 4, Chapter 3: Inter-relationships of the ES (document reference F4.3). Each topic chapter within the Environmental Statement (document refernece F2 – F4) lays out the topic baseline environment and all relevant information used to inform the associated assessment of significant effects and potential for cumulative effects. These can be used to allow weighing of impacts and benefits in the decision-making process.
	4.1.6	In this context, the Secretary of State should take into account environmental, social and economic benefits and adverse impacts, at national, regional and local levels. These may be identified in this NPS, the relevant technology specific NPS, in the application or elsewhere (including in local impact reports, marine plans, and other material considerations as outlined in Section 1.1).	The Environmental Statement (document reference F1 – F4) catalogues the wide and thorough assessment undertaken across environmental, social and economic receptors, which can be used to allow weighing of impacts and benefits in the decision-making process. In addition, the Environmental Statement provides an assessment of ecosystem based impacts in Volume 4, Chapter 3: Inter-relationships of the ES (document reference F4.3). Volume 1, Chapter 2: Policy and legislative context (document reference F1.2) provides the national, regional and local context relevant to the Transmission Assets, whilst topic specific policies and legislation are assessed in each topic chapter of the Environmental Statement (document refernece F2 – F4). The Planning Statement (J28 F03) at Section 6.2 sets out the benefits of the Transmission Assets and how these are considered within the overall planning balance.
	4.1.7	Where this NPS or the relevant technology specific NPSs require an applicant to mitigate a particular impact as far as possible, but the Secretary of State considers that there would still be residual adverse effects after the implementation of such mitigation measures, the Secretary of State should weigh those residual effects against the benefits of the proposed development. For projects which qualify as CNP Infrastructure, it is likely that the need case will outweigh the residual effects in all but the most exceptional cases. This presumption, however, does not apply to residual impacts which present an unacceptable risk to, or interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. Further, the same exception applies to this presumption for residual impacts which present an unacceptable risk to, or unacceptable interference offshore to navigation, or onshore to flood and coastal erosion risk.	In providing low carbon energy infrastructure, the Transmission Assets will be providing CNP infrastructure for the purposes of NPS EN-1 with the need for the project clearly outweighing any residual impacts. The Statement of Reasons (document reference D2) and the Planning Statement (document reference J28) set out why there is a compelling case in the public interest to deliver the Transmission Assets, which are identified in National Policy Statement EN-1 as ‘critical national priority’ infrastructure." As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5), mitigation measures have been developed to avoid, prevent, reduce, or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. Assessments on human health are provided in Volume 1, Annex 5.1 of the ES (document reference F1.5.1), on habitats within Volume 3, Chapter 3 of the ES (document reference F3.3) and on climate change and achievement of net zero in Volume 4, Chapter 1 of the ES (document reference F4.1). In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3).

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			The ES identifies likely significant environmental effects, for the purposes of the decision making process. Following the application of mitigation, 10 residual significant adverse effects have been identified across all topics. The Applicants are not proposing compensation for the 10 remaining significant adverse effects; it should be noted that all of these residual effects relate only to the construction stage. Table 1.1. of The Applicants' Response to ExQ2: 1.1.6 - Mitigation Hierarchy (S_D5_5.2) provides further detail. In summary, none of the residual effects identified disengage the presumption in favour of the project as there is no identified unacceptable risk to, or interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. Neither have any unacceptable risks been identified in relation to offshore navigation nor onshore flood and coastal erosion risk. This includes no unacceptable risk in relation to impacts on aviation, which have been considered at length (see Annex 5.3 to Applicants response to ExQ2 4.1.14, 4.1.18 and 4/1/20 - Technical Note Bird Strike Policy Note, S_D5_5.3).
Land rights	4.1.8	Where the use of land at a specific location is required to facilitate the development by providing for mitigation and landscape enhancement, an applicant may, as part of its application to the Secretary of State, seek the compulsory acquisition of that land, or rights over that land.	The draft DCO (document reference C1/F09) which accompanies the application, does seek the ability for the Applicants to acquire rights and/or land compulsorily for the purpose of providing land which may be needed for onshore electrical infrastructure including the new substations, and for associated mitigation effects such as for landscape enhancement (see Outline Ecological Management Plan, document reference: J6; and Outline Landscape Management Plan, document reference J2) and biodiversity benefit (see outline Biodiversity Benefit Management Plan, document reference J11/F06). The Applicants have also demonstrated in the Statement of Reasons (document reference D2) that the land over which compulsory acquisition powers are sought meets the relevant tests and there is a compelling case in the public interest for the rights and powers sought to be granted.
	4.1.9	The Secretary of State will consider any such application under the usual compulsory acquisition principles, taking into account the content of the NPSs.	
Other documents	4.1.11-4.1.15	The energy NPSs have taken account of the National Planning Policy Framework (NPPF), the Planning Practice Guidance for England, and Planning Policy Wales and Technical Advice Notes (TANs) for Wales, where appropriate. Other matters that the Secretary of State may consider both important and relevant to their decision-making may include Development Plan documents or other documents in the Local Development Framework. Where the project conflicts with a proposal in a draft Development Plan, the Secretary of State should take account of the stage which the Development Plan document in England or Local Development Plan in Wales has reached in deciding what weight to give to the plan for the purposes of determining the planning significance of what is replaced, prevented, or precluded. The closer the Development Plan document in England or Local Development Plan in Wales is to being adopted by the LPA, the greater weight which can be attached to it. In the event of a conflict between these documents and an NPS, the NPS prevails for the purpose of Secretary of State decision making given the national significance of the infrastructure.	Volume 1, Chapter 2: Policy and Legislative Context of the ES (document reference F1.2) provides the national, regional and local context of the Transmission Assets, whilst topic specific policies and legislation are assessed in each topic chapter of the ES (document reference F2 – F4). The submitted Planning Statement (document reference J28) provides a summary of the relevant NPPF, Marine policies and Local policies for Transmission Assets and assesses the project against their requirements. Section 6 of the Planning Statement provides with the Planning Balance and the weight afforded to the NPS and other policies. Whilst the primary policy for the Transmission Assets are the relevant NPSs, local policies are a material consideration. The Local Plan Policy Tracker (J28.3/F02) identifies the local plan policies of the Host Authorities, which are relevant to the Transmission Assets. It provides a summary of how the Transmission Assets are in compliance, or broad compliance with these policies, whilst also noting the limited weight afforded to local policies in this instance in the overall planning balance.
Early engagement	4.1.19 to 4.1.20	Early engagement both before and at the formal pre-application stage between the applicant and key stakeholders, including public regulators, Statutory Consultees (including Statutory Nature Conservation Bodies (SNCBs)), and those likely to have an interest in a proposed energy infrastructure application, is strongly encouraged in line with the Government's pre-application guidance. This means that only applications which are fully prepared and comprehensive can be accepted for examination, enabling them to be properly assessed by the Examining Authority and leading to a clear recommendation report to the Secretary of State.	Early engagement has taken place before and at the statutory pre-application stage with all relevant (statutory and non-statutory) stakeholders and members of the public who have an interest in the project. Where necessary that engagement has continued during the Transmission Assets' examination to ensure that the position of the relevant statutory consultees is presented to the ExA and the SoS at the close of examination. Full details of all statutory and non-statutory consultation undertaken for the Transmission Assets are outlined in the Consultation Report (document reference E1).

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
		This is particularly so in the case of Habitats Regulations Assessment (HRA) matters covered in paragraphs 5.4.25 to 5.4.31 below, which explain the onus is on the applicant to submit sufficient information to enable the Secretary of State to conduct an Appropriate Assessment if required.	
4.2 The critical national priority for low carbon infrastructure			
The critical national priority for low carbon infrastructure	4.2.1 to 4.2.4	Government has committed to fully decarbonising the power system by 2035, subject to security of supply, to underpin its 2050 net zero ambitions. More than half of final energy demand in 2050 could be met by electricity, as transport and heating in particular shift from fossil fuel to electrical technology. Ensuring the UK is more energy independent, resilient and secure requires the smooth transition to abundant, low-carbon energy. The UK's strategy to increase supply of low carbon energy is dependent on deployment of renewable and nuclear power generation, alongside hydrogen and CCUS. Our energy security and net zero ambitions will only be delivered if we can enable the development of new low carbon sources of energy at speed and scale. With smart and strategic planning, the UK can maintain high environmental standards and minimise impacts while increasing the levels of deployment at the scale and pace needed to meet our energy security and net zero ambitions. Government has therefore concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure.	The Transmission Assets are considered nationally significant low carbon energy infrastructure, as they fit within the normal definition of "low carbon" and have received a direction under s35 of the PA2008.The CNP policy therefore applies to the Transmission Assets. The Transmission Assets will deliver new clean renewable energy generation from the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm, which both qualify as NSIPs. Further, in accordance with paragraphs 3.2.6 – 3.2.8 (with reference also to 3.2.11 and 3.2.12), the urgent need for the project is something to which the Secretary of State should give substantial weight in his decision. This weight applies regardless of the application of the CNP policy to the project and the connection of the Generation Assets to the National Grid. -4.2.6
	4.2.5	This does not extend the definition of what counts as nationally significant infrastructure: the scope remains as set out in the Planning Act 2008. Low carbon infrastructure for the purposes of this policy means: … for energy infrastructure which is directed into the NSIP regime under section 35 of the Planning Act 2008, and fit within the normal definition of "low carbon", such as interconnectors, Multi-Purpose Interconnectors, or 'bootstraps' to support the onshore network which are routed offshore…	
	4.2.6	The overarching need case for each type of energy infrastructure and the substantial weight which should be given to this need in assessing applications, as set out in paragraphs 3.2.6 to 3.2.8 of EN-1, is the starting point for all assessments of energy infrastructure applications.	The Transmission Assets accord with this requirement as they will make a significant contribution to the mix of new renewable energy generation required in order to deliver a secure, reliable, affordable, and net zero consistent system (refer to Planning Statement (document reference J28). The need for energy infrastructure is established by legislation within the Climate Change Act 2008 and Energy Act 2013, by international obligations on climate change and within the NPSs (refer to Statement of Reasons for further details, document reference D2) The Transmission Assets will deliver new clean renewable energy generation from the the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm. In accordance with paragraphs 3.2.6 – 3.2.8 (with reference also to 3.2.11 and 3.2.12), the urgent need for the project is something to which the Secretary of State should give substantial weight in his decision. This weight applies regardless of the application of the CNP policy to the project and the connection of the Generation Assets to the National Grid.
	4.2.8	During decision making, the CNP policy will influence how non-HRA and non-MCZ residual impacts are considered in the planning balance. The policy will therefore also influence how the Secretary of State considers whether tests requiring clear outweighing of harm, exceptionality, or very special circumstances have been met by a CNP Infrastructure application. Further detail is provided in paragraphs 4.2.15 to 4.2.17, and Figure 2	The submitted Planning Statement (document reference J28) provides the Planning Balance and the weight afforded to the NPS and other policies. It considers that the CNP policy clearly outweighs any harm resulting from non-HRA and non-MCZ residual impacts. In addition, the Planning Statement also considers the mitigation hierarchy, which has been applied throughout the ES and highlights advice has been sought from appropriate SNCBs via adequate consultation and engagement, as detailed within the Consultation Report (document reference E1). As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5). Mitigation measures are measures developed to

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
			avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3).
	4.2.9	During decision making, the CNP policy also explains the Secretary of State's approach to HRA derogations and MCZ assessments. Specifically, the policy explains how the alternative solutions and IROPI tests are considered by the Secretary of State. Further detail is provided in paragraphs 4.2.18 to 4.2.22, and Figure 3.	Information to Support Appropriate Assessment Information to Support Appropriate Assessment (ISAA) does not predict any adverse effects on integrity of any SAC, SPA or Ramsar and as such, no compensatory measures are considered necessary for the purposes of the HRA process. Within the HRA three mitigation areas were proposed to reduce the effects of the development, and throughout the examination process the issue of compensation versus mitigation has been tested by the ExA. In response to ExA Q2:9.1.9 Natural England state: "*Lytham Moss and Newton-with-Scales were proposed by the Applicant to avoid or reduce impacts to FLL impacted by the temporary activities along the terrestrial cable route, they were not proposed to compensate for unavoidable residual impacts within the SPA. Therefore, our view is that it is acceptable to consider Lytham Moss and Newton-with-Scales as mitigation rather than compensation areas.*" In addition, Natural England have been able to rule out AEoI for impacts at the landfall, therefore the remaining mitigation area at Fairhaven Saltmarsh is now considered as an alleviation measure with no need for compensatory measures. Similarly, the MCZ Stage 1 assessment concludes that the project will not represent a significant risk of hindering the achievement of conservation objectives of any of the MCZs identified and as such, Measures of Equivalent Environmental Benefit (MEEB) are not required. There is no identified adverse effect on the integrity of a protected site or species, and in respect of the MCZ although the Applicants do not consider it necessary, a Stage 2 assessment and measures of equivalent environmental benefit have been provided on a 'without prejudice' basis.
Applicant assessment	4.2.10	Applicants for CNP infrastructure must continue to show how their application meets the requirements in this NPS and the relevant technology specific NPS, applying the mitigation hierarchy, as well as any other legal and regulatory requirements.	These requirements have been fully complied with by the Transmission Assets. Every chapter of the Environmental Statement sets out in detail the legal and national policy requirements relevant to the chapter and explains where each requirement is addressed . Every chapter of the Environmental Statement applies the mitigation hierarchy as explained in detail in Volume 1, Chapter 5: Environmental Assessment Methodology (document reference F1.5). The Applicants have sought to minimise adverse impacts on the environment wherever possible in the design of the Transmission Assets. Mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse
	4.2.11	Applicants must apply the mitigation hierarchy and demonstrate that it has been applied. They should also seek the advice of the appropriate SNCB or other relevant statutory body when undertaking this process. Applicants should demonstrate that all residual impacts are those that cannot be avoided, reduced or mitigated	
	4.2.12	Applicants should set out how residual impacts will be compensated for as far as possible. Applicants should also set out how any mitigation or compensation measures will be monitored and reporting agreed to ensure success and that action is taken. Changes to measures may be needed e.g. adaptive management. The cumulative impacts of multiple developments with residual impacts should also be considered	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
			effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3). The advice of appropriate SNCBs and relevant statutory bodies has been sought throughout the process. Details of SNCBs and statutory bodies' recommendations are included in every relevant Environmental Statement chapter alongside an explanation of how they have been incorporated into the Transmission Assets application. Engagement with SNCBs has continued throughout the examination process to resolve outstanding issues and SoCGs have been prepared where necessary (see The Applicants' Statement of Commonality document reference S_D1_6 for further information) Every chapter of the Environmental Statement (document references F1.1-F4.4) considers the cumulative impacts of the proposed Transmission Assets and other developments and considers where necessary residual impacts. Insofar as project mitigation measures have been required in order to mitigate residual effects, these have been incorporated as part of the proposed works The Applicants consider that the assessment and mitigation requirements of NPS EN-1 have been met.
	4.2.13	Where residual impacts relate to HRA or MCZ sites then the Applicant must provide a derogation case, if required, in the normal way in compliance with the relevant legislation and guidance	Information to Support Appropriate Assessment does not predict any adverse effects on integrity of any SAC, SPA or Ramsar and as such, no compensatory measures are considered necessary for the purposes of the HRA process. Within the HRA, three mitigation areas were proposed to reduce the effects, and throughout the examination process the issue of compensation versis mitigation has been tested by the ExA/ In response to ExA Q2:9.1.9, Natural England state: "*Lytham Moss and Newton-with-Scales were proposed by the Applicant to avoid or reduce impacts to FLL impacted by the temporary activities along the terrestrial cable route, they were not proposed to compensate for unavoidable residual impacts within the SPA. Therefore, our view is that it is acceptable to consider Lytham Moss and Newton-with-Scales as mitigation rather than compensation areas*." In addition, Natural England have been able to rule out AEoI for impacts at the landfall. Therefore, the remaining mitigation area at Fairhaven Saltmarsh is now considered as an alleviation measure with no need for compensatory measures. Similarly, the MCZ Stage 1 assessment concludes that the project will not represent a significant risk of hindering the achievement of conservation objectives of any of the MCZs identified and as such, Measures of Equivalent Environmental Benefit (MEEB) are not required. There is no identified adverse effect on the integrity of a protected site or species, and in respect of the MCZ although the Applicants do not consider it necessary, a Stage 2 assessment and measures of equivalent environmental benefit have been provided on a 'without prejudice' basis. Whilst the Applicants and Natural England are not agreed on the need for MEEB, and without prejudice to the Applicants' position, the Applicants prepared a MEEB assessment at Deadline 1 and the Applicants and Natural England agree with progressing the strategic compensation approach if the Secretary of State determines that MEEB for the Fylde MCZ are required (REP6-179).
Secretary of State decision making	4.2.14	The Secretary of State will continue to consider the impacts and benefits of all CNP Infrastructure applications on a case-by-case basis. The Secretary of State must be satisfied that the applicant's assessment demonstrates that the requirements set out above have been met. Where the Secretary of State is satisfied that they have been met, the CNP presumptions set out below apply.	The submitted Planning Statement (document reference J28) provides the planning balance and the weight afforded to the NPS and other policies. It is considered that the relevant requirements set out above have been met, that the CNP presumptions apply to the Transmission Assets applicationand that the benefits of the Transmission Assets clearly outweigh any residual harm resulting from non-HRA and non-MCZ residual impacts.

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
Non-HRA and non-MCZ residual impacts of CNP infrastructure	4.2.15 to 4.2.17	Where residual non-HRA or non-MCZ impacts remain after the mitigation hierarchy has been applied, these residual impacts are unlikely to outweigh the urgent need for this type of infrastructure. Therefore, in all but the most exceptional circumstances, it is unlikely that consent will be refused on the basis of these residual impacts. The exception to this presumption of consent are residual impacts onshore and offshore which present an unacceptable risk to, or unacceptable interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. Further, the same exception applies to this presumption for residual impacts which present an unacceptable risk to, or unacceptable interference offshore to navigation, or onshore to flood and coastal erosion risk. As a result, the Secretary of State will take as the starting point for decision-making that such infrastructure is to be treated as if it has met any tests which are set out within the NPSs, or any other planning policy, which requires a clear outweighing of harm, exceptionality or very special circumstances. This means that the Secretary of State will take as a starting point that CNP Infrastructure will meet the following, non-exhaustive, list of tests: • where development within a Green Belt requires very special circumstances to justify development; • where development within or outside a Site of Special Scientific Interest (SSSI) requires the benefits (including need) of the development in the location proposed to clearly outweigh both the likely impact on features of the site that make it a SSSI, and any broader impacts on the national network of SSSIs; • where development in nationally designated landscapes requires exceptional circumstances to be demonstrated; and • where substantial harm to or loss of significance to heritage assets should be exceptional or wholly exceptional.	The Applicants' Information to Support Appropriate Assessment does not predict any adverse effects on integrity of any SAC, SPA or Ramsar and as such, no compensatory measures are considered necessary for the purposes of the HRA process. Within the HRA three mitigation area were proposed to reduce the effects, and throughout the examination process the issue of compensation versus mitigation has been tested by the ExA. In response to ExA Q2:9.1.9, Natural England state: "*Lytham Moss and Newton-with-Scales were proposed by the Applicant to avoid or reduce impacts to FLL impacted by the temporary activities along the terrestrial cable route, they were not proposed to compensate for unavoidable residual impacts within the SPA. Therefore, our view is that it is acceptable to consider Lytham Moss and Newton-with-Scales as mitigation rather than compensation areas.*" In addition, Natural England have been able to rule out AEoI for impacts at the landfall, therefore the remaining mitigation area at Fairhaven Saltmarsh is now considered as an alleviation measure with no need for compensatory measures. Similarly, the MCZ Stage 1 assessment concludes that the project will not represent a significant risk of hindering the achievement of conservation objectives of any of the MCZs identified and as such, Measures of Equivalent Environmental Benefit (MEEB) are not required. There is no identified adverse effect on the integrity of a protected site or species, and in respect of the MCZ although the Applicants do not consider it necessary, a Stage 2 assessment and measures of equivalent environmental benefit have been provided on a 'without prejudice' basis. As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5). Mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3). Sections 1.3, 1.4 and 1.5 of the Green Belt Technical Note (REP4-092) demonstrate how the Applicants have applied the mitigation hierarchy to avoid, minimise and mitigate impacts and harm to the Green Belt as far as practicable. Consequently, the starting point for determination should be that the test for very special circumstances is presumed to have been met. However, the Applicants consider that there is a compelling case that the harm to the Green Belt would be clearly outweighed by the very special circumstances (VSC) required to justify the proposed development and as Critical National Priority infrastructure the starting point for decision making is that any harm is outweighed by the critical need for the Transmission Assets. Regardless of the CNP status of the Transmission Assets and the appropriate application of the Mitigation Hierarchy, very special circumstances have been demonstrated given the need for transmission infrastructure of this nature as set out in paragraphs 3.3.65 to 3.3.83 of NPS EN-1 and the Transmission Asset's role in delivering the new renewable energy generation from two offshore wind NSIPs, which clearly outweigh any harms to be caused to the Green Belt.
HRA derogations and MCZ assessments for CNP infrastructure	4.2.18 to 4.2.21	Any HRA or MCZ residual impacts will continue to be considered under the framework set out in the Habitats Regulations and the Marine and Coastal Access Act 2009 respectively. Where, following Appropriate Assessment, CNP Infrastructure has residual adverse impacts on the integrity of sites forming part of the UK national site network, either alone or in combination with other	The Applicants' Information to Support Appropriate Assessment (document reference E2.1 to E2.3) does not predict any adverse effects on integrity of any SAC, SPA or Ramsar site as such, no compensatory measures are considered necessary for the purposes of the HRA process.

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
		plans or projects, the Secretary of State will consider making a derogation under the Habitats Regulations. Similarly, if during an MCZ assessment, CNP Infrastructure has residual impacts which significantly risk hindering the achievement of the stated conservation objectives for the MCZ, the Secretary of State will consider making a derogation under section 126(7) of the Marine and Coastal Access Act 2009. For both derogations, the Secretary of State will consider the particular circumstances of any plan or project, but starting from the position that energy security and decarbonising the power sector to combat climate change: • requires a significant number of deliverable locations for CNP Infrastructure and for each location to maximise its capacity. This NPS imposes no limit on the number of CNP infrastructure projects that may be consented. Therefore, the fact that there are other potential plans or projects deliverable in different locations to meet the need for CNP Infrastructure is unlikely to be treated as an alternative solution. Further, the existence of another way of developing the proposed plan or project which results in a significantly lower generation capacity is unlikely to meet the objectives and therefore be treated as an alternative solution; and • are capable of amounting to imperative reasons of overriding public interest (IROPI) for HRAs, and, for MCZ assessments, the benefit to the public is capable of outweighing the risk of environmental damage, for CNP Infrastructure.	Within the HRA, three mitigation areas were proposed to reduce the effects, and throughout the examination process the issue of compensation vs mitigation has been tested by the ExA In response to ExA Q2:9.1.9 Natural England state: "*Lytham Moss and Newton-with-Scales were proposed by the Applicant to avoid or reduce impacts to FLL impacted by the temporary activities along the terrestrial cable route, they were not proposed to compensate for unavoidable residual impacts within the SPA. Therefore, our view is that it is acceptable to consider Lytham Moss and Newton-with-Scales as mitigation rather than compensation areas*." In addition, Natural England have been able to rule out AEoI for impacts at the landfall, therefore the remaining mitigation area at Fairhaven Saltmarsh is now considered as an alleviation measure with no need for compensatory measures. Similarly, the MCZ Stage 1 assessment concludes that the project will not represent a significant risk of hindering the achievement of conservation objectives of any of the MCZs identified and as such, Measures of Equivalent Environmental Benefit (MEEB) are not required. There is no identified adverse effect on the integrity of a protected site or species, and in respect of the MCZ although the Applicants do not consider it necessary, a Stage 2 assessment and measures of equivalent environmental benefit have been provided on a 'without prejudice' basis.
	4.2.22	For HRAs, where an applicant has shown there are no deliverable alternative solutions, and that there are IROPI, compensatory measures must be secured by the Secretary of State as the competent authority, to offset the adverse effects to site integrity as part of a derogation. For MCZs, where an applicant has shown there are no other means of proceeding which would create a substantially lower risk, and the benefit to the public outweighs the risk of damage to the environment, the Secretary of State must be satisfied that measures of equivalent environmental benefit will be undertaken.	
4.3 Environmental effects/considerations			
4.3 Environmental effects/considerations	4.3.1 to 4.3.4	All proposals for projects that are subject to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) must be accompanied by an Environmental Statement (ES) describing the aspects of the environment likely to be significantly affected by the project. The Regulations specifically refer to effects on population, human health, biodiversity, land, soil, water, air, climate, the landscape, material assets and cultural heritage, and the interaction between them. The Regulations require an assessment of the likely significant effects of the proposed project on the environment, covering the direct effects and any indirect, secondary, cumulative, transboundary, short, medium, and long-term, permanent and temporary, positive and negative effects at all stages of the project, and also of the measures envisaged for avoiding or mitigating significant adverse effects. To consider the potential effects, including benefits, of a proposal for a project, the applicant must set out information on the likely significant environmental, social and economic effects of the development, and show how any likely significant negative effects would be avoided, reduced, mitigated or compensated for, following the mitigation hierarchy. This information could include matters such as employment, equality, biodiversity net gain, community cohesion, health and well-being	An Environmental Statement (document reference F1 – F4) has been submitted for this application which undertakes a thorough assessment including environmental, social and economic receptors. The assessment allows the weighing of both adverse and beneficial impacts to assist in the decision-making process. All likely significant effects of the Transmission Assets have been assessed within the topic specific chapters of the ES (document reference F2 – F4). Volume 1, Chapter 5: Environmental Impact Assessment Methodology of the ES (document reference F1.5) explains the methodology of the environmental assessment. This confirms that assessment of the likely significant effects of the Transmission Assets covers direct effects, indirect, secondary, cumulative, transboundary, short, medium, and long-term, permanent and temporary, positive and negative effects at all stages of the Transmission Assets (construction, operations and maintenance, and decommissioning, where relevant). Table 5.2 of Volume 1, Chapter 5: Environmental assessment methodology sets out that the ES has been prepared in accordance with Regulation 14(2) of the EIA Regulations 2017 to provide '*a description of any features of the proposed development, or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment*'. This is reiterated in Paragraph 4.3.4 of NPS EN-1. Evidence of the mitigation hierarchy has been applied within each ES chapter. In addition, the Applicants have also provided The Applicants' Response to ExQ2:1.1.6 - Mitigation Hierarchy (REP5-132) which refers the reader to the substantial level of work undertaken within the site selection process at the pre-application stage to avoid impacts on the environment and harm to the Green Belt as far as practicable, i.e., Volume 1, Chapter 4 (AS-026), Annex 4.1 (APP-031) and Annex 4.3 (AS-028) in addition to Site Selection of the Environmental

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
			Mitigation and Biodiversity Benefit Areas (REP2-046) and the Green Belt Technical Note (REP4-092). Measures adopted by the Transmission Assets for avoiding or mitigating significant adverse effects are considered in each topic chapter and those measures are set out in the Commitments Register: Volume 1, Annex 5.3: Commitments register (document reference F1.5.3). Each topic chapter provides evidence of embedded mitigation (both primary (inherent) and tertiary (such as standard practices to manage impacts) and secondary mitigation to reduce the significance of any environmental effects. The Applicants have also set out that compensation for the residual impacts is not appropriate (refer to Table 1.1 of The Applicants' Response to ExQ2:1.1.6 - Mitigation Hierarchy (REP5-132). In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3) Fylde Borough Council have alleged inadequacies regarding the Environmental Statement but, despite being specifically requested to do so by the Applicants and the ExA, no detail was provided for the Applicants to respond to. Where FBC has made specific comment, this has been addressed by the Applicants. For example, FBC raised paragraph 4.3.2 specifically in relation to Human Health and 4.4.3 with regards to risk management and resilience in their written representation (REP1-079). In response to this the Applicant confirmed that an assessment on the potential impacts on human health as a result of the Project can be found in Volume 1, Annex 5.1 : Human Health (document reference F1.5.1). Similarly, the topic of Recreation is covered in Volume 3, Chapter 6: Land Use and Recreation (document reference F3.6). Lastly, Risk Management is a multi-disciplinary topic and is covered within the following documentation: • Volume 3, Chapter 2: Hydrology and Flood Risk (F3.2); • Outline Spillage and Emergency Response Plan (J1.8) • Outline Code of Construction Practice (J1). The Applicants provided further response to this within Section 14 and 15 within the Applicants' response to Fylde Council Local Impact Report (S_D2_5) and in the Applicants' response to FBC D6 submission (document reference S_D7_2X)
	4.3.5 to 4.3.6	For the purposes of this NPS and the technology specific NPSs the ES should cover the environmental, social and economic effects arising from pre-construction, construction, operation and decommissioning of the project. Where the NPSs use the term 'environment' they are referring to both the natural and historic environments.	An Environmental Statement (document reference F1 – F4) has been submitted for this application which undertakes a thorough assessment including environmental, social and economic receptors throughout the Transmission Assets' project lifetime. The assessment allows the weighing of impacts both adverse and beneficial to assist in the decision-making process. Onshore historic environment is assessed in Volume 3, Chapter 5 of the ES. Potential impacts during project development i.e., pre-construction, are included within the economic impact estimates presented in Volume 4, Annex 2.1: Socio-economics technical report of the ES (document reference F4.2.1). Potential economic and social impacts during construction, operation and maintenance, and decommissioning phases are presented in Volume 4, Annex 2.1: Socio-economics technical report of the ES. Effects resulting from potential economic and social impacts are assessed within sections 2.11 and 2.12 of Volume 4, Chapter 2: Socio-economics of ES (document reference F4.2).
	4.3.9	As in any planning case, the relevance or otherwise to the decision making process of the existence (or alleged existence) of alternatives to the proposed development is, in the first instance, a matter of law. This NPS does not contain any general requirement to consider alternatives or to establish	There is no general requirement to consider alternatives or to consider whether the site chosen represents the best option. Absent of any legal requirement to consider alternatives, for example for Compulsory Acquisition or a habitats

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
		whether the proposed project represents the best option from a policy perspective. Although there are specific requirements in relation to compulsory acquisition and habitats sites, the NPS does not change requirements in relation to compulsory acquisition and habitats sites.	derogation case (which the Applicants consider is not required for the Project), the consideration of alternatives is something to report under the Environmental Impact Regulations. As established in *Trusthouse Forte v Secretary of State for the Environment (1987) 53 P & CR 293*, alternatives are not typically a material planning consideration. Land may be developed in any manner that is acceptable for planning purposes, but the existence of "more acceptable land" does not necessarily justify the refusal of planning permission, which was reaffirmed in the *Save Stonehenge World Heritage Site Ltd and another vs SoS for Transport [2021] EWHC 2161 (admin) ("Save Stonehenge") (and its subsequent appeals)* (paragraph 268). Alternative sites and uses are therefore only relevant in "exceptional circumstances" where there may be "*significant adverse effects and where the major argument advanced in support of the planning application is that the need for the development outweighs the planning disadvantages inherent in it*" (*Trusthouse* at para 300). Even in circumstances where alternatives might be relevant, *Save Stonehenge* at paragraph 270 reaffirms that this does not include "*vague or inchoate schemes, or [those] which have no real possibility of coming about"* as irrelevant or, if relevant, that they should be given little to no weight in the planning balance. Therefore, the consideration of alternatives is a spectrum. See REP1-039 for further details. The Applicants have undertaken a site selection and consideration of alternatives process to identify the location of the Transmission Assets through early engagement with a range of stakeholders. The aim was to identify locations and routes (for the offshore export cable route, landfall location, onshore cable route and onshore substation) that were environmentally acceptable, deliverable and consentable, whilst also enabling the benefits in the long term of the lowest energy cost to be passed to the consumer. The process has taken account of environmental, physical, technical, commercial, and social considerations and opportunities as well as engineering requirements. Each stage of the site selection and consideration of alternatives process formed part of an iterative design process undertaken to identify the most suitable locations and configuration for the Transmission Assets. A full description of the site selection and consideration of alternatives process is provided in Volume 1, Chapter 4: Site Selection and Consideration of Alternatives (document reference F1.4), Volume 1, Annex 4.1: Selection and Refinement of Cable Landfall (document reference F1.4.1), Volume 1, Annex 4.2: Selection and Refinement of Offshore Infrastructure (document reference F1.4.2) and Volume 1, Annex 4.3: Selection and Refinement of Onshore Infrastructure (document reference F1.4.3).
Applicant assessment	4.3.10 to 4.3.12	The applicant must provide information proportionate to the scale of the project, ensuring the information is sufficient to meet the requirements of the EIA Regulations. In some instances, it may not be possible at the time of the application for development consent for all aspects of the proposal to have been settled in precise detail. Where this is the case, the applicant should explain in its application which elements of the proposal have yet to be finalised, and the reasons why this is the case. Where some details are still to be finalised, the ES should, to the best of the applicant's knowledge, assess the likely worst-case environmental, social and economic effects of the proposed development to ensure that the impacts of the project as it may be constructed have been properly assessed.	An Environmental Statement (document reference F1 – F4) has been submitted for this application which undertakes a thorough assessment including environmental, social and economic receptors throughout the Transmission Assets Project lifetime. The assessment allows the weighing of impacts both adverse and beneficial to assist in the decision-making process. Volume 1, Chapter 2: Policy and Legislative Context of the ES sets the legislative context, and Volume 1, Chapter 5, Environmental Impact Assessment Methodology of the ES (document reference F1.5) sets out the proportionate approach taken to the assessment. Volume 1, Chapter 3 Project Description of the ES (document reference F1.3) sets out the project design envelope including the elements yet to be finalised, and each topic chapter assessment has taken a Maximum Design Scenario (MDS) approach, which considers the likely worst cast environmental, social and economic effects to ensure that a worst case scenario has been assessed. The 'most likely' (current capacity) and 'worst case' (low) scenarios have been considered in the assessment of both economic and social effects within section

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			2.11 of Volume 4, Chapter 2: Socio-economics of ES (document reference F4.2). Section 2.9 of Volume 4, Chapter 2 of the ES provides further details on how the 'most likely' and 'worst case' scenarios have been considered for the topic of socio-economics.
	4.3.15 to 4.3.17	Applicants are obliged to include in their ES, information about the reasonable alternatives they have studied. This should include an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility. In some circumstances, the NPSs may impose a policy requirement to consider alternatives. Where there is a policy or legal requirement to consider alternatives, the applicant should describe the alternatives considered in compliance with these requirements.	Volume 1, Chapter 4: Site Selection and Consideration of Alternatives of the ES (document reference F1.4), details the assessments of the reasonable alternatives including the environmental, social, technical, commercial and economic reasons for the preferred choices. As established in *Trusthouse Forte v Secretary of State for the Environment (1987) 53 P & CR 293*, alternatives are not typically a material planning consideration. Land may be developed in any manner that is acceptable for planning purposes, but the existence of "more acceptable land" does not necessarily justify the refusal of planning permission, which was reaffirmed in the *Save Stonehenge World Heritage Site Ltd and another vs SoS for Transport [2021] EWHC 2161 (admin) ("Save Stonehenge") (and its subsequent appeals)* (paragraph 268). Alternative sites and uses are therefore only relevant in "exceptional circumstances" where there may be "*significant adverse effects and where the major argument advanced in support of the planning application is that the need for the development outweighs the planning disadvantages inherent in it*" (*Trusthouse* at para 300). Even in circumstances where alternatives might be relevant, *Save Stonehenge* at paragraph 270 reaffirms that this does not include "*vague or inchoate schemes, or [those] which have no real possibility of coming about"* as irrelevant or, if relevant, that they should be given little to no weight in the planning balance. See REP1-039 for further details.
Secretary of State decision making	4.3.18	The Secretary of State should consider the worst-case impacts in its consideration of the application and consent, providing some flexibility in the consent to account for uncertainties in specific project details.	Volume 1, Chapter 3: Project Description of the ES (document reference F1.3) sets out the project design envelope including the elements yet to be finalised, and each topic chapter assessment has taken a MDS approach which considers the likely worst case environmental, social and economic effects to ensure that a worst case scenario has been assessed.
	4.3.19	The Secretary of State should consider how the accumulation of, and interrelationship between, effects might affect the environment, economy, or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place.	An Environmental Statement (document reference F1 – F4) has been submitted for this application which undertakes a thorough assessment including environmental, social and economic receptors. The assessment allows the weighing of impacts both adverse and beneficial to assist in the decision-making process. Each topic chapter of the ES includes a cumulative effects assessment. The Environmental Statement also includes an Inter-relationships chapter (document reference F4.3).
	4.3.20	The Government has set 13 legally binding targets for England under the Environment Act 2021, covering the areas of: biodiversity; air quality; water; resource efficiency and waste reduction; tree and woodland cover; and Marine Protected Areas. Meeting the legally binding targets will be a shared endeavour that will require a whole of government approach to delivery. The Secretary of State have regard to the ambitions, goals and targets set out in the Government's Environmental Improvement Plan 2023 for improving the natural environment and heritage. This includes having regard to the achievement of statutory targets set under the Environment Act.	An Environmental Statement (document reference F1 – F4) has been submitted for this application which undertakes a thorough assessment including environmental, social and economic receptors. The assessment allows the weighing of impacts both adverse and beneficial to assist in the decision-making process. Specifically the relevant chapters of the ES are: Volume 3, Chapter 3: Onshore and intertidal ecology of the ES (document reference F3.3), Volume 3, Chapter 9: Air quality of the ES (document reference F3.9), Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2), the Outline Site Waste Management Plan (document reference J1.6), Volume 3, Annex 10.5: Tree survey and arboricultural impact assessment (F3.10.5) and Volume 2, Chapters 2-6 of the ES. The primary goal of the Government's 2023 Environmental Improvement Plan is to "*...halt the decline in our biodiversity so we can achieve thriving plants and wildlife*". The ES documents referred to above clearly set out the predicted impacts on sensitive environmental and ecological receptors, and commitments to avoidance/ mitigation/ compensation measures where significant effects were

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			identified. Due to the nature of the projects, most of the impacts on plants and wildlife are temporary and reversible. Although there is not currently a mandatory requirement for 10% net gain, or any guidance on the approach to undertaking a BNG assessment for projects seeking a DCO, the Applicants have undertaken a voluntary BNG assessment for permanent habitat losses arising from the new substations using the statutory DEFRA metric calculator tool (document reference: J11/F06 outline Biodiversity Benefit Management Plan). The BNG assessment has demonstrated that the projects can deliver measurable biodiversity net gain and sets out how and where the Applicants would do this.
	4.3.22 to 4.3.29	Given the level and urgency of need for new energy infrastructure, the Secretary of State should, subject to any relevant legal requirements (e.g. under the Habitats Regulations) which indicate otherwise, be guided by the following principles when deciding what weight should be given to alternatives: • the consideration of alternatives in order to comply with policy requirements should be carried out in a proportionate manner; and • only alternatives that can meet the objectives of the proposed development need to be considered. The Secretary of State should be guided in considering alternative proposals by whether there is a realistic prospect of the alternative delivering the same infrastructure capacity (including energy security, climate change, and other environmental benefits) in the same timescale as the proposed development. The Secretary of State should not refuse an application for development on one site simply because fewer adverse impacts would result from developing similar infrastructure on another suitable site, and should have regard as appropriate to the possibility that all suitable sites for energy infrastructure of the type proposed may be needed for future proposals. Alternatives not among the main alternatives studied by the applicant (as reflected in the ES) should only be considered to the extent that the Secretary of State thinks they are both important and relevant to the decision. As the Secretary of State must assess an application in accordance with the relevant NPS (subject to the exceptions set out in section 104 of the Planning Act 2008), if the Secretary of State concludes that a decision to grant consent to a hypothetical alternative proposal would not be in accordance with the policies set out in the relevant NPS, the existence of that alternative is unlikely to be important and relevant to the Secretary of State's decision. Alternative proposals which mean the necessary development could not proceed, for example because the alternative proposals are not commercially viable or alternative proposals for sites would not be physically suitable, can be excluded on the grounds that they are not important and relevant to the Secretary of State's decision. Alternative proposals which are vague or immature can be excluded on the grounds that they are not important and relevant to the Secretary of State's decision. It is intended that potential alternatives to a proposed development should, wherever possible, be identified before an application is made to the Secretary of State (so as to allow appropriate consultation and the development of a suitable evidence base in relation to any alternatives which are particularly relevant). Therefore, where an alternative is first put forward by a third party after an application has been made, the Secretary of State may place the onus on the person proposing the alternative to provide the evidence for its suitability as such and the Secretary of State should not necessarily expect the applicant to have assessed it	Volume 1, Chapter 4: Site Selection and Consideration of Alternatives of the ES (document reference F1.4), details the assessments of the reasonable alternatives including the environmental, social, technical, commercial and economic reasons for the preferred choices. The Applicants have undertaken a site selection and consideration of alternatives process to identify the location of the Transmission Assets through early engagement with a range of stakeholders. The aim was to identify locations and routes (for the offshore export cable route, landfall location, onshore cable route and onshore substation) that were environmentally acceptable, deliverable and consentable, whilst also enabling the benefits in the long term of the lowest energy cost to be passed to the consumer. The process has taken account of environmental, physical, technical, commercial, and social considerations and opportunities as well as engineering requirements. Each stage of the site selection and consideration of alternatives process formed part of an iterative design process undertaken to identify the most suitable locations and configuration for the Transmission Assets. As established in *Trusthouse Forte v Secretary of State for the Environment (1987) 53 P & CR 293*, alternatives are not typically a material planning consideration. Land may be developed in any manner that is acceptable for planning purposes, but the existence of "more acceptable land" does not necessarily justify the refusal of planning permission, which was reaffirmed in the *Save Stonehenge World Heritage Site Ltd and another vs SoS for Transport [2021] EWHC 2161 (admin) ("Save Stonehenge") (and its subsequent appeals)* (paragraph 268). Alternative sites and uses are therefore only relevant in "exceptional circumstances" where there may be "*significant adverse effects and where the major argument advanced in support of the planning application is that the need for the development outweighs the planning disadvantages inherent in it*" (*Trusthouse* at para 300). Even in circumstances where alternatives might be relevant, *Save Stonehenge* at paragraph 270 reaffirms that this does not include "*vague or inchoate schemes, or [those] which have no real possibility of coming about"* as irrelevant or, if relevant, that they should be given little to no weight in the planning balance. Therefore, in relation to the suggestion of an alternative route involving an alternative Point of Interconnection at or near Stanah, which has been suggested by some IPs, including the suggestion that the onshore substations should be located at Hillhouse Technology Local Enterprise Zone (LEZ) adjacent to the NGET Stanah substation (which is part of NETS, the transmission network owned by NGET including existing overhead lines), do not meet these tests. Any form of alternative Point of Interconnection into the NETS which is proposed, would be a change to the Point of Interconnection for the Projects, as identified by NESO in the HND and secured in connection agreements with NESO. NGET were engaged in the preparation of the HNDR by NESO and the upgrade works between Stanah and Penwortham are reinforcement works to the NETS (for which NGET have responsibility for); subsequently there was a full understanding of a potential connection at or near Stanah when the HNDR was prepared. Therefore, the Applicants' position is that the Point of Interconnection for the Transmission Assets (i.e at or around Stanah compared to Penwortham) is

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			primarily a matter for NESO (inwith NGET) as part of the HND and subsequent connection offer process. Ultimately a project with a different Point of Interconnection would be an entirely different project, and one which is not within the gift or control of the Applicants.
4.4 Health			
Applicant assessment	4.4.4	As described in the relevant sections of this NPS and in the technology specific NPSs, where the proposed project has an effect on humans, the ES should assess these effects for each element of the project, identifying any potential adverse health impacts, and identifying measures to avoid, reduce or compensate for these impacts as appropriate.	The human health assessment (ES Volume 1, Annex 5.1: Human health (document reference F1.5.1) addresses the potential effects of the project on human health, including the potential for adverse health effects. As the human health assessment uses the residual effects of other technical chapters as the basis of its assessment, mitigation measures adopted as part of the project in other technical assessments were taken into account within the health assessment, including any measures to avoid, reduce, enhance or compensate for impacts. Overall, it is concluded that there will be no significant adverse human health effects arising from the Transmission Assets during the construction, operation and maintenance or decommissioning phases
	4.4.5	The impacts of more than one development may affect people simultaneously, so the applicant should consider the cumulative impact on health in the ES where appropriate.	Cumulative and inter-related effects are assessed within the health assessment contained within ES Volume 1, Annex 5.1: Human health (document reference F1.5.1).
	4.4.6	Opportunities should be taken to mitigate indirect impacts, by promoting local improvements to encourage health and wellbeing, this includes potential impacts on vulnerable groups within society and impacts on those with protected characteristics under the Equality Act 2010, i.e. those groups which may be differentially impacted by a development compared to wider society as a whole.	Relevant vulnerable population groups are considered within the human health assessment, including vulnerability as a result of age, income, health, social disadvantage (including were relevant protected characteristics under the Equality Act 2010), access and geographical factors (ES Volume 1, Annex 5.1: Human health (document reference F1.5.1). The Public Sector Equality Duty Statement (PSED) (S_D1_8) provides a comprehensive summary of the potential impacts of the Project on receptor groups within Volume 1, Annex 5.1: Human Health (document reference F1.5.1). This annex identifies vulnerable groups, which includes children and young people, older people, low income groups, people with existing poor health including disability, those who share protected characteristics under the Equality Act 2010 and people living in deprivation. No aspect of the Project would affect the protected characteristics of anyone in the community however the PSED draws together the relevant information to allow PINS, the ExA and the SoS to carry out their duty under the Equality Act 2010. Measures which have been undertaken throughout the application include having regard to equal opportunities and diversity throughout the pre-application consultation process, which, for example, included the Applications providing hard-copy consultation materials for the digitally disadvantaged. Other measures include giving careful consideration to schools and care homes within the vicinity of the project and measures to control noise and vibration impact (see outline Noise and Vibration Management Plan, J1.3/F03) and artificial light (see outline Construction Artificial Light Management Emissions Plan, J1.11/F03). Furthermore, in relation to the potential impacts on Wrea Green Equitation Centre, engagement has taken place throughout the pre-application stage with a commitment to control noise and vibration at the centre included in the outline Noise and Vibration Management Plan, J1.3/F03) and a bespoke Communications Plan for the centre to mitigate impacts. In addition, a study has been undertaken by the Applicants to identify the risk of noise impacts on equestrian receptors, including Wrea Green, which will be used to inform specific noise mitigation at these receptors during construction. This study, submitted at Deadline 6 (REP6-183), identified approaches to mitigating impacts, both from existing commitments within the oCNVMPs and potential additional measures to be considered on a receptor specific basis. Overall, the PSED demonstrates that the Applicants through the whole application and its process have had regard to

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			and ensured mitigation is in place to address any impacts of the project on vulnerable groups.
Secretary of State decision making	4.4.7	Generally, those aspects of energy infrastructure which are most likely to have a significantly detrimental impact on health are subject to separate regulation (for example for air pollution) which will constitute effective mitigation of them, so that it is unlikely that health concerns will either by themselves constitute a reason to refuse consent or require specific mitigation under the Planning Act 2008.	Impacts that are governed by separate regulation have been considered when scoping (ES Volume 1, Annex 5.1: Human health (document reference F1.5.1).
	4.4.8	However, not all potential sources of health impacts will be mitigated in this way and the Secretary of State may want to take account of health concerns when setting requirements relating to a range of impacts such as noise.	Where relevant, the human health assessment has had regard to non-threshold effects that occur even below regulatory standards. The outline Noise and Vibration Management Plan (oNVMP)(J1.3/F03) sets out the key management and monitoring procedures that will be adopted during the onshore site preparation works and construction of the Transmission Assets. The main objective is to minimise noise and vibration impacts on nearby residents and other sensitive receptors to acceptable levels in accordance with British Standard (BS) 5228:2009+A1:2014 or other relevant guidance agreed in consultation with the relevant planning authority. Examples of noise control management measures, provided at Table 1.1 of the oNVMP include, *inter alia*, localised acoustic screening including earth bunds, use of rotary drills and boring plant inside acoustic sheds with adequate ventilation and the reduction of simultaneous plant use. The Applicants have committed to the implementation of detailed Construction Noise and Vibration Management Plans via CoT79 (Volume 1, Annex 5.3: Commitments Register, document reference F1.5.3 (REP3-013)) and is secured by inclusion of Requirement 8 of the draft DCO (C1/F09) Schedules 2A & 2B.
4.5 Marine considerations			
Applicant assessment	4.5.8	Applicants for a Development Consent Order must take account of any relevant Marine Plans and are expected to complete a Marine Plan assessment as part of their project development, using this information to support an application for development consent.	Each relevant topic of the ES chapters (document reference F2 – F4) contains a section regarding assessment and compliance with marine policies which include the Marine Policy Statement and the Northwest Inshore and Offshore Marine Plan. The aims and policies contained within these documents have been taken into account during pre-application and have informed the proposed development. A summary of the assessment of the development against marine policies is included within the Planning Statement (document reference J28) and the Marine Policies Tracker (Appendix 2 of the Planning Statement (document reference J28.2)).
	4.5.9	Applicants are encouraged to refer to Marine Plans at an early stage, such as in pre-application, to inform project planning, for example to avoid less favourable locations as a result of other uses or environmental constraints	
Secretary of State decision making	4.5.11	In making a decision, the Secretary of State is responsible for determining how the Marine Plan informs the decision-making process. For example, the Secretary of State will determine if and how proposals meet the high-level marine objectives, plan vision, and all relevant policies.	
	4.5.12	In the event of a conflict between an NPS and any marine planning documents, the NPS prevails for purposes of decision making.	
4.6 Environmental and biodiversity net gain			
Environmental and Biodiversity Net Gain	4.6.1	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.	For terrestrial development consented under the Planning Act 2008, the mandatory biodiversity net gain (BNG) requirement has been delayed and is now set to come into force in May 2026. Although the Transmission Assets are not subject to mandatory net gain requirement under the Environment Act 2021, the Applicants have worked with statutory consultees to discuss the approach and to develop the design to allow the maximum benefit to biodiversity, within the parameters of the Project, that align with legislation and national and local policy. An outline Biodiversity Benefit Management Plan (document reference J11/F06) has been provided as part of the application for development consent. The biodiversity benefit approach taken for the Transmission Assets considers the above ground permanent onshore infrastructure and ensures that biodiversity benefit will be delivered for the areas of (permanent) habitat loss. Furthermore,
	4.6.2	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.	
	4.6.3	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.	

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			the Applicants will aim to improve habitat connectivity in accordance with NPS EN-5 where possible. The temporary land required will be restored to baseline habitat type and condition (CoT08, 14, 27 (document reference 1.5.3). This approach affords biodiversity benefit whilst balancing other socio-economic and land use considerations. The Biodiversity Benefit Supporting Statement (S_D5_11) highlights that in addition to biodiversity benefit being delivered for all permanent above ground infrastructure (outwith Central Lancashire), Lea Marsh Fields (located within Central Lancashire) is also to be subject to ecological enhancements and provides a strategically located opportunity to deliver substantial additional biodiversity gains, strengthen ecological connectivity between designated sites and contribute to the Lancashire Local Nature Recovery Strategy. In addition, a hierarchy of biodiversity benefit delivery options ensures that biodiversity benefit can be achieved whether through on-site provision, reduced off-site delivery, funding of local biodiversity projects, or the purchase of biodiversity credits. This voluntary approach, which reflects emerging best practice, is supported by a robust 30-year management and monitoring framework and ensures that biodiversity benefit will not only offset permanent land take but also contribute to wider ecological resilience and the delivery of strategic environmental outcomes in Lancashire. The Transmission Assets can deliver biodiversity benefit, exceed the minimum 10% target where feasible, and provide a long-term positive legacy for nature in the local area alongside the delivery of NSIP energy infrastructure.
	4.6.6	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.	Information to inform this decision is provided within Volume 3, Chapter 3: Onshore ecology and nature conservation (document reference F3.3) of the ES, the outline Biodiversity Benefit Management Plan (document reference J11/F06) and the Marine Enhancement Statement (document reference J12) and the Biodiversity Benefit Supporting Statement (S_D5_11).
	4.6.7	In England applicants for onshore elements of any development are encouraged to use the latest version of the biodiversity metric to calculate their biodiversity baseline and present planned biodiversity net gain outcomes. This calculation data should be presented in full as part of their application.	For terrestrial development consented under the Planning Act 2008, the mandatory biodiversity net gain (BNG) requirement has been delayed and is now set to come into force in May 2026. Projects that have been accepted for examination by the Planning Inspectorate before the specified commencement date would not be required to deliver mandatory BNG, ensuring projects which are at a sufficiently advanced stage do not need to then identify scheme amendments (and potentially additional land) to meet the mandatory net gain requirement. Although the Transmission Assets are not subject to mandatory net gain requirement under the Environment Act 2021, the Applicants have worked with statutory consultees to discuss the approach and to develop the design to allow the maximum benefit to biodiversity within the parameters of the Project. For the Transmission Assets, the Applicants' preference is to deliver biodiversity benefit within the Onshore Order Limits, however, Requirement 26 of Schedules 2A and 2B of the draft DCO (document reference C1/F09) does allow for a prioritisation exercise to be carried out, whereby biodiversity benefit may be delivered through a mixture of the Work No 44A or 44B (as appropriate), biodiversity projects within close proximity to the order limits and through the purchase of biodiversity credits .. Further qualitative benefits to biodiversity are proposed via potential collaboration with stakeholders and local groups, contributing to existing plans and programmes, both within and outside the Onshore Order Limits.
	4.6.8	Where possible, this data should be shared, alongside a completed biodiversity metric calculation, with the Local Authority and Natural England for discussion at the pre-application stage as it can help to highlight biodiversity and wider environmental issues which may later cause delays if not addressed.	
	4.6.10	Biodiversity net gain should be applied after compliance with the mitigation hierarchy and does not change or replace existing environmental obligations, although compliance with those obligations will be relevant to the question of the baseline for assessing net gain and if they deliver an additional enhancement beyond meeting the existing obligation, that enhancement will count towards net gain.	
	4.6.11	Biodiversity net gain can be delivered onsite or wholly or partially off-site. We encourage details of any off-site delivery of biodiversity net gain to be set out within the application for development consent.	
Environmental and Biodiversity Net Gain continued	4.6.12	When delivering biodiversity net gain off-site, developments should do this in a manner that best contributes to the achievement of relevant wider strategic outcomes, for example by increasing habitat connectivity, enhancing other ecosystem service outcomes, or considering use of green infrastructure strategies. Reference should be made to relevant national or local plans and strategies, to inform off-site biodiversity net gain delivery. If published, the relevant strategy is the Local Nature Recovery Strategy (LNRS). If an LNRS has not been published, the relevant consenting body or planning authority may specify alternative plans, policies or strategies to use.	
	4.6.13	In addition to delivering biodiversity net gain, developments may also deliver wider environmental gains and benefits to communities relevant to the local area, and to national policy priorities, such as:	

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		• reductions in GHG emissions • reduced flood risk • improvements to air or water quality, • climate adaptation, • landscape enhancement • increased access to natural greenspace, or • the enhancement, expansion or provision of trees and woodlands The scope of potential gains will be dependent on the type, scale, and location of specific projects. Applicants should look for a holistic approach to delivering wider environmental gains and benefits through the use of nature-based solutions and Green Infrastructure.	In accordance with NPS EN-1 paragraph 4.6.7 the calculation undertaken for the outline Onshore Biodiversity Benefit Management Plan (document reference J11/F06) utilises the latest biodiversity metric published by Defra (version 4.1). Further details of the approach to biodiversity benefit are provided in the Biodiversity Benefit Management Plan (document reference J11). With reference to paragraph 4.6.8, the onshore ecology and onshore and intertidal ornithology Expert Working Group (EWG), held in March 2023, introduced the anticipated approach for biodiversity benefit, and the guidance and calculation data/methodology being used. Discussion included the availability of some baseline data sets, the approach to including trenchless techniques in the biodiversity assessment and treatment of areas of mitigation in the metric. A later EWG meeting, held in December 2023, included a discussion of areas of land potentially suitable for delivering biodiversity benefit identified by survey, review of aerial photographs and consultation with landowners and other stakeholders. It included results of a preliminary assessment and calculation of the preliminary areas of interest. There was a presentation and discussion on the legislation, policies and principles of biodiversity benefit and the limited permanent habitat loss proposed for the Transmission Assets, especially when considering the proposed trenchless techniques to avoid impacts on habitats of significant ecological value. In terms of the biodiversity benefit approach, it was proposed to consider permanent substation areas and ensure biodiversity benefit will be delivered for these (permanent) issues. The aim to improve habitat connectivity in accordance with NPS EN-5 where possible was discussed. The January 2024 EWG meeting included discussion of feedback on the approach to biodiversity benefit. The subsequent meeting on 27 June included discussion of the approach to mitigation and initial, high-level proposals for biodiversity benefit. Further details regarding EWG meetings and the calculation data are set out in section 3.3.2 of Volume 3, Chapter 3: Onshore ecology and nature conservation (document reference F3.3). With respect to data sharing, a series of onshore ecology and onshore and intertidal ornithology EWGs have been held in 2023 and 2024 to introduce the anticipated approach to biodiversity benefit, including the guidance and calculation methodology being used. Discussion included the availability of some baseline data sets, the approach to including trenchless techniques in the biodiversity assessment and treatment of areas of mitigation in the metric. Results of preliminary assessment and calculations of the preliminary areas of interest were shared with the EWG. The EWG meeting held in January 2024 included discussion of feedback on the approach to biodiversity benefit. With respect to the mitigation hierarchy, commitments made as part of the Transmission Assets are set out in section 3.8 of Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). This includes measures to conserve biodiversity in terms of ecological interests and complies with the mitigation hierarchy, with measures to avoid and minimise impacts as far as is possible. Offsetting will only be required for the permanent habitat loss areas, where biodiversity benefit is being delivered. Biodiversity benefit associated with the permanent above ground infrastructure will be provided within the Onshore Order Limits, which is set out within the outline Biodiversity Benefit Management Plan (document reference J11/F06). Further details of the approach to biodiversity benefit are also provided in the Biodiversity Benefit Supporting Statement (document reference S_D5_11). Where practicable, the Applicants have looked to provide a coordinated approach to the design and development of mitigation and enhancement measures. This
	4.6.14	The Environment Act 2021 mandated the preparation of Local Nature Recovery Strategies (LNRSs) across England. They are a new system of spatial strategies for nature recovery and will play a major role in providing detail on the best locations to create, enhance and restore nature and deliver wider environmental benefits. LNRSs will also agree priorities for nature recovery and map the most valuable existing areas for nature. They will be critical in delivering new government targets for species abundance and habitat creation commitments, as well as other pressing environmental outcomes for water and flood risk, carbon and tree planting and woodland creations. LNRSs will also drive the creation of a Nature Recovery Network (NRN), a major commitment in the government's 25 Year Environment Plan.	
	4.6.15	Applications for development consent should be accompanied by a statement demonstrating how opportunities for delivering wider environmental net gains have been considered, and where appropriate, incorporated into proposals as part of good design (including any relevant operational aspects) of the project.	
Environmental and Biodiversity Net Gain continued	4.6.16	Applicants should make use of available guidance and tools for measuring natural capital assets and ecosystem services, such as the Natural Capital Committee's 'How to Do it: natural capital workbook', the government's guidance on Enabling a Natural Capital Approach (ENCA) and other tools that aim to enable wider benefits for people and nature.	
	4.6.17	Where environmental net gain considerations have featured as part of the strategic options appraisal process to select a project, applicants should reference that information to supplement the site-specific details.	
	4.6.18	Opportunities for environmental, social, and economic enhancements, protection and mitigation measures are identified in a number of sections in Part 5 of this NPS, which provides guidance on the impacts of new energy infrastructure.	
Secretary of State decision making	4.6.1	Although achieving biodiversity net gain is not currently an obligation on applicants, Schedule 15 of the Environment Act 2021 contains provisions which, when commenced, mean the Secretary of State may not grant an application for a Development Consent Order unless satisfied that a biodiversity gain objective is met in relation to the onshore development in England to which the application relates.	

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			has included, for example, a coordinated approach to the design at the onshore substation sites to incorporate ecological, drainage and landscape considerations, that will result in wider environmental gains. Flood risk is considered in Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2), and water quality is considered in Volume 3, Annex 2.1: Water Framework Directive Surface and Groundwater Assessment of the ES (document reference F3.2.1). Greenhouse gas emissions and climate adaptation are assessed in Volume 4, Chapter 1: Climate change of the ES (document reference F4.1). Landscape and visual effects are assessed in Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10), and heritage impacts in Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5). The status of the Local Nature Recovery Strategy for Lancashire is summarised in section 3.6.1 of Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). Step 1 of the strategy, to map areas of particular importance for biodiversity, has been completed by Lancashire County Council. Accordingly, section 3.11 of Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3) includes assessment of areas of particular importance such as statutory and non-statutory designated sites. Section 3.11.5 considers impacts on habitat connectivity within the Local Nature Recovery Strategy area, in which areas of particular importance are included as core areas and fragmentation of connectivity between them is assessed on the basis of the available information on woodland and grassland habitat networks for Lancashire. As stated in the EWG held on 23 March 2023, the Applicants will aim to improve habitat connectivity. Consequently, areas included within the Order Limits for mitigation and biodiversity benefit have sought to enhance and expand areas of particular importance where possible to do so, such as within Lytham Moss Biological Heritage Site (BHS) and within and adjacent to Lea Marsh BHS. In addition, the landscaping associated with the onshore substation sites will contribute to reinstating the permanent loss of habitat connectivity in these areas.
Secretary of State decision making continued	4.6.2	The biodiversity gain objective will be set out in a biodiversity gain statement (as defined under the Environment Act 2021). Normally these statements would be included within an NPS, but the Act allows for the statement to be published separately where a review of an NPS has begun before the provisions are commenced, as is the case with these energy NPSs. Under the provision of the Environment Act 2021, any such separate biodiversity gain statement will be regarded as being contained within these NPSs.	For the Transmission Assets, the Applicants' preference is to deliver biodiversity benefit within identified biodiversity benefit areas within the Onshore Order Limits, however, Requirement 26 of Schedules 2A and 2B of the draft DCO (document reference C1/F09) does allow for a prioritisation exercise to be carried out, whereby biodiversity benefit may be delivered through a mixture of the Work No 44A or 44B (as appropriate), biodiversity projects within close proximity to the order limits and through the purchase of biodiversity credits .. Further qualitative benefits to biodiversity are proposed via potential collaboration with stakeholders and local groups, contributing to existing plans and programmes, both within and outside the Onshore Order Limits. Further details of the approach to biodiversity benefit are provided in the outline Biodiversity Benefit Management Plan (document reference J11/F06).The calculation undertaken utilises the biodiversity metric published by Defra.
	4.6.3	The Secretary of State should give appropriate weight to environmental and biodiversity net gain, although any weight given to gains provided to meet a legal requirement (for example under the Environment Act 2021) is likely to be limited.	
4.7 Criteria for good design for energy infrastructure			
Applicant assessment	4.7.5	To ensure good design is embedded within the project development, a project board level design champion could be appointed, and a representative design panel used to maximise the value provided by the infrastructure. Design principles should be established from the outset of the project to guide the development from conception to operation. Applicants should consider how their design principles can be applied post-consent.	The Applicants have prepared the outline Design Principles (oDP) (document J3) to demonstrate compliance with best practice and policy guidance on good design. The oDP forms part of the certified suite of documents supporting the DCO application and provides a central, clear, and enforceable framework for post-consent detailed design with the discharging planning authority. The principles of the oDP seek to guide the design process towards design outcomes that ensure that the substation sites would fit sensitively into the local context; mitigate (as far as possible) adverse environmental effects and respects local communities.
	4.7.6	Whilst the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting relative to existing landscape character, land form and vegetation. Furthermore, the design and sensitive use of materials in any associated development such as electricity substations	

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		will assist in ensuring that such development contributes to the quality of the area. Applicants should also, so far as is possible, seek to embed opportunities for nature inclusive design within the design process.	The Applicants' design approach has been informed by the National Infrastructure Commission's Design Principles for National Infrastructure (2020), updated during Examination to reflect the Project-Level Design Principles (May 2024), alongside lessons learned from recently consented DCO precedent projects. This structured approach ensures that the Transmission Assets respond directly to the key elements of good design set out in NPS EN-1. The Applicants believe that the Transmission Assets application has strongly responded to the criteria for good design, as illustrated by the following: • The Transmission Assets have been designed to be fit for purpose and efficient in delivering their operational role of connecting offshore generation to the national electricity transmission system. The Maximum Design Scenario (MDS), prepared in accordance with Advice Note Nine: Rochdale Envelope, establishes clear parameters that provide sufficient certainty for the EIA process while retaining appropriate flexibility, beneath the parameters set in the MDS, to accommodate final procurement, design and technology selection during post -consent detailed design. Functionality has been embedded from the outset of the Projects as part of the iterative site selection and refinement process, ensuring that the substation sites can be delivered safely, efficiently and with resilience. • The design approach incorporates measures to minimise environmental impacts, as set out in the EIA. Embedded mitigation has been integrated, insofar as possible at this stage of the Projects, into the substation sites and their immediate contexts. Both the strategic and project -level design principles, as outlined in the oDP (J3), promote sustainable construction methods and adaptability to technological innovation, thereby supporting the overarching vision for the Transmission Assets and contributing to national decarbonisation objectives. Consideration has also been given to energy efficiency, climate resilience and biodiversity enhancement as part of the iterative design process. • The Applicants are committed to ensuring that the final appearance of the substations is sensitively designed insofar as possible. Through the oDP (J3) and its project - level design principles and codes, discussed and informed by engagement with the local planning authorities, the Applicants are committed to delivering in collaboration with the discharging local authority, designs that reflect and integrate, as far as practicable, the key characteristics of the receiving landscape. Whilst recognising the primarily functional nature of electrical substation infrastructure, the project -level design principles will continue to guide the post-consent detailed design process, ensuring consistency with the principles secured through the DCO, while retaining flexibility to respond to technical and environmental considerations. A degree of flexibility in relation to layout will be explored during detailed design, subject to the appointment of technical partners, with the Applicants' Design Champions providing oversight. Appearance and landscape integration are treated as core design considerations. The illustrative landscape proposals, as documented in the oLMP (J2/F04), incorporate embedded landscape mitigation and proportionate design measures that are responsive to their setting, informed by consultation feedback and environmental constraints. As stated above, the oDP establishes central, clear, and enforceable framework for detailed design of the form, scale and landscape treatment (within the Order Limits), with final detailed designs to be reviewed and approved by the relevant planning authority in accordance with Requirement 5 of the DCO. • The Applicants' consenting strategy has been developed to provide appropriate flexibility in the design of the Transmission Assets, ensuring that the substations remain resilient and adaptable to future requirements. As stated above, the MDS establishes a robust framework for environmental assessment while accommodating the input of technology providers during the detailed design stage. This flexibility might encompass construction methods, final extent and
	4.7.7	Applicants must demonstrate in their application documents how the design process was conducted and how the proposed design evolved. Where a number of different designs were considered, applicants should set out the reasons why the favoured choice has been selected.	
	4.7.8	Applicants should consider taking independent professional advice on the design aspects of a proposal. In particular, the Design Council can be asked to provide design review for nationally significant infrastructure projects and applicants are encouraged to use this service. Applicants should also consider any design guidance developed by the local planning authority.	
	4.7.9	Further advice on what applicants should demonstrate by way of good design is provided in the technology specific NPSs where relevant.	
Secretary of State decision making	4.7.10	In the light of the above and given the importance which the Planning Act 2008 places on good design and sustainability, the Secretary of State needs to be satisfied that energy infrastructure developments are sustainable and, having regard to regulatory and other constraints, are as attractive, durable, and adaptable (including taking account of natural hazards such as flooding) as they can be.	

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			layout, allowing the Transmission Assets to respond to advances in technology and supply chain input without undermining the principles of good design.
	4.7.11	In doing so, the Secretary of State should be satisfied that the applicant has considered both functionality (including fitness for purpose and sustainability) and aesthetics (including its contribution to the quality of the area in which it would be located, any potential amenity benefits, and visual impacts on the landscape or seascape) as far as possible.	Details of the design and/or environmental constraints considered as part of the iterative design process, are set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4) and the Outline Design Principles document (document reference J3). An iterative EIA process has been used to avoid impacts where practicable, in addition to mitigating remaining impacts. The design at the onshore substations is set out in Chapter 3 Project Description (document reference F1.3) and the outline landscaping plans are set out in the Outline Landscape Management Plan (document reference J2). The ES describes effects on landscape character and visual resources during construction, operation and maintenance and decommissioning during the day and at night and winter/summer without mitigation and residual effects with mitigation. The landscape and visual assessment (Volume 3, Chapter 10: Landscape and visual resources of the ES) (document reference F3.10) is based on the maximum design scenario. Operational, safety and security requirements are set out within the project description, in outline, and will be further confirmed at detailed design stage (document reference F1.3).
	4.7.12	In considering applications, the Secretary of State should take into account the ultimate purpose of the infrastructure and bear in mind the operational, safety and security requirements which the design has to satisfy. Many of the wider impacts of a development, such as landscape and environmental impacts, will be important factors in the design process.	
	4.7.13	The Secretary of State should consider such impacts under the relevant policies in this NPS. Assessment of impacts must be for the stated design life of the scheme rather than a shorter time period.	
	4.7.14	The Secretary of State should consider taking independent professional advice on the design aspects of a proposal. In particular, the Design Council can be asked to provide design review for nationally significant infrastructure projects.	
4.10 Climate change adaptation and resilience			
Applicant assessment	4.10.6	Integrated approaches, such as looking across the water cycle, considering coordinated management of water storage, supply, demand, wastewater, and flood risk can provide further benefits to address multiple infrastructure needs, as well as carbon sequestration benefits.	Volume 4, Chapter 1: Climate change of the ES (document reference F4.1) sets out the climate change risk assessment for the relevant elements of the Transmission Assets (Volume 4, Annex 2.2: Climate change risk assessment of the ES (document reference F4.2.2). Solutions in relation to hydrology, flood risk, landscape and biodiversity are set out in: • Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2). • Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). • Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4). • Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). The development of the outline design at the onshore substations has taken an integrated approach, considering hydrology, flood risk, landscape and biodiversity and this is reflected in the Outline Operational Drainage Management Plan (document reference J10), Outline Landscape Management Plan (document reference J2) and outline Biodiversity Benefit Management Plan (document reference J11/F06).
	4.10.7	In addition to avoiding further GHG emissions when compared with more traditional adaptation approaches, nature-based solutions can also result in biodiversity benefits and net gain, as well as increasing absorption of carbon dioxide from the atmosphere.	
	4.10.8	New energy infrastructure will typically need to remain operational over many decades, in the face of a changing climate. Consequently, applicants must consider the direct (e.g. site flooding, limited water availability, storms, heatwave and wildfire threats to infrastructure and operations) and indirect (e.g. access roads or other critical dependencies impacted by flooding, storms, heatwaves or wildfires) impacts of climate change when planning the location, design, build, operation and, where appropriate, decommissioning of new energy infrastructure.	
	4.10.9	The ES should set out how the proposal will take account of the projected impacts of climate change, using government guidance and industry standard benchmarks such as the Climate Change Allowances for Flood Risk Assessments,148 Climate Impacts Tool, and British Standards for climate change adaptation, in accordance with the EIA Regulations.	Volume 4, Chapter 1: Climate change of the ES (document reference F4.1) considers the climate change risk assessment for the relevant elements of the Transmission Assets (the subject of the application for development consent). Volume 1, Chapter 4: Site selection and consideration of alternatives (document reference F1.4) describes the factors considered during the site selection and design evolution process.
	4.10.10	Applicants should assess the impacts on and from their proposed energy project across a range of climate change scenarios, in line with appropriate expert advice and guidance available at the time.	Volume 4, Chapter 1: Climate change of the ES (document reference F4.1) provides a climate change risk assessment for the relevant elements of the Transmission Assets. Further details are provided within Volume 4, Annex 1.2: Climate change risk assessment of the ES (document reference F4.1.2). The assessment is based on the latest available climate projections.
	4.10.11	Applicants should demonstrate that proposals have a high level of climate resilience built-in from the outset and should also demonstrate how proposals can be adapted over their predicted lifetimes to remain resilient to a credible maximum climate change scenario. These results should be considered alongside relevant research which is based on the climate change projections.	

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			Volume 4, Annex 1.2 of the ES considers the maximum climate change scenario, informed by climate projections using the representative concentration pathway (RCP) 8.5, a high-emissions scenario assuming 'business as usual' growth globally with little additional mitigation. This represents a maximum credible scenario. The chapter has been prepared taking into account the latest guidance available from IEMA.
	4.10.12	Where energy infrastructure has safety critical elements, the applicant should apply a credible maximum climate change scenario. It is appropriate to take a risk-averse approach with elements of infrastructure which are critical to the safety of its operation.	Volume 4, Chapter 1: Climate change of the ES (document reference F4.1) provides an assessment of climate risk and resilience for the Transmission Assets. Consideration of onshore flood risk has been addressed within Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2).
Secretary of State decision making	4.10.13	The Secretary of State should be satisfied that applicants for new energy infrastructure have taken into account the potential impacts of climate change using the latest UK Climate Projections and associated research and expert guidance (such as the EA's Climate Change Allowances for Flood Risk Assessments or the Welsh Government's Climate change allowances and flood consequence assessments) available at the time the ES was prepared to ensure they have identified appropriate mitigation or adaptation measures. This should cover the estimated lifetime of the new infrastructure, including any decommissioning period.	Volume 4, Chapter 1: Climate change of the ES (document reference F4.1) provides a climate change risk assessment for the relevant elements of the Transmission Assets. Further details are provided within Volume 4, Annex 1.2: Climate change risk assessment of the ES (document reference F4.1.2). The assessment is based on the latest available climate projections. Volume 4, Annex 1.2 of the ES considers the maximum climate change scenario, informed by climate projections using the representative concentration pathway (RCP) 8.5, a high-emissions scenario assuming 'business as usual' growth globally with little additional mitigation. This represents a maximum credible scenario. The chapter has been prepared taking into account the latest guidance available from IEMA.
Secretary of State decision making continued	4.10.14	Should a new set of UK Climate Projections or associated research become available after the preparation of the ES, the Secretary of State (or the Examining Authority during the examination stage) should consider whether they need to request further information from the applicant.	
	4.10.15	The Secretary of State should be satisfied that there are not features of the design of new energy infrastructure critical to its operation which may be seriously affected by more radical changes to the climate beyond that projected in the latest set of UK climate projections, taking account of the latest credible scientific evidence on, for example, sea level rise (for example by referring to additional maximum credible scenarios – i.e. from the Intergovernmental Panel on Climate Change or EA) and that necessary action can be taken to ensure the operation of the infrastructure over its estimated lifetime.	
	4.10.16	If any adaptation measures give rise to consequential impacts (for example on flooding, water resources or coastal change) the Secretary of State should consider the impact of the latter in relation to the application as a whole and the impacts guidance set out in Part 5 of this NPS.	
	4.10.17	Any adaptation measures should be based on the latest set of UK Climate Projections, the government's latest UK Climate Change Risk Assessment, when available, and in consultation with the EA's Climate Change Allowances for Flood Risk Assessments or the Welsh Government's Climate change allowances and flood consequence assessments.	Details of proposed measures to manage flood risk are provided in Volume 3, Chapter 2: Hydrology and flood risk (document reference F3.3) and Volume 3, Annex 2.3: Flood Risk Assessment of the ES (document reference F3.2.3/F05). The design of such measures has been based on the latest climate change allowances from the Environment Agency. The assessment of climate risk provided in Volume 4, Chapter 1: Climate Change of the ES (document reference F4.1) is based on the latest climate change projections. In line with NPS EN-1 guidance, applicants should demonstrate proposals can be adapted over the predicted lifetimes to remain resilient to a credible maximum climate change scenario. H++ is the credible maximum scenario to 2100 and is informed by UKCP18 to assess impacts from low probability, high impact climate change events including sea level rise. Sea level rise projections for the H++ scenario have been informed by including a 1.9 m allowance onto the design flood level. Further discussion regarding the H++ assessment is presented in sections 1.5.4, 1.6.4 and 1.7.4 within Volume 3, Annex 2.3: Flood risk assessment of the ES (Document reference: F3.2.3/F05).
		Adaptation measures should be required to be implemented at the time of construction where necessary and appropriate to do so. However, where they are necessary to deal with the impact of climate change, and that measure would have an adverse effect on other aspects of the project and/or surrounding environment (for example coastal processes), the Secretary of State may consider requiring the applicant to keep the need for the adaptation measure under review, and ensure that the measure could be implemented should the need arise, rather than at the outset of the development (for example increasing height of existing, or requiring new, sea walls).	

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4.11 Network connection			
Applicant assessment	4.11.6	Applicants may wish to take a commercial risk where they have not received or accepted a formal offer of a grid connection from the relevant network operator at the time of the application. In this situation applicants should provide information as part of their application confirming that there is no obvious reason why a network connection would not be possible.	The Applicants have worked closely to identify how best to develop (and consent) aligned but electrically separate grid connection (and following the Holistic Network Design, projects have received separate grid connection agreements). In order to do so, the Applicants have identified and considered a number of consenting options. The output of this process has been to promote an unprecedented aligned grid connection whereby both wind farms: • consent their Generation Assets separately (so that they remain commercially and geographically distinct and subject to their individual agreements for lease with The Crown Estate); and • pursue a joint consent for the Transmission Assets (covering both projects' offshore export cables and onshore transmission infrastructure). Rather than requiring multiple separate consents from different decision-makers for these large scale, complex, and high value works (for example, the onshore works cover four local planning authority areas), the consenting strategy for the Transmission Assets provides for a single, consistent consent, particularly important for an aligned transmission connection as is required by the HND. This approach also avoids the proliferation of infrastructure across a wider area. Furthermore, given the intrinsic link with the Generation Assets, the Applicants believe that consideration and determination of the Transmission Assets under the Planning Act 2008 ensures alignment and consistency with the applications and any consents for the Generation Assets and to ensure that the NPSs be given appropriate consideration in the decision-making process, alongside local planning policy. Key reasons for selecting this consenting approach are to: • allow for better consideration and assessment of potential impacts (including beneficial and cumulative impacts); • facilitate more efficient use of stakeholder resources to minimise stakeholder fatigue or confusion; • provide a formal structure for the projects to collaborate and align on transmission design, assessment and mitigation approach; • align with the NPSs for delivering major energy infrastructure (for example paragraphs 4.11.3 and 4.11.4 of NPS EN-1 (DESNZ, 2023); and • avoid separate complex consenting processes locally and nationally, enabling alignment and consistent consenting with timetabling certainty, reducing the potential for delays from the consenting of the necessary Transmission Assets to delay the delivery of two NSIP Generation Assets projects. As set out in Annex 5.2 to the Applicants response to Hearing Action Points (document S_D1_5.2), the Applicants are two wholly independent Joint Ventures (JVs) and commercial competitors. They were competing for sites during the Round 4 bidding process (and ultimately remain competitors). It is noted that competition is a design feature and core foundational principle of the UK electricity industry to minimise cost to the consumer, so should be viewed as an inherent positive. Despite being arms-length competitors, subsequent to Round 4, the Applicants have agreed to work together to deliver the recommendation of the HND and NPS policy on collaboration. This collaboration is unprecedented in the industry because all other examples of coordinated projects were essentially a single JV or consortium established at the outset to deliver more than one project (for example, Dogger Bank Creyke Beck or the Sheringham Shoal and Dudgeon Extension Projects). In those examples there was commonality of ownership, commercial goals and strategy. In contrast to those examples, the Applicants are not working together
	4.11.7	The Planning Act 2008 aims to create a holistic planning regime so that the cumulative effect of different elements of the same project can be considered together. Co-ordinated applications typically bring economic efficiencies and reduced environmental impact. The government therefore envisages that wherever reasonably possible, applications for new generating stations and related infrastructure should be contained in a single application to the Secretary of State or in separate applications submitted in tandem which have been prepared in an integrated way, as outlined in EN-5. This is particularly encouraged to ensure development of more co-ordinated transmission overall.	
	4.11.8	On some occasions it may not be possible to coordinate applications. For example, different elements of a project may have different lead-in times and be undertaken by different legal entities subject to different commercial and regulatory frameworks (for example grid companies operate within OFGEM controls) making it inefficient from a delivery perspective to submit one application. Applicants may therefore decide to submit separate applications for each element. Where this is the case, the applicant should include information on the other elements and explain the reasons for the separate application confirming that there are no obvious reasons for why other elements are likely to be refused.	
	4.11.9	If this option is pursued, the applicant accepts the implicit risks involved in doing so and must ensure they provide sufficient information to comply with the EIA Regulations including the indirect, secondary, and cumulative effects, which will encompass information on grid connections.	
	4.11.10	It is recognised that this may be the situation for some new offshore transmission projects, where applications for consent may be brought forward separate to (though planned with) the applications for associated wind farms as outlined in EN-5.	
Secretary of State decision making	4.11.11	The Secretary of State should consider guidance contained within EN-5.	
	4.11.12	The Secretary of State should be satisfied that appropriate network connection arrangements are/will be in place for a given project regardless of whether one or multiple (linked) applications are submitted.	
	4.11.13	Where the Secretary of State has decided to grant consent for one project this should not in any way fetter the Secretary of State's ability to take subsequent decisions on any related projects.	

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			because it is a commercial strategy or necessarily in their commercial best interests. Before they discovered they were to be 'neighbours' in the Irish Sea, there was no contact between the Applicants. Instead, and in contrast to previous situations, the Applicants are collaborating to support and deliver on the UK's aim for better co-ordination on offshore transmission to best balance cost, technical, environmental and community factors. Indeed, in the past arms-length developers have actively sought spatial separation between projects to minimise the potential for interaction.
4.12 Pollution control and other environmental regulatory regimes			
Applicant assessment	4.12.6	Many projects covered by this NPS will be subject to the Environmental Permitting Regulations, which also incorporates operational waste management requirements for certain activities. When an applicant applies for an Environmental Permit, the relevant regulator (usually the EA or NRW but sometimes the local authority) requires that the application demonstrates that processes are in place to meet all relevant Environmental Permitting Regulations requirements.	The Consultation Report (document reference E1) describes the consultation process that the Applicants have followed both in terms of the non-statutory consultation and the statutory consultation, and publicity stages as required under sections 42, 47 and 48 of the Planning Act 2008. Other necessary consents are provided within the Consents and Licences Required Under Other Legislation (document reference J27). The Applicants have prepared a draft European Protected Species (EPS) mitigation licence for sand lizards, due to the potential for temporary disturbance to a small proportion of the Lytham St Anne's Dunes during the use of temporary compound 3 and an existing beach access track during construction. The Applicants are engaging with the Natural England Wildlife Licensing Service (NEWLS) team to obtain a Letter of No Impediment (LONI) and hope to have this resolved prior to the close of examination. If a LONI is not received before the close of the examination, it would be submitted to the Secretary of State for consideration.
	4.12.7	Applicants should make early contact with relevant regulators, including EA or NRW and the MMO, to discuss their requirements for Environmental Permits and other consents, such as marine licences.	
	4.12.8	Wherever possible, applicants should submit applications for Environmental Permits and other necessary consents at the same time as applying to the Secretary of State for development consent.	
Secretary of State decision making	4.12.9	In considering an application for development consent the Secretary of State should focus on whether the development itself is an acceptable use of the land or sea, and the impact of that use, rather than the control of processes, emissions or discharges themselves.	
	4.12.10	The Secretary of State should work on the assumption that the relevant pollution control regime and other environmental regulatory regimes, including those on land drainage, water abstraction and biodiversity, will be properly applied and enforced by the relevant regulator. The Secretary of State should act to complement but not seek to duplicate them.	The MMO has been involved in stakeholder consultation from the outset as detailed in section 1.3 of Volume 2, Chapter 1: Physical processes of the ES (document reference F2.1). Natural Resources Wales (NRW) have played an important role in stakeholder consultation as although the Transmission Assets are not located in Welsh waters, NRW were informed throughout the consultation process
	4.12.11	The Secretary of State's consent may include a deemed marine licence and the MMO, or NRW, will advise on what conditions should apply to the deemed marine licence.	
	4.12.12	The Secretary of State and the MMO, or NRW, should cooperate closely to ensure that energy NSIPs are licensed in accordance with environmental legislation.	This draft DCO (document reference C1/F09) includes draft Marine Licences which have been discussed with the MMO and wherever possible the MMO's requested changes to the dML drafting have been accommodated. The Applicants have engaged with the MMO throughout the pre-application and the course of the Examination, and submitted draft SoCGs at Deadline 1 (S_D1_6.8_F01; REP1-053) and Deadline 3 (S_D1_6.8_F02; REP3-049). The final SoCG with the MMO is S_D1_6.8/F04 submitted at Deadline 6.
	4.12.13	In considering the impacts of the project, the Secretary of State may wish to consult the regulator on any management plans that would be included in an Environmental Permit application.	
	4.12.15	The Secretary of State should be satisfied that development consent can be granted taking full account of environmental impacts. Working in close cooperation with the EA or NRW and/or the pollution control authority, and other relevant bodies, such as the MMO, the SNCB, Drainage Boards, and water and sewerage undertakers, the Secretary of State should be satisfied, before consenting any potentially polluting developments, that: • the relevant pollution control authority is satisfied that potential releases can be adequately regulated under the pollution control framework the effects of existing sources of pollution in and around the site are not such that the cumulative effects of pollution when the proposed development is added would make that development unacceptable, particularly in relation to statutory environmental quality limits	
	4.12.16	The Secretary of State should not refuse consent on the basis of pollution impacts unless there is good reason to believe that any relevant necessary operational pollution control permits or licences or other consents will not subsequently be granted. On this basis, it is reasonable for the Secretary of State to consider residual amenity issues only when considering whether the development itself is an acceptable use of the land or sea, and on the impacts of that use.	Detailed assessments are provided within all topic chapters within Volumes 2 to 4 of the ES (document reference F2 to F4). As set out in every ES chapter, mitigation measures have been developed to primarily avoid, then prevent, reduce or offset significant adverse environmental effects.

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			The Applicants have continued to work closely with all stakeholders through the examination process. The assessment of the impact of increased flood risk arising from additional surface water runoff is presented within section 2.11.4 of Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2). Mitigation measures are set out within Table 2.20 of Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2). In addition, best practice with regard to the use and storage of oils, chemicals and other wastes, to remove the risk of causing pollution during construction is outlined within the Outline CoCP (document reference J1). An Outline CoCP (document reference J1) has been prepared and submitted with the application for development consent. The Outline CoCP includes measures in relation to flood risk and pollution prevention during the construction phase. An Outline Operational Drainage Management Plan (document reference J10) for the substation site(s) has been prepared and submitted with the application for development consent. The detailed Operational Drainage Management Plan will be prepared in line with the Outline Operational Drainage Management Plan and will include measures to ensure that existing land drainage is reinstated and/or maintained. This will include measures to limit discharge rates and attenuate flows to maintain greenfield runoff rates at the onshore substations. It will also include measures to control surface water runoff, including measures to prevent flooding of the working areas or offsite and to ensure any runoff is treated appropriately. The Operational Drainage Management Plan will be developed in line with the latest relevant drainage guidance notes in consultation with the Environment Agency and the Lead Local Flood Authority (Lancashire County Council).
4.13 Safety			
Applicant assessment	4.13.6	Applicants seeking to develop infrastructure subject to the COMAH regulations should make early contact with the Competent Authority.	The Applicants have consulted with the HSE on matters relating to safety as demonstrated in the Consultation Report (document reference E1) and the Technical Engagement Plan (document reference E5).
	4.13.7	If a safety report is required it is important to discuss with the Competent Authority the type of information that should be provided at the design and development stage, and what form this should take. This will enable the Competent Authority to review as much information as possible before construction begins, in order to assess whether the inherent features of the design are sufficient to prevent, control and mitigate major accidents.	The Transmission Assets are not anticipated to be considered a COMAH site because no hazardous substances used on site will exceed relevant COMAH thresholds.
Secretary of State decision making	4.13.8	The Secretary of State should be satisfied that a safety assessment has been prepared, where required, and that the Competent Authority has raised no safety objections.	The Applicants intend to apply for temporary 500 m safety zones around construction vessels and operations and maintenance vessel activities. Further information can be found in the Safety Zone Statement (document reference J33).
4.14 Hazardous substances			
Applicant assessment	4.14.6	HSE sets a consultation distance around every site with hazardous substances consent and notifies the relevant local planning authorities. The applicant should therefore consult the local planning authority at pre-application stage to identify whether its proposed site is within the consultation distance of any site with hazardous substances consent and, if so, should consult the HSE for its advice on locating the particular development on that site. Where a hazardous substance consent has been deemed to be granted, the developer is required to send the relevant HSA any information required by them for the purposes of a register	The Transmission Project is not seeking hazardous substances consent as it is not anticipated that the Project will require the use or storage of hazardous substances.

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Secretary of State decision making	4.14.7	Where hazardous substances consent is applied for, the Secretary of State will consider whether to make an order directing that hazardous substances consent shall be deemed to be granted alongside making an order granting development consent. The Secretary of State should consult HSE about this.	
4.15 Common land nuisance and statutory nuisance			
Applicant assessment	4.15.5 and 4.15.6	At the application stage of an energy NSIP, possible sources of nuisance under section 79(1) of the EPA 1990 and how they may be mitigated or limited should be considered by the Secretary of State so that appropriate requirements can be included in any subsequent order granting development consent (see Section 5.7 on dust, odour, artificial light etc. and Section 5.12 on noise and vibration).	The Applicants' Statutory Nuisance Statement (J29) considers potential sources of nuisance under s79(1) of the Environmental Protection Act 1990. It confirms that: *Following adherence to the measures set out in the plans described no significant residual impacts are predicted in relation noise, air quality and light emissions therefore, they are not expected to engage Section 79(1).* Assessment of dust generated during the construction phase is considered in section 9.11 and mitigation measures outlined in Table 9.15 of Volume 3 Chapter 9: Air Quality of the ES (document reference F3.9). An assessment of the potential noise and vibration impacts during the construction phase of the Transmission Assets is presented in Volume 3, Annex 8.2: Construction noise and vibration of the ES (document reference F3.8.2). The noise sources and example mitigation measures are presented for each construction activity to be undertaken. The noise impacts during the operational phase of the Transmission Assets are assessed in Volume 3, Annex 8.3: Operational noise of the ES (document reference F3.8.3). This annex includes details of the proposed plant strategy and potential noise mitigation measures to be incorporated as part of the design. An assessment of the significance of the effects due to noise and vibration is presented in section 8.11 of Volume 3, Chapter 8: Noise and Vibration of ES. Details of the embedded mitigation and commitments to be adopted as part of the Transmission Assets are presented in Table 8.10 of Volume 3, Chapter 8: Noise and Vibration of ES. Noise and vibration impacts, and thereby the risk of nuisance, during the construction, operation and maintenance, and decommissioning phases of the Transmission Assets will be controlled as best as reasonably practicable such that significant adverse effects are avoided, and adverse impacts are minimised. Details of the assessment of noise and vibration effects are outlined in section 8.11 of Volume 3, Chapter 8: Noise and vibration of ES, with details of embedded mitigation measures provided in section 8.8 the chapter. Effects arising from lighting are set out in Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10) and the Outline Construction Artificial Light Emissions Management Plan (document reference J1.11).
Secretary of State decision making	4.15.7	The Secretary of State should note that the defence of statutory authority is subject to any contrary provision made by the Secretary of State in any particular case in a Development Consent Order (section 158(3) of the Planning Act 2008). Therefore, subject to Section 5.7 and Section 5.12, the Secretary of State can disapply the defence of statutory authority, in whole or in part, in any particular case, but in so doing should have regard to whether any particular nuisance is an inevitable consequence of the development.	
4.16 Security considerations			
Applicant assessment	4.16.7	The applicant should only include sufficient information in the application as is necessary to enable the Secretary of State to examine the development consent issues and make a properly informed decision on the application.	No national security implications have been identified for the Transmission Assets.
Secretary of State decision making	4.16.8	If NPSA, ONR (for civil nuclear) and/or DESNZ are satisfied that security issues have been adequately addressed in the project when the application is submitted to the Secretary of State, it will provide confirmation of this to the Secretary of State. The Secretary of State should not need to give any further consideration to the details of the security measures in its examination.	
	4.16.9	In exceptional cases, where examination of an application would involve public disclosure of information about defence or national security which would not be in the national interest, the	

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		examination of that evidence may take place in a closed session as set out under Examination Procedure Rules.	
	4.16.10	The Secretary of State must also consider duties under other legislation including duties under the Environment Act 2021 in relation to environmental targets and the Government's Environmental Improvement Plan 2023.	
5 Generic Impacts			
5.2 Air quality and emissions			
Applicant assessment	5.2.9	The ES should describe: • existing air quality concentrations and the relative change in air quality from existing levels; • any significant air quality effects, mitigation action taken and any residual effects, distinguishing between the project stages and taking account of any significant emissions from any road traffic generated by the project; • the predicted absolute emissions, concentration change and absolute concentrations as a result of the proposed project, after mitigation methods have been applied; and • any potential eutrophication impacts.	The air quality impacts during the construction and decommissioning phases of the Transmissions Assets have been described and considered within section 9.11.2 (dust) and section 9.11.3 (emissions from traffic) of Volume 3 Chapter 9: Air Quality of the ES (document reference F3.9). This includes numerical data derived using standard modelling outputs which provide absolute numerical values for emissions. This approach ensures emission impact data is based on quantifiable model outputs rather than qualitative assumptions. The ES also presents numerical concentration data, which includes conservative assumptions in terms of baseline conditions. Therefore, Volume 3, Chapter 9: Air Quality of the ES (document reference F3.9) provides both a 'worst case scenario' in terms of absolute numerical concentration estimates and predicted absolute emissions from the modelling exercise. In relation to eutrophication impacts, Volume 3, Chapter 9: Air Quality of the ES (document reference F3.9) has modelled nitrogen deposition from nitrogen-containing pollutants (e.g. nitrogen dioxide and ammonia) contained within the exhaust emissions from road traffic associated with the Transmission Assets. The predicted deposition of nutrient nitrogen at ecological sites is provided in Volume 3, Annex 9.1: Air quality impacts on ecologically designated sites (document reference F3.9.1) with an assessment of effect provided in Volume 3, Chapter 3: Onshore ecology and nature conservation (document reference F3.3). The assessment confirms that there would be no significant effects on these receptors. Impacts during the operation and maintenance phase are not likely and have been scoped out as outlined in section 9.7 of Volume 3 Chapter 9: Air Quality of the ES.
	5.2.10	In addition, applicants should consider the Environment Targets (Fine Particulate Matter) (England) Regulations 2022 and associated Defra guidance.	
	5.2.11	Defra publishes future national projections of air quality based on estimates of future levels of emissions, traffic, and vehicle fleet. Projections are updated as the evidence base changes and the applicant should ensure these are current at the point of an application. The applicant's assessment should be consistent with this but may include more detailed modelling and evaluation to demonstrate local and national impacts. If an applicant believes they have robust additional supporting evidence, to the extent they could affect the conclusions of the assessment, they should include this in their representations to the Examining Authority along with the source.	The latest Defra mapped concentration estimates are used in section 9.5. of Volume 3 Chapter 9: Air Quality of the ES (document reference F3.9). The results of traffic modelling show that the development will not lead to a breach of any limits or targets.
	5.2.12	Where a proposed development is likely to lead to a breach of any relevant statutory air quality limits, objectives or targets, or affect the ability of a non-compliant area to achieve compliance within the timescales set out in the most recent relevant air quality plan/strategy at the time of the decision, the applicant should work with the relevant authorities to secure appropriate mitigation measures to ensure that those statutory limits, objectives or targets are not breached.	The latest Defra mapped concentration estimates are used in the section 9.5 of Volume 3 Chapter 9: Air Quality of the ES (document reference F3.9). Modelling has been carried out to assess changes in air quality levels from traffic-related emissions. This is outlined in section 9.11.3 of Volume 3, Chapter 9: Air Quality of ES and it is concluded the impacts would be negligible and therefore not significant in EIA terms.
	5.2.13	The Secretary of State should consider whether mitigation measures are needed both for operational and construction emissions over and above any which may form part of the project application. A construction management plan may help codify mitigation at this stage. In doing so the Secretary of State should have regard to the Air Quality Strategy in England, or the Clean Air Plan for Wales in Wales, or any successors to these and should consider relevant advice within Local Air Quality Management guidance and PM2.5 targets guidance.	

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	5.2.14	The mitigations identified in Section 5.14 on traffic and transport impacts will help mitigate the effects of air emissions from transport.	Mitigation measures are considered in Table 9.15 of Volume 3 Chapter 9: Air Quality of the ES (document reference F3.9). Modelling has been carried out to assess changes in air quality levels from traffic-related emissions. This is outlined in section 9.11.3 of Volume 3, Chapter 9: Air Quality of ES and it is concluded the impacts would be negligible and therefore not significant in EIA terms.
Secretary of State decision making	5.2.15	Many activities involving air emissions are subject to pollution control. The considerations set out in Section 4.12 on the interface between planning and pollution control therefore apply. The Secretary of State must also consider duties under other legislation including duties under the Environment Act 2021 in relation to environmental targets and have regard to policies set out in the Government's Environmental Improvement Plan 2023.	
	5.2.16	The Secretary of State should give air quality considerations substantial weight where a project would lead to a deterioration in air quality. This could for example include where an area breaches any national air quality limits or statutory air quality objectives. However, air quality considerations will also be important where substantial changes in air quality levels are expected, even if this does not lead to any breaches of statutory limits, objectives or targets.	The potential air quality impacts which may arise during construction and decommissioning of the Transmissions Assets have been described and considered within section 9.11.2 of Volume 3, Chapter 9: Air Quality of the ES (document reference F3.9). This chapter focuses on the potential impacts from dust generated during construction of the Transmission Assets and considers mitigation and residual effects. There may also be air quality effects associated with emissions from traffic generated during construction of the Transmission Assets. This is assessed in section 9.11.3 of Volume 3, Chapter 9, through dispersion modelling using traffic data to quantify the potential impact of the Transmission Assets. The impacts during the operation and maintenance phase have been scoped out as outlined in section 9.7 of Volume 3, Chapter 9.
	5.2.17	The Secretary of State should give air quality considerations substantial weight where a project is proposed near a sensitive receptor site, such as an education or healthcare facility, residential use or a sensitive or protected habitat.	Modelling has been carried out to assess changes in air quality levels from traffic-related emissions. This is outlined in section 9.11.3 of Volume 3, Chapter 9: Air Quality of ES (document reference F3.9) and it is concluded the impacts would be negligible and therefore not significant in EIA terms. A range of receptors, including nearby sensitive receptors, have been considered as set out in section 9.10.4 of Volume 3, Chapter 9,
	5.2.18	Where a project is proposed near to a sensitive receptor site for air quality, if the applicant cannot provide justification for this location, and a suitable mitigation plan, the Secretary of State should refuse consent.	
	5.2.19	In all cases, the Secretary of State must take account of any relevant statutory air quality limits, objectives and targets. If a project will lead to non-compliance with a statutory limit, objective or target the Secretary of State should refuse consent.	A full description of the site selection and consideration of alternatives process is provided in Volume 1, Chapter 4: Site Selection and Consideration of Alternatives (document reference F1.4). Mitigation measures are outlined in Table 9.15 of Volume 3 Chapter 9: Air Quality of the ES (document reference F3.9).
5.3 Greenhouse gas emissions			
Mitigation	5.3.5	A GHG assessment should be used to drive down GHG emissions at every stage of the proposed development and ensure that emissions are minimised as far as possible for the type of technology, taking into account the overall objectives of ensuring our supply of energy always remains secure, reliable and affordable, as we transition to net zero.	Volume 4, Chapter 1: Climate change of the ES (document reference F4.1) provides an assessment of the construction, operation and maintenance and decommissioning emissions associated with the Transmission Assets and details the cumulative impact of the Transmission Assets on climate change, in combination with the Generation Assets. A GHG assessment has been produced as a separate document (Volume 4, Annex 1.1: Greenhouse gas assessment of the ES, document reference: F4.1.1).
	5.3.6	Applicants should look for opportunities within the proposed development to embed nature-based or technological solutions to mitigate or offset the emissions of construction and decommissioning.	Mitigation measures (Commitments) to reduce emissions associated with the Transmission Assets, particularly by embodied carbon reductions are detailed in Volume 4, Chapter 1: Climate change of the ES (document reference F4.1).
	5.3.7	Steps taken to minimise and offset emissions should be set out in a GHG Reduction Strategy, secured under the Development Consent Order. The GHG Reduction Strategy should consider the creation and preservation of carbon stores and sinks including through woodland creation, hedgerow creation and restoration, peatland restoration and through other natural habitats.	The development of the outline design at the onshore substations has taken an integrated approach, considering hydrology, flood risk, landscape and biodiversity and this is reflected in the Outline Operational Onshore Substation Drainage Management Plan (document reference J10), Outline Landscape Management Plan and Outline Biodiversity Benefit Statement (document reference J2).
Secretary of State decision making	5.3.8	The Secretary of State must be satisfied that the applicant has as far as possible assessed the GHG emissions of all stages of the development.	The Applicants have submitted a Greenhouse Reduction Gas (GHG) Reduction Strategy (document reference J4) with the application which explores options to

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			minimise and offset emissions. It is not a commitment to submit a GHG Reduction Strategy, however, one has been produced.
	5.3.9	The Secretary of State should be content that the applicant has taken all reasonable steps to reduce the GHG emissions of the construction and decommissioning stage of the development.	Volume 4, Chapter 1: Climate change of the ES (document reference F4.1) considers the GHG emissions for the construction, operation and maintenance and decommission stages of the Transmission Assets as well as the overall net whole life emissions.
	5.3.10	Secretary of State should give appropriate weight to projects that embed nature-based or technological processes to mitigate or offset the emissions of construction and decommissioning within the proposed development. However, in light of the vital role energy infrastructure plays in the process of economy wide decarbonisation, the Secretary of State must accept that there are likely to be some residual emissions from construction and decommissioning of energy infrastructure.	The Applicants are committed to exploring options to reduce construction related emissions. Areas as detailed in the (GHG) Reduction Strategy (document reference J4).
	5.3.11	Operational GHG emissions are a significant adverse impact from some types of energy infrastructure which cannot be totally avoided (even with full deployment of CCS technology). Given the characteristics of these and other technologies, as noted in Part 3 of this NPS, and the range of non-planning policies that can be used to decarbonise electricity generation, such as the UK ETS (see Section 2.4), government has determined that operational GHG emissions are not reasons to prohibit the consenting of energy projects or to impose more restrictions on them in the planning policy framework than are set out in the energy NPSs (e.g. the CCR requirements). Any carbon assessment will include an assessment of operational GHG emissions, but the policies set out in Part 2, including the UK ETS, can be applied to these emissions.	The design of the Transmission Assets has incorporated nature-based solutions, where practicable, such as in the development of biodiversity enhancement measures and in the outline design of the onshore substations, which has taken into account hydrology, flood risk, landscape and biodiversity considerations. The purpose of the Transmission Assets is to provide a connection to the UK Grid for two offshore wind farms. The cumulative climate change effects of the Transmission Assets with the Generation Assets is provided in Volume 4 Chapter 1: Climate change of the ES (document reference F4.1). This demonstrates that some construction phase emissions are unavoidable. However, the overall effect of the Transmission Assets and Generation Assets together would be significant beneficial in regards to GHG emissions.
	5.3.12	Operational emissions will be addressed in a managed, economy-wide manner, to ensure consistency with carbon budgets, net zero and our international climate commitments. The Secretary of State does not, therefore need to assess individual applications for planning consent against operational carbon emissions and their contribution to carbon budgets, net zero and our international climate commitments.	
5.4 Biodiversity and geological conservation			
Habitats Regulations	5.4.4	The highest level of biodiversity protection is afforded to sites identified through international conventions. The Habitats Regulations set out sites for which an HRA will assess the implications of a plan or project, including Special Areas of Conservation and Special Protection Areas.	The conservation status of habitats and species is considered throughout Volume 2, Chapters 1 – 5 of the ES (document reference F2.1 – F2.5), with the baseline sections and assessment of significant effects examining this in detail. The potential future impact of climate change is examined in the future baseline scenario.
	5.4.5	As a matter of policy, the following should be given the same protection as sites covered by the Habitats Regulations and an HRA will also be required: (a) potential Special Protection Areas and possible Special Areas of Conservation; (b) listed or proposed Ramsar sites; and (c) sites identified, or required, as compensatory measures for adverse effects on any of the other sites covered by this paragraph.	Internationally designated sites are identified and described in Volume 2, Chapter 4: Marine mammals and Chapter 5: Offshore ornithology of the ES (document reference F2.4 and F2.5) and, where relevant assessments provided ISAA (document reference E2).
Sites of Special Scientific Interest (SSSIs)	5.4.7 – 5.4.8	Many Sites of Special Scientific Interest (SSSIs) are also designated as sites of international importance and will be protected accordingly. Those that are not, or those features of SSSIs not covered by an international designation, should be given a high degree of protection. Most National Nature Reserves are notified as SSSIs. Development on land within or outside a SSSI, and which is likely to have an adverse effect on an it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits (including need) of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSIs.	The landfall overlaps with the Lytham St. Annes Dunes SSSI. All designated features of this SSSI are located above MHWS and are therefore assessed in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). Additionally CoT44 (Volume 1, Annex 5.3 of the ES (document reference F1.5.3)) sets out that the installation of the onshore export cable corridor at Lytham St Annes SSSI and the St Anne's Old Link Golf Course will be undertaken by direct pipe trenchless installation technique. The exit pits associated with the direct pipe installation will be at least 100 m seaward of the western boundary of the SSSI to avoid direct impacts. Furthermore direct pipe or micro tunnel trenchless installation techniques will also be used to cross the River Ribble where the 400 kV grid connection corridor is proposed (CoT90, Volume 1, Annex 5.3 of the ES (document reference F1.5.3)), therefore avoiding impacts on the Ribble Estuary SSSI.

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Marine Conservation Zones	5.4.9	MCZs (Marine Protected Areas in Scotland), introduced under the Marine and Coastal Access Act 2009, are areas that have been designated for the purpose of conserving marine flora or fauna, marine habitats or types of marine habitat or features of geological or geomorphological interest. The protected feature or features and the conservation objectives for the MCZ are stated in the designation order for the MCZ. If a proposal is likely to have significant impacts on an MCZ, an MCZ Assessment should be undertaken as per the requirements under section 126 of the Marine and Coastal Access Act 2009.	All relevant nearby or overlapping MCZs have been identified in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES (document reference F2.2), with the relevant qualifying features of these sites identified as Important Ecological Features (IEFs) and given specific consideration where relevant in the assessment of effects (section 2.11 of Volume 2, Chapter 2 of the ES). Additionally, an MCZ Screening and Stage 1 Assessment Report (document reference: E4) has been undertaken to determine if a full MCZ assessment is required. The MCZ Screening and Stage 1 Assessment Report concluded that the Transmission Assets have the potential to affect the interest features of the Fylde MCZ and this site was taken forward for a full MCZ Stage 1 Assessment which determined that the Transmission Assets would not hinder the conservation objectives of the MCZ (document reference: E4). There is no identified adverse effect on the integrity of a protected site or species, and in respect of the MCZ although the Applicants do not consider it necessary, a Stage 2 assessment (REP6-134) and DCO schedule for measures of equivalent environmental benefit (REP5-108) have been provided on a 'without prejudice' basis.
Protection and enhancement of habitats and species	5.4.16	Many individual species receive statutory protection under a range of legislative provisions. Other species and habitats have been identified as being of principal importance for the conservation of biodiversity in England and Wales, as well as for their continued benefit for climate mitigation and adaptation and thereby requiring conservation action.	All species and habitats including those receiving relevant protection under wildlife legislation (e.g Wildlife and Countryside Act 1981, Conservation of Habitats and Species Regulations 2017), habitats and species of principal importance (as listed in Section 41 of the Natural Environment and Rural Communities Act 2006), and notable habitats and species not specifically protected but identified as being of national or local conservation concern (e.g. 'Red List' species, habitats and species listed in local authority Local Plans) have been considered through the assessment process including following the mitigation hierarchy; this included desk study data and field surveys, assessment, avoidance, mitigation and compensation (where required). This is documented in detail within relevant documents submitted throughout the planning process.
Applicant assessment	5.4.17	Where the development is subject to EIA, the applicant should ensure that the ES clearly sets out any effects on internationally, nationally, and locally designated sites of ecological or geological conservation importance (including those outside England), on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity, including irreplaceable habitats.	The assessments presented in relevant chapters of the ES have followed relevant legislation and guidance as identified in Volume 1, Chapter 2: Policy and legislative context of the ES, Volume 4, Chapter 3: Inter-relationships of the ES with regard to inter-dependencies and ecosystem impacts. Volume 2, Chapters 1 – 5 of the ES (document reference F2.1 – F2.5) consider species and habitats relevant to specific topics with the ISAA (document reference E2) assessing the impact specifically on all European sites and designated features.

	5.4.19	The applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.	The potential effects on internationally, nationally and locally designated sites for ecological or geological features of conservation importance have been assessed for the Transmission Assets. The Habitats Regulations Assessment (HRA) Stage 1 Screening Report (document reference E3) identifies direct or indirect effects on designated sites which could be affected, and those sites are assessed in the HRA Stage 2 ISAA (document reference E2.1 – E2.3). The HRA Stage 1 ISAA concludes that there will be no adverse effect on integrity of any European site as a result of the Transmission Assets alone or in-combination with other projects. The effects of the Transmission Assets on sites of geological conservation importance are considered in section 1.6 of Volume 3, Chapter 1: Geology, hydrogeology and ground conditions of the ES (document reference F3.1). Effects on designated sites associated with onshore ecology and protected or otherwise notable species are set out in section 3.11 of Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). The baseline ornithological environment is described in section 4.6 of Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4). As part of Chapter 4 (F3.4), the process of identifying designated sites has been undertaken and results are presented in section 4.6.2. The specific bird species that may be impacted by the Transmission Assets are identified in section 4.6.2 and an assessment of the effects for these specific species are identified and considered in section 4.11 of Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4). Impacts on protected sites, habitats and species relating to aspects of ecology and nature conservation other than ornithology are set out in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). Impacts on geological conservation interests are considered in Volume 3, Chapter 1: Geology, hydrogeology and ground conditions of the ES (document reference F3.1). Whilst there are limited opportunities for enhancement of biodiversity due to the largely buried nature of the Transmission Assets, the Applicants' preference is that biodiversity benefit will be delivered within identified biodiversity benefit areas within the Onshore Order Limits, however, Requirement 26 of Schedules 2A and 2B of the draft DCO (document reference C1/F09) does allow for a prioritisation exercise to be carried out, whereby biodiversity benefit may be delivered through a mixture of the Work No 44A or 44B (as appropriate), biodiversity projects within close proximity to the order limits and through the purchase of biodiversity credits .. Further qualitative benefits to biodiversity are proposed via potential collaboration with stakeholders and local groups, contributing to existing plans and programmes, both within and outside the Onshore Order Limits. Further details of the approach to conserving and enhancing biodiversity are provided in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES and in the outline Biodiversity Benefit Management Plan (document reference J11/F06) (CoT83, Volume 1, Annex 5.3 of the ES (document reference F1.5.3). Wider ecological enhancement measures are set out within the Outline Ecological Management Plan (document reference J6). The Applicants are committed to engaging with stakeholders to deliver further qualitative benefits to biodiversity. It contains information on the measures that will be implemented ensure that risk of disturbance or damage to species or habitats is minimised, and for restoration of habitats that are unavoidably affected. For terrestrial development consented under the Planning Act 2008, the mandatory biodiversity net gain (BNG) requirement has been delayed and is now set to come into force in May 2026. Projects that have been accepted for examination by the Planning Inspectorate before the specified commencement date would not be required to deliver mandatory BNG, ensuring projects which are at a sufficiently advanced stage do not need to then identify scheme amendments (and potentially additional land) to meet the mandatory net gain requirement.

			Although the Transmission Assets are not subject to mandatory net gain requirement under the Environment Act 2021, the Applicants have worked with statutory consultees to discuss the approach and to develop the design to allow the maximum benefit to biodiversity within the parameters of the Project. An Biodiversity Benefit Management Plan provides an assessment of the overall benefit to onshore biodiversity, specifically associated with the onshore substations, associated access tracks and biodiversity benefit area at Lea Marsh Field. (document reference J11/F06). The total predicted biodiversity net gain for area-based habitat units are 50.36%, 44.43% for hedgerow units and 91.77% for linear watercourse units. Furthermore, the Biodiversity Benefit Supporting Statement (S_D5_11) highlights that in addition to biodiversity benefit being delivered for all permanent above ground infrastructure (outwith Central Lancashire), Lea Marsh Fields (located within Central Lancashire) is also to be subject to ecological enhancements and provides a strategically located opportunity to deliver substantial additional biodiversity gains, strengthen ecological connectivity between designated sites and contribute to the Lancashire Local Nature Recovery Strategy. A hierarchy of biodiversity benefit delivery options ensures that biodiversity benefit can be achieved whether through on-site provision, reduced off-site delivery, funding of local biodiversity projects, or the purchase of biodiversity credits. This voluntary approach, which reflects emerging best practice, is supported by a robust 30-year management and monitoring framework and ensure that biodiversity benefit will not only offset permanent land take but also contribute to wider ecological resilience and the delivery of strategic environmental outcomes in Lancashire. The Transmission Assets can deliver biodiversity benefit, exceed the minimum 10% target where feasible, and provide a long-term positive legacy for nature in the local area alongside the delivery of NSIP energy infrastructure. The Applicants are committed to engaging with stakeholders to deliver further qualitative benefits to biodiversity.

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
	5.4.20	Applicants should consider wider ecosystem services and benefits of natural capital when designing enhancement measures.	Measures that will be adopted as part of the Transmission Assets to conserve maintain and enhance biodiversity are detailed in Commitments Register (Volume 1, Annex 5.3: Commitments Register of the ES) and considered further in topic specific chapters within Volume 2 (Chapters 1 – 5) and Volume 3 (Chapters 1 – 4) of the ES (document reference F2 – F3). Further details of the approach to conserving and enhancing biodiversity were provided in the outline Biodiversity Benefit Management Plan (document reference J11/F06). The document has been updated to an 'Outline Biodiversity Benefit Management Plan' and this was submitted at Deadline 6 to provide greater detail on the long-term management objectives for the biodiversity benefit areas. Should the projects be consented, detailed Biodiversity Benefit Management Plans would be prepared on behalf of Morgan OWL and/ or Morecambe OWL prior to the commencement of the relevant stage of works, following the principles established in the outline plan. The Applicants have committed to the implementation of detailed Biodiversity Management Plans, and this is secured by inclusion of Requirement 26 of the draft Development Consent Order (DCO) (document reference C1/F09) Schedules 2A & 2B.
	5.4.21	As set out in Section 4.7, 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 (see Section 4.6 on Environmental and Biodiversity Net Gain). The scope of potential gains will be dependent on the type, scale, and location of each project.	Where practicable, the Applicants have looked to provide a coordinated approach to the design and development of mitigation and enhancement measures. This has included, for example, a coordinated approach to the design at the onshore substation sites to incorporate ecological, drainage and landscape considerations, that will result in wider environmental gains. More details regarding the project design evolution can be found in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4). The permanent infrastructure is mainly buried electricity transmission cables (either buried in the seabed or buried underground on land) and therefore there would be no potential for interactions of mobile/ migratory species (birds, fish and marine and terrestrial mammals)with the infrastructure once it has been constructed. Further details regarding the approach to mitigation and enhancement measures can be found in Volume 1, Chapter 5: Environmental assessment methodology of the ES (document reference F1.5) and within section 4.8 of Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4). Those measures adopted are set out within Table 4.19 of the chapter. Further details of the approach to conserving and enhancing biodiversity are provided in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3) and in the Outline Biodiversity Benefit Management Statement (document reference J11/F06). The ES, and the Transmission Assets proposal meet the requirements of the NPS. Mobile / Migratory fish and mammal species that have potential to interact with the Transmission Assets have been presented in Volume 2, Chapter 3: Fish and shellfish (document reference F2.3) and Volume 2, Chapter 4: Marine mammals of the ES (document reference F2.4). The impacts on migratory fish associated with the River Ribble are assessed in section 3.11.13 of Volume 3 Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). The potential for transboundary impacts on these species is considered within section 3.15 of Volume 3 Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). Transboundary impacts on other species are considered in Volume 1, Annex 5.4: Transboundary screening of the ES (document reference F1.5.4). Impacts on migratory birds are considered in Volume 2, Chapter 5: Offshore Ornithology (document reference F2.5) and Volume 3, Chapter 4: Onshore and Intertidal Ornithology of the ES (document reference F3.4). Those migratory species that have potential to interact with the infrastructure associated with the Transmission Assets have been presented in Volume 3 Annex 4.1: Breeding birds technical report of the ES (document reference
	5.4.22	The design of energy NSIP proposals will need to consider the movement of mobile/migratory species such as birds, fish and marine and terrestrial mammals and their potential to interact with infrastructure. As energy infrastructure could occur anywhere within England and Wales, both inland and onshore and offshore, the potential to affect mobile and migratory species across the UK and more widely across Europe (transboundary effects) requires consideration, depending on the location of development.	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
			F3.4.1); Volume 3, Annex 4.2: Wintering and migratory birds technical report of the ES (document reference F3.4.2); Volume 3, Annex 4.3: Intertidal birds technical report of the ES (document reference F.4.3) with summaries included within Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4) in section 4.6.4. An assessment of the potential significant effects of the Transmission Assets for these species is given in section 4.11 of Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4). A cumulative assessment of the potential impact of the Transmission Assets and other projects on these species is presented in section 4. The potential for transboundary impacts on these species is considered within the topic specific chapters of the ES.
	5.4.23	Energy projects will need to ensure vessels used by the project follow existing regulations and guidelines to manage ballast water.	The Applicants have a commitment to adhere to the IMO ballast water management guidelines (CoT65, Volume 1, Annex 5.3: Commitments Register of the ES, document reference F1.5.3)
Applicant assessment – Habitats Regulations	5.4.25	The applicant should seek the advice of the appropriate SNCB and provide the Secretary of State with such information as the Secretary of State may reasonably require, to determine whether an HRA Appropriate Assessment (AA) is required. Applicants can request and agree 'Evidence Plans' with SNCBs, which is a way to record upfront the information the applicant needs to supply with its application, so that the HRA can be efficiently carried out. If an AA is required, the applicant must provide the Secretary of State with such information as may reasonably be required to enable the Secretary of State to conduct the AA. This should include information on any mitigation measures that are proposed to minimise or avoid likely significant effects.	The HRA Stage 1 Screening report (document reference E3) identifies direct or indirect effects on European sites which could be affected, and those sites have been assessed in the HRA Stage 2 ISAA (document reference E2.1, E2.2 and E2.3). The HRA Stage 1 ISAA concludes that there will be no adverse effect on integrity of any European site as a result of the Transmission Assets alone or in-combination with other projects; as such, no derogation case is required and no compensatory measures are considered necessary for the purposes of the HRA process. . Similarly, the MCZ Stage 1 assessment (document reference E5) concludes that the project will not represent a significant risk of hindering the achievement of conservation objectives of any of the MCZs identified and as such, Measures of Equivalent Environmental Benefit (MEEB) are not required. There is no identified adverse effect on the integrity of a protected site or species, and in respect of the MCZ although the Applicants do not consider it necessary, a Stage 2 assessment and measures of equivalent environmental benefit have been provided on a 'without prejudice' basis. Impacts on internationally designated sites forming part of the National Site Network are considered in section 4.11 of Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4) and in the ISAA that accompanies the application (document reference E2.1, 2.2, 2.3). A summary of the consultation carried out with SNCBs relevant to onshore and intertidal ornithology is provided within section 4.3.4 of Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4) and further details of all consultation conducted can be found within the Consultation Report (document reference E1).
	5.4.26	If, during the pre-application stage, the SNCB indicate that the proposed development is likely to adversely impact the integrity of habitat sites, the applicant must include with their application such information as may reasonably be required to assess a potential derogation under the Habitats Regulations.	
	5.4.27	If the SNCB gives such an indication at a later stage in the development consent process, the applicant must provide this information as soon as is reasonably possible and before the close of the examination. This information must include assessment of alternative solutions, a case for Imperative Reasons of Overriding Public Interest (IROPI) and appropriate environmental compensation.	
	5.4.28	Provision of such information will not be taken as an acceptance of adverse impacts and if an applicant disputes the likelihood of adverse impacts, it can provide this information as part of its application 'without prejudice' to the Secretary of State's final decision on the impacts of the potential development. If, in these circumstances, an applicant does not supply information required for the assessment of a potential derogation, there will be no expectation that the Secretary of State will allow the applicant the opportunity to provide such information following the examination.	
	5.4.29	It is vital that applicants consider the need for compensation as early as possible in the design process as 'retrofitting' compensatory measures will introduce delays and uncertainty to the consenting process.	
	5.4.30	Applicants should work closely at an early stage in the pre-application process with SNCB and Defra/Welsh Government to develop a compensation plan for all protected sites adversely affected by the development. Applicants should engage with the relevant Local Planning Authority at an early stage regarding the proposed location of compensatory measures. Applicants should also take account of any strategic plan level compensation plans in developing project level compensation plans.	
	5.4.31	Before submitting an application, applicants should seek the views of the SNCB and Defra/Welsh Government as to the suitability, securability and effectiveness of the compensation plan to ensure the development will not hinder the achievement of the conservation objectives for the protected site. In cases where such views are provided, the applicant should include a copy of this information with the compensation plan in their application for further consideration by the Examining Authority.	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
Applicant assessment – Ancient woodland, ancient trees, veteran trees and other irreplaceable habitats	5.4.32	Applicants should include measures to mitigate fully the direct and indirect effects of development on ancient woodland, ancient and veteran trees or other irreplaceable habitats during both construction and operational phases.	Impacts on ancient woodland and ancient and veteran trees are set out in section 3.11 of Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3), which demonstrates that there will be no adverse effects on them. ES Volume 3, Annex 10.5: Tree survey and arboricultural impact assessment (document reference F3.10.5) also outlines the quality of surveyed trees and assesses and quantifies the aboricultural impact of the Transmission Assets. The outline Arboriculture Method Statement (S_D5_10) sets out measures that will be implemented for the protection and removal of trees during the construction of the onshore and intertidal elements of the Transmission Assets, to reduce impacts to trees, as far as possible. In relation to ancient woodlands/veteran trees, measures includes buffer zones and tree protection fencing and no works will be carried out within the ancient woodlands/veteran tree buffer zones unless otherwise specified within the detailed Aboriculture Method Statement, which will be developed post-consent, prior to the commencement of construction of the Transmission Assets and will be in accordance with the outline Aboriculture Method Statement (S_D5_10 F01). There will be no loss or irreplaceable habitats as a result of the Transmission Assets.
Applicant assessment – Protection and enhancement of habitats and species	5.4.33	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 as set out under Section 4.6.	Commitments made as part of the Transmission Assets are set out in section 3.8 of Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). This includes measures to conserve biodiversity in terms of ecological interests. As stated in Volume 1, Chapter 3: Project Description of the ES (document reference F1.3), the installation of the onshore export cable corridor at Lytham St Annes Dunes SSSI and the St Anne's Old Links Golf Course will be undertaken by trenchless techniques (direct pipe) to avoid the need for any trenching at these locations. Commitments made as part of the Transmission Assets are set out in section 4.8 of Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4). This includes measures to conserve biodiversity in terms of ornithological interests. It also includes opportunities for biodiversity benefit. For the Transmission Assets, the Applicants' preference is that biodiversity benefit will be delivered within identified biodiversity benefit areas within the Onshore Order Limits, however, Requirement 26 of Schedules 2A and 2B of the draft DCO (document reference C1/F09) does allow for a prioritisation exercise to be carried out, whereby biodiversity benefit may be delivered through a mixture of the Work No 44A or 44B (as appropriate), biodiversity projects within close proximity to the order limits and through the purchase of biodiversity credits . Further qualitative benefits to biodiversity are proposed via potential collaboration with stakeholders and local groups, contributing to existing plans and programmes, both within and outside the Onshore Order Limits. Further details of the approach to conserving and enhancing biodiversity are provided in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES and in the outline Biodiversity Benefit Management Plan (document reference J11/F06) (CoT83, Volume 1, Annex 5.3 of the ES (document reference F1.5.3))).
	5.4.34	Consideration should be given to improvements to, and impacts on, habitats and species in, around and beyond developments, for wider ecosystem services and natural capital benefits, beyond those under protection and identified as being of principal importance. This may include considerations and opportunities identified through Local Nature Recovery Strategies, and national goals and targets set through the Environment Act 2021 and the Environmental Improvement Plan 2023	The design of the Transmission Assets and consideration of design options has had regard to the mitigation hierarchy and to the need to avoid significant harm. Commitments made as part of the Transmission Assets are set out in section 4.8 of Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4). This includes measures to conserve biodiversity in terms of ornithological interests. It also includes opportunities for biodiversity benefit. The Applicants have had regard to the goals of the Environmental Improvement Plan and the need to conserve and enhance habitats in developing appropriate mitigation for the Transmission Assets.

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
			As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5), mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3).
Mitigation	5.4.35	Applicants should include appropriate avoidance, mitigation, compensation and enhancement measures as an integral part of the proposed development. In particular, the applicant should demonstrate that: • during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works • the timing of construction has been planned to avoid or limit disturbance • during construction and operation best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised, including as a consequence of transport access arrangements • habitats will, where practicable, be restored after construction works have finished • opportunities will be taken to enhance existing habitats rather than replace them, and where practicable, create new habitats of value within the site landscaping proposals. Where habitat creation is required as mitigation, compensation, or enhancement, the location and quality will be of key importance. In this regard habitat creation should be focused on areas where the most ecological and ecosystems benefits can be realised. • mitigations required as a result of legal protection of habitats or species will be complied with.	The Applicants have implemented the mitigation hierarchy. Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4) sets out the measures taken to avoid ecological features, where practicable. Details of the mitigation measures proposed are set out in section 4.8 of Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4) and Volume 3, Chapter 3: Ecology and nature conservation of the ES (document reference F3.3). These have been developed taking into account discussions held with SNCBs during EWG meetings. As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5), mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. A full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3).
	5.4.36	• Applicants should produce and implement a Biodiversity Management Strategy as part of their development proposals. This could include provision for biodiversity awareness training to employees and contractors so as to avoid unnecessary adverse impacts on biodiversity during the construction and operation stages.	Commitments made as part of the Transmission Assets include measures to conserve biodiversity in terms of ecological interests. Habitat creation and enhancement measures necessary to compensate for the adverse effects of the project are described in the Outline Ecological Management Plan (document reference J9). It also includes opportunities for biodiversity benefit. Habitat creation and enhancement necessary to compensate for the adverse effects of the project are described in section 3.11 of Volume 3, Chapter 3: Ecology and nature conservation of the ES (document reference F3.3). Biodiversity benefit will be delivered within identified biodiversity benefit areas within the Onshore Order Limits. Further details of the approach to biodiversity benefit are provided in the outline Biodiversity Benefit Management Plan (document reference J11/F06). Wider ecological enhancement measures are set out within the Outline Ecological Management Plan (document reference J6). The Applicants are committed to engaging with stakeholders to deliver further qualitative benefits to biodiversity. It contains information on the measures that will be implemented ensure that risk of disturbance or damage to species or habitats is minimised, and for restoration of habitats that are unavoidably affected. Commitments made as part of the Transmission Assets are set out in section 4.8 of Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4). This includes measures to conserve biodiversity in terms of ornithological interests. It also includes opportunities for biodiversity benefit. For the Transmission Assets, biodiversity benefit will be delivered within identified biodiversity benefit areas within the Onshore Order Limits. Further qualitative benefits to biodiversity are proposed via potential collaboration with stakeholders and local groups, contributing to existing plans and programmes, both within and outside the Onshore Order Limits.

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			In relation to a biodiversity management strategy, the outline Ecological Management Plan (document reference J6 F05) was developed to fulfil the requirement of managing risks to sensitive ecological receptors during construction and operation of the Transmission Assets. The outline EMP (document reference J6/F06) includes measures such as 'toolbox talks' to raise awareness to contractors during construction, the use of Ecological Clerk of Works during construction. This will provide biodiversity awareness training to employees and contractors to avoid unnecessary adverse impact on biodiversity. Detailed Ecological Management Plans will be submitted to and agreed with the relevant planning authority to satisfy DCO Requirement 12 of Schedules 2A and B (C1/F09) once the detailed design of the scheme has been completed, and following the results obtained from preconstruction ecology surveys. This will include details on long-term management and monitoring, as summarised in section 1.7 of the oEMP.
	5.4.38	To further minimise any adverse impacts on geodiversity, where appropriate applicants are encouraged to produce and implement a Geodiversity Management Strategy to preserve and enhance access to geological interest features, as part of relevant development proposals	There will be no adverse impacts on geodiversity as discussed in Volume 3 Chapter 1: Geology, Hydrogeology and Ground Conditions of the ES (document reference F3.1). Therefore, no Geodiversity Management Strategy is required.
Secretary of State decision making	5.4.39	The government's 25 Year Environment Plan and the Environment Act 2021 mark a step change in ambition for wildlife and the natural environment. The Secretary of State should have regard to the aims and goals of the government's Environmental Improvement Plan 2023, and in Wales the objectives of the Nature Recovery Plan, and any relevant measures and targets, including statutory targets set under the Environment Act or elsewhere.	Commitments made as part of the Transmission Assets are set out in section 3.8 of Volume 3, Chapter 3: Ecology and nature conservation of the ES (document reference F3.3). This includes measures to conserve biodiversity in terms of ecological interests. It also includes opportunities for biodiversity benefit. The Applicants have had regard to the goals of the Environmental Improvement Plan and the need to conserve and enhance habitats in developing appropriate mitigation for the Transmission Assets.
	5.4.41	The benefits of nationally significant low carbon energy infrastructure development may include benefits for biodiversity and geological conservation interests and these benefits may outweigh harm to these interests. The Secretary of State may take account of any such net benefit in cases where it can be demonstrated.	A full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3). Where practicable, the Applicants have looked to provide a coordinated approach to the design and development of mitigation and enhancement measures. This has included, for example, a coordinated approach to the design at the onshore substation sites to incorporate ecological, drainage and landscape considerations, that will result in wider environmental gains. The level of importance of ecological features is discussed in Section 3.6 and summarised in Table 3.15 of Volume 3, Chapter 3: Ecology and nature conservation of the ES (document reference F3.3). The significance of an effect is determined by the importance and sensitivity of a site or other ecological feature, as well the magnitude of the impact as summarised in Table 3.22 of Volume 3, Chapter 3. Likely significant effects on designated sites have been taken into account in the site selection process and are considered in Volume 3 Chapter 1: Geology, hydrogeology and ground conditions of the ES (document reference F3.1), Volume 3, Chapter 3: Ecology and nature conservation of the ES (document reference F3.3) and Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4). As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5), mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement
	5.4.42	As a general principle, and subject to the specific policies below, development should, in line with the mitigation hierarchy, aim to avoid significant harm to biodiversity and geological conservation interests, including through consideration of reasonable alternatives (as set out in Section 4.3 above). Where significant harm cannot be avoided, impacts should be mitigated and as a last resort, appropriate compensation measures should be sought.	
	5.4.43	If significant harm to biodiversity resulting from a development cannot be avoided (for example through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then the Secretary of State will give significant weight to any residual harm.	
	5.4.44	The Secretary of State should consider what appropriate requirements should be attached to any consent and/or in any planning obligations entered into, in order to ensure that any mitigation or biodiversity net gain measures, if offered, are delivered and maintained. Any habitat creation or enhancement delivered including linkages with existing habitats for compensation or biodiversity net gain should generally be maintained for a minimum period of 30 years, or for the lifetime of the project, if longer.	
	5.4.45	The Secretary of State will need to take account of what mitigation measures may have been agreed between the applicant and the SNCB and the MMO/NRW (where appropriate). The Secretary of State will also need to consider whether the SNCB or the MMO/NRW has granted or refused, or intends to grant or refuse, any relevant licences, including protected species mitigation licences.	
	5.4.46	Development proposals provide many opportunities for building-in beneficial biodiversity or geological features as part of good design. The Secretary of State should give appropriate weight to	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
		environmental and biodiversity enhancements, although any weight given to gains provided to meet a legal requirement (for example under the Environment Act 2021) is likely to be limited.	measures. Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4) sets out the measures taken to avoid ecological features, where practicable. A full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3). These include measures to conserve biodiversity in terms of ecological and ornithological interests. An Outline Ecological Management Plan (document reference J6/F06) is provided as part of the application for development consent. This contains information on the measures that will be implemented ensure that risk of disturbance or damage to species or habitats is minimised, and for restoration of habitats that are unavoidably affected. The commitments also include opportunities for biodiversity benefit. The Applicants have had regard to the goals of the Environmental Improvement Plan and the need to conserve and enhance habitats in developing appropriate mitigation for the Transmission Assets. These commitments have been developed taking into account discussions held with Statutory Nature Conservation Bodies (SNCBs) during EWG meetings (see both Volume 3, Chapter 3 and Chapter 4) and throughout the examination process.. Geological enhancements have not been identified within the topic chapter of the ES however likely significant effects on designated sites have been taken into account in the site selection process. Any beneficial impacts are set out within section 3.11 of Volume 3, Chapter 3: Ecology and nature conservation of the ES (document reference F3.3). A description of the potential benefits presented to birds is presented within paragraphs 4.12.6.1 to 4.4.1, 4.13.6.1 to 4.13.7.1, and 4.14.6.1 to 4.14.10.1 of Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4). For terrestrial development consented under the Planning Act 2008, the mandatory biodiversity net gain (BNG) requirement has been delayed and is now set to come into force in May 2026. Projects that have been accepted for examination by the Planning Inspectorate before the specified commencement date would not be required to deliver mandatory BNG, ensuring projects which are at a sufficiently advanced stage do not need to then identify scheme amendments (and potentially additional land) to meet the mandatory net gain requirement. Although the Transmission Assets are not subject to mandatory net gain requirement under the Environment Act 2021, the Applicants have worked with statutory consultees to discuss the approach and to develop the design to allow the maximum benefit to biodiversity within the parameters of the Project. A Biodiversity Benefit Management Plan provides an assessment of the overall benefit to onshore biodiversity, specifically associated with the onshore substations, associated access tracks and biodiversity benefit area at Lea Marsh Field. (document reference J11/F06). The total predicted biodiversity net gain for area-based habitat units are 50.36%, 44.43% for hedgerow units and 91.77% for linear watercourse units. Furthermore, the Biodiversity Benefit Supporting Statement (S_D5_11) highlights that in addition to biodiversity benefit being delivered for all permanent above ground infrastructure (outwith Central Lancashire), Lea Marsh Fields (located within Central Lancashire) could be subject to ecological enhancements and provides a strategically located opportunity to deliver substantial additional biodiversity gains, strengthen ecological connectivity between designated sites and contribute to the Lancashire Local Nature Recovery Strategy. A hierarchy of biodiversity benefit delivery options ensures that biodiversity benefit can be
	5.4.47	When considering proposals, the Secretary of State should maximise such reasonable opportunities in and around developments, using requirements or planning obligations where appropriate. This can help towards delivering biodiversity net gain as part of or in addition to the approach set out at Section 4.6.	
	5.4.48	In taking decisions, the Secretary of State should ensure that appropriate weight is attached to designated sites of international, national, and local importance; protected species; habitats and other species of principal importance for the conservation of biodiversity; and to biodiversity and geological interests within the wider environment.	

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			achieved whether through on-site provision, reduced off-site delivery, funding of local biodiversity projects, or the purchase of biodiversity credits. This voluntary approach, which reflects emerging best practice, is supported by a robust 30-year management and monitoring framework and ensure that biodiversity benefit will not only offset permanent land take but also contribute to wider ecological resilience and the delivery of strategic environmental outcomes in Lancashire. The Transmission Assets can deliver biodiversity benefit, exceed the minimum 10% target where feasible, and provide a long-term positive legacy for nature in the local area alongside the delivery of NSIP energy infrastructure. The Applicants are committed to engaging with stakeholders to deliver further qualitative benefits to biodiversity.
Secretary of State decision making – Habitats Regulations	5.4.49	The Secretary of State must consider whether the project is likely to have a significant effect on a protected site which is part of the National Site Network (a habitat site), a protected marine site, or on any site to which the same protection is applied as a matter of policy, either alone or in combination with other plans or projects.	Impacts on internationally designated sites forming part of the National Site Network are considered in section 3.11 of this chapter and in the ISAA (document references E2.1, 2.2, 2.3) that accompanies the application.
Secretary of State decision making - Sites of Special Scientific Interest (SSSIs)	5.4.50	The Secretary of State should use requirements and/or planning obligations to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest.	Information to Support Appropriate Assessment (document reference E2) does not predict any adverse effects on integrity of any SAC, SPA or Ramsar and as such, no compensatory measures are considered necessary for the purposes of the HRA process. Impacts on internationally designated sites forming part of the National Site Network are considered in Volume 3, Chapter 3: Ecology and nature conservation of the ES (document reference F3.3) and in the ISAA (document references E2.1, 2.2, 2.3) that accompanies the application. There will be no adverse impacts on geodiversity. This is discussed further in Volume 3 Chapter 1: Geology, Hydrogeology and Ground Conditions of the ES (document reference F.3.1). Measures to ensure the conservation and enhancement of the biodiversity or geological interest within the Transmission Assets Order Limits are secured via the outline Ecological Management Plan (J6/F05) the final version of which is secured via Requirement 12 in the draft DCO (C1/F09), will be agreed with the relevant authorities and in accordance with the outline EMP.
Secretary of State decision making – Marine Conservation Zones	5.4.51	The Secretary of State is bound by the duties on public authorities in relation to MCZs imposed by sections 125 and 126 of the Marine and Coastal Access Act 2009	The MCZ Stage 1 assessment (document reference E5) concludes that the project will not represent a significant risk of hindering the achievement of conservation objectives of any of the MCZs identified and as such, Measures of Equivalent Environmental Benefit (MEEB) are not required. There is no identified adverse effect on the integrity of a protected site or species, and in respect of the MCZ although the Applicants do not consider it necessary, a Stage 2 assessment and measures of equivalent environmental benefit have been provided on a 'without prejudice' basis.
Secretary of State decision making – Regional and local sites	5.4.52	The Secretary of State should give due consideration to regional or local designations. However, given the need for new nationally significant infrastructure, these designations should not be used in themselves to refuse development consent.	Impacts on regionally or locally designated sites are considered in Volume 3, Chapter 3: Ecology and nature conservation of the ES (document reference F3.3) and in Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4).
Secretary of State decision making – Ancient woodland, ancient trees, veteran trees and other irreplaceable habitats	5.4.53	The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of any irreplaceable habitats, including ancient woodland, and ancient and veteran trees unless there are wholly exceptional reasons and a suitable compensation strategy exists.	Commitments made as part of the Transmission Assets are set out in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3). This includes measures to conserve biodiversity in terms of ecological interests. Potential impacts on ancient woodland and ancient and veteran trees are set out in section Volume 3, Chapter 3: Ecology and nature conservation of the ES (document reference F3.3), which demonstrates that there will be no adverse effects on them. The other irreplaceable habitatpresent within the study and survey area,

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
			being the coastal sand dunes at Lytham St Anne's Dunes SSSI, is set out in section 3.6 of the chapter; this would be avoided through the use of trenchless techniques to install the onshore cables and would therefore not be adversely affected. The location of the veteran tree is set out in Volume 3, Annex 10.5: Tree survey and arboricultural impact assessment of the ES (document reference F3.10.5). The Applicants have prepared an outline Arboriculture Method Statement (REP6-154), which sets out at section 1.8.5.1 that where ancient woodlands/veteran trees have been identified, both within and outside the Order Limits, an appropriate buffer has been determined along with appropriate tree protection fencing where necessary. Detailed Arboriculture Method Statements will be developed post-consent as secured by Requirement 8 of Schedules 2A and 2B of the draft DCO (C1/F09).
Secretary of State decision making – Protection and enhancement of habitats and species	5.4.54	The Secretary of State should ensure that species and habitats identified as being of importance for the conservation of biodiversity are protected from the adverse effects of development by using requirements, planning obligations, or licence conditions where appropriate.	Details of the Commitments proposed in relation to species and habitats are set out in Volume 2, Chapters 1 -5 of the ES (document reference F2.1 – F2.5) and Volume 3, Chapters 3 – 4 of the ES (document reference F3.3-F3.4). Consideration of impacts on protected species and habitats is provided in the ISAA (document reference E2). An Outline Ecological Management Plan (document reference J6) is provided as part of the application for development consent. This contains information on the measures that will be implemented ensure that risk of disturbance or damage to species or habitats is minimised, and for restoration of habitats that are unavoidably affected.
Secretary of State decision making – Protection and enhancement of habitats and species	5.4.55	The Secretary of State should refuse consent where harm to a protected species and relevant habitat would result, unless there is an overriding public interest and the other relevant legal tests are met. In this context the Secretary of State should give substantial weight to any such harm to the detriment of biodiversity features of national or regional importance or the climate resilience and the capacity of habitats to store carbon, which they consider may result from a proposed development	Impacts on protected species and relevant habitats are considered in Volume 3, Chapter 3: Onshore ecology and nature conservation and Chapter 4: Onshore and intertidal ornithology of the ES (document references F3.3 and F3.4). The main habitats that have potential for material carbon storage are forestry, peatlands, wetlands and oceans. No such habitats would be significantly disturbed as a result of the Transmission Assets and the Outline Soil Management Plan (document reference Rep4-040) details measures for handling peat soils where relevant.
5.5 Civil and military aviation and defence interests			
Aviation	5.5.5	UK airspace is important for both civilian and military aviation interests. It is essential that new energy infrastructure is developed collaboratively alongside aerodromes, aircraft, air systems and airspace so that safety, operations and capabilities are not adversely affected by new energy infrastructure. Likewise, it is essential that aerodromes, aircraft, air systems and airspace operators work collaboratively with energy infrastructure developers essential for net zero. Aerodromes can have important economic and social benefits, particularly at the regional and local level, but their needs must be balanced with the urgent need for new energy developments, which bring about a wide range of social, economic, and environmental benefits.	Impacts arising from the construction, operations and maintenance and decommissioning phases of the Transmission Assets have been assessed in section 11.11 of Volume 3, Chapter 11: Aviation and radar of the ES (document reference F3.11). The Applicants have sought throughout to work with BAE Systems (Operations) Limited (BAE) and the Defence Infrastructure Organisation on behalf of the Ministry of Defence to identify a realistic and pragmatic way forward that protects all parties' aims and interests as far as possible. The Applicants note that substantive progress has been made with Blackpool Airport in respect of any potential bird strike risk and that an approach has been agreed with Blackpool Airport that robustly secures a method for further assessment and mitigation, if required. Good progress has also been made with BAE and DIO/MOD in relation to Warton Aerodrome, although the inability of BAE to share necessary information regarding current birdstrike management has severely hampered progress on a specific Risk assessment. A policy note setting out the Applicants' compliance with relevant NPS and other policy regarding bird strike and aviation was submitted to examination (see

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
			document reference REP5-133). The Applicants also prepared a joint policy statement with Blackpool Airport as to the same (REP6-181).
	5.5.10	Areas of airspace around aerodromes used by aircraft, including taking off or on approach and landing are described as “Obstacle Limitation Surfaces” (OLS). All civil aerodromes licensed by the CAA and all military aerodromes must comply with the OLS. These are defined according to criteria set out in relevant CAA guidance for licensed civil aerodromes and according to Ministry of Defence (MOD) criteria, as set by the Military Aviation Authority (MAA), which is part of the Defence Safety Authority, for military aerodromes.	A summary of consultation undertaken to date is presented in section 11.3 and Table 11.5 of Volume 3, Chapter 11: Aviation and Radar of ES (document reference F3.11). Impacts arising from the construction, operations and maintenance and decommissioning phases of the Transmission Assets on OLS have been assessed in section 11.11 of Volume 3, Chapter 11: Aviation and Radar of the ES (document reference F3.11). In respect of Blackpool Airport Properties Limited (BAPL) and Blackpool Airport Operations Limited (BAOL), a Cooperation Agreement was completed on 22 September 2025. All parties confirm that this agreement together with mitigation measures secured through the DCO requirements in Schedules 2A and 2B of the draft DCO (document reference C1/F08) provide the framework to ensure that Blackpool Airport can continue its safe, uninterrupted and efficient Airport operations while the Transmission Assets project is constructed and operated within the Airport boundary and wide safeguarding areas. The Cooperation Agreement includes provisions which ensure that the Applicants’ works do not exceed or interfere with the Runway 10-28 OLS and allow BAOL to continue to operate safely in accordance with the OLS requirements and the Airport’s Civil Aviation Authority (CAA) licence conditions.
Safeguarding	5.5.11	Aerodromes that are officially safeguarded will have officially produced plans that show the OLS. Care must be taken to ensure that new developments do not infringe these protected OLS except where an aerodrome operator has considered the development and either determined there to be no adverse impact or agreed an acceptable mitigation can be put in place, as these encompass the critical airspace within which key air traffic associated with the aerodrome operates.	
	5.5.12	The CAA’s CAP 738 sets out that all licensed aerodromes are required to ensure they have a system in place to safeguard their aerodrome against the growth of obstacles or activities that may present a hazard to aircraft operations.	Warton Aerodrome is licensed for both civil and military aviation purposes and, accordingly, it must comply with both CAA and Military Aviation Authority (MAA) guidance, including Regulatory Articles (RA) published by MOD and the MAA. While EN-1 does not specifically refer to MAA compliance, the MAA RA 3500 guidance (relating to aerodrome design and safeguarding) which states that CAA publications may be consulted where they supplement the RAs relating to aerodrome design and safeguarding. NPS EN-1 infers that military licensed aerodromes must continue to comply with any pre-existing requirements under safeguarding guidance. The Applicants interpret paragraph 5.5.12 of EN-1, and CAP 738, as placing an ongoing, forward-looking obligation on all aerodrome operators to ensure that their safeguarding systems (including any existing bird strike risk assessments and safeguarding plans) remain in place and can be ‘scaled up’ against the expansion of potentially hazardous obstacles or activities (it is noted that the need for infrastructure like the projects presented in the NPS is a clear signal that growth of these types of activities is anticipated). This means that BAE’s existing bird strike mitigation management should be future proofed to account for the changing environment, whether or not that is caused by other developments that come forward, farming and agricultural practices or even those caused by climate change. In respect of Blackpool Airport Properties Limited (BAPL) and Blackpool Airport Operations Limited (BAOL), a Cooperation Agreement was completed on 22 September 2025. All parties confirm that this agreement together with mitigation measures secured through the DCO requirements in Schedules 2A and 2B of the draft DCO (document reference C1/F08) provide the framework to ensure that Blackpool Airport can continue its sage, uninterrupted and efficient Airport operations while the Transmission Assets project is constructed and operated within the Airport boundary and wide safeguarding areas. The Cooperation Agreement includes provisions which ensure that the Applicants’ works do not exceed or interfere with the Runway 10-28 OLS and allow BAOL to continue to operate safely in accordance with the OLS requirements and the Airport’s Civil Aviation Authority (CAA) licence conditions.

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Safeguarding continued	5.5.16	The CAA makes clear that the responsibility for the safeguarding of General Aviation aerodromes lies with the aerodrome operator.	This makes it clear where the responsibility for safeguarding lies. This position is reflected in DIO's submissions during examination. This does not mean that it is an aerodrome operator that must ultimately be satisfied with any bird strike risk assessment (as inferred by the Examining Authority's Q2:4.1.10), but rather that the day-to-day responsibility for assessing the risk of and carrying out any mitigation for bird strike rests with the aerodrome operator, as they are the party that can and should control safeguarding the aerodrome. Where a proposed development potentially increases or impacts on the bird strike risk, it may be appropriate that the undertaker of that development contributes to the costs (in full or in part) or otherwise supports the aerodrome in carrying out mitigation should it be required. This is recognised by the Applicants, BAOL and BAPL and the Cooperation Agreement includes provisions and agreed ways of working to manage the Airport's ongoing compliance with CAA regulations through the obligations and processes contained within CAP 791 – Procedures for changes to aerodrome infrastructure and CAP 738 – Safeguarding of Aerodromes.
Other Defence Interests	5.5.34	Other operational defence assets may be affected by new development, for example non-aviation technical equipment such as: the Seismological Monitoring Station at Eskdalemuir; maritime acoustic facilities; communications installations including satellite ground stations; and range control radars.	Defence assets have been assessed in section 11.11 of Volume 3, Chapter 11: Aviation and Radar of ES (document reference F3.11). There is no reason to conclude that with effective mitigation secured through the DCO there would be unacceptable impeding or compromise to the safe and effective use of facilities at Warton.
	5.5.35	It is important that new energy infrastructure does not unacceptably impede or compromise the safe and effective use of any defence assets or operations.	
Applicant assessment	5.5.37	Where the proposed development may affect the performance of civil or military aviation CNS, meteorological radars and/or other defence assets an assessment of potential effects should be set out in the ES (see Section 4.3).	The Applicants' ES included an assessment of potential effects from the Transmission Assets on the performance of civil and military aviation assets. Paragraph 5.5.40 of EN-1 sets out what this assessment should include, namely potential impacts of the proposed development on those assets including operational impact. This requirement does not, however, require an assessment in all circumstances – it is only where it is considered that the proposed development may affect civil or military infrastructure. In circumstances where an applicant considers that there will be no effect, no assessment is required. This was the approach the Applicants took at submission, as detailed in the ES which scoped out Warton Aerodrome from assessment. The Applicants' justification for scoping out Warton Aerodrome is provided in Table 11.4 of Chapter 11 Aviation and Radar of the ES (document reference F3.11).
	5.5.38	The requirement for ATC and non-cooperative surveillance – i.e. radar/tracking technologies – forms part of the environmental baseline for proposed developments.	The assessment of civil and military aviation infrastructure; defence assets and civil assets is provided in section 11.11, and cumulative impacts within section 11.12 of Volume 3, Chapter 11: Aviation and Radar of the ES (document reference F3.11). Impacts on civil and military radar, and aviation and defence interests are assessed in section 11.11 of Volume 3, Chapter 11: Aviation and Radar of the ES (document reference F3.11). The impact on Warton Aerodrome was scoped out from assessment on the basis of the distance to the Aerodrome and there being no expected impacts on the Aerodrome. This was accepted by PINS, on behalf of the Secretary of State, having regard to responses from relevant stakeholders when issuing the Scoping Opinion for the Transmission Assets. The proposed design of the Transmission Assets is highly unlikely to materially alter the existing ornithological baseline (which already fluctuates seasonally and
	5.5.39	The applicant should consult the MOD, Met Office, Civil Aviation Authority (CAA), NATS and any aerodrome – licensed or otherwise – likely to be affected by the proposed development in preparing an assessment of the proposal on aviation, meteorological or other defence interests.	
	5.5.40	Any assessment of effects on aviation, meteorological or other defence interests should include potential impacts of the project upon the operation of CNS infrastructure, flight patterns (both civil and military), generation of weather warnings and forecasts, other defence assets (including radar) and aerodrome operational procedures. It should also assess the demonstratable cumulative effects of the project with other relevant projects in relation to aviation, meteorological and defence.	
	5.5.41	In addition, consideration of developments near aerodromes should take into account the following factors: • Bird Strike Risk – Aircraft are vulnerable to wildlife strike, in particular bird strike. Birds and other wildlife may be attracted to the vicinity of an aerodrome by various types of development, for example, large buildings with perching/roosting opportunities for birds. It is therefore important that infrastructure, buildings and other elements from energy installations, as well as environmental	

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		mitigation are designed in such a way so as not to increase the bird strike risk to the airport for developments within 13km (this can vary). • Building Induced Turbulence – If a significant building or structure is proposed close to the airport/runways, there is potential for building induced turbulence/wind shear to be created which has the potential to impact on aircraft on take-off and landing. Studies may be required to identify the extent of any turbulence resulting from the energy infrastructure. • Thermal Plume Turbulence – This is caused under certain conditions by the release of hot air from a power plant equipped with a dry cooling system. The plumes generated by these facilities have the potential to create invisible turbulence that can affect the manoeuvrability of aircraft.	annually and will not increase the bird strike risk to Warton Aerodrome or Blackpool Airport. The outline Wildlife Hazard Management Plan (S_D3_8/F03) adds an additional layer of certainty that no new birds are introduced to the area specifically as a result of the Transmission Assets. In addition, a draft Wildlife Attractants Habitat Risk Assessment (WAHRA) as an appendix to the outline Wildlife Habitat Management Plan (S_D3_8/F02) has been prepared which sets out why the Applicants' proposed Ecological Mitigation Areas and Biodiversity Benefits Sites will not materially increase or change the distribution of birds within the 13km safeguarding areas, and therefore not increase bird strike at Warton Aerodrome from current managed levels. The WAHRA also commits to monitoring and additional management, should it be needed, to ensure birds at risk of bird strike will be managed to agreed levels, the detail of which will be agreed post-consent. This reasonable mitigation, which ties into pre-existing mitigation measures that BAE are already obliged to have in place, has been proposed to manage any increase in bird strike risk The Applicants' position is that reasonable mitigation has been proposed to manage any increase in bird strike risk and that this is secured by DCO requirements 4, 5 and 27 of Schedules 2A and 2B. The Applicants do not consider that any of the exceptions to the presumption for consent for CNP infrastructure, as set out in paragraph 4.1.7 of EN-1, apply. In particular, taking into account the draft Wildlife Attractants Habitat Risk Assessment and the requirement for a detailed Wildlife Hazard Management Plan (Requirement 27), the Examining Authority and the Secretary of State can safely conclude that the Transmission Assets would not impede or compromise the safe and effective use of Warton Aerodrome and therefore have no unacceptable risk to public safety.. The Applicants have agreed the wording of requirements 4,5 and 27 with both Blackpool Airport and BAE/DIO which enables the Secretary of State to conclude that appropriate mitigation is secured and therefore consent may be granted.
	5.5.42	If any relevant changes are made to proposals during the pre-application and determination period, it is the responsibility of the applicant to ensure that the relevant aviation, meteorological and defence consultees are informed as soon as reasonably possible.	
Mitigation	5.5.43	The applicant should include appropriate mitigation measures as an integral part of the proposed development.	Mitigation is discussed in paragraph 11.11.3.9 of Volume 3, Chapter 11: Aviation and Radar (document reference F3.11). The requirement for approved marking and lighting post consent with the appropriate bodies including the Civil Aviation Authority and Ministry of Defence (MoD) with regard of the relevant guidance has been embedded in the project (refer to section 11.3.3 and Table 11.5 of Volume 3, Chapter 11: Aviation and Radar (document reference F3.11) Overall, it is concluded that, with secondary mitigation as provided within Table 11.21 of Volume 3, Chapter 11: Aviation and radar, there will be no significant effects arising from the Transmission Assets during any of the phases of development. The Applicants scoped out Warton Aerodrome from assessment on the basis of the distance to the Aerodrome and there being no expected impacts on the Aerodrome, which was accepted by PINS, on behalf of the Secretary of State, having regard to responses from relevant stakeholders when issuing the Scoping Opinion for the Transmission Assets. The Applicants have prepared a draft Wildlife Attractants Habitat Risk Assessment (WAHRA) as an appendix to the outline Wildlife Habitat Management Plan (S_D3_8/F02) and sets out why the Applicants' proposed Ecological Mitigation Areas and Biodiversity Benefit Sites will not materially increase or change the distribution of birds within the 13km safeguarding area

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			and therefore will not increase bird strike at Warton Aerodrome from current managed levels. It also commits to monitoring and additional management (should it be needed) to ensure birds at risk of bird strike will be managed to agreed levels, the detail of which will be agreed post-consent. The Applicants have proposed a Commercial Agreement with BAE Systems to provide the necessary funding for the implementation of the adaptive management measures, and any associated safeguarding assessments.
	5.5.44	Mitigation for infringement of OLS may include: • agreed changes to operational procedures of the aerodromes in accordance with relevant guidance, provided that safety assurances can be provided by the operator that are acceptable to the CAA where the changes are proposed to a civilian aerodrome. Applicants should engage airport operators at an early stage of the planning process to understand the potential impacts of development on aviation operations and develop mitigations if appropriate; or installation of obstacle lighting and/or by notification in Aeronautical Information Service publications	Consultation with relevant statutory stakeholders has been carried out from the early stages of the design process through the Evidence Plan Process (EPP) as detailed in the Consultation Report (document reference E1) and in Volume 2 of the ES (document reference F2). Following submission of the DCO Application, consultation with statutory stakeholders has continued throughout the Examination phase via Relevant Representations, Written Representations and Examining Authority Questions, which the Applicants have responded to at the relevant deadlines. The impact on Warton Aerodrome was scoped out from assessment on the basis of the distance to the Aerodrome and there being no expected impacts on the Aerodrome. This was accepted by PINS, on behalf of the Secretary of State, having regard to responses from relevant stakeholders when issuing the Scoping Opinion for the Transmission Assets. The Applicants have prepared a draft Wildlife Attractants Habitat Risk Assessment (WAHRA) as an appendix to the outline Wildlife Habitat Management Plan (S_D3_8/F02) and sets out why the Applicants' proposed Ecological Mitigation Areas and Biodiversity Benefit Sites will not materially increase or change the distribution of birds within the 13km safeguarding area and therefore will not increase bird strike at Warton Aerodrome from current managed levels. It also commits to monitoring and additional management (should it be needed) to ensure birds at risk of bird strike will be managed to agreed levels, the detail of which will be agreed post-consent. The Applicants have proposed a Commercial Agreement with BAE Systems to provide the necessary funding for the implementation of the adaptive management measures, and any associated safeguarding assessments. In relation to Blackpool Airport, the Transmission Assets application includes appropriate mitigation which has been achieved through: • the design of the Transmission Assets and the design commitments embedded in the outline Wildlife Hazard Management Plan, illustrate how the requirement to design infrastructure, buildings and other elements from energy installations, as well as environmental mitigation in such a way so as not to increase the bird strike risk; • the measures secured through the requirements including BAOL's role as named consultee in respect of Requirement 4 (Substation works), Requirements 8 (Code of Construction Practice), 10 (Highway accesses) and 27 (Wildlife Hazard Management Plan); • the Change Request amendments to the Onshore Order Limits at the Airport; and • the additional mitigation measures included in the Cooperation Agreement securing ongoing cooperation and collaboration between the Applicants, BAOL and BAPL during construction and operation of the Transmission Assets. The Applicants have agreed the wording of requirements 4,5 and 27 with both Blackpool Airport and BAE/DIO which enables the Secretary of State to conclude that appropriate mitigation is secured and therefore consent may be granted.
	5.5.45	For CNS infrastructure, the UK military Low Flying system (including TTAs) and designated air traffic routes, mitigation may also include: • operational airspace changes • agreement to upgrade CNS infrastructure, the cost of which the applicant will be required to fund until the end of the life of the surveillance equipment if subsequently replaced by a fully windfarm tolerant system. If an appropriate system upgrade cannot be identified at the point of application, the applicant will be required to fund any future upgrade for the lifetime of the wind farm. • MOD will engage early with developers to ensure that costs are reflective of their need and impacts of the energy installation on the monitoring equipment. introducing commercially viable radar mitigation technology to the development, e.g. by using non-radar reflecting materials to manufacture wind turbine blades.	
	5.5.46	Mitigation for effects on meteorological radar and CNS systems may include reducing the scale of a project, although it is likely to be unreasonable for the Secretary of State to require mitigation by way of a reduction or alteration in the scale of development.	
	5.5.47	There may be exceptional circumstances where a small reduction in the scale of a development and any associated reduction in generating capacity, will result in proportionately greater mitigation for radar and CNS systems. In these cases, the Secretary of State may consider that the benefits to CNS and radar mitigation outweighs this loss of capacity.	

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Secretary of State decision making	5.5.49	The Secretary of State should be satisfied that the effects on meteorological radars, civil and military aerodromes, aviation technical sites and other defence assets or operations have been addressed by the applicant and that any necessary assessment of the proposal on aviation, NSWWS or defence interests has been carried out.	The Applicants consider that the draft Wildlife Attractants Habitat Risk Assessment (WAHRA) as an appendix to the outline Wildlife Habitat Management Plan (S_D3_8/F02) together with the Site Selection of the Environmental Mitigation and Biodiversity Benefit Areas (REP2-046), Strategy for Wildlife Hazard Management Plan (REP2-047) and Outline Wildlife Hazard Management Plan (REP3-065), together with responses to ExQ1 (REP3-056) satisfies the need for “any necessary assessment of the proposal on aviation” pursuant to paragraph 5.5.49 of EN-1. The Secretary of State can therefore be satisfied that effects of the proposed development on civil and military aerodromes have been addressed by the Applicants and necessary assessments of the proposal on those interests carried out
	5.5.50	In particular, the Secretary of State should be satisfied that the proposal has been designed, where possible, to minimise adverse impacts on the operation and safety of aerodromes and that realistically achievable mitigation is carried out on existing surveillance systems such as radar/tracking technologies. It is incumbent on Operators of aerodromes to regularly review the possibility of agreeing to make reasonable changes to operational procedures	The draft DCO submitted at Deadline 5 (C1/F09) now contains a standalone requirement that secures the measures which will minimise any impacts, namely the submission and approval of a detailed Wildlife Hazard Management Plan (Requirement 27 of Schedules 2A and 2B of the draft DCO). BAE have existing obligations to maintain bird strike risk measures which, under CAA, MAA and NPS policy, they must not just maintain as a status quo but also future-proof and adapt to new development. Notwithstanding this, the Applicants have committed to appropriate measures secured through the DCO that would mitigate for any actual increase to wildlife hazards as a result of the Ecological Mitigation Areas and Biodiversity Benefit Sites (including infrastructure, buildings and other elements from energy installations). Further information can be found within The Applicants' Bird Strike Policy Note (Document Reference: S_D5_5.3) Specifically, visual effects, including effects arising from lighting, are set out in Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10), and impacts on aviation and radar arising from the construction, operation and maintenance and decommissioning phases of the Transmission Assets have been assessed within Volume 3, Chapter 11: Aviation and radar of the ES (document reference F3.11) .Mitigation is discussed in paragraph 11.11.3.9 of Volume 3, Chapter 11: Aviation and radar (document reference F3.11). The Applicants have agreed processes and procedures, in line with the Civil Aviation Authority’s regulatory expectation (CAP 791: Procedures for changes to aerodrome infrastructure) for on-aerodrome works within Blackpool Airport. If the Secretary of State were minded to agree with BAE and consider instead that the Transmissions Assets would significantly impede or compromise the safe and effective use of Warton Aerodrome (or that the possibility of this could not be excluded), the Applicants consider that there is an appropriate DCO requirement in front of the Secretary of State that mitigates for any such impact (Requirement 27 (Wildlife Hazard Management Plan) of Schedules 2A and 2B). There would therefore be no need to impose a Grampian condition on the Applicants. The Applicants’ position is that reasonable mitigation, which ties into pre-existing mitigation measures that BAE are already obliged to have in place, has been proposed to manage any increase in bird strike risk and that this is secured by DCO requirements. The Applicants do not consider that any of the exceptions to the presumption for consent for CNP infrastructure, as set out in paragraph 4.1.7 of EN-1, apply. In particular, taking into account the draft Wildlife Attractants Habitat Risk Assessment and the requirement for a detailed Wildlife Hazard Management Plan, the Examining Authority and the Secretary of State can safely conclude that the Transmission Assets would not impede or compromise the safe and effective use of Warton Aerodrome and therefore have no unacceptable risk to public safety.
	5.5.51	When assessing the necessity, acceptability, and reasonableness of operational changes to aerodromes, the Secretary of State should be satisfied that they have the necessary information regarding the operational procedures along with any demonstrable risks or harm of such changes, taking into account the cases put forward by all parties. When making such a judgement in the case of military aerodromes, the Secretary of State should have regard to interests of defence and national security.	
	5.5.54	There are statutory requirements concerning lighting to tall structures. Where lighting is requested on structures that goes beyond statutory requirements by any of the relevant aviation and defence consultees, the Secretary of State should be satisfied of the necessity of such lighting taking into account the case put forward by the consultees. The effect of such lighting on the landscape and ecology may be a relevant consideration.	
	5.5.55	Lighting must also be designed in such a way as to ensure that there is no glare or dazzle to pilots and/or ATC, aerodrome ground lighting is not obscured and that any lighting does not diminish the effectiveness of aeronautical ground lighting and cannot be confused with aeronautical lighting. Lighting may also need to be compatible with night vision devices for military low flying purposes.	
	5.5.58	Where a proposed energy infrastructure development would significantly impede or compromise the safe and effective use of civil or military aviation, meteorological radars, defence assets and/or significantly limit military training, the Secretary of State may consider the use of ‘Grampian conditions’, or other forms of requirement which relate to the use of current or future technological solutions, to mitigate impacts on legacy CNS equipment.	
	5.5.59	Where, after reasonable mitigation, operational changes, obligations and requirements have been proposed, the Secretary of State should consider whether: • a development would prevent a licensed aerodrome from maintaining its licence and the operational loss of the said aerodrome would have impacts on national security and defence, or result in substantial local/national economic loss, or emergency service needs • it would cause harm to aerodromes’ training or emergency service needs • the development would impede or compromise the safe and effective use of defence assets or unacceptably limit military training • the development would have a negative impact on the safe and efficient provision of en-route air traffic control services for civil aviation, in particular through an adverse effect on CNS infrastructure the development would compromise the effective provision of weather warnings by the NSWWS, or flood warnings by the UK’s flood agencies	

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	5.5.60	Provided that the Secretary of State is satisfied that the impacts of proposed energy developments do not present risks to national security and physical safety, and where they do, provided that the Secretary of State is satisfied that appropriate mitigation can be achieved, or appropriate requirements can be attached to any Development Consent Order to secure those mitigations, consent may be granted	The Applicants have agreed the wording of requirements 4,5 and 27 with both Blackpool Airport and BAE/DIO which enables the Secretary of State to conclude that appropriate mitigation is secured and therefore consent may be granted.
5.6 Coastal change			
Applicant assessment	5.6.10	Where relevant, applicants should undertake coastal geomorphological and sediment transfer modelling to predict and understand impacts and help identify relevant mitigating or compensatory measures.	The Applicants note that coastal geomorphological and sediment transfer modelling is not a requirement in all circumstances, only where relevant. The Applicants consider the detail around location and design of cable protection is appropriate to support the conclusions of the environmental assessment and, in this case, detailed numerical modelling would not be required. A conceptual approach to this was also agreed with MMO, Cefas, Environment Agency and Natural England through the consultation processes via the Benthic Ecology, Fish and Shellfish and Physical Processes Expert Working Group meetings. This was supported by a number of appropriate studies and modelling campaigns including a detailed project specific morphological seabed study which incorporated both assessment of historical datasheets and modelling. Data regarding the location, volumes, orientation and type of cable protection between Lowest Astronomical Tide and the Depth of Closure (DoC) is provided within Volume 2, Chapter 1: Physical Processes (F2.1/F02) which also provides detail on the location and design of the cables and associated protection to support the determination that impacts for sediment transport pathways, including the pathway into the Ribble Estuary, which are of negligible to minor significance, which are not significant in EIA Terms.
	5.6.11	The ES (see Section 4.3) should include an assessment of the effects on the coast, tidal rivers and estuaries. In particular, applicants should assess • the impact of the proposed project on coastal processes and geomorphology, including by taking account of potential impacts from climate change. If the development will have an impact on coastal processes the applicant must demonstrate how the impacts will be managed to minimise adverse impacts on other parts of the coast • the implications of the proposed project on strategies for managing the coast as set out in Shoreline Management Plans (SMPs)(which are designed to identify the most sustainable approach to managing flood and coastal erosion risks from short to long term and are long term non-statutory plans which set out the agreed high-level objective for coastal flooding and erosion management for each SMP area), any relevant Marine Plans, River Basin Management Plans, and capital programmes for maintaining flood and coastal defences and Coastal Change Management Area • the effects of the proposed project on marine ecology, biodiversity, protected sites and heritage assets • how coastal change could affect flood risk management infrastructure, drainage and flood risk • the effects of the proposed project on maintaining coastal recreation sites and features • the vulnerability of the proposed development to coastal change, taking account of climate change, during the project's operational life and any decommissioning period	The evidence based assessment undertaken in Volume 2 Chapter 1: Physical Processes of the ES (document reference F2.1) is informed by modelling studies undertaken for Morgan Offshore Wind Project: Generation Assets and Mona Offshore Wind Project, included within Volume 2, Annex 1.1: Physical processes associated modelling studies of the ES (document reference F2.1.1). The results of the assessment of effects and cumulative effects assessment presented in section 1.10 and section 1.12 of Volume 2 Chapter 1: Physical Processes of the ES (document reference F2.1) respectively, did not identify any significant effects on designated receptors, therefore no mitigation further to those measures that are built into the project have been proposed.
	5.6.12	For any projects involving dredging or deposit of any substance or object into the sea, the applicant should consult the MMO and Historic England, or the NRW in Wales. Where a project has the potential to have a major impact in this respect, this is covered in the technology specific NPSs. For example, EN-4 looks further at the environmental impacts of dredging in connection with Liquified Natural Gas (LNG) tanker deliveries to LNG import facilities.	The impacts on coastal processes including within protected sites of ecological importance is assessed in section 1.10 of Volume 2 Chapter 1: Physical Processes of the ES (document reference F2.1) whilst future baseline conditions with consideration for climate change are discussed in section 1.5.5. Assessments of specific marine ecological receptors have been included for benthic ecology (Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES (document reference F2.2)), fish and shellfish ecology (Volume 2, Chapter 3: Fish and shellfish ecology of the ES (document reference F2.3)), marine mammals (Volume 2, Chapter 4: Marine mammals of the ES (document

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			reference F2.4)), offshore ornithology (Volume 2, Chapter 5: Offshore ornithology of the ES (document reference F2.5)). The potential impacts that may give rise to significant effects on marine heritage assets as a result of the Transmission Assets have been identified and assessed in Volume 2, Chapter 8: Marine archaeology of the ES (document reference F2.8). The impact of coastal change on socio-economic receptors located on the coast has been explored within Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2). Effects on coastal recreation sites are assessed in Volume 2, Chapter 9: Other Sea users of the ES (document reference F2.9) and in the Water Framework Directive coastal waters assessment (Volume 1, Annex 2.2, document reference F2.2.2) Impacts on onshore biodiversity, including protected sites, are set out in section 3.11 of Volume 3 Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3).
	5.6.13	The applicant should be particularly careful to identify any effects of physical changes on the integrity and special features of Marine Protected Areas (MPAs). These could include MCZs, habitat sites including Special Areas of Conservation and Special Protection Areas with marine features, Ramsar Sites, Sites of Community Importance, and SSSIs with marine features. Applicants should also identify any effects on the special character of Heritage Coasts.	Impacts to suspended sediment concentrations and physical processes as a result of construction activities and the presence of infrastructure in the marine environment have been appropriately mitigated by those in-built measures presented in Table 1.13 of Volume 2 Chapter 1: Physical Processes of the ES (document reference F2.1), so that no significant effect shall arise. A full list of commitments is presented in Volume 1, Annex 5.3: Commitments Register of the ES (document reference F1.5.3). The MMO have been involved in stakeholder consultation from the outset as detailed in section 1.3. NRW have played an important role in stakeholder consultation as although the Transmission Assets are not located in Welsh waters NRW were informed throughout the consultation process. The Consultation Report (document reference E1) contains a full list of consultee stakeholders and consultation responses during pre-application consultation. Since Examination, Natural England has maintained its representations that they consider that 3.04ha of lasting habitat change/loss of subtidal sand and subtidal mud interest features from the placement of cable protection within the Fylde MCZ will hinder the conservation objectives of the site and have advised that Measures of Equivalent Environmental Benefit (MEEB) will be required. The Applicants have maintained their position that there will be no significant risks to the achievement of the conservation objectives of the Fylde MCZ due to the Transmission Assets and therefore, a Stage 2 MCZ Assessment is not required. The conclusions of the MCZ Assessment are a matter that is not agreed between Natural England and the Applicants as reflected in the Statement of Common Ground with Natural England (S_D6_6.28; REP6-179). Without prejudice to the Applicants' position on the Stage 1 MCZ assessment, the Applicants submitted a Stage 2 MCZ Assessment at Deadline 1 (REP1-059), as requested by Natural England, which included a without prejudice, in-principle MEEB Plan. Additionally, the Applicants also provided a without prejudice benthic compensation schedule at Deadline 3 which was updated at Deadline 5; (REP5-109) should the Secretary of State deem it required. As reflected in the Statement of Common Ground with Natural England (S_D6_6.28;REP6-179), both parties are agreed that, should the Secretary of State deem that benthic compensation is required, strategic compensation with a payment into the Marine Recovery Fund (MRF) should be the preferred and prioritised option for this project, as outlined in the Applicant's commitment made at Deadline 4 (CoT136). The MMO defers to Natural England regarding the implications on the Fylde MCZ and all other MCZs. (MMO's Relevant representation (1414) Section 5.4.1 (PDA-013)).

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
	5.6.14	Applicants must demonstrate that full account has been taken of the policy on assessment and mitigation in paragraphs 4.3.1 to 4.3.9 of this NPS, taking account of the potential effects of climate change on these risks.	Designated sites and features of importance within and surrounding the study area have been identified and are discussed in section 1.5.2 of Volume 2 Chapter 1: Physical Processes of the ES (document reference F2.1). Potential impacts have also been identified and the significance of likely significant effects to physical processes receptors such as designated sites and seabed features, has been assessed in section 1.10 of Volume 2 Chapter 1: Physical Processes of the ES (document reference F2.1). Information to Support Appropriate Assessment (document reference E2) does not predict any adverse effects on integrity of any SAC, SPA or Ramsar and as such, no compensatory measures are considered necessary for the purposes of the HRA process. Within the HRA three mitigation area were proposed to reduce the effects, and throughout the examination process the issue of compensation vs mitigation has been tested by the ExA In response to ExA Q2:9.1.9 Natural England state: *"Lytham Moss and Newton-with-Scales were proposed by the Applicant to avoid or reduce impacts to FLL impacted by the temporary activities along the terrestrial cable route, they were not proposed to compensate for unavoidable residual impacts within the SPA. Therefore, our view is that it is acceptable to consider Lytham Moss and Newton-with-Scales as mitigation rather than compensation areas."* (document reference REP5-184). In addition, Natural England have been able to rule out AEoI for impacts at the landfall, therefore the remaining mitigation area at Fairhaven Saltmarsh is now considered as an alleviation measure with no need for compensatory measures. Similarly, the MCZ Stage 1 assessment (document reference E5) concludes that the project will not represent a significant risk of hindering the achievement of conservation objectives of any of the MCZs identified and as such, Measures of Equivalent Environmental Benefit (MEEB) are not required. There is no identified adverse effect on the integrity of a protected site or species, and in respect of the MCZ although the Applicants do not consider it necessary, a Stage 2 assessment and measures of equivalent environmental benefit have been provided on a 'without prejudice' basis.
Mitigation	5.6.15	Applicants should propose appropriate mitigation measures to address adverse physical changes to the coast, in consultation with the MMO, the EA or NRW, LPAs, other statutory consultees, Coastal Partnerships and other coastal groups, as it considers appropriate. Where this is not the case, the Secretary of State should consider what appropriate mitigation requirements might be attached to any grant of development consent.	As the Transmission Assets are subject to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, the application is accompanied by an ES as required by NPS EN-1 paragraph 4.3.1. Consideration of the potential effects of climate change are identified and assessed in Volume 4, Chapter 1: Climate Change of the ES (document reference F4.1). The results of the assessment of effects and cumulative effectsassessment presented in section 1.10 and section 1.12 of Volume 2 Chapter 1: Physical Processes of the ES (document reference F2.1) respectively, did not identify any significant effects on designated receptors, therefore no mitigation further to those measures that are built into the project have been proposed.

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
Secretary of State decision making	5.6.16	The Secretary of State should be satisfied that the proposed development will be resilient to coastal erosion and deposition, taking account of climate change, during the project's operational life and any decommissioning period. Proposals that aim to facilitate the relocation of existing energy infrastructure from unsustainable locations which are at risk from coastal change, should be supported where it would result in climate resilient infrastructure.	A number of in-built mitigation measures are included as commitments within the Transmission Assets, which have been developed through consultation with relevant stakeholders and engineering design. Within Volume 2 Chapter 1: Physical Processes of the ES (document reference F2.1) compliance with regulation, guidance and mitigation measures are addressed within the commitments presented in Table 1.13. A full list of commitments is presented in Volume 1, Annex 5.3: Commitments Register of the ES (document reference F1.5.3). The results of the assessment of effects and cumulative effects assessment presented in section 1.10 and section 1.12 of Volume 2 Chapter 1: Physical Processes of the ES (document reference F2.1) respectively, did not identify any significant effects on designated receptors, therefore no mitigation further to those measures that are built into the project have been proposed.
	5.5.17	The Secretary of State should not normally consent new development in areas of dynamic shorelines where the proposal could inhibit sediment flow or have an adverse impact on coastal processes at other locations. Impacts on coastal processes must be managed to minimise adverse impacts on other parts of the coast. Where such proposals are brought forward, consent should only be granted where the Secretary of State is satisfied that the benefits (including need) of the development outweigh the adverse impacts.	Detailed assessments are provided within all chapters within Volumes 1 to 4 of the ES (document reference F1 to F4) and take into account climate change, where appropriate. As set out in every ES chapter, mitigation measures have been developed to primarily avoid, then prevent, reduce or offset significant adverse environmental effects. Mitigation measures adopted as part of the Transmission Assets are provided in Volume 1, Annex 5.3: Commitments register of the ES (document reference F1.5.3). Cable protection measures will be tailored to the specific location and installed to ensure compliance with CoT45 of Volume 1, Annex 5.3: Commitments Register of the ES (F1.5.3/F07) and Condition 18 (1)(e) of Schedules 14 and 15 to the draft DCO (C1/F09) to limit change in water depth to 5% or less (unless otherwise approved by the MMO in consultation with the Maritime Coastguard Agency) in accordance with Marine Guidance Note 654 (MCA, 2021). The height of cable protection above the seabed will be governed by water depth (and otherwise limited to a maximum height of 2 m within the MCZ) to adhere to this commitment, ensuring that any cable protection in the nearshore is sufficiently low profile and contoured to allow sediment transport to continue. Thus, the detailed design (either by location, installation methodology or type of cable protection) will ensure there are no significant effects to the nearshore as result of any cable protection, and implemented with approval by the MMO in consultation with relevant stakeholders.
	5.6.18	The Secretary of State should ensure that applicants have restoration plans for areas of foreshore disturbed by direct works and will undertake pre- and post-construction coastal monitoring arrangements with defined triggers for intervention and restoration.	Volume 2, Chapter 1: Physical Processes of the ES (document reference F2.1) sets out the assessment of effects in relation to physical processes including tidal currents, the wave climate and the sediment transport regime Overall, it is concluded that there will be no significant effects arising from the Transmission Assets during the construction, operation and maintenance, or decommissioning phases. There would be no significant cumulative or transboundary effects.
	5.6.19	The Secretary of State should examine the broader context of coastal protection around the proposed site, and the influence in both directions, i.e. coast on site, and site on coast.	
	5.6.20	The Secretary of State should consult the MMO on projects which could impact on coastal change in England, or NRW for projects in Wales, since the MMO or NRW may also be involved in considering other projects which may have related coastal impacts.	
	5.6.21	In addition to this NPS, the Secretary of State must have regard to the appropriate marine policy documents in taking any decision which relates to the exercise of any function capable of affecting any part of the UK marine area.	
	5.6.22	The Secretary of State should also have regard to any relevant Shoreline Management Plans.	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
	5.6.23	Substantial weight should be attached to the risks of flooding and coastal erosion and the Secretary of State should be satisfied that the applicant has taken full account of the policy on assessment and mitigation in paragraphs 4.3.1 to 4.3.9 of this NPS, taking account of the potential effects of climate change on these risks.	
5.7 Dust, odour, artificial light, smoke, steam and insect infestation			
Applicant assessment	5.7.6	In particular, the assessment provided by the applicant should describe: • the type, quantity and timing of emissions • aspects of the development which may give rise to emissions • premises or locations that may be affected by the emissions • effects of the emission on identified premises or locations • measures to be employed in preventing or mitigating the emissions.	Impacts from dust during construction are considered in Volume 3, Chapter 9: Air Quality of the ES (document reference F3.9). Artificial light emissions are considered in Volume 3: Chapter 3: Onshore Ecology and nature conservation (document reference F3.3) and Volume 3, Chapter 10: Landscape and Visual Resources of the ES (document reference F3.10). Given the nature of the Transmission Assets, there is limited potential for impacts to arise from insect infestation, odour, steam and smoke.
	5.7.7	The applicant is advised to consult the relevant local planning authority and, where appropriate, the EA about the scope and methodology of the assessment	Consultation is outlined in section 9.3 of Volume 3, Chapter 9: Air Quality of the ES (document reference F3.9).
Mitigation	5.7.8	Mitigation measures may include one or more of the following: • engineering: prevention of a specific emission at the point of generation; control, containment and abatement of emissions if generated • lay-out: adequate distance between source and sensitive receptors; reduced transport or handling of material • administrative: limiting operating times; restricting activities allowed on the site; implementing management plans	Mitigation measures are outlined in Table 9.15 of Volume 3, Chapter 9: Air Quality of the ES (document reference F3.9) and the outline dust management plan (document reference J1.2).
	5.7.9	Construction should be undertaken in a way that reduces emissions, for example the use of low emission mobile plant during the construction, and demolition phases as appropriate, and consideration should be given to making these mandatory in Development Consent Order requirements.	Impacts from dust during construction are considered in Volume 3, Chapter 9: Air Quality of the ES (document reference F3.9). Table 9.15 Given the nature of the Transmission Assets, there is limited potential for impacts to arise from insect infestation, odour, steam and smoke. Mitigation measures are outlined in Table 9.15 of Volume 3, Chapter 9: Air Quality of the ES (document reference F3.9) and the outline dust management plan (document reference J1.2). In addition, an outline Code of Construction Practice (document reference J1/F05) has been submitted in support of the DCO application and presents a framework and outline of measures to manage the environmental impacts during the construction phase of the Transmission Assets and includes a set of standards and measures that will be implemented during the onshore site preparation works and construction process. This includes general site operational measures in relation to, inter alia, construction lighting, pest control and pollution prevent alongside management of environmental effects, including those relating to air quality and dust management.
	5.7.10	Demolition considerations should be embedded into designs at the outset to enable demolition techniques to be adopted that remove the need for explosive demolition.	
	5.7.11	A construction management plan may help clarify and secure mitigation	
Secretary of State decision making	5.7.12	The Secretary of State should satisfy itself that: • an assessment of the potential for artificial light, dust, odour, smoke, steam and insect infestation to have a detrimental impact on amenity has been carried out • that all reasonable steps have been taken, and will be taken, to minimise any such detrimental impacts.	
	5.7.13	If development consent is granted for a project, the Secretary of State should consider whether there is a justification for all of the authorised project (including any associated development) to be covered by a defence of statutory authority against nuisance claims. If the Secretary of State cannot conclude that this is justified, the Secretary of State should disapply in whole or in part the defence through a provision in the Development Consent Order.	The submitted information in the form of an ES provides sufficient and accurate detail regarding these matters; This is particularly evidenced in Volume 3, Chapter 9: Air quality of the ES (document reference F3.9) and Volume 3, Chapter 8: Noise and Vibration of the ES (document reference F3.8). Whilst the Transmission Assets have the potential to cause statutory nuisance, it is not expected to arise and the above chapters have concluded there will be no significant effects arising from the Transmission Assets in relation to noise,
	5.7.14	Where the Secretary of State believes it appropriate, the Secretary of State may consider attaching requirements to the development consent, to secure certain mitigation measures.	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
	5.7.15	In particular, the Secretary of State should consider whether to require the applicant to abide by a scheme of management and mitigation concerning insect infestation and emissions of odour, dust, steam, smoke, and artificial light from the development. The Secretary of State should consider the need for such a scheme to reduce any loss to amenity which might arise during the construction, operation and decommissioning of the development. A construction management plan may help codify mitigation at that stage.	vibration, or dust emissions during the construction, operation and maintenance, or decommissioning phases. The draft DCO (C1/F09) contains a provision at Article 8 (Defence to proceedings in respect of statutory nuisance) that would provide a defence to proceedings for statutory nuisance under the terms of the DCO. A Statutory Nuisance Statement (document reference J29) has been provided to comply with Regulation 5(2)(f) of the APFP Regulations which states that any application for a DCO should be accompanied by a statement setting out whether the development proposed could cause a statutory nuisance pursuant to Section 79(1) of the EPA 1990. If such a nuisance could occur, the Statement sets out how the Applications propose to mitigate or limit the effects. Requirement 8 of Schedules 2A and 2B of the draft DCO (C1/F09) secures the preparation and agreement of detailed construction noise and vibration management plan with the relevant planning authority. As committed to within CoT35, the Outline CoCP (J1/F04) includes measures to maintain and address air quality emissions during construction, as secured by Requirement 8 of Schedules 2A and 2B of the draft DCO (C1/F09). Paragraph 1.7.3.9 of the oCoCP sets out that good practice air quality management measures will accord with the IAQM Guidance (IAQM, 2024). The IAQM guidance states 'Exhaust emission from road vehicles and non-road mobile machinery (NRMM) are controlled through European Directives' and 'Experience of assessing the exhaust emissions from on-site plant (NRMM) and site traffic suggests that they are unlikely to make a significant impact on local air quality, and in the vast majority of cases they will not need to be quantitatively assessed.' Defra's LAQM.TG (2022) states the following in relation to NRMM: 'The following provides example measures of how NRMM emissions from construction sites may be minimised: • Ensure all equipment complies with the appropriate NRMM standards; • Where feasible, ensure further abatement plant is installed on NRMM equipment, e.g. Diesel Particulate Filters (DPFs); • Ensure all vehicles switch off engines when stationary – no idling vehicles; • Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where possible; and • Impose and signpost a maximum-speed-limit of 15mph on surfaced and 10mph on unsurfaced haul roads and work areas (if long haul routes are required, these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate).' These measures will be adopted where appropriate and practicable during the construction and decommissioning phases. In addition, a Greenhouse Gas Reduction Strategy was submitted with the application which outlines options to reduce construction-related emissions (J4)
5.8 Flood risk			
Applicant assessment	5.8.13	A site-specific flood risk assessment should be provided for all energy projects in Flood Zones 2 and 3 in England or Zones B and C in Wales. In Flood Zone 1 in England or Zone A in Wales, an assessment should accompany all proposals involving: • sites of 1 hectare or more • land which has been identified by the EA or NRW as having critical drainage problems	Climate change is considered in Volume 3, Annex 2.3: Flood Risk Assessment (FRA) of the ES (document reference F3.2.3). An assessment of an increase of peak river flow, peak rainfall intensities and sea level rise driven by climate change has been made within the FRA to the end of the construction phase for the landfall, onshore export cable corridor and 400 kV grid connection cable corridor and the operation and maintenance phase for the Morgan onshore

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		• land identified (for example in a local authority strategic flood risk assessment) as being at increased flood risk in future • land that may be subject to other sources of flooding (for example surface water) where the EA or NRW, Lead Local Flood Authority, Internal Drainage Board or other body have indicated that there may be drainage problems.	substation and Morecambe onshore substation. Peak river flow and sea level rise are accounted for within fluvial flood risk sections (section 3.2.1, section 4.2.1 and section 5.2.1) of the FRA. Peak rainfall intensity is taken into account within surface water flooding sections as well as the Outline Operational Drainage Management Plan (document reference J10), to be secured through Requirement 20 of the DCO.
	5.8.14	This assessment should identify and assess the risks of all forms of flooding to and from the project and demonstrate how these flood risks will be managed, taking climate change into account.	Due to the nature and scale of the Transmission Assets, an FRA was prepared and is presented within Volume 3, Annex 2.3: Flood Risk Assessment of the ES (document reference F3.2.3) and demonstrate that the Transmission Assets meet the requirements of the NPS EN-1, the NPPF and the associated PPG ID7. Development has been steered towards Flood Zone 1, with Permanent substations located within Flood Zone 1. Temporary and permanent access tracks are located within Flood Zone 1, 2 and 3 and have been subjected to the exception test The landfall, export cable corridor and 400kV400 kV grid connection cable corridor is mainly located within Flood Zone 1, and crosses areas of Flood Zones 2 and 3. Additional detail is provided within Volume 3, Annex 2.3: Flood Risk Assessment of the ES. Aspects of development within Flood Zone 3 has been subject to and has passed the sequential test and exception test (see Volume 3, Annex 2.3: Flood Risk Assessment of the ES). The flood risk assessment (REP1-022, REP1-023 and REP1-024)) has been updated to take account of the updated flood map for planning from the Environment Agency. The majority of the Onshore Infrastructure Area benefits from flood defences. The export cable corridor and the temporary and permanent access road associated with the Morecambe onshore substation has a residual risk of tidal flooding associated with the 0.5% AEP undefended event. The 400 kV grid connection cable corridor is at risk from fluvial and tidal flooding. The landfall area at MHWS is at risk from the 0.5% AEP tidal flood event. The landfall and Onshore Infrastructure Area has a low risk of flooding from other assessed sources. Climate change has been taken into account in the characterisation of the baseline and future baseline environment (see Section 2.6.10). Climate change with regard to flooding is also considered in the FRA (see Volume 3, Annex 2.3: Flood Risk Assessment of the ES). Other effects of climate change on the Transmission Assets are considered in the climate change risk assessment (see Volume 4, Chapter 1: Climate change (document reference F4.1) and Volume 4, Annex 1.2: Climate change risk assessment of the ES (document reference F4.1.2)). Appropriate mitigation measures in regard to flood risk, such as Flood Management Plans are outlined within Volume 3, Annex 2.3: Flood Risk Assessment of the ES. The Outline Operational Drainage Management Plan (document reference J10) has been prepared in line with Sustainable urban Drainage System (SuDS) principles including the recent National Standards for Sustainable Drainage Systems (Department for Environment, Food & Rural Affairs (DEFRA), 2025), the key points of which are summarised in Volume 3, Annex 2.3: Flood Risk Assessment of the ES.
	5.8.15	The minimum requirements for Flood Risk Assessments (FRA) are that they should: • be proportionate to the risk and appropriate to the scale, nature and location of the project; • consider the risk of flooding arising from the project in addition to the risk of flooding to the project; • take the impacts of climate change into account, across a range of climate scenarios, clearly stating the development lifetime over which the assessment has been made; • be undertaken by competent people, as early as possible in the process of preparing the proposal; • consider both the potential adverse and beneficial effects of flood risk management infrastructure, including raised defences, flow channels, flood storage areas and other artificial features, together with the consequences of their failure and exceedance; • consider the vulnerability of those using the site, including arrangements for safe access and escape; • consider and quantify the different types of flooding (whether from natural and human sources and including joint and cumulative effects) and include information on flood likelihood, speed-of-onset, depth, velocity, hazard and duration; • identify and secure opportunities to reduce the causes and impacts of flooding overall, making as much use as possible of natural flood management techniques as part of an integrated approach to flood risk management; • consider the effects of a range of flooding events including extreme events on people, property, the natural and historic environment and river and coastal processes; • include the assessment of the remaining (known as 'residual') risk after risk reduction measures have been taken into account and demonstrate that these risks can be safely managed, ensuring people will not be exposed to hazardous flooding; • consider how the ability of water to soak into the ground may change with development, along with how the proposed layout of the project may affect drainage systems. Information should include: – i. Describe the existing surface water drainage arrangements for the site – ii. Set out (approximately) the existing rates and volumes of surface water run-off generated by the site. Detail the proposals for restricting discharge rates – iii. Set out proposals for managing and discharging surface water from the site using sustainable drainage systems and accounting for the predicted impacts of climate change. If sustainable drainage systems have been rejected, present clear evidence of why their inclusion would be inappropriate – iv. Demonstrate how the hierarchy of drainage options has been followed. – v. Explain and justify why the types of SuDS219 and method of discharge have been selected and why they are considered appropriate. – vi. Explain how sustainable drainage systems have been integrated with other aspects of the development such as open space or green infrastructure, so as to ensure an efficient use of the site – vii. Describe the multifunctional benefits the sustainable drainage system will provide – viii. Set out which opportunities to reduce the causes and impacts of flooding have been identified and included as part of the proposed sustainable drainage system	

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		– ix. Explain how run-off from the completed development will be prevented from causing an impact elsewhere – x. Explain how the sustainable drainage system been designed to facilitate maintenance and, where relevant, adoption. Set out plans for ensuring an acceptable standard of operation and maintenance throughout the lifetime of the development • detail those measures that will be included to ensure the development will be safe and remain operational during a flooding event throughout the development's lifetime without increasing flood risk elsewhere; • identify and secure opportunities to reduce the causes and impacts of flooding overall during the period of construction; and be supported by appropriate data and information, including historical information on previous events	
	5.8.16	Further guidance can be found in the Planning Practice Guidance Flood Risk and Coastal Change section which accompanies the NPPF, TAN15 for Wales or successor documents.	
	5.8.17	Development (including construction works) will need to account for any existing watercourses and flood and coastal erosion risk management structures or features, or any land likely to be needed for future structures or features so as to ensure: • Access, clearances and sufficient land are retained to enable their maintenance, repair, operation, and replacement, as necessary; • Their standard of protection is not reduced; and Their condition or structural integrity is not reduced.	
	5.8.18	Applicants for projects which may be affected by, or may add to, flood risk should arrange pre-application discussions before the official pre-application stage of the NSIP process with the EA or NRW, and, where relevant, other bodies such as Lead Local Flood Authorities, Internal Drainage Boards, sewerage undertakers, navigation authorities, highways authorities and reservoir owner and operators.	The Hydrology and Flood Risk Expert Working Group (EWG) met in May and August 2023 and January and May 2024 prior to the submission of the application. In attendance were representatives from stakeholders including the EA, Lancashire County Council, the Lead Local Flood Authority, and LPAs. The purpose of the EWG was to discuss hydrology and flood risk matters and to discuss concerns from stakeholders and to reach a solution. A summary of the key comments raised during consultation activities undertaken to date, specific to the FRA of the Transmission Assets is provided in Table 1.5 within Volume 3, Annex 2.3: Flood Risk Assessment of the ES (document reference F3.2.3). A technical meeting was also held with the EA in August 2024 to discuss queries and proposed approach in relation to the items raised to inform the preparation of the hydrology and flood risk chapter of the Environmental Statement (ES) prior to submission of the application. Since Examination, the EA and Lead local Flood Authority maintained its representations with respect to flood risk considerations which were all resolved as evidenced in the Statement of Common Grounds with the EA and Lancashire County Council Lead Local Flood Authority (document ref: S_D1_6.6 and S_D1_6.1 respectively).
	5.8.19	Such discussions should identify the likelihood and possible extent and nature of the flood risk, help scope the FRA, and identify the information that will be required by the Secretary of State to reach a decision on the application when it is submitted. The Secretary of State should advise applicants to undertake these steps where they appear necessary but have not yet been addressed.	
	5.8.20	If the EA, NRW or another flood risk management authority has reasonable concerns about the proposal on flood risk grounds, the applicant should discuss these concerns with the EA or NRW and take all reasonable steps to agree ways in which the proposal might be amended, or additional information provided, which would satisfy the authority's concerns.	Volume 3, Annex 2.3: Flood Risk Assessment of the ES (document reference F3.2.3) has identified that the majority of the Onshore Infrastructure Area benefits from flood defences. The export cable corridor and the temporary and permanent access road associated with the Morecambe onshore substation has a residual risk of tidal flooding associated with the 0.5% AEP undefended event. The 400 kV grid connection cable corridor is at risk from fluvial and tidal flooding. The landfall area at MHWS is at risk from the 0.5% AEP tidal flood event. The landfall and Onshore Infrastructure Area has a low risk of flooding from other assessed sources.

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	5.8.21	The Sequential Test ensures that a sequential, risk-based approach is followed to steer new development to areas with the lowest risk of flooding, taking all sources of flood risk and climate change into account. Where it is not possible to locate development in low-risk areas, the Sequential Test should go on to compare reasonably available sites with medium risk areas and then, only where there are no reasonably available sites in low and medium risk areas, within high-risk areas.	The approach to flood risk and the assessment is described in the FRA (see (Volume 3, Annex 2.3: Flood Risk Assessment of the ES). Due to the nature and scale of the Transmission Assets, an FRA was prepared and is presented within Volume 3, Annex 2.3: Flood Risk Assessment of the ES (document reference F3.2.3) and demonstrate that the Transmission Assets meet the requirements of the NPS EN-1, the NPPF and the associated PPG ID7. The site selection process is detailed within Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (F1.4/ES01). This site selection process indicates that the development has been steered towards Flood Zone 1, with Permanent substations located within Flood Zone 1. Temporary and permanent access tracks are located within Flood Zone 1, 2 and 3 and have been subjected to the exception test The landfall, export cable corridor and 400 kV grid connection cable corridor is mainly located within Flood Zone 1, and crosses areas of Flood Zones 2 and 3. Additional detail is provided within Volume 3, Annex 2.3: Flood Risk Assessment of the ES. Aspects of development within Flood Zone 3 has been subject to and has passed the sequential test and exception test (see Volume 3, Annex 2.3: Flood Risk Assessment of the ES).
	5.8.22	The technology specific NPSs set out some exceptions to the application of the Sequential Test. However, when seeking development consent on a site allocated in a development plan through the application of the Sequential Test, informed by a strategic flood risk assessment, applicants need not apply the Sequential Test, provided the proposed development is consistent with the use for which the site was allocated and there is no new flood risk information that would have affected the outcome of the test.	
	5.8.23	Consideration of alternative sites should take account of the policy on alternatives set out in Section 4.3 above. All projects should apply the Sequential Test to locating development within the site	
Mitigation	5.8.24	To satisfactorily manage flood risk, arrangements are required to manage surface water and the impact of the natural water cycle on people and property.	Consideration of alternative sites is include in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4). The landfall, onshore export cable corridor and 400 kV grid connection cable corridor are mainly located within Flood Zone 1, and cross areas of Flood Zones 2 and 3. Aspects of development within Flood Zone 3 have been subject to and have passed the sequential test and exception test (see Volume 3, Annex 2.3: Flood Risk Assessment of the ES (document reference F3.2.3)).
	5.8.25	In this NPS, the term SuDS refers to the whole range of sustainable approaches to surface water drainage management including, where appropriate: • source control measures including rainwater recycling and drainage • infiltration devices to allow water to soak into the ground, that can include individual soakaways and communal facilities • filter strips and swales, which are vegetated features that hold and drain water downhill mimicking natural drainage patterns • filter drains and porous pavements to allow rainwater and run-off to infiltrate into permeable material below ground and provide storage if needed • basins, ponds and tanks to hold excess water after rain and allow controlled discharge that avoids flooding flood routes to carry and direct excess water through developments to minimise the impact of severe rainfall flooding	The outline Operational Drainage Management Plan (document reference J10) and has been developed in accordance with the NPS EN-1, NPPF, PPG ID7, the SuDS Manual and local council policy. With regards to the proposed substations, surface water from the 1 in 100-year storm event plus an allowance for climate change is to be stored within an attenuation pond, with flows to be discharged following the SuDS hierarchy. Further SuDS are to be determined at detailed design stage.
	5.8.26	Site layout and surface water drainage systems should cope with events that exceed the design capacity of the system, so that excess water can be safely stored on or conveyed from the site without adverse impacts.	
	5.8.27	The surface water drainage arrangements for any project should, accounting for the predicted impacts of climate change throughout the development's lifetime, be such that the volumes and peak flow rates of surface water leaving the site are no greater than the rates prior to the proposed project, unless specific off-site arrangements are made and result in the same net effect.	
	5.8.28	It may be necessary to provide surface water storage and infiltration to limit and reduce both the peak rate of discharge from the site and the total volume discharged from the site. There may be circumstances where it is appropriate for infiltration facilities or attenuation storage to be provided outside the project site, if necessary through the use of a planning obligation.	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
	5.8.29	The sequential approach should be applied to the layout and design of the project. Vulnerable aspects of the development should be located on parts of the site at lower risk and residual risk of flooding. Applicants should seek opportunities to use open space for multiple purposes such as amenity, wildlife habitat and flood storage uses. Opportunities should be taken to lower flood risk by reducing the built footprint of previously developed sites and using SuDS.	
	5.8.30	Where a development may result in an increase in flood risk elsewhere through the loss of flood storage, on-site level-for-level compensatory storage, accounting for the predicted impacts of climate change over the lifetime of the development, should be provided.	The approach to flood risk and the assessment is described in the FRA (see Volume 3, Annex 2.3: Flood Risk Assessment of the ES (document reference F3.2.3)). Development has been steered towards Flood Zone 1, with Permanent substations located within Flood Zone 1. Temporary and permanent access tracks are located within Flood Zone 1, 2 and 3 and have been subjected to the exception Test The landfall, export cable corridor and 400 kV grid connection cable corridor is mainly located within Flood Zone 1, and crosses areas of Flood Zones 2 and 3. Additional detail is provided within Volume 3, Annex 2.3: Flood Risk Assessment of the ES. Aspects of development within Flood Zone 3 has been subject to and has passed the sequential test and exception test (see Volume 3, Annex 2.3: Flood Risk Assessment of the ES).
	5.8.31	Where it is not possible to provide compensatory storage on site, it may be acceptable to provide it off-site if it is hydraulically and hydrologically linked. Where development may cause the deflection or constriction of flood flow routes, these will need to be safely managed within the site.	
	5.8.32	Where development may contribute to a cumulative increase in flood risk elsewhere, the provision of multifunctional sustainable drainage systems, natural flood management and green infrastructure can also make a valuable contribution to mitigating this risk whilst providing wider benefits.	
	5.8.33	The receipt of and response to warnings of floods is an essential element in the management of the residual risk of flooding. Flood Warning and evacuation plans should be in place for those areas at an identified risk of flooding.	
	5.8.34	The applicant should take advice from the local authority emergency planning team, emergency services and, where appropriate, from the local resilience forum when producing an evacuation plan for a manned energy project as part of the FRA. Any emergency planning documents, flood warning and evacuation procedures that are required should be identified in the FRA.	
	5.8.35	Flood resistant and resilient materials and design should be adopted to minimise damage and speed recovery in the event of a flood	A Flood Warning Evacuation Plan is proposed for temporary and permanent aspects of the Transmission Assets located within Flood Zone 3.
Secretary of State decision making	5.8.36	In determining an application for development consent, the Secretary of State should be satisfied that where relevant: • the application is supported by an appropriate FRA • the Sequential Test has been applied and satisfied as part of site selection • a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk • the proposal is in line with any relevant national and local flood risk management strategy • SuDS (as required in the next paragraph on National Standards) have been used unless there is clear evidence that their use would be inappropriate • in flood risk areas the project is designed and constructed to remain safe and operational during its lifetime, without increasing flood risk elsewhere (subject to the exceptions set out in paragraph 5.8.42) • the project includes safe access and escape routes where required, as part of an agreed emergency plan, and that any residual risk can be safely managed over the lifetime of the development • land that is likely to be needed for present or future flood risk management infrastructure has been appropriately safeguarded from development to the extent that development would not prevent or hinder its construction, operation or maintenance	An FRA has been prepared (see Volume 3, Annex 2.3: Flood Risk Assessment of the ES (document reference F3.2.3)) which details that infrastructure proposed within areas of flood risk is to be constructed using waterproof/water resistant materials to minimise damage. Development has been steered towards areas of lowest flood risk, including Flood Zone 1, with onshore substation development platforms assessed to have a low risk of flooding. The Transmission Assets are partially located within Flood Zone 3 and have been subjected to and deemed to have passed the sequential test as presented within section 1.9.2 of Volume 3, Annex 2.3: Flood risk assessment of the ES.
	5.8.37	For energy projects which have drainage implications, approval for the project's drainage system, including during the construction period, will form part of the development consent issued by the Secretary of State. The Secretary of State will therefore need to be satisfied that the proposed drainage system complies with any National Standards published by Ministers under paragraph 5(1) of Schedule 3 to the Flood and Water Management Act 2010.	The assessment of the impact of increased flood risk arising from additional surface water runoff is presented within section 2.11.4 of Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2). Mitigation measures are discussed within Table 2.20 of of Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2). In addition, best practice with regard the use and storage of oils, chemicals and other wastes, to remove the risk of causing pollution during construction is outlined within the

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
			Outline CoCP (document reference J1). An Outline CoCP (document reference J1) has been prepared and submitted with the application for development consent. The Outline CoCP includes measures in relation to flood risk during the construction phase. An Outline Operational Drainage Management Plan (document reference J10) for the substation site(s) has been prepared and submitted with the application for development consent. The Outline Operational Drainage Management Plan (document reference J10) has been prepared in line with Sustainable urban Drainage System (SuDS) principles including the recent National Standards for Sustainable Drainage Systems (Department for Environment, Food & Rural Affairs (DEFRA), 2025). The Operational Drainage Management Plan will include measures to ensure that existing land drainage is reinstated and/or maintained. This will include measures to limit discharge rates and attenuate flows to maintain greenfield runoff rates at the onshore substations. It will also include measures to control surface water runoff, including measures to prevent flooding of the working areas or offsite and to ensure any runoff is treated appropriately. The Operational Drainage Management Plan will be developed in line with the latest relevant drainage guidance notes in consultation with the Environment Agency and the Lead Local Flood Authority (Lancashire County Council). Taking into account the measures proposed, the assessment has not identified any significant effects arising from the Transmission Assets during the construction, operation and maintenance or decommissioning phases. In addition, it is concluded that there will be no significant cumulative effects from the Transmission Assets.
	5.8.38	In addition, the Development Consent Order, or any associated planning obligations, will need to make provision for appropriate operation and maintenance of any SuDS throughout the project's lifetime. Where this is secured through the adoption of any SuDS features, any necessary access rights to property will need to be granted.	Volume 1, Annex 3.1: Outline Code of Construction Practice of the ES (document reference F1.3.1) includes an Outline Surface Water and Groundwater Management Plan (Document reference J.19) and Outline Pollution Prevention Plan (Document reference J1.4). An Outline Operational Drainage Management Plan (document reference J10) for the substation site(s) has been prepared and submitted with the application for development consent . This includes conceptual drainage strategies which have been developed in accordance with the 2011 and draft 2023 NPS EN-1, NPPF, PPG ID7 the SuDS Manual, the recent National Standards for Sustainable Drainage Systems (Department for Environment, Food & Rural Affairs (DEFRA), 2025) and local council policy. The Outline Operational Drainage Management Plan also provides information regarding the management and maintenance of SuDS within the Morgan onshore substation and Morecambe onshore substation With regards to the substations, surface water from the 1 in 100-year storm event plus an allowance for climate change is to be stored within an attenuation pond, with flows to be discharged following the SuDS hierarchy. Further SuDS are to be determined at detailed design stage. The detailed Operational Drainage Management Plans (in accordance with the outline operational drainage management plan) will be submitted to and approved by the relevant local planning authority in consultation with the lead local flood authority and, the relevant highway authority in consultation with, and the Environment Agency as appropriate. This is secured through Requirement 20 of Schedule 2A and 2B of the draft DCO (C1/F09).
	5.8.39	Where relevant, the Secretary of State should be satisfied that the most appropriate body is being given the responsibility for maintaining any SuDS, taking into account the nature and security of the infrastructure on the proposed site. Responsible bodies could include, for example the landowner, the relevant lead local flood authority or water and sewerage company (through the Ofwat approved Sewerage Sector Guidance), or another body, such as an Internal Drainage Board.	
	5.8.40	If the EA, NRW or another flood risk management authority continues to have concerns and objects to the grant of development consent on the grounds of flood risk, the Secretary of State can grant consent, but would need to be satisfied before deciding whether or not to do so that all reasonable steps have been taken by the applicant and the authority to try to resolve the concerns.	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
	5.8.41	Energy projects should not normally be consented within Flood Zone 3b, or Zone C2 in Wales, or on land expected to fall within these zones within its predicted lifetime. This may also apply where land is subject to other sources of flooding (for example surface water). However, where essential energy infrastructure has to be located in such areas, for operational reasons, they should only be consented if the development will not result in a net loss of floodplain storage, and will not impede water flows.	The approach to flood risk and the assessment is described in the FRA (see (Volume 3, Annex 2.3: Flood Risk Assessment of the ES). Due to the nature and scale of the Transmission Assets, an FRA was prepared and is presented within Volume 3, Annex 2.3: Flood Risk Assessment of the ES (document reference F3.2.3) and demonstrate that the Transmission Assets meet the requirements of the NPS EN-1, the NPPF and the associated PPG ID7. The site selection process is detailed within Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES. Development has been steered towards areas of lowest flood risk, including Flood Zone 1, with onshore substation development platforms assessed to have a low risk of flooding. The Transmission Assets are partially located within Flood Zone 3 and have been subjected to and deemed to have passed the sequential test as presented within section 1.9.2 of Volume 3, Annex 2.3: Flood risk assessment of the ES. The Hydrology and Flood Risk Expert Working Group (EWG) met in May and August 2023 and January and May 2024 prior to the submission of the application. In attendance were representatives from stakeholders including the EA, Lancashire County Council, the Lead Local Flood Authority, and LPAs. The purpose of the EWG was to discuss hydrology and flood risk matters and to discuss concerns from stakeholders and to reach a solution. A summary of the key comments raised during consultation activities undertaken to date, specific to the FRA of the Transmission Assets is provided in Table 1.5 within Volume 3, Annex 2.3: Flood Risk Assessment of the ES (document reference F3.2.3). A technical meeting was also held with the EA in August 2024 to discuss queries and proposed approach in relation to the items raised to inform the preparation of the hydrology and flood risk chapter of the Environmental Statement (ES) prior to submission of the application. Since Examination, the EA and Lead local Flood Authority maintained its representations with respect to flood risk considerations which were all resolved as evidenced in the Statement of Common Grounds with the EA and Lancashire County Council Lead Local Flood Authority (document ref: S_D1_6.6 and S_D1_6.1 respectively).
	5.8.42	Exceptionally, where an increase in flood risk elsewhere cannot be avoided or wholly mitigated, the Secretary of State may grant consent if they are satisfied that the increase in present and future flood risk can be mitigated to an acceptable and safe level and taking account of the benefits of, including the need for, nationally significant energy infrastructure as set out in Part 3 above. In any such case the Secretary of State should make clear how, in reaching their decision, they have weighed up the increased flood risk against the benefits of the project, taking account of the nature and degree of the risk, the future impacts on climate change, and advice provided by the EA or NRW and other relevant bodies	
5.9 Historic Environment			
Applicant assessment	5.9.10	As part of the ES the applicant should provide a description of the significance of the heritage assets affected by the proposed development, including any contribution made by their setting. The level of detail should be proportionate to the importance of the heritage assets and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum, the applicant should have consulted the relevant Historic Environment Record (or, where the development is in English or Welsh waters, Historic England or Cadw) and assessed the heritage assets themselves using expertise where necessary according to the proposed development's impact.	The impact of the Transmission Assets on the significance of heritage assets is assessed within section 5.11 of Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5). The assessment has included the consideration of embedded mitigation measures and proposal of secondary (further) measures, which are detailed in Table 5.9. Consideration has also been given to the possible cumulative impacts, which is presented within section 5.13 of Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5).
	5.9.11	Where a site on which development is proposed includes, or the available evidence suggests it has the potential to include, heritage assets with an archaeological interest, the applicant should carry out appropriate desk-based assessment and, where such desk-based research is insufficient to properly assess the interest, a field evaluation. Where proposed development will affect the setting of a heritage asset, accurate representative visualisations may be necessary to explain the impact.	The baseline historic environment has been established through a review of available information acquired from appropriate sources including the National Heritage List for England (NHLE), the Lancashire Historic Environment Record (HER) and the Lancashire Archives. A description of the baseline heritage assets is provided in section 5.6.2 of Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5) and in Volume 3, Annex 5.1: Historic environment desk-based assessment of the ES (document reference F3.5.1).
	5.9.12	The applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage assets affected can be adequately understood from the application and supporting documents. Studies will be required on those heritage assets affected by noise, vibration,	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
		light and indirect impacts, the extent and detail of these studies will be proportionate to the significance of the heritage asset affected.	An assessment of the potential impacts and effects on heritage assets, resulting from the Transmission Assets, is presented within Volume 3, Annex 5.5: Settings assessment of the ES (document reference F3.5.5). The desk-based assessment is presented in Volume 3, Annex 5.1: Historic environment desk-based assessment of the ES (document reference F3.5.1). Field evaluation has been undertaken and the available results are presented in Volume 3, Annex 5.2: Onshore archaeological geophysical survey report of the ES (document reference F3.5.2), Volume 3, Annex 5.3: Intertidal archaeological survey report (document reference F3.5.3) and Volume 3, Annex 5.6: Interim trial trenching report of the ES (document reference F3.5.6). Representative visualisations have been produced for the assessment presented in Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10) (see Volume 3, Figure 10.6). Where relevant these have been used to assist in the assessment of impacts related to the settings of heritage assets. The impact of the Transmission Assets on the significance of heritage assets is assessed within section 5.11 of Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5), and supported by Volume 3, Annex 5.5: Settings assessment of the ES (document reference F3.5.5). A marine archaeology desktop assessment and technical report has been produced which informs the archaeological assessment (volume 2, appendix 8.1). The archaeological review of geophysical data is included in section 8.6.4 of Volume 2, Chapter 8: Marine Archaeology of the ES (document reference F2.8) and in Volume 2, Appendix 8.1: Marine archaeology technical report of the ES (document reference F2.8.1). The outline offshore WSI for archaeology (document reference: J17, as per CoT63, Volume 1, Annex 5.3 of the ES (document reference F1.5.3)) presents the archaeological input required prior to any site-specific work post-consent. The impacts on marine archaeology receptors, including magnitude, extent, and duration are presented in section 8.11 of Volume 2, Chapter 8: Marine Archaeology.
	5.9.13	The applicant is encouraged, where opportunities exist, to prepare proposals which can make a positive contribution to the historic environment, and to consider how their scheme takes account of the significance of heritage assets affected. This can include, where possible: • enhancing, through a range of measures such a sensitive design, the significance of heritage assets or setting affected • considering where required the development of archive capacity which could deliver significant public benefits • considering how visual or noise impacts can affect heritage assets, and whether there may be opportunities to enhance access to, or interpretation, understanding and appreciation of, the heritage assets affected by the scheme	
	5.9.14	Careful consideration in preparing the scheme will be required on whether the impacts on the historic environment will be direct or indirect, temporary, or permanent.	The impact of the Transmission Assets on the significance of heritage assets is assessed within section 5.11 of Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5). This includes consideration of the nature and timescale of any impacts. Where recording evidence of an asset is proposed, this is regarded as offsetting the impact rather than mitigating the impact. No opportunities for enhancement of the significance of heritage assets have been identified. A programme of further archaeological and geoarchaeological investigation is set out in the Outline Onshore and Intertidal Written Scheme of Investigation (document reference J9). This includes reference to the publication of evidence and the deposition of information with the Lancashire HER, also the deposition of the archive with the appropriate museum service. DCO Schedules 2A & 2B, Requirement 11 (onshore archaeology) within the draft DCO (document reference C1/F09) establishes that detailed site specific archaeological written schemes of investigation will be prepared in accordance with the Outline Onshore and Intertidal Written Scheme of Investigation (document reference J9) and agreed with the appropriate stakeholders. Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5) sets out a programme of further archaeological and geoarchaeological investigation to be undertaken ahead of and during construction.
	5.9.15	Applicants should look for opportunities for new development within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably.	
Mitigation	5.9.16	A documentary record of our past is not as valuable as retaining the heritage asset, and therefore the ability to record evidence of the asset should not be a factor in deciding whether such loss should be permitted, and whether or not consent should be given.	
	5.9.17	Where the loss of the whole or part of a heritage asset's significance is justified, the Secretary of State will require the applicant to record and advance understanding of the significance of the heritage asset before it is lost (wholly or in part). The extent of the requirement should be proportionate to the asset's importance and significance and the impact. The applicant should be required to publish this evidence and to deposit copies of the reports with the relevant Historic Environmental Record. They should also be required to deposit the archive generated in a local museum or other public repository willing to receive it.	
	5.9.18	Where appropriate, the Secretary of State will impose requirements on the Development Consent Order to ensure that the work is undertaken in a timely manner, in accordance with a written scheme of investigation that complies with the policy in this NPS and which has been agreed in writing with the relevant local authority, and to ensure that the completion of the exercise is properly secured.	

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	5.9.19	Where the loss of significance of any heritage asset has been justified by the applicant on the merits of the new development and the significance of the asset in question, the Secretary of State should consider: • imposing a requirement in the Development Consent Order • requiring the applicant to enter into an obligation	Objectives of archaeological research, based on research frameworks are written into the outline offshore WSI for archaeology (document reference: J17, as per CoT63). The objectives of the frameworks and the reporting on archaeological assessment of site-specific work will be reported to Historic England and the Online Access to the Index of Investigations (OASIS) and the Archaeology Data Service (ADS).
	5.9.20	That will prevent the loss occurring until the relevant part of the development has commenced, or it is reasonably certain that the relevant part of the development is to proceed.	
	5.9.21	Where there is a high probability (based on an adequate assessment) that a development site may include, as yet undiscovered heritage assets with archaeological interest, the Secretary of State will consider requirements to ensure appropriate procedures are in place for the identification and treatment of such assets discovered during construction.	
Secretary of State decision making	5.9.22	In determining applications, the Secretary of State should seek to identify and assess the particular significance of any heritage asset that may be affected by the proposed development, including by development affecting the setting of a heritage asset (including assets whose setting may be affected by the proposed development), taking account of: • relevant information provided with the application and, where applicable, relevant information submitted during the examination of the application any designation records, including those on the National Heritage List for England, or included on Cof Cymru for Wales. • historic landscape character records • the relevant Historic Environment Record(s), and similar sources of information • representations made by interested parties during the examination process • expert advice, where appropriate, and when the need to understand the significance of the heritage asset demands it	
	5.9.23	The Secretary of State must also comply with the requirements on listed buildings, conservation areas and scheduled monuments, set out in Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010.	The baseline historic environment has been established through a review of available information acquired from appropriate sources including the National Heritage List for England, the Lancashire Historic Environment Record and the Lancashire Archives. A description of the baseline heritage assets is provided in section 5.6.2 and in Volume 3, Annex 5.1: Historic environment desk-based assessment of the ES (document reference F3.5.1). In addition to the desk-based studies, field evaluation has been undertaken and the available results are presented in Volume 3, Annex 5.2: Onshore archaeological geophysical survey report of the ES, Volume 3, Annex 5.3: Intertidal archaeological survey report and Volume 3, Annex 5.6: Interim trial trenching report of the ES (document reference F5.3.2, F3.5.3, F3.5.6). Representative visualisations have been produced to inform the assessment and are presented in Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). Where relevant, these have been used to assist in the assessment of impacts related to the settings of heritage assets. No designated heritage assets would be directly physically impacted by the construction, operation and maintenance of the Transmission Assets. Any impacts on designated heritage assets would arise from a change within the setting of the asset. There are no World Heritage Sites, Registered Battlefields or Scheduled Monuments are within 1 km of the Onshore Infrastructure Area associated with construction of the installation of onshore cables. There are no Scheduled Monuments, Registered Parks and Gardens, Registered Battlefields or Conservation Areas within 5 km of the onshore substations.
	5.9.24	In considering the impact of a proposed development on any heritage assets, the Secretary of State should consider the particular nature of the significance of the heritage assets and the value that they hold for this and future generations. This understanding should be used to avoid or minimise conflict between their conservation and any aspect of the proposal.	
	5.9.25	The Secretary of State should consider the desirability of sustaining and, where appropriate, enhancing the significance of heritage assets, the contribution of their settings and the positive contribution that their conservation can make to sustainable communities, including to their quality of life, their economic vitality, and to the public's enjoyment of these assets.	
	5.9.26	The Secretary of State should also consider the desirability of the new development making a positive contribution to the character and local distinctiveness of the historic environment. The consideration of design should include scale, height, massing, alignment, materials, use and landscaping (for example, screen planting).	
	5.9.27	When considering the impact of a proposed development on the significance of a designated heritage asset, the Secretary of State should give great weight to the asset's conservation. The more important the asset, the greater the weight should be. This is irrespective of whether any potential harm amounts to substantial harm, total loss, or less than substantial harm to its significance.	
	5.9.28	The Secretary of State should give considerable importance and weight to the desirability of preserving all heritage assets. Any harm or loss of significance of a designated heritage asset (from its alteration or destruction, or from development within its setting) should require clear and convincing justification.	

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	5.9.29	Substantial harm to or loss of significance of a grade II Listed Building or a grade II Registered Park or Garden should be exceptional.	A number of listed buildings are located in the area surrounding the Transmission Assets. However, no significant effects on the significance of these assets as a result of change within their settings are identified. The Transmission Assets have been assessed as required by paragraph 5.9.9 of the NPS EN-1. The assessment carried out has confirmed that no significant effects in relation to historic environment have been identified, with effects resulting in less than substantial harm to the significance of designated or non-designated heritage assets. The sensitivity or value of heritage assets as used within the assessment methodology set out in Table 5.1 of Volume 3, Chapter 5: Historic Environment of the ES reflects the distinction between paragraphs 5.9.29 and 5.9.30 in relation to substantial harm to or loss of significance to a Grade II listed building/Registered Park or Garden being exceptional and the substantial harm to or loss of significant of assets of the highest significance (Scheduled Monuments, Protected Wrecks, Registered Battlefields, Grade I and II* listed buildings/Registered Park and Gardens and World Heritage Sites) being wholly exceptional. With respect to paragraph 5.9.28 of NPS EN-1, the assessment has concluded that there would be no impacts arising from the Transmission Assets that would result in substantial harm to the significance of those assets. The baseline historic environment has been established through a review of available information acquired from appropriate sources including the NHLE, the Lancashire HER and the Lancashire Archives. The historic environment baseline is summarised in section 5.6 of Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5) and presented in greater detail in Volume 3, Annex 5.1: Historic environment desk-based assessment of the ES (document reference F3.5.1) and in Volume 3, Annex 5.4: Geoarchaeological desk-based assessment of the ES (document reference F3.5.4). The legislative context relevant to the historic environment, including the Infrastructure Planning (Decisions) Regulations 2010 is detailed in section 5.2.1 of Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5). The historic environment baseline is summarised in section 5.6 of Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5) and presented in greater detail in Volume 3, Annex 5.1: Historic environment desk-based assessment of the ES (document reference F3.5.1) and in Volume 3, Annex 5.4: Geoarchaeological desk-based assessment of the ES (document reference F3.5.4). The impact of the Transmission Assets on the significance of heritage assets is assessed within section 5.11 of Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5). This is supported by Volume 3, Annex 5.5: Settings assessment of the ES (document reference F3.5.5). Mitigation measures are detailed in Table 5.9 of Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5). No opportunities for enhancement of the significance of heritage assets have been identified. Volume 1, Chapter 3: Project description of the ES (document reference F1.3) provides details of the design at the time of the draft DCO (document reference C1/F09).
	5.9.30	Substantial harm to or loss of significance of assets of the highest significance, including Scheduled Monuments; Protected Wreck Sites; Registered Battlefields; grade I and II* Listed Buildings; grade I and II* Registered Parks and Gardens; and World Heritage Sites, should be wholly exceptional.	
	5.9.31	Where the proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset the Secretary of State should refuse consent unless it can be demonstrated that the substantial harm to, or loss of, significance is necessary to achieve substantial public benefits that outweigh that harm or loss, or all the following apply: • the nature of the heritage asset prevents all reasonable uses of the site • no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation • conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible • the harm or loss is outweighed by the benefit of bringing the site back into use	
	5.9.32	Where the proposed development will lead to less than substantial harm to the significance of the designated heritage asset, this harm should be weighed against the public benefits of the proposal, including, where appropriate securing its optimum viable use.	
	5.9.33	In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.	
	5.9.34	Not all elements of a Conservation Area or World Heritage Site will necessarily contribute to its significance. Loss of a building (or other element) which makes a positive contribution to the significance of the Conservation Area or World Heritage Site should be treated either as substantial harm under paragraph 5.9.30 or less than substantial harm under paragraph 5.9.32, as appropriate, considering the relative significance of the element affected and its contribution to the significance of the Conservation Area or World Heritage Site as a whole.	
	5.9.35	Where there is evidence of deliberate neglect of, or damage to, a heritage asset, the Secretary of State should not take its deteriorated state into account in any decision.	
	5.9.36	When considering applications for development affecting the setting of a designated heritage asset, the Secretary of State should give appropriate weight to the desirability of preserving the setting such assets and treat favourably applications that preserve those elements of the setting that make a positive contribution to, or better reveal the significance of, the asset. When considering applications that do not do this, the Secretary of State should give great weight to any negative effects, when weighing them against the wider benefits of the application. The greater the negative impact on the significance of the designated heritage asset, the greater the benefits that will be needed to justify approval.	
5.10 Landscape and visual			
Introduction	5.10.4	Landscape effects arise not only from the sensitivity of the landscape but also the nature and magnitude of change proposed by the development, whose specific siting and design make the assessment a case-by-case judgement.	The potential landscape and visual effects of the Transmission Assets with respect to the townscapes are identified in section 10.7 and assessed in section 10.12 of Volume 3, Chapter 10: Landscape and visual resources of the ES

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			(document reference F3.10). Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.9 of Volume 3, Chapter 10 of the ES. Seascape has been scoped out of the LVIA in consultation with stakeholders due to no seapiercing structures forming part of the Transmission Assets, as described further in section 10.8 (Volume 3, Chapter 10: Landscape and Visual Resources of ES)
	5.10.5	Virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape, but there may also be beneficial landscape character impacts arising from mitigation.	The assessment of landscape and visual resources has been undertaken in accordance with the methodology set out in Volume 1, Chapter 5: Environmental assessment methodology of the ES (document reference F1.5) in addition to the guidance set out in section 10.2.3 of Volume 3, Chapter 10; Landscape and Visual Resources of ES (document reference F3.10). The methodology used for the assessment of landscape and visual resources, including the significance criteria used is provided in section 10.11 of Volume 3, Chapter 10 of the ES. A detailed explanation of the assessment methodology in accordance with Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3) (Landscape Institute and Institute for Environmental Management and Assessment (IEMA), 2013) is provided in Volume 3, Annex 10.4: Landscape and visual impact assessment methodology of the ES (document reference F3.10.4). The siting and design of the Transmission Assets is discussed in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4) and the Outline Design Principles (oDP) document (document reference J3). The principles of the oDP seek to guide the design process towards design outcomes that ensure that the substation sites would fit sensitively into the local context; mitigate (as far as possible) adverse environmental effects and respects local communities.
	5.10.6	Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.	The potential landscape and visual effects of the Transmission Assets with respect to the landscape character are assessed in section 10.12 of Volume 3, Chapter 10 of ES. Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.9 of Volume 3, Chapter 10: Landscape and Visual Resources of ES (document reference F3.10). The Outline Landscape Management Plan (document reference J2) sets out the landscape design proposals for enhancement of the local landscape, where practicable, and the Outline Design Principles document (document reference J3) sets out the process of achieving good design.
	5.10.12	Outside nationally designated areas, there are local landscapes that may be highly valued locally. Where a local development document in England or a local development plan in Wales has policies based on landscape or waterscape character assessment, these should be paid particular attention. However, locally valued landscapes should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.	The potential landscape and visual effects of the Transmission Assets with respect to the landscape character are assessed in section 10.12 of Volume 3, Chapter 10 of ES. Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.9 of Volume 3, Chapter 10: Landscape and Visual Resources of ES (document reference F3.10).
	5.10.13	All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites.	Justification for the location of the Transmission Assets, including a description of the design and environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and

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			consideration of alternatives of the ES and within the Outline Design Principles document (document reference J3). The potential landscape and visual effects of the Transmission Assets with respect to the landscape character are identified in section 10.7 and assessed in section 10.12 of Volume 3, Chapter 10: Landscape and Visual Resources of ES (document reference F3.10). Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.9 of Volume 3, Chapter 10 of ES and the Outline Landscape Management Plan (document reference J2).
	5.10.15	Coastal areas are particularly vulnerable to visual intrusion because of the potential high visibility of development on the foreshore, on the skyline and affecting views along stretches of undeveloped coast.	The potential visual receptors of the Transmission Assets are identified in section 10.7.3 and assessed in section 10.12 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). Measures adopted as part of the Transmission Assets to mitigate potential impacts on visual resources are provided in section 10.9 of Volume 3, Chapter 10: Landscape and Visual Resources of ES (document reference F3.10).
Applicant assessment	5.10.16	The applicant should carry out a landscape and visual impact assessment and report it in the ES, including cumulative effects (see Section 4.3). Several guides have been produced to assist in addressing landscape issues.	Visual receptors located within coastal areas have been considered in the assessment of landscape and visual resources. Visual receptors of the Transmission Assets are identified in section 10.7.3 and assessed in section 10.12 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). Measures adopted as part of the Transmission Assets to mitigate potential impacts on visual resources are provided in section 10.9 of Volume 3, Chapter 10: Landscape and Visual Resources of the ES.
Applicant assessment continued	5.10.17	The landscape and visual assessment should include reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project. The applicant's assessment should also take account of any relevant policies based on these assessments in local development documents in England and local development plans in Wales.	The potential landscape and visual effects of the Transmission Assets are identified in section 10.6 and assessed in section 10.11 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10) . Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.8 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). The potential cumulative landscape and visual effects of the Transmission Assets are considered in section 10.13 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). The assessment of landscape and visual resources has been undertaken in accordance with the methodology set out in Volume 1, Chapter 5: Environmental assessment methodology of the ES in addition to the guidance set out in section 10.2.3 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10) . The methodology used for the assessment of landscape and visual resources, including the significance criteria used is provided in section of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). A detailed explanation of the assessment methodology in accordance with GLVIA3 (Landscape Institute and IEMA, 2013) is provided in Volume 3, Annex 10.4: Landscape and visual resources impact assessment methodology of the ES (document reference F3.10.4).
	5.10.18	For seascapes, applicants should consult the Seascape Character Assessment and the Marine Plan Seascape Character Assessments, and any successors to them.	Seascape and Visual resources has been scoped out of the ES as agreed with stakeholders due to having no sea surface piercing infrastructure. Therefore, this paragraph of the National Policy Statements is not relevant to the Transmission Assets.
	5.10.19	The applicant should consider landscape and visual matters in the early stages of siting and design, where site choices and design principles are being established. This will allow the applicant to demonstrate in the ES how negative effects have been minimised and opportunities for creating positive benefits or enhancement have been recognised and incorporated into the design, delivery and operation of the scheme.	Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4) and the Outline Design Principles (oDP) document (document reference J3). The principles of the oDP seek to guide the design process towards design outcomes that ensure that the

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			substation sites would fit sensitively into the local context; mitigate (as far as possible) adverse environmental effects and respect local communities.
	5.10.20	The assessment should include the effects on landscape components and character during construction and operation. For projects which may affect a National Park, The Broads or an AONBs the assessment should include effects on the natural beauty and special qualities of these areas'.	The assessment includes impacts of the Transmission Assets on landscape components and character during construction, operation and maintenance and decommissioning, and these are identified in section 10.6.2 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10) and assessed in sections 10.11.2, 10.11.3 and 10.11.4 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). The Transmission Assets Order Limits are not located within or near any National Parks or National Landscapes (NLs).
	5.10.21	The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include light pollution effects, including on dark skies, local amenity, and nature conservation.	The potential landscape and visual effects during construction, operation and maintenance and decommissioning the Transmission Assets are identified in section 10.6 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10) and assessed in section 10.11 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). This includes consideration of light pollution effects during construction on local amenity, where relevant. The effects of light pollution with respect to nature conservation are considered separately in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3).
	5.10.22	The assessment should also address the landscape and visual effects of noise and light pollution, and other emissions (see Section 5.2 and Section 5.7), from construction and operational activities on residential amenity and on sensitive locations, receptors and views, how these will be minimised.	The potential landscape and visual effects during construction, operation and maintenance and decommissioning the Transmission Assets are identified in section 10.6 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10) and assessed in section 10.11 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). This includes consideration of light pollution effects during construction on residential amenity and views, where relevant. The effects of noise pollution on human and ecological receptors are considered in Volume 3, Chapter 8: Noise and vibration (document reference F3.8) and Chapter 3: Ecology and nature conservation of the ES (document reference F3.3) respectively.
	5.10.24	Applicants should consider how landscapes can be enhanced using landscape management plans, as this will help to enhance environmental assets where they contribute to landscape and townscape quality.	Measures set out to enhance environmental assets are set out within the Outline Landscape Management Plan (document reference J2), as summarised in Table 10.17 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10).
	5.10.25	In considering visual effects it may be helpful for applicants to draw attention, in the supporting evidence to their applications, to any examples of existing permitted infrastructure they are aware of with a similar magnitude of impact on equally sensitive receptors. This may assist the Secretary of State in judging the weight they should give to the assessed visual impacts of the proposed development.	The baseline assessment for landscape and visual resources is provided in section 10.6 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10) . This includes consideration of existing development, which has been used to inform the assessment of the potential landscape and visual effects of the Transmission Assets in section 10.11 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10) Examples of existing permitted infrastructure of a similar magnitude of impact include: Sheringham and Dudgeon extension project (Norfolk) Hornsea 3 offshore wind farm (Norfolk) East Anglia ONE North offshore windfarm (Suffolk). East Anglia TWO offshore windfarm (Suffolk)

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			For further details on these projects, refer to Appendix 3.2 of Applicants response to ExQ1 (document reference S_D3_3).
	5.10.26	Reducing the scale of a project can help to mitigate the visual and landscape effects of a proposed project. However, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function – for example, electricity generation output. There may, however, be exceptional circumstances, where mitigation could have a very significant benefit and warrant a small reduction in function. In these circumstances, the Secretary of State may decide that the benefits of the mitigation to reduce the landscape and/or visual effects outweigh the marginal loss of function.	Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.8 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10).The outline landscape design is set out within the Outline Landscape Management Plan (document reference J2) and Outline Design Principles document (document reference J3). The principles of the oDP seek to guide the design process towards design outcomes that ensure that the substation sites would fit sensitively into the local context; mitigate (as far as possible) adverse environmental effects and respect local communities.
Mitigation	5.10.27	Adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within its development site and wider setting. The careful consideration of colours and materials will support the delivery of a well-designed scheme, as will sympathetic landscaping and management of its immediate surroundings.	Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4). Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.8 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). The outline landscape design is set out within the Outline Landscape Management Plan (document reference J2) and Outline Design Principles document (oDP) (document reference J3). The principles of the oDP seek to guide the design process towards design outcomes that ensure that the substation sites would fit sensitively into the local context; mitigate (as far as possible) adverse environmental effects and respect local communities
	5.10.28	Depending on the topography of the surrounding terrain and areas of population it may be appropriate to undertake landscaping off site. For example, filling in gaps in existing tree and hedge lines may mitigate the impact when viewed from a more distant vista.	Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.8 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). The outline landscape design is set out within the Outline Landscape Management Plan (document reference J2) and Outline Design Principles document (document reference J3).
Secretary of State decision making	5.10.29	The Secretary of State should take into consideration the level of detailed design which the applicant has provided and is secured in the Development Consent Order, and the extent to which design details are subject to future approvals.	A MDS has been used for this draft DCO (document reference C1/F09) including for the export cable installation at the landfall and the substations which ensures that a reasonable assessment of the effects of the various impacts associated with the proposal has been taken into consideration, in compliance with this requirement. The Transmission Assets has been designed in accordance with the Outline Design Principles Document (document reference J3).
	5.10.30	The Secretary of State should be satisfied that local authorities will have sufficient design content secured to ensure future consenting will meet landscape, visual and good design objectives.	
	5.10.32	When considering applications for development within National Parks, the Broads and AONBs the conservation and enhancement of the natural beauty should be given substantial weight by the Secretary of State in deciding on applications for development consent in these areas. The Secretary of State may grant development consent in these areas in exceptional circumstances. Such development should be demonstrated to be in the public interest and consideration of such applications should include an assessment of: • the need for the development, including in terms of national considerations, and the impact of consenting or not consenting it upon the local economy; • the cost of, and scope for, developing all or part of the development elsewhere outside the designated area or meeting the need for it in some other way, taking account of the policy on alternatives set out in Section 4.3; and • any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.	There are no landscape designations such as National Parks, AONBs, NLs, Registered Parks and Gardens or World Heritage Sites within the Order Limits or impacted by the Transmission Assets.

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	5.10.33	For development proposals located within designated landscapes the Secretary of State should be satisfied that measures which seek to further purposes of the designation are sufficient, appropriate and proportionate to the type and scale of the development. The Secretary of State should ensure that any projects consented in these designated areas should be carried out to high environmental standards, including through the application of appropriate requirements where necessary.	
	5.10.34	The duty to seek to further the purposes of nationally designated landscapes also applies when considering applications for projects outside the boundaries of these areas, which may have impacts within them. The aim should be to avoid harming the purposes of designation or to minimise adverse effects on designated landscapes, and such projects should be designed sensitively given the various siting, operational, and other relevant constraints. The fact that a proposed project will be visible from within a designated area should not in itself be a reason for the Secretary of State to refuse consent.	
	5.10.35	The scale of energy projects means that they will often be visible across a very wide area. The Secretary of State should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project.	Information on landscape and visual resources within the study area was collected through a desktop review of published landscape and seascape character assessments, site surveys and photography during summer and winter. Section 10.16 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10) presents a summary of impacts, measures adopted as part of the Transmission Assets and residual effects in respect to LVIA. The impacts assessed include impacts on landscape character and visual amenity and visual receptors during the daytime and at night, during the construction /decommissioning phase and the operation/maintenance phase. The landscape proposals around the onshore substations are included as further secondary mitigation, which is reflected in the assessment of residual effects. The majority of landscape and visual effects as a result of the onshore elements of Transmission Assets are considered not to be significant and those which have been identified as significant are related to temporary impacts during construction and early operation (year 1) with no significant permanent visual effects predicted by Year 15, once the landscape proposals, as set out in the Outline Landscape Management Plan (document reference J2) and Outline Design Principles document (document reference J3) have become established.
	5.10.36	In reaching a judgement, the Secretary of State should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the Secretary of State considers reasonable.	
	5.10.37	The Secretary of State should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by appropriate mitigation	
	5.10.38	The Secretary of State should consider whether requirements to the consent are needed requiring the incorporation of particular design details that are in keeping with the statutory and technical requirements for landscape and visual impacts	
5.11 Land use, including open space, green infrastructure and green belt			
Introduction	5.11.2	Green Belts, defined in a local authority's development plan in England or regional strategic development plans in Wales, are situated around certain cities and large built-up areas. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and permanence. For further information on the purposes of Green Belt policy see chapter 13 of the NPPF, or any successor to it.	Existing and proposed land uses within or near the Onshore Order Limits and Intertidal Infrastructure Area, including public open space are identified in section 6.6 of Volume 3 Chapter 6: Land use and recreation of the ES (document reference F3.6) and assessed in section 6.11. It is acknowledged that elements of the Transmission Assets run through areas of Green Belt. An assessment of Transmission Assets against Green Belt policy is provided at 5.24 of the Planning Statement (document reference J28), and more details are provided within the Green Belt Technical Note REP4-092). The potential impacts of the Transmission Assets with respect to agricultural land, including best and most versatile soils are identified in section 6.6 of Volume 3 Chapter 6: Land use and recreation of the ES (document reference F3.6) and assessed in section 6.11. Measures adopted as part of the Transmission Assets to mitigate potential impacts on land use and recreation are provided in section 6.8 of this chapter of the ES. This includes the preparation of a Soil Management Plan in general accordance with the Outline Soil Management Plan (document reference J17), which has been submitted with the DCO application. The measures to be implemented as part of the Outline Soil Management Plan seek to minimise impacts on soil health and protect and maintain soil quality during construction of the Transmission Assets.
	5.11.4	Development of land will affect soil resources, including physical loss of and damage to soil resources, through land contamination and structural damage. Indirect impacts may also arise from changes in the local water regime, organic matter content, soil biodiversity and soil process.	
	5.11.6	The government's policy is to ensure there is adequate provision of high quality open space and sports and recreation facilities to meet the needs of local communities. Connecting people with open spaces, sports and recreational facilities all help to underpin people's quality of life and have a vital role to play in promoting healthy living.	
Applicant assessment	5.11.8	The ES (see Section 4.3) should identify existing and proposed land uses near the project, any effects of replacing an existing development or use of the site with the proposed project or preventing a development or use on a neighbouring site from continuing. Applicants should also assess any effects of precluding a new development or use proposed in the development plan. The assessment should be proportionate to the scale of the preferred scheme and its likely impacts on such receptors. For developments on previously developed land, the applicant should ensure that they have considered the risk posed by land contamination and how it is proposed to address this.	

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			An Outline Open Space Management Plan has been appended to the Outline PRoW Management Plan, which includes measures to minimise potential impacts to the users of Lytham St Annes beach and Blackpool Road Recreation Ground.
	5.11.9	Applicants will need to consult the local community on their proposals to build on existing open space, sports or recreational buildings and land. Taking account of the consultations, applicants should consider providing new or additional open space including green and blue infrastructure, sport or recreation facilities, to substitute for any losses as a result of their proposal. When considering proposals for green infrastructure, Applicants should refer to the Green Infrastructure Framework.	Existing and proposed land uses are identified and assessed in Volume 3, Chapter 6: Land Use and Recreation of the ES (document reference F3.6). Existing and proposed land uses located within the Transmission Assets project area are identified in section 6.6 Volume 3, Chapter 6: Land Use and Recreation of the ES (document reference F3.6). Measures adopted as part of the Transmission Assets to mitigate impacts on existing and proposed land uses within the land use and recreation study area are considered in section 6.8 of the chapter and the likely significant effects are assessed in section 6.11 of Volume 3, Chapter 6: Land Use and Recreation of the ES (document reference F3.6). The assessment of land use and recreation determined that there would be no significant effects on existing or proposed land uses during construction, operation and maintenance and decommissioning of the Project other than the loss of BMV land. With respect to contaminated land, this is considered in Volume 3, Chapter 1: Geology, hydrogeology and ground conditions of the ES (document reference F3.1) and supporting documentation. As such, contaminated land has not been considered further in this chapter of the ES. The risks posed by land contamination are considered in qualitative assessment summarised in section 1.6.6 and section 1.11 of Volume 3 Chapter 1: Geology, hydrology and ground conditions of the ES (document reference F3.1), with further details of baseline conditions provided in Volume 3, Annex 1.1: Phase 1 Geo-Environmental Preliminary Risk Assessment of the ES (document reference F3.1.1).
	5.11.10	Applicants should use any up-to-date local authority assessment or, if there is none, provide an independent assessment to show whether the existing open space, sports and recreational buildings and land is surplus to requirements.	Consultation has taken place between the Applicants and the local community at a number of stages prior to submission of the DCO application for the Transmission Assets. Consultation undertaken to date which is of relevance to the assessment land use and recreation for the Transmission Assets is set out in section 6.3 of Volume 3, Chapter 6: Land Use and Recreation of the ES (document reference F3.6). The potential impacts of the Transmission Assets with respect to recreational resources, including open space, sports or recreational buildings and land are identified in section 6.6 and assessed in section 6.11. Measures adopted as part of the Transmission Assets to mitigate potential impacts on land use and recreation are provided in section 6.8 of Volume 3, Chapter 6: Land Use and Recreation of the ES (document reference F3.6).
	5.11.11	During any pre-application discussions with the applicant the LPA should identify any concerns it has about the impacts of the application on land use, having regard to the development plan and relevant applications and including, where relevant, whether it agrees with any independent assessment that the land is surplus to requirements.	
	5.11.12	Applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5).	Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES. A range of sites were considered during site selection using provisional and detailed source mapping. The Applicants acknowledge that all potential sites were likely to contain some BMV land, particularly sub-grade 3A, and that this was considered alongside other factors in the selection process. In relation to the permanent loss of the best and most versatile land, Table 4.7 of F1.4.3 contains the BRAG assessment of the Onshore Substations zones. All zones were identified to have intermediate potential to constrain development meaning that the impact to Best and Most Versatile Land could not be avoided.

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			The potential impacts of the Transmission Assets with respect to agricultural land, including best and most versatile soils are identified in section 6.6 of Volume 3, Chapter 6: Land Use and Recreation of the ES (document reference F3.6) . A note with further detail on compliance with section 5.11 of NPS EN-1 was provided at Deadline 1 (REP1-043). The installation of the onshore cable corridor would only result in the temporary loss of agricultural land including best and most versatile land. This is because the cables will be buried for their entire length and the land reinstated post-construction. The only areas where there is permanent loss of agricultural land is at the onshore substation sites and link boxes along the onshore cable corridor. However the highest quality Grade 1 within the definition of best and most versatile land was avoided and the detailed survey work undertaken at the onshore substation sites has identified them to comprise only areas of Subgrade 3a land which comprises the lowest quality land within the definition of best and most versatile land.
	5.11.13	Applicants should also identify any effects and seek to minimise impacts on soil health and protect and improve soil quality taking into account any mitigation measures proposed.	The impacts of the Transmission Assets with respect to agricultural land, including best and most versatile soils are identified in section 6.6 and assessed in section 6.11 of Volume 3, Chapter 6: Land Use and Recreation of the ES (document reference F3.6). Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in section 6.8. This includes the preparation of detailed Soil Management Plan(s) in accordance with the Outline Soil Management Plan (document reference J1.7), which has been submitted with the DCO application. The outline soil management plan and the measures contained within it has been developed in accordance with recognised best practice guidance in the Department for Environment and Rural Affairs (Defra) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (2009) and Institute of Quarrying (IoQ) Good Practice Guide for Handling Soils in Mineral Workings (2021). The outline Soil Management Plan at Section 1.6 identifies that, in addition to the soil survey data that has been undertaken to inform the ES, further soil surveys will be undertaken at a density of 1 auger boring/ha to inform the detailed soil management plan(s).
	5.11.14	Applicants are encouraged to develop and implement a Soil Management Plan which could help minimise potential land contamination. The sustainable reuse of soils needs to be carefully considered in line with good practice guidance where large quantities of soils are surplus to requirements or are affected by contamination.	
	5.11.15	Developments should contribute to and enhance the natural and local environment by preventing new and existing developments from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability.	The potential effects of the Transmission Assets with respect to soil, air, water and noise and land stability have been considered within Volume 3, Chapter 6: Land Use and Recreation (document reference F3.6), Chapter 9: Air Quality (document reference F3.9), Chapter 2: Hydrology and Flood Risk (document reference F3.2) and Chapter 8: Noise and Vibration (document reference F3.8) of the ES respectively. Land instability is considered (where relevant) in Volume 3, Chapter 1: Geology, hydrogeology and ground conditions of the ES (document reference F3.1). Each chapter sets out suitable mitigation measures adopted as part of the Transmission Assets to avoid or reduce potential effects on soil, air, water and noise or land stability during the construction, operation and maintenance and decommissioning phase. A Preliminary Risk Assessment is provided in Volume 3, Annex 1.1: Phase 1 Geo-Environmental Preliminary Risk Assessment of the ES (document reference F3.1.1). Effects associated with existing contamination are considered in section 1.11.3, 1.11.7 and 1.11.10 of Volume 3 Chapter 1: Geology, hydrogeology and ground conditions of the ES (document reference F3.1).
	5.11.16	Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans.	
	5.11.17	Applicants should ensure that a site is suitable for its proposed use, taking account of ground conditions and any risks arising from land instability and contamination.	
	5.11.18	For developments on previously developed land, applicants should ensure that they have considered the risk posed by land contamination, and where contamination is present, applicants should consider	A Preliminary Risk Assessment is provided in Volume 3, Annex 1.1: Phase 1 Geo-Environmental Preliminary Risk Assessment of the ES (document reference F3.1.1). A ground investigation will be completed with an assessment of the

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		opportunities for remediation where possible. It is important to do this as early as possible as part of engagement with the relevant bodies before the official pre-application stage.	potential risks arising from any contamination identified and a remediation strategy prepared as necessary (CoT 118, Volume 1, Annex 5.3 of the ES (document reference F1.5.3)).
	5.11.19	Applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place.	The design of the Transmission Assets has aimed to avoid significant harm to mineral resources, where possible. The approach to site selection and consideration of alternatives is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4). Effects on mineral resources are considered in section 1.11.11 of Volume 3 Chapter 1: Geology, Hydrogeology and Ground Conditions of the ES (document reference F3.1).
	5.11.20	The general policies controlling development in the countryside apply with equal force in Green Belts but there is, in addition, a general presumption against inappropriate development within them. Such development should not be approved except in very special circumstances. Applicants should therefore determine whether their proposal, or any part of it, is within an established Green Belt and if it is, whether their proposal may be inappropriate development within the meaning of Green Belt policy (see paragraph 5.11.36 below).	Paragraph 5.11.22 of NPS EN-1 confirms that 'an applicant may be able to demonstrate that energy infrastructure, such as an underground pipeline, may be considered as an engineering operation and regarded as not inappropriate in the Green Belt'. In addition, NPS EN-1 paragraph 5.11.37 confirms the Secretary of State should ensure 'substantial weight is given to any harm to the Green Belt when considering any application for such development, while taking account, in relation to renewable and linear infrastructure, of the extent to which its physical characteristics are such that it has limited or no impact on the fundamental purposes of Green Belt designation'. The Green Belt Technical Note (REP4-092) addresses which elements of the Transmission Assets comprise 'engineering operations' for the purposes for paragraph 5.11.22 (and paragraph 154 of the NPPF 2025) and the extent to which the Transmission Assets will impact the Green Belt in Section 1.6.4. It is worth noting that the Transmission Assets are considered to constitute CNP infrastructure. As such, the starting point for decision making is that CNP infrastructure is to be treated as if it has met any tests which are set out within the NPSs, or any other planning policy, which requires a clear outweighing of harm, exceptionality, or very special circumstances where the mitigation hierarchy has been applied. Sections 1.3, 1.4 and 1.5 of the Green Belt Technical Note (REP4-092), demonstrate how the Applicants have applied the mitigation hierarchy to avoid, minimise and mitigate impacts and harm to the Green Belt as far as practicable. Consequently, the starting point for determination should be that the test for very special circumstances is presumed to have been met. Further detail on the interaction between Green Belt and the Transmission Assets as CNP infrastructure was provided in response to hearing action point ISH4_45 (see REP6-176).
	5.11.21	However, infilling or redevelopment of major developed sites in the Green Belt, if identified as such by the local planning authority, may be suitable for energy infrastructure. It may help to secure jobs and prosperity without further prejudicing the Green Belt or offer the opportunity for environmental improvement. Applicants should refer to relevant criteria on such developments in Green Belts.	
	5.11.22	Moreover an applicant may be able to demonstrate that particular energy infrastructure, such as an underground pipeline, may be considered an "engineering operation" and regarded as not inappropriate in Green Belt. This is provided it preserves the openness of the Green Belt and does not conflict with the purposes of Green Belt designation. It may also be possible for an applicant to show that the physical characteristics of a proposed overhead line in a particular location would not have so harmful an impact as to conflict with the purposes of Green Belt designation, or with other protections of rural landscape.	
Mitigation	5.11.23	Although in the case of most energy infrastructure there may be little that can be done to mitigate the direct effects of an energy project on the existing use of the proposed site (assuming that some of that use can still be retained post project construction) applicants should nevertheless seek to minimise these effects and the effects on existing or planned uses near the site by the application of good design principles, including the layout of the project and the protection of soils during construction.	
	5.11.24	Where green infrastructure is affected, the Secretary of State should consider imposing requirements to ensure the functionality and connectivity of the green infrastructure network is maintained in the vicinity of the development and that any necessary works are undertaken, where possible, to mitigate any adverse impact and, where appropriate, to improve that network and other areas of open space including appropriate access to National Trails and other public rights of way and new coastal access routes	Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4). Existing and proposed land uses within or near the Onshore Order Limits are identified in section 6.6 and assessed in section 6.11 of Volume 3, Chapter 6: Land Use and Recreation of the ES (document reference F3.6). Measures adopted as part of the Transmission Assets to mitigate potential impacts on land use and recreation are provided in section 6.8. This includes the preparation of a Soil Management Plan in general accordance with the Outline Soil Management Plan (document reference J1.7), which has been submitted with the DCO application. The measures to be implemented as part of the Soil Management Plan seek to minimise impacts on soil health and protect and maintain soil quality during construction of the Transmission Assets.
	5.11.25	The Secretary of State should also consider whether any adverse effect on green infrastructure and other forms of open space is adequately mitigated or compensated by means of any planning	The impacts of the Transmission Assets with respect to recreational resources, including open space, are identified in section 6.6 and assessed in section 6.11 of

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		obligations, for example exchange land and provide for appropriate management and maintenance agreements. Any exchange land should be at least as good in terms of size, usefulness, attractiveness and quality, and accessibility.	Volume 3, Chapter 6: Land use and recreation of the ES (document reference F3.6). Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in section 6.8 of this chapter. This includes the preparation of an Open Space Management Plan in general accordance with the Outline Open Space Management Plan, which is part of the Outline Public Rights of Way Management Plan (document reference J1.5), which has been submitted with the application for development consent and is secured by Requirement 8 of Schedules 2A and 2B to the DCO. The aim of the Outline PRoW Management Plan is to seek to maintain access within the existing PRoW for the public during construction and operation of the Transmission Assets. However, where this has not been possible, proposed indicative temporary diversions or permanent gated crossings (i.e. for the Morecambe onshore substation) have been identified as part of this Outline PRoW Management Plan (J1.5/F05). The measures to be implemented as part of the Open Access Management Plan seek to minimise impacts on Blackpool Road Playing Field during construction of the Transmission Assets. These impacts are further mitigated by the Applicants' commitment to enter into a s106 agreement with the Council with regard to mitigating the temporary impacts on the Blackpool Road Playing Field. This is secured by the provision of a without prejudice Grampian condition at Requirement 28 of Schedules 2A and 2B of the draft DCO (C1/F09). The Applicants further provided detail on compliance with s132 of the Planning Act in Appendix B of REP5-138.
	5.11.26	Alternatively, where sections 131 and 132 of the Planning Act 2008 apply, replacement land provided under those sections will need to conform to the requirements of those sections.	
	5.11.27	Existing trees and woodlands should be retained wherever possible. In the EIP, the Government committed to increase the tree canopy and woodland cover to 16.5% of total land area of England by 2050. The applicant should assess the impacts on, and loss of, all trees and woodlands within the project boundary and develop mitigation measures to minimise adverse impacts and any risk of net deforestation as a result of the scheme. Mitigation may include, but is not limited to, the use of buffers to enhance resilience, improvements to connectivity, and improved woodland management. Where woodland loss is unavoidable, compensation schemes will be required, and the long-term management and maintenance of newly planted trees should be secured.	An assessment of trees and woodland within the project boundary is set out within Volume 3, Annex 10.5: Tree survey and arboricultural impact assessment of the ES (document reference F3.10.5). The Outline Ecological Management Plan (document reference J6) contains information on the measures that will be implemented ensure that risk of disturbance or damage to species or habitats is minimised, and for restoration of habitats that are unavoidably affected. The Arboriculture Method Statement (S_D5_10 F01), which forms an appendix to the outline Code of Construction Practice (CoCP, document reference J1), sets out measures that will be implemented for the protection and removal of trees during the construction of the onshore and intertidal elements of the Transmission Assets to reduce the impacts on trees (as far as possible). It also sets out that where ancient woodlands/veteran trees have been identified, both within and outside the Order Limits, an appropriate buffer has been determined along with appropriate tree protection fencing where necessary. Detailed Arboriculture Method Statements will be developed post-consent as secured by Requirement 8 of Schedules 2A and 2B of the draft DCO (C1/F09). In terms of compensation and enhancement, details are provided in the outline Biodiversity Benefit Management Plan (document reference J11/F06). The Applicants are committed to engaging with stakeholders to deliver further qualitative benefits to biodiversity.
	5.11.28	Where a proposed development has an impact upon a Mineral Safeguarding Area (MSA), the Secretary of State should ensure that appropriate mitigation measures have been put in place to safeguard mineral resources	The impact on MSA is considered in section 1.11.11.3 of Volume 3 Chapter 1: Geology, Hydrogeology and Ground Conditions of the ES (document reference F3.1).
	5.11.29	Where a project has a sterilising effect on land use (for example in some cases under transmission lines) there may be scope for this to be mitigated through, for example, using or incorporating the land for nature conservation or wildlife corridors or for parking and storage in employment areas.	Existing and proposed land uses within or near the Onshore Order Limits and Intertidal Infrastructure Area are identified in section 6.6 and assessed in section 6.11 of Volume 3, Chapter 6: Land Use and Recreation of the ES (document reference F3.6). Measures adopted as part of the Transmission Assets to mitigate potential impacts on land use and recreation are provided in section 6.8.

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	5.11.30	Public Rights of way, National Trails, and other rights of access to land are important recreational facilities for example for walkers, cyclists and horse riders. The Secretary of State should expect applicants to take appropriate mitigation measures to address adverse effects on coastal access, National Trails, other rights of way and open access land and, where appropriate, to consider what opportunities there may be to improve or create new access. In considering revisions to an existing right of way, consideration should be given to the use, character, attractiveness, and convenience of the right of way	PRoW, National Trails, coastal access and other rights of access to land within or near the Onshore Order Limits are identified in section 6.6 and assessed in section 6.11 of Volume 3, Chapter 6: Land Use and Recreation of the ES (document reference F3.6). Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in section 6.8 of the chapter. This includes the preparation of a PRoW Management Plan in general accordance with the Outline Public Rights of Way Management Plan (document reference J1.5), which has been submitted with the application for development consent and is secured by Requirement 8 of Schedules 2A and 2B of the DCO. The aim of the Outline PRoW Management Plan is to seek to maintain access within the existing PRoW for the public during construction and operation of the Transmission Assets. However, where this has not been possible, proposed indicative temporary diversions or permanent gated crossings (i.e. for the Morecambe onshore substation) have been identified as part of this Outline PRoW Management Plan (J1.5/F05).The measures to be implemented as part of the PRoW Management Plan seek to minimise impacts on public footpaths, bridleways and other promoted routes (e.g., NCRs, Long Distance Footpaths) during construction of the Transmission Assets.
	5.11.31	The Secretary of State should consider whether the mitigation measures put forward by an applicant are acceptable and whether requirements or other provisions in respect of these measures should be included in any grant of development consent	Measures adopted as part of the Transmission Assets and an explanation of why these are acceptable to mitigate impacts on land use and recreation are provided in section 6.8 of Volume 3, Chapter 6: Land use and recreation of the ES (document reference F3.6). This includes the preparation of a PRoW Management Plan and Soil Management Plan in general accordance with the Outline Public Rights of Way Management Plan (document reference J1.5) and Outline Soil Management Plan (document reference J1.7), which have been submitted with the application for development consent and are secured by Requirement 8 of Schedules 2A and 2B of the draft DCO.
Secretary of State decision making	5.11.32	The Secretary of State should not grant consent for development on existing open space, sports and recreational buildings and land unless an assessment has been undertaken either by the local authority or independently, which has shown the open space or the buildings and land to be surplus to requirements or the Secretary of State determines that the benefits of the project (including need), outweigh the potential loss of such facilities, taking into account any positive proposals made by the applicant to provide new, improved or compensatory land or facilities.	The impacts of the Transmission Assets with respect to recreational resources, including open space, sports or recreational buildings and land are identified in section 6.6 and assessed in section 6.11 of Volume 3, Chapter 6: Land use and recreation of the ES (document reference F3.6). Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in section 6.8 of this chapter of the ES.
	5.11.33	The loss of playing fields should only be allowed where applicants can demonstrate that they will be replaced with facilities of equivalent or better quantity or quality in a suitable location.	The impacts of the Transmission Assets with respect to recreational resources, including playing fields, are identified in section 6.6 and assessed in section 6.11 of Volume 3, Chapter 6: Land use and recreation of the ES (document reference F3.6). Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in section 6.8 of this chapter.
	5.11.34	The Secretary of State should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. Where schemes are to be sited on best and most versatile agricultural land the Secretary of State should take into account the economic and other benefits of that land. Where development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.	Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES. A range of sites were considered during site selection using provisional and detailed source mapping. The Applicants acknowledge that all potential sites were likely to contain some BMV land, particularly sub-grade 3A, and that this was considered alongside other factors in the selection process. In relation to the permanent loss of the best and most versatile land, Table 4.7 of F1.4.3 contains the BRAG assessment of the Onshore Substations zones. All zones were identified to have intermediate potential to constrain development meaning that the impact to Best and Most Versatile Land could not be avoided. The potential impacts of the Transmission Assets with respect to agricultural land, including best and most versatile soils are identified in section 6.6 of Volume 3, Chapter 6: Land Use and Recreation of the ES (document reference F3.6) .

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			The installation of the onshore cable corridor would only result in the temporary loss of agricultural land including best and most versatile land. This is because the cables will be buried for their entire length and the land reinstated post-construction. The only areas where there is permanent loss of agricultural land is at the onshore substation sites and link boxes along the onshore cable corridor. However the highest quality Grade 1 within the definition of best and most versatile land was avoided and the detailed survey work undertaken at the onshore substation sites has identified them to comprise only areas of Subgrade 3a land which comprises the lowest quality land within the definition of best and most versatile land.
	5.11.35	In considering the impact on maintaining coastal recreation sites and features, the Secretary of State should expect applicants to have taken advantage of opportunities to maintain and enhance access to the coast. In doing so the Secretary of State should consider the implications for development of the creation of a continuous signed and managed route around the coast, as provided for in the Marine and Coastal Access Act 2009.	The impacts of the Transmission Assets with respect to recreational resources, including coastal areas, are identified in section 6.6 and assessed in section 6.11 of this chapter of the ES. Measures adopted as part of the Transmission Assets to mitigate impacts on land use and recreation are provided in section 6.8 of Volume 3, Chapter 6: Land use and recreation of the ES (document reference F3.6). With respect to offshore enhancements to be included as part of the Transmission Assets, these are described in Marine Enhancement Statement (document reference J12). With respect to onshore enhancements, these are included within relevant sections of the Outline Ecological Management Plan (document reference J6) and Outline Landscape Management Plan (document reference J2).
	5.11.36	When located in the Green Belt, energy infrastructure projects may comprise 'inappropriate development'. Inappropriate development is by definition harmful to the Green Belt. The NPPF makes clear that most new building is inappropriate in Green Belt and should be refused permission unless in very special circumstances.	See response at Paragraph 5.11.20 – 5.11.22 of NPS-EN1.
	5.11.37	Very special circumstances are not defined in national planning policy as it is for the individual decision maker to assess each case on its merits and give relevant circumstances their due weight. However, when considering any planning application affecting Green Belt land, the Secretary of State should ensure that substantial weight is given to any harm to the Green Belt when considering any application for such development, while taking account, in relation to renewable and linear infrastructure, of the extent to which its physical characteristics are such that it has limited or no impact on the fundamental purposes of Green Belt designation. Very special circumstances may include the wider environmental benefits associated with increased production of energy from renewables and other low carbon sources.	
	5.11.38	In England, Local Green Spaces may be designated locally in Local Plans and Neighbourhood Plans. These enjoy the same protection as Green Belt in England and the Secretary of State should adopt a similar approach.	The Transmission Assets do not affect any Local Green Spaces. Open greenspace has been assessed in section 6.11 of Volume 3, Chapter 6: Land use and recreation of the ES (document reference F3.6). It has been concluded that there are no significant adverse effects on such spaces.
Noise and vibration			
Applicant assessment	5.12.6	Where noise impacts are likely to arise from the proposed development, the applicant should include the following in the noise assessment: • a description of the noise generating aspects of the development proposal leading to noise impacts, including the identification of any distinctive tonal characteristics, if the noise is impulsive, whether the noise contains particular high or low frequency content or any temporal characteristics of the noise • identification of noise sensitive receptors and noise sensitive areas that may be affected • the characteristics of the existing noise environment • a prediction of how the noise environment will change with the proposed development o in the shorter term, such as during the construction period	The noise assessment undertaken in the ES complies with the requirements of Paragraphs 5.12.6. The relevant information can be found in: • Volume 3, Chapter 3, Onshore Ecology and Nature Conservation (document reference F3.3) • Volume 3, Chapter 5, Historic Environment (document reference F3.5) • Volume 3, Chapter 8, Noise and Vibration (document reference F3.3) • Volume 3, Annex 8.2, Construction Noise and vibration (document reference F3.8.2)

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		o in the longer term, during the operating life of the infrastructure o at particular times of the day, evening and night (and weekends) as appropriate, and at different times of year • an assessment of the effect of predicted changes in the noise environment on any noise-sensitive receptors, including an assessment of any likely impact on health and quality of life / well-being where appropriate, particularly among those disadvantaged by other factors who are often disproportionately affected by noise-sensitive areas • if likely to cause disturbance, an assessment of the effect of underwater or subterranean noise • all reasonable steps taken to mitigate and minimise potential adverse effects on health and quality of life	• Volume 3, Annex 8.3, Operational Noise (document reference F3.8.3) Section 9 of BS 4142:2014+A1:2019 provides a methodology for identification of tonal, impulsive or low frequency content of a sound from industrial and commercial sources, and how this is to be considered within the assessment. This primarily relates to the operational noise arising from the onshore substations. This method has been used to identify such characteristics from the operational sound sources within the onshore substations. In regard to distinctive tonal components and those of low frequency, one method for their identification is through analysis of the associated frequency spectrum. Graph 1.1 of the Operational Noise Annex of the ES, shows a typical frequency spectrum associated with a Super Grid Transformer. Annex C of BS 4142:2014+A1:2019 identifies the low frequencies to be between 25 and 125 Hz, and states in this range, a distinctive tone can be identified based on a 15 dB difference between the adjacent one-third octave bands in this range. Using Graph 1.1 of F3.8.3 Volume 3, Annex 8.3: Operational Noise to demonstrate this, should there be a 15 dB difference between the decibel level of the 100 Hz tone and the 80 Hz tone, as well as between the 100 Hz tone and 125 Hz tone, the sound has a distinctive tonal component. As shown on Graph 1.1, there is a 15 dB difference, where the 100 Hz tone is approximately 80 dB, and the 80 and 125 Hz tones are approximately 60 dB. In regard to impulsivity, an understanding of the operation of source is key in determining if any component is impulsive against the existing acoustic environment. As the sound sources from the onshore substations will be continuous in nature, there will be no sudden peaks of sound produced. Therefore, the sound has been concluded as having no impulsive components. . With regard to construction noise, the Applicants confirm that the application has applied the use of Lowest Observed Adverse Effect Levels (LOAEL) and Significant Observed Adverse Effect Levels (SOAEL) in line with the approach in Annex E of BS 5228-1 2009 and DMRB LA 111 to determine construction noise impacts, in accordance with the relevant industry standards and best practice approaches for assessing construction. With regard to noise sensitive receptors the glossary of F3.8.2 and F3.8.3 includes examples of noise sensitive areas: 'Receptors which are potentially sensitive to noise. Examples include residential properties, education facilities, community facilities, quiet areas, international and national or statutorily designated sites, public rights of way and cultural heritage assets'. The Applicants refer to Volume 3, Chapter 3: Onshore ecology and nature conservation (F3.3) and Volume 3, Chapter 5: Historic Environment (F3.5) in which potential noise impacts on ecological and historical assets are also considered. Sources of potential sound impacts have been modelled in Volume 3, Chapter 8: Noise and vibration of the ES (document reference F3.8). Specific measures adopted as part of the Transmission Assets have been identified and are detailed in Volume 1, Annex 5.3: Commitments register (document reference F1.5.3).
	5.12.7	The nature and extent of the noise assessment should be proportionate to the likely noise impact.	A proportionate assessment of the potential noise impacts during the construction, operation, and decommissioning phases of the Transmission Assets has been undertaken to ensure all potential impacts are mitigated such that significant adverse effects are avoided, and adverse impacts are minimised as best as reasonably practicable. Emphasis is placed on night-time impacts due to trenchless techniques as part of the construction phase, as well as operational noise impacts due to the operation of the onshore substations. The assessment of operational noise has been undertaken to ensure that noise impacts due to the concurrent operation of the Morgan and Morecambe onshore substations are mitigated sufficiently.

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			Details of the assessment of noise and vibration effects are outlined in section 8.11 of Volume 3, Chapter 8: Noise and Vibrations of ES, with details of embedded mitigation measures provided in section 8.8 of the chapter.
	5.12.8	Applicants should consider the noise impact of ancillary activities associated with the development, such as increased road and rail traffic movements, or other forms of transportation.	An assessment of the potential noise impacts due to increased traffic flows on local highway networks during the construction phase of the Transmission Assets is considered in Volume 3, Annex 8.3: Construction noise and vibration of the ES. The significance of the resultant effects are considered in section 8.11 of Volume 3, Chapter 8: Noise and Vibration of ES.
	5.12.9	Operational noise, with respect to human receptors, should be assessed using the principles of the relevant British Standards and other guidance. Further information on assessment of particular noise sources may be contained in the technology specific NPSs. In particular, for renewables (EN-3) and electricity networks (EN-5) there is assessment guidance for specific features of those technologies. For the prediction, assessment and management of construction noise, reference should be made to any relevant British Standards and other guidance which also give examples of mitigation strategies.	Construction, operation and maintenance, and decommissioning noise and vibration effects are assessed in section 8.11 of Volume 3, Chapter 8: Noise and Vibration of ES (document reference F3.8). Best Practicable Means (BPM) (as defined in Section 72 of the Control of Pollution Act 1974 and Section 79 of the Environmental Protection Act 1990) will be implemented during the construction, operation, maintenance aspects of the Transmission Assets, where appropriate, to ensure that noise levels are minimised within all reasonably foreseeable circumstances. For the construction phase these are detailed within the Outline CoCP (document reference J1), for the operational and maintenance phase these are detailed within the Operational Noise Management Plan(s). Potential noise reduction achieved via BPM during the construction and decommissioning phases of the Transmission Assets can be found in Volume 3, Annex 8.2: Construction noise and vibration of the ES (document reference F3.8.2), with details to be confirmed at the detailed design stage. Measures to reduce will be outlined in the Outline Construction Noise and Vibration Management Plan (document reference J1.3).
	5.12.10	Some noise impacts will be controlled through environmental permits and parallel tracking is encouraged where noise impacts determined by an environmental permit interface with planning issues (i.e. physical design and location of development). The applicant should consult the EA and/or the SNCB, and other relevant bodies, such the MMO or NRW, as necessary, and in particular regarding assessment of noise on protected species or other wildlife. The results of any noise surveys and predictions may inform the ecological assessment. The seasonality of potentially affected species in nearby sites may also need to be considered.	An assessment is provided in Volume 3, Annex 8.3: Operational noise of the ES (document reference F3.8.3). An assessment of the significance of effects is provided in section 8.11 of Volume 3, Chapter 8: Noise and Vibration of the ES (document reference F3.8). Noise impacts on ecological receptors are assessed in the following chapters: • Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES; and • Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES. Also, in response to matters raised during Examination with regard to potential impacts on horses and the protected characteristics of users of the equestrian facilities, the Applicants undertook a study to identify the risk of noise impacts on equestrian receptors which will be used to inform specific noise mitigation at these receptors during construction. This study, submitted at Deadline 6 (REP6-183), identified approaches to mitigating impacts, both from existing commitments within the oCNVMPs and potential additional measures to be considered on a receptor specific basis.
	5.12.11	In the marine environment, applicants should consider noise impacts on protected species, as well as other noise sensitive receptors, both at the individual project level and in-combination with other marine activities.	Sources of potential sound impacts have been modelled in Volume 1, Annex 5.2: Underwater sound technical report of the ES, and assessed on protected species, where relevant in Volume 2: Chapters 1 – 5 of the ES (document reference F2.1 – F2.5). Specific measures adopted as part of the Transmission Assets have been identified and are detailed in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3).The offshore substation platforms and interconnector cables were removed from the Transmission Assets DCO prior to application and were considered within the relevant Generation Assets DCO application. In addition, the Morgan Booster Station was been removed from the Transmission Assets DCO prior to application. Throughout the course of

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			Examination, high order unexploded ordnance clearance was removed from the deemed marine licences by the Applicants (C1/F09).
	5.12.12	Applicants should submit a detailed impact assessment and mitigation plan as part of any development plan, including the use of noise mitigation and noise abatement technologies during construction and operation.	BPM will be implemented during the construction, operation, maintenance aspects of the Transmission Assets, where appropriate, to ensure that noise levels are minimised within all reasonably foreseeable circumstances. For the construction phase these are detailed within the Outline CoCP (document reference J1). For the operational and maintenance phase, measures to manage and monitor noise will be detailed within the Operational Noise Management Plan(s) to be approved by the relevant planning authorities, as set out Requirement 18 of Schedules 2A and 2B of the DCO. Fylde Borough Council agrees that this Requirement represents reasonable control of operational noise from the Onshore Substations (FBC.NV.16 of Fylde SoCG (S_D1_6.3 F03)) and therefore no further measures to control operational noise are required. Potential noise reduction achieved via BPM during the construction and decommissioning phases of the Transmission Assets can be found in Volume 3, Annex 8.2: Construction noise and vibration of the ES (document reference F3.8.2), with details to be confirmed at the detailed design stage. The Applicants have also prepared an Outline Construction Noise and Vibration Management Plan (oCNVMP) (J1.3 F04) which sets out general measures to mitigate noise and vibration impacts from construction activities. The Plan(s), which are secured in Requirement 8 of Schedules 2A and 2B of the draft DCO (C1/F09), also include examples of noise control measures that can be applied to specific construction activities. These measures are in line with British Standard 5228:2009+A1:2024 and comply with NPS EN1. These measures will be defined as the detailed design progresses and will be agreed with the relevant authorities through agreement of the final CNVMP. The oCNVMP is a matter which is agreed with two local authorities, as reported in the Fylde Borough Council SoCG (FBC.NV.18 of Fylde SoCG (S_D1_6.3 F03)) and the Preston City Council SoCG (PCC.NV.2 of Preston City Council SoCG (S_D4_6.4 F03)). South Ribble Borough Council have noted this as a matter of ongoing discussion with a request for a commitment to low-noise and emission running plant as mandatory (SRBC.NV.16 of South Ribble SoCG (S_D1_6.5 F02)). The Applicants note that a commitment to use low noise and low vibration construction plant was included in an update to the oCNVMP submitted at Deadline 6. An assessment of the significance of the effects due to noise and vibration is presented in section 8.11 of Volume 3, Chapter 8: Noise and Vibration of ES.
Mitigation	5.12.13	The Secretary of State should consider whether mitigation measures are needed both for operational and construction noise over and above any which may form part of the project application. In doing so the Secretary of State may wish to impose mitigation measures. Any such mitigation measures should take account of the NPPF or any successor to it and the Planning Practice Guidance on Noise.	
	5.12.14	Mitigation measures may include one or more of the following: • engineering: reducing the noise generated at source and/or containing the noise generated • lay-out: where possible, optimising the distance between the source and noise-sensitive receptors and/or incorporating good design to minimise noise transmission through the use of screening by natural or purpose-built barriers, or other buildings • administrative: using planning conditions/obligations to restrict activities allowed on the site at certain times and/or specifying permissible noise limits/noise levels, differentiating as appropriate between different times of day, such as evenings and late at night, and taking into account seasonality of wildlife in nearby designated sites • insulation: mitigating the impact on areas likely to be affected by noise including through noise insulation when the impact is on a building.	BPM will be implemented during the construction, operation, maintenance aspects of the Transmission Assets, where appropriate, to ensure that noise levels are minimised within all reasonably foreseeable circumstances. For the construction phase these are detailed within the Outline CoCP (document reference J1), for the operational and maintenance phase these are detailed within the Operational Noise Management Plan(s). Potential noise reduction achieved via BPM during the construction and decommissioning phases of the Transmission Assets can be found in Volume 3, Annex 8.2: Construction noise and vibration of the ES (document reference F3.8.2), with details to be confirmed at the detailed design stage. Measures to reduce will be outlined in the Outline Construction Noise and Vibration Management Plan (document reference J1.3). An assessment of the significance of the effects due to noise and vibration is presented in section 8.11 of Volume 3, Chapter 8: Noise and Vibration of ES.
	5.12.15	The project should demonstrate good design through selection of the quietest or most acceptable cost-effective plant available; containment of noise within buildings wherever possible, taking into account any other adverse impacts that such containment might cause (e.g. on landscape and visual impacts;	The Applicants are committed to good design principles to be adopted through the detailed design phase (refer to the Outline Design Principles document (document reference J3)). Where the EIA process identifies any measures

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		optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission).	required to reduce noise, these have been (and will continue to be at detailed design stage) identified and set out as commitments (see section 8.8 of Volume 3, Chapter 8: Noise and Vibration of the ES (document reference F3.8)).
	5.12.16	A development must be undertaken in accordance with statutory requirements for noise. Due regard must be given to the relevant sections of the Noise Policy Statement for England, the NPPF, and the government's associated planning guidance on noise. In Wales the relevant policy will be PPW and the TANs, as well as the Welsh Government's Noise and Soundscape Action Plan.	The noise impact criteria for each phase of the Transmission Assets have been derived considering the requirements of the National Planning Policy Framework (NPPF) and the Noise Policy Statement for England (NPSE). Details of the relevant sections are provided in section 8.2.2 of Volume 3, Chapter 8: Noise and Vibration of the ES (document reference F3.8).
Secretary of State decision making	5.12.17	The Secretary of State should not grant development consent unless they are satisfied that the proposals will meet the following aims, through the effective management and control of noise: • avoid significant adverse impacts on health and quality of life from noise • mitigate and minimise other adverse impacts on health and quality of life from noise • where possible, contribute to improvements to health and quality of life through the effective management and control of noise	The Applicants confirm the Project will be designed so as to avoid significant adverse impacts and mitigate and minimise any adverse impacts, therefore complying with the first two aims of paragraph 5.12.17. Regarding the third aim, as the Project will introduce a new industrial sound source to the environment, it is not possible to contribute to the improvement of health and quality of life for nearby receptors. This is the case for the majority of applications in which a new sound source is introduced. It should be acknowledged however, by achieving the first two aims, there would be no significant adverse effects on health and quality of life already experienced by nearby receptors, as concluded within Volume 1, Annex 5.1: Human health (document reference F1.5.1).
	5.12.18	When preparing the Development Consent Order, the Secretary of State should consider including measurable requirements or specifying the mitigation measures to be put in place to ensure that noise levels do not exceed any limits specified in the development consent. These requirements or mitigation measures may apply to the construction, operation, and decommissioning of the energy infrastructure development	Potential noise mitigation measures are provided in section 8.8 of Volume 3, Chapter 8: Noise and Vibration of ES and the Commitments Register (Volume 1, Annex 5.3: Commitments register of the ES (document reference F1.5.3)). Indicative mitigation measures which may be adopted to control noise during the construction and operation phases of the Transmission Assets are outlined in: • Volume 3, Annex 8.2: Construction Noise and Vibration; and • Volume 3, Annex 8.3: Operational Noise of the ES. An assessment of the significance of the effects due to noise and vibration is presented in section 8.11 (Volume 3, Chapter 8: Noise and Vibration of ES (document reference F3.8)). For the construction phase, the Applicants have prepared an Outline Construction Noise and Vibration Management Plan (oCNVMP) (REP6-083) which sets out general measures to mitigate noise and vibration impacts from construction activities. The Plan(s) also include construction noise and vibration limits in line with BS 5228:2009+A1:2024, as well as agreement to monitoring of construction noise and vibration. The Plan(s), which are secured in Requirement 8 of Schedules 2A and 2B of the draft DCO (REP6-013), also include examples of noise control measures that can be applied to specific construction activities. These measures are in line with British Standard 5228:2009+A1:2024 and comply with NPS EN1. These measures will be defined as the detailed design progresses and will be agreed with the relevant authorities through agreement of the final CNVMP. For the operational and maintenance phase, measures to manage and monitor noise will be detailed within schemes to be approved by the relevant planning authorities, as secured by Requirement 18 of Schedules 2A and 2B of the DCO. Fylde Borough Council agrees that this Requirement represents reasonable control of operational noise from the Onshore Substations (FBC.NV.16 of Fylde SoCG (S_D1_6.3 F03)).
5.13 Socio-economics impacts			
Applicant assessment	5.13.2	Where the project is likely to have socio-economic impacts at local or regional levels, the applicant should undertake and include in their application an assessment of these impacts as part of the ES (see Section 4.3).	Paragraph 5.13.2 of NPS EN-1 requires that "Where the project is likely to have socio-economic impacts at local or regional levels, the applicant should undertake and include in their application an assessment of these impacts as part of the ES

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			(see Section 4.2)" (emphasis added). Paragraphs 5.13.3 - 5.13.6 detail the advised scope of any such assessment. In accordance with paragraph 5.13.2 of NPS EN-1 the Applicants undertook an assessment of potential socio-economic effects (including tourism) at a regional level within section 2.11 and 2.12 of ES Volume 4, Chapter 2: Socio-economics (document reference F4.2). Prior to this, the Applicants had published a Preliminary Environmental Information Report (PEIR) as part of the statutory consultation, which included an assessment of potential socio-economic effects (including tourism) at the regional level. As part of this statutory consultation for the Transmission Assets, no responses were received from local authorities or other stakeholders on the matter of the spatial scale at which potential tourism effects had been assessed, or any other comments to suggest that there was concern regarding the Transmission Assets' potential to have a likely significant effect on tourism at a local level. Subsequently, the full Environmental Statement submitted as part of the DCO application was accepted for examination by the Planning Inspectorate. The Applicants' position is that the approach taken within ES Volume 4, Chapter 2: Socio-economics (document reference F4.2) is further supported by the Examining Authority's Report of Findings and Conclusions with respect to the Mona Offshore Wind Farm, published on 4 July 2025. The assessment of potential socio-economic effects (including tourism) associated with the Mona Offshore Wind Farm included both offshore and onshore effects. The consideration of potential onshore effects associated with that project's transmission assets makes it a relevant example to cite. The onshore grid connection point for the Mona Offshore Wind Farm is located just 80 miles from the onshore grid connection point for the Transmission Assets, reinforcing the relevance of that project's recommendation. The Mona Offshore Wind Farm application followed a comparable approach to assessing onshore socio-economics (and tourism) effects at a regional level, and the Examining Authority concluded in paragraph 6.4.53 of their findings they were "…satisfied that the Applicant's assessment has fully addressed the potential socio-economic effects associated with the construction, operation and decommissioning of the Proposed Development in accordance with Section 5.13 of NPS EN-1.". However, as part of the DCO examination for the Transmission Assets, some local planning authorities have made comments in relation to the spatial scale at which potential effects on tourism have been assessed within ES Volume 4, Chapter 2: Socio-economics (document reference F4.2), pursuant to paragraph 5.13.2 of NPS EN-1. Section 4.2 of NPS EN-1 is cross-referenced by 5.13.2. Paragraph 4.2.4 requires that "To consider the potential effects, including benefits, of a proposal for a project, the applicant must set out information on the likely significant environmental, social and economic effects of the development, and show how any likely significant negative effects would be avoided, reduced, mitigated or compensated for, following the mitigation hierarchy. This information could include matters such as employment, equality, biodiversity net gain, community cohesion, health and well-being." (emphasis added). There is no wider evidence available to suggest the construction and/or operation of onshore infrastructure associated with offshore wind development is likely to have significant effects on local tourism. Fylde Borough Council and Blackpool Borough Council were requested by the Examining Authority to "Provide evidence of where projects of this kind have had an impact on the tourism economy" via Hearing Action Point 53 under Agenda Item 6(i) of the Issue Specific Hearing 1.

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			No such evidence has been provided to substantiate each Council's position on the matter. There is also no statutory guidance available to direct the identification of appropriate socio-economic study areas, including for the assessment of potential tourism effects. The Applicants maintain that Paragraph 5.13.2 (and therefore 5.13.3 - 5.13.6) of NPS EN-1 was complied with, on the basis that an assessment would only be required as part of the application where it was considered prior to the application stage that the project would be likely to have significant socio-economic effects (including tourism) at a local level – there was no evidence (either from the Applicants' own assessments, or as part of any submission from the local planning authorities in response to the statutory consultation or other pre-application engagement) at or prior to the application stage that such an impact would be likely, therefore no assessment was required or undertaken at application stage. Notwithstanding and without prejudice to the above, further to concerns being raised during the examination process, the Applicants have undertaken a Local Tourism Assessment which can be found at document reference (S_D5_8). Potential effects on tourism at a local level are assessed as not significant. This supports the findings of ES Volume 4, Chapter 2: Socio-economics (document reference F4.2), which assessed no significant effects on tourism at a regional level. The Applicants have gone so far as to implement updates to outline management plans to take account of potential local impacts which have been assessed as not significant in the context of the local tourism economy as a whole, in order to provide further assurances to the local planning authorities around future engagement. Updated outline management plans include the Outline Construction Traffic Management Plan (document reference J5/F05), which mitigates potential traffic and transport-related effects on major events, and the Outline Communications Plan (document reference J1.1/F05) which mitigates potential effects on individual tourism businesses, including accommodation and hospitality providers. In addition to this, the Applicants have repeatedly confirmed that they have no intention and no powers to close Starr Gate/Squires Gate which appears to be the sole issue for Blackpool Borough Council. The Applicants note that the the Applicants and Blackpool Borough Council have been able to make significant progress in relation to Starr Gate since Issue Specific Hearing 4. Although this matter remains 'not agreed' within row BBC.SE.7 of the Statement of Common Ground (S_D3_6.2/F04) submitted at Deadline 6, the Applicants consider that a further update will likely be provided by the Applicants and Blackpool Borough Council at Deadline 7 to confirm agreement on this matter as indicated in the Statement of Common Ground (S_D3_6.2/F04).
	5.13.3	The applicant is strongly encouraged to engage with relevant local authorities during early stages of project development so that the applicant can gain a better understanding of local or regional issues and opportunities.	Stakeholder consultation (both non-statutory and statutory) undertaken for the topic of socio-economics involved engagement with all potentially relevant local authorities within the Order Limits, in order to ensure there were continued opportunities for these authorities to provide feedback to the Applicants and to participate in the prescribed consultation process. This has allowed the Applicants to gain a deeper understanding of local and regional issues, which have been considered throughout the design refinement process. (refer to section 2.3 of Volume 4, Chaper 2: Socio economics of the ES (document reference F4,2).
	5.13.4	The applicant's assessment should consider all relevant socio-economic impacts, which may include:	Potential social impacts are estimated within Volume 4, Annex 2.1: Technical impact report – socio-economics of the ES (document reference F4.2.1), covering

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		• the creation of jobs and training opportunities. Applicants may wish to provide information on the sustainability of the jobs created, including where they will help to develop the skills needed for the UK's transition to Net Zero the contribution to the development of low-carbon industries at the local and regional level as well as nationally • the provision of additional local services and improvements to local infrastructure, including the provision of educational and visitor facilities • any indirect beneficial impacts for the region hosting the infrastructure, in particular in relation to use of local support services and supply chains • effects (positive and negative) on tourism and other users of the area impacted • the impact of a changing influx of workers during the different construction, operation and decommissioning phases of the energy infrastructure. This could change the local population dynamics and could alter the demand for services and facilities in the settlements nearest to the construction work (including community facilities and physical infrastructure such as energy, water, transport and waste). There could also be effects on social cohesion depending on how populations and service provision change as a result of the development • cumulative effects - if development consent were to be granted for a number of projects within a region and these were developed in a similar timeframe, there could be some short-term negative effects, for example a potential shortage of construction workers to meet the needs of other industries and major projects within the region	potential workforce impacts on housing, accommodation and population (including local services). An Outline Employment and Skills Plan (OESP) (document reference J31) is included in the DCO application, having been prepared in accordance with this paragraph of the NPS. The OESP establishes the high level approach to support positive local employment, training and employments impacts included in the DCO application and will form the basis of a post-consent Employment Plan and Skills, which will be adopted by the Applicants to help develop and support the economic benefits associated with the Transmission Assets in relation to skills and employment within the offshore wind sector. The Applicants have considered the provision of visitor facilities and concluded the inclusion of such facilities as part of the Transmission Assets is not appropriate. Potential economic impacts are estimated within Volume 4, Annex 2.1: Technical impact report – socio-economics of the ES (document reference F4.2.1), covering regional employment and GVA impacts and the potential associated impacts on local employment opportunities. This includes an estimate of potential direct, indirect (i.e. supply chain) and induced (i.e. household expenditure) economic impacts within the regions of North West England, North Wales and other local impacted geographies. Potential effects on tourism are assessed within section 2.12 of Volume 4, Chapter 2: Socio-economics of the ES (document reference F4.2). on housing, accommodation and population (including local services). Effects associated with potential social impacts are assessed within sections 2.11 and 2.12 of Volume 4 Chapter 2: Socio-economics of the ES (document reference F4.2). Potential cumulative effects associated with other projects are assessed within section 2.14 of Volume 4 Chapter 2: Socio-economics of the ES (document reference F4.2). Further to concerns being raised during the examination process, the Applicants have undertaken a Local Tourism Assessment which can be found at document reference (S_D5_8). Potential effects on tourism at a local level are assessed as not significant. This supports the findings of ES Volume 4, Chapter 2: Socio-economics (document reference F4.2), which assessed no significant effects on tourism at a regional level.
	5.13.5	Applicants should describe the existing socio-economic conditions in the areas surrounding the proposed development and should also refer to how the development's socio-economic impacts correlate with local planning policies.	Socio-economics conditions in the areas surrounding the proposed development are set out at section 2.6 of Volume 4 Chapter 2: Socio-economics of the ES (document reference F4.2). This includes employment, GVA, labour market, population, housing, and tourism conditions. Relevant economic conditions concerning Blackpool Airport and Blackpool Airport Enterprise Zone are also set out. The Local Tourism Assessment (document reference S_D6_8) includes further information on tourism conditions in the areas surrounding the proposed development. The proposed development's socio-economic impacts are assessed on the basis of the following local planning policies (as per Table 2.7. of Volume 4 Chapter 2: Socio-economics of the ES (document reference F4.2)): • Adopted Fylde Local Plan to 2032 (incorporating Partial Review) (Fylde Council, 2021) • Economic Development Strategy and Action Plan 2012 to 2030 (Fylde Council, 2013)

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			• Blackpool Local Plan Part 1: Core Strategy (2012–2027) (Blackpool Council, 2016) • South Ribble Local Plan 2012 – 2026 (South Ribble Borough Council, adopted 2015) • Central Lancashire Adopted Core Strategy – Local Development Framework (Preston City Council, South Ribble Borough Council and Chorley Council, 2012) • Lancashire Strategic Economic Plan (2014) Potential local tourism impacts are assessed on the basis of the following local planning policies (as per Table 2.1 of Local Tourism Assessment (document reference S_D6_8)): • Adopted Fylde Local Plan to 2032 (incorporating Partial Review) (Fylde Council, 2021) • Economic Development Strategy and Action Plan 2012 to 2030 (Fylde Council, 2013) • Blackpool Local Plan Part 1: Core Strategy (2012–2027) (Blackpool Council, 2016) • South Ribble Tourism Strategy 2023-2025 (South Ribble Borough Council, 2023) • South Ribble Economic Strategy (South Ribble Borough Council, 2023) • Wyre Local Plan 2011-2031 (incorporating partial update of 2022) (Wyre Council, adopted 2023) • Wyre Borough Economic Development and Visitor Economy Strategy (Wyre Council, 2024) • Central Lancashire Adopted Core Strategy – Local Development Framework (Preston City Council, South Ribble Borough Council and Chorley Council, 2012). • South Ribble Borough Council Local Plan 2010-2026 (South Ribble Borough Council, adopted 2015) • Draft Central Lancashire Local Plan 2023-2041 (Regulation 19 Publication Version, Central Lancashire, 2025) • Lancashire County Council Economic Strategy 2023-2025 (Lancashire County Council, 2022) • Central Lancashire Economic Regeneration Strategy 2026 (Preston City Council, South Ribble Borough Council and Chorley Council, 2010). • Lancashire Building better demand: A Plan to extend the reach and benefit of Lancashire's visitor economy (Lancashire County Council, The Lancashire Enterprise Partnership and Marketing Lancashire, 2022) • Lancashire 2050 (Lancashire County Council, 2022) • Lancashire Strategic Economic Plan 2015-2025 (Lancashire Enterprise Partnership, 2014)
	5.13.6	Socio-economic impacts may be linked to other impacts, for example visual impacts considered in Section 5.10 but may also have an impact on tourism and local businesses. Applicants are encouraged, where possible, to demonstrate that local suppliers have been considered in any supply chain.	The Local Tourism Assessment (document reference S_D6_8) assesses potential local tourism impacts on the basis of Natural capital, Culture and entertainment, Heritage, Recreation, Accommodation, and Hospitality. The assessment is informed by a consideration of impact pathways between the above tourism asset categories and the following ES chapters (and their annexes): • Traffic and transport – Volume 3, Chapter 7: Traffic and transport of the ES (document reference F3.7)

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			• Land use and recreation – Volume 3, Chapter 6: Land use and recreation of the ES (document reference F3.6) • Visual impacts – Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10) • Historic environment – Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5) • Ecology – Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3) • Noise and vibration – Volume 3, Chapter 8: Noise and vibration of the ES (document reference F3.8) As accounted for by paragraphs 4.2.11–4.2.12 of NPS EN-1, there is currently insufficient information at this stage of the application to demonstrate consideration of local suppliers within the supply chain however should the Morgan Offshore Wind Project or the Morecambe Offshore Windfarm take part in the government's Contract for Difference (CfD) process, the projects will be required to submit a Clean Industry Bonus (CIB) application as part of the CfD process. The CIB is intended to incentivise developers to support economic growth and regeneration in disadvantaged or deprived areas of the UK. To be eligible for the CIB, applicants must demonstrate credible and tangible commitments to investment that deliver measurable local benefits. These could be through the location of manufacturing, assembly, installation, or port-related activities within qualifying areas.
	5.13.7	Applicants should consider developing accommodation strategies where appropriate, especially during construction and decommissioning phases, that would include the need to provide temporary accommodation for construction workers if required	Potential social impacts are estimated within Volume 4, Annex 2.1: Socio-economics technical report of the ES, covering potential workforce on housing, accommodation. Effects associated with potential social impacts are assessed within sections 2.11 and 2.12 of Volume 4, Chapter 2: Socio-economics of ES (document reference F4.2). An accommodation strategy is not appropriate for a development of this scale.
Mitigation	5.13.8	The Secretary of State should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development. For example, high quality design can improve the visual and environmental experience for visitors and the local community alike.	As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5). Mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3). Mitigation measures adopted as part of the Transmission Assets specific to socio-economics are set out within section 2.8 of Volume 4 Chapter 2: Socio-economics of the ES (document reference F4.2), and section 4.3.7 of the Local Tourism Assessment (document reference S_D6_8). In particular, the latter sets out key mitigation measures related to tourism as: • Outline Construction Traffic Management Plan (oCTMP) (document reference J5): mitigates potential traffic and transport-related effects on major events. • Outline Communications Plan (document reference J1.1): mitigates potential effects on individual tourism businesses.
Secretary of State decision making	5.13.9	The Secretary of State should have regard to the potential socio-economic impacts of new energy infrastructure identified by the applicant and from any other sources that the Secretary of State considers to be both relevant and important to its decision.	Effects resulting from potential socio-economic impacts are assessed within sections 2.11 and 2.12 of Volume 4 Chapter 2: Socio-economics of the ES (document reference F4.2).

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	5.13.10	The Secretary of State may conclude that limited weight is to be given to assertions of socio-economic impacts that are not supported by evidence (particularly in view of the need for energy infrastructure as set out in this NPS).	Potential economic impacts are estimated within Volume 4, Annex 2.1: Technical impact report – socio-economics of the ES (document reference F4.2.1). The annex sets out a detailed methodology which aligns with industry best practice and the latest available guidance, including: • Marine Scotland (2022) Defining 'local area' for assessing impact of offshore renewables and other marine developments • Crown Estate and Offshore Renewable Energy (ORE) Catapult (2019) Guide to an offshore wind farm • Glasson, J. et al. (2020) Guidance on assessing the socio-economic impacts of offshore wind farms. In addition, the Local Tourism Assessment (document reference S_D6_8) is underpinned by two important pieces of evidence. Firstly, Glasson et al (2021) presents a literature review setting out key findings from recent academic articles and professional and industry reports on the impacts of offshore wind projects on local tourism and recreation. The research also provides a number of UK case studies of specific projects in coastal locations that provide primary data, by direct survey, of impacts. The research concludes that: • Whilst impacts vary from stakeholder to stakeholder, findings from the literature indicate the overall impact of offshore wind projects on the visitor economy are 'benign', and in some cases positive. • This is supported by findings from research on onshore wind farms, which indicates little or no evidence to demonstrate that any windfarm development has resulted in any adverse impact on tourism. • Results from agency and local business and residents' survey responses indicate there is little evidence of negative impacts of offshore wind projects on local visitor economy and recreation activities. Results demonstrate there are considerably more comments on positive impacts, all set in the wider context of the importance of offshore wind developments in the transition towards renewable energy. Secondly, a Biggar Economics (2020) study analysed indicators of the visitor economy in 11 cases (including 3 in North West England) to identify any relationship between offshore wind farms and changes in visitor behaviour or spending during construction periods. This included consideration of whether the construction of associated infrastructure, such as onshore cabling and substations, had an impact on the performance of the visitor economy where this activity took place. The purpose of the research was to identify evidence of the construction of offshore wind farms having an impact on the local visitor economy. No evidence was found to support this. Instead, it was found that areas, including those with landscape sensitivities, were not impacted by the construction activities of offshore wind farms, including installation of cabling and onshore substations. The industry evidence with which the findings of the Local Tourism Assessment (document reference S_D6_8) aligns is therefore well established.
	5.13.11	The Secretary of State should consider any relevant positive provisions the applicant has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise as well as any options for phasing development in relation to the socio-economic impacts.	An Outline Employment and Skills Plan (OSEP) (document reference J31) is included in the DCO application. The OSEP establishes the high level approach to support positive local employment, training and employment impacts included in the DCO application. The actions presented within the OSEP will form the basis of detailed post-consent Employment and Skills Plan(s), which will be adopted by the Applicants to help develop and support the economic benefits associated with the
	5.13.12	The Secretary of State may wish to include a requirement that specifies the approval by the local authority of an employment and skills plan detailing arrangements to promote local employment and	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
		skills development opportunities, including apprenticeships, education, engagement with local schools and colleges and training programmes to be enacted.	Transmission Assets in relation to skills and employment within the offshore wind sector.
5.14 Traffic and transport			
Introduction	5.14.2	Environmental impacts may result particularly from trips generated on roads which may increase noise and air pollution as well as greenhouse gas emissions.	Section 7.11 of Volume 3 Chapter 7: Traffic and transport of the ES (document reference F3.7) considers all relevant potential transport impacts during the construction, operation and maintenance, and decommissioning phases of the onshore elements of the Transmission Assets. The study area for the assessment of traffic and transport (the study area) has been established to include all relevant routes along the connecting transport network. Noise is considered in Volume 3, Chapter 8: Noise and vibration of the ES (document reference F3.8), emissions is considered in Volume 3, Chapter 9: Air quality of the ES (document reference F3.9) and inter-related effects are considered in Volume 3, Chapter 5: Inter-related effects – onshore of the ES (document reference F3.5). Any mitigation required in relation to traffic and transport has been set out in section 7.8 of Chapter 7: Traffic and transport of the ES (document reference F3.7).
	5.14.3	Disturbance caused by traffic and abnormal loads generated during the construction phase will depend on the scale and type of the proposal.	
	5.14.4	The consideration and mitigation of transport impacts is an essential part of Government's wider policy objectives for sustainable development as set out in Section 2.6 of this NPS.	
	5.14.5	If a project is likely to have significant transport implications, the applicant's ES (see Section 4.3) should include a transport appraisal. The DfT's Transport Overarching National Policy Statement for Energy (EN-1) Analysis Guidance (TAG)266 and Welsh Governments WelTAG provides guidance on modelling and assessing the impacts of transport schemes.	
Applicant assessment	5.14.6	National Highways and Highways Authorities are statutory consultees on NSIP applications including energy infrastructure where it is expected to affect the strategic road network and / or have an impact on the local road network. Applicants should consult with National Highways and Highways Authorities as appropriate on the assessment and mitigation to inform the application to be submitted.	Volume 3 Chapter 7: Traffic and Transport of the ES (document reference F3.7) contains an integrated TA throughout to consider the potential impacts and effects on the operation of the highway network arising from the onshore elements of the Transmission Assets in accordance with guidance and best practice and relevant parts of the Department for Transport's (DfT) TAG.
	5.14.7	The applicant should prepare a travel plan including demand management and monitoring measures to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by active, public and shared transport to: • reduce the need for parking associated with the proposal • contribute to decarbonisation of the transport network • improve user travel options by offering genuine modal choice	The oCTMP (J5/F06) includes the elements of a travel plan for managing employee travel as well as measures to manage HGV traffic. A single document is typical practice for managing construction traffic. The rationale for not having two separate documents, is that there would be a high degree of commonality and repetition between many of the measures, monitoring and control measures and it is therefore considered simpler for highways stakeholders and contractors to have a single reference document. The oCTMP is underpinned by the ES assessment which embeds a car share ratio of 1.33 employees per vehicle to promote demand management of light vehicles (Section 1.4 of Volume 3, Annex 7.5: Construction trip generation assumptions refers (APP-115)). Section 1.7 of the oCTMP includes details of a range of travel plan measures to be adopted by the contractor to reduce single occupancy vehicle trips and section 1.13.4 of the oCTMP includes details of the proposed approach to monitoring employee travel.
	5.14.8	The assessment should also consider any possible disruption to services and infrastructure (such as road, rail and airports).	The Applicants have undertaken a comprehensive data collection exercise including capturing baseline traffic flows, speeds, identification of sensitive receptors (ES Volume 3, Chapter 7: Traffic and Transport: Table 7.12) and collisions for all highway links within Blackpool Council, Lancashire County Council and National Highways administration areas. In total, data for 91 highway links have been collected covering over 155km of highway network. The assessment has scoped in the construction of the onshore elements of the transmission assets and the impacts resultant from increases in HGV and Light vehicle flows on the highway network. Operation and maintenance of onshore elements of the transmission assets has been scoped out due the very low traffic demand (as has the construction, operation and maintenance of the offshore elements of the transmission assets.

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			The increase in traffic movements has been informed by experienced industry experts to derive maximum daily traffic numbers from detailed material and activity schedules see [APP-115] F3.7.5 Volume 3, Annex 7.5: Construction trip generation assumptions. A Maximum Design Envelope (realistic worst case scenario) has been developed to inform the assessment which assumes that Morgan Offshore Windfarm Transmission Assets and Morecambe Offshore Windfarm Transmission Assets are constructed concurrently, therefore intensifying the construction traffic demand over a shorter period (in comparison to a sequential scenario). The assessment has considered the potential impacts of the Project in relation to **driver delay**, **severance**, **non-motorised user delay**, **fear and intimidation**, **road safety and abnormal loads**. An access strategy has been developed that seeks to reduce the requirement for construction traffic to travel via local road and instead aims to prioritise the use of motorways and A and B roads (in line with the functional road hierarchy) for the movement of construction traffic where possible. To facilitate this strategy the Applicants have made a commitment to the use of a temporary haul roads as set out in (CoT 24 of Volume 1, Annex 5.3: Commitments Register of the ES (AS-030) and secured by Requirement 9 of the draft Development Consent Order (C1/F09), thereby reducing the requirement for construction traffic to avoid travel via the local road network and avoiding sensitive communities. With the application of embedded and secondary measures mitigation to control construction routes and access, the hours of construction traffic movement and restrict movement on sensitive routes, the assessment concludes that the residual effects would not be significant in Environmental Impact Assessment (EIA) terms. The summary of this assessment can be found in [APP-108] F3.7 Volume 3, Chapter 7: Traffic and transport **Table 7.43**.
	5.14.9	If additional transport infrastructure is needed or proposed, it should always include good quality walking, wheeling and cycle routes, and associated facilities (changing/storage etc.) needed to enhance active transport provision.	An access strategy has been developed that seeks to reduce the requirement for construction traffic to travel via local road and instead aims to prioritise the use of motorways and A and B roads (in line with the functional road hierarchy) for the movement of construction traffic where possible. To facilitate this strategy the Applicants have made a commitment to the use of a temporary haul roads as set out in (CoT 24 of Volume 1, Annex 5.3: Commitments Register of the ES (F1.5.3/F07) and secured by Requirement 9 within Schedules 2A & 2B of the draft Development Consent Order (C1/F09), thereby reducing the requirement for construction traffic to avoid travel via the local road network and avoiding sensitive communities. It is however acknowledged by the Applicants that there are some locations where the existing highway geometry is constrained, typically this comprises of short sections of highway which provide key connections to wider main roads (referred to herein as the 'last leg'). The last leg routes form approximately 17km of the delivery routes, the majority of which are between 5.5 and 6.0m in width.
	5.14.10	Applicants should discuss with network providers the possibility of co-funding by government for any third-party benefits. Guidance has been issued which explains the circumstances where this may be possible, although the government cannot guarantee in advance that funding will be available for any given uncommitted scheme at any specified time.	
Mitigation	5.14.11	Where mitigation is needed, possible demand management measures must be considered. This could include identifying opportunities to: • reduce the need to travel by consolidating trips • locate development in areas already accessible by active travel and public transport • provide opportunities for shared mobility • re-mode by shifting travel to a sustainable mode that is more beneficial to the network • retime travel outside of the known peak times • reroute to use parts of the network that are less busy	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
			The oCtmp (J5/f06) contains a description of link specific mitigation strategies to to be developed post consent as part of the detailed design stage. The strategies contain the following measures: • Use of alternative accesses, e.g. removal of the Guild Wheel route and Link 30; • Localised widening, creation/improvement of passing places; • Limits on vehicle numbers and one in one out strategy (i.e. avoiding conflicting movements); • Signage to advise of local pinch points and passing areas; • Localised trimming of vegetation; • Parking management/enforcement; • Use of escort/pilot vehicles; • Localised verge profiling/maintenance; and • Driver education and induction processes. The oCTMP also contains measures for capping HGV demand and controlling the arrival and departure times to minimise impacts on the highway network. Details of construction accesses are set out in the Outline Highways Access Management Plan (OHAMP) (document reference J8) to be secured as part of Requirement 10 of Schedules 2A and 2B of the draft DCO. The oEMP (J6/F05) includes measures to collaborate with third parties to enhance public rights of way and green corridors where possible.
	5.14.12	If feasible and operationally reasonable, such mitigation should be required, before considering requirements for the provision of new inland transport infrastructure to deal with remaining transport impacts. All stages of the project should support and encourage a modal shift of freight from road to more environmentally sustainable alternatives, such as rail, cargo bike, maritime and inland waterways, as well as making appropriate provision for and infrastructure needed to support the use of alternative fuels including charging for electric vehicles.	There are no commercial ports or commercial freight railway sidings in the vicinity that would allow materials to be viably transported via rail or water. The mitigation adopted considers the routeing of Heavy Goods Vehicle (HGV) movements which do not require the provision of any new inland transport infrastructure apart from temporary access improvements, which would be required irrespective of any modal shift of freight from road to more environmentally sustainable alternatives. Regarding charging for electric vehicles, which is only required where feasible and operationally reasonable, given the limited traffic numbers and the unmanned nature of the substations, it would be unreasonable to include on-site charging infrastructure. For construction, the focus is to reduce vehicle numbers and it is considered more practical for charging for electric vehicles at origin points, rather than within temporary compounds, which will likely require generators to enable charging for electric vehicles.
	5.14.13	Regard should always be given to the needs of freight at all stages in the construction and operation of the development including the need to provide appropriate facilities for HGV drivers as appropriate.	All proposed accesses have been designed to accommodate the movement of HGVs as set out within the OHAMP (document reference J8), which is secured by Requirement 10 of the DCO. A comprehensive suite of HGV measures are set out in the OCTMP (document reference J5) secured by Requirement 9 of the DCO.
	5.14.14	The Secretary of State may attach requirements to a consent where there is likely to be substantial HGV traffic that: • control numbers of HGV movements to and from the site in a specified period during its construction and possibly on the routing of such movements;	HGV routes and the potential locations of truck stops and local waiting areas have been identified and are set out in the OCTMP (document reference J5) secured by Requirement 9 of the DCO, along with associated mitigation measures including daily cap on numbers, the prevention of loading/unloading on the highway and turning/parking provisions. All accesses will provide appropriate

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
		• make sufficient provision for HGV parking, and associated high quality drive facilities either on the site or at dedicated facilities elsewhere, to support driver welfare, avoid 'overspill' parking on public roads, prolonged queuing on approach roads and uncontrolled on-street HGV parking in normal operating conditions; and • ensure satisfactory arrangements for reasonably foreseeable abnormal disruption, in consultation with network providers and the responsible police force.	geometries and layouts for HGVs to mitigate potential likely significant effects on highways. Further details are provided in section 7.8 of Volume 3 Chapter 7: Traffic and Transport of the ES (document reference F3.7). The OCTMP forms the basis for detailed CTMPs, which will be prepared in consultation with Lancashire County Council and Blackpool Borough Council as the Local Highway Authorities and National Highways as the highway authority for the strategic road network. Wynns (consulting engineers specialising in the movement of abnormal loads) have been appointed to assess the impact of moving the special-order abnormal loads for the Transmission Assets transformers and non-special order abnormal loads for the Transmission Assets cable drums. Wynns have submitted notifications for the movement of both transformers and cable drums to National Highways who have consulted with Lancashire County Council and Network Rail and no concerns in regard to structural clearance have been advised. Wynns have also checked all routes for geometry and confirmed that the routes are negotiable, with typical accommodation works for the larger special order abnormal loads (e.g. movements of signs, trimming of trees, etc). The Transmission Assets abnormal load strategy is detailed in S_D2_16 Abnormal Indivisible Load Study: Transformers - Rev F01 (REP2-049) and S_D2_17 Abnormal Indivisible Load Study: Cable drums - Rev F01 (REP2-050)
	5.14.15	The Secretary of State should have regard to the cost-effectiveness of demand management measures compared to new transport infrastructure, as well as the aim to secure more sustainable patterns of transport development when considering mitigation measures.	The oCTMP (document reference J5/06) contains a range of measures to manage and mitigate the Transmission Assets' construction traffic demand complemented by a range of infrastructure inventions where necessary to mitigate the impacts of HGV traffic.
	5.14.16	Applicants should consider the DfT policy guidance "Water Preferred Policy Guidelines for the movement of abnormal indivisible loads" when preparing their application.	Section 7.11 of Volume 3 Chapter 7: Traffic and Transport of the ES (document reference F3.7) considers all relevant potential transport impacts during the construction phase of the onshore and intertidal elements of the Transmission Assets including disturbance (effects) from traffic and AILs. An AIL study that considers the movement of AILs with due regard to the DfT document has identified previous similar delivery locations along the River Ribble, as set out in Volume 3, Annex 7.5: Construction trip generation assumptions of the ES. The Transmission Assets abnormal load strategy is compliant with the DfT water preferred policy and is detailed in S_D2_16 Abnormal Indivisible Load Study: Transformers - Rev F01 (REP2-049) and S_D2_17 Abnormal Indivisible Load Study: Cable drums - Rev F01 (REP2-050)
	5.14.17	If an applicant suggests that the costs of meeting any obligations or requirements would make the proposal economically unviable this should not in itself justify the relaxation by the Secretary of State of any obligations or requirements needed to secure the mitigation.	The costs of transport mitigation currently envisaged are not expected to make the proposal economically unviable.
Secretary of State decision making	5.14.18 and 5.14.19	A new energy NSIP may give rise to substantial impacts on the surrounding transport infrastructure and the Secretary of State should therefore ensure that the applicant has sought to mitigate these impacts, including during the construction phase of the development and by enhancing active, public and shared transport provision and accessibility.	Section 7.11 of Volume 3 Chapter 7: Traffic and Transport of the ES (document reference F3.7) provides an analysis of the impacts on traffic and transport receptors during construction of the Transmission Assets. Section 7.8 sets out the mitigation measures adopted, where relevant. The relevant transport impacts during the construction phase take into account mitigation measures documented in the OHAMP (document reference J8) and OCTMP (document reference J5),

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
		Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the Secretary of State should consider requirements to mitigate adverse impacts on transport networks arising from the development, as set out below.	secured by Requirements 10 and 9 respectively of the DCO. Further details are provided in section 7.8 (see CoT23 and CoT38, Volume 1, Annex 5.3 of the ES (document reference F1.5.3)). No residual likely significant effects have been identified in sections 7.11 and 7.13. The potential transport impacts during the operation, maintenance and decommissioning phases have been scoped out as set out in Table 7.14.
	5.14.20	Development consent should not be withheld provided that the applicant is willing to enter into planning obligations for funding new infrastructure or requirements can be imposed to mitigate transport impacts. In this situation the Secretary of State should apply appropriately limited weight to residual effects on the surrounding transport infrastructure.	Section 7.11 of Volume 3 Chapter 7: Traffic and Transport of the ES (document reference F3.7) considers all relevant transport impacts during the construction, operation and maintenance, and decommissioning phases and ways to mitigate them where necessary. The transport impacts arising during those associated with the biodiversity benefit, enhancement and/or mitigation areas, and decommissioning phases have been scoped out as set out in Table 7.14 of the chapter. The relevant transport impacts during the construction phase are considered within section 7.11 and have identified no specific requirements to enter into planning obligations or requirements to be imposed to fund new infrastructure to mitigate any impacts that result in significant effects. No residual significant effects have been identified and any impacts can be sufficiently mitigated via the OCTMP (document reference J5) and the OHAMP (document reference J8), which are secured by Requirements 10 and 9 respectively of the DCO. Further details are provided in section 7.8 of the chapter.
	5.14.21	The Secretary of State should only consider refusing development on highways grounds if there would be an unacceptable impact on highway safety, residual cumulative impacts on the road network would be severe, or it does not show how consideration has been given to the provision of adequate active public or shared transport access and provision.	Volume 3 Chapter 7: Traffic and Transport of the ES (document reference F3.7) considers all relevant transport impacts during the construction, operation and maintenance, and decommissioning phases and ways to mitigate them where necessary. The transport impacts during the operation, maintenance and decommissioning phases have been scoped out as set out in Table 7.14 of the chapter. The relevant transport impacts during the construction phase are considered within section 7.11, which has not identified any unacceptable impacts on highway safety and that the residual cumulative impacts on the road network would not be severe. The OCTMP (document reference J5) secured by Requirement 9 of the DCO sets out travel plan measures which include demand management measures that will promote active travel and shared travel (car sharing). Further details are provided in section 7.8 of the chapter.
5.15 Resource and waste management			
Applicant assessment	5.15.7	The proposed plant must not compete with greater waste prevention, re-use, or recycling, or result in over-capacity of EfW or similar processes for the treatment of residual waste at a national or local level.	Construction waste from the Transmission Project will be managed in accordance with the Site Waste Management Plan (SWMP) which will be developed in accordance with the Outline SWMP (document reference J1.6). It will identify the anticipated types and quantities of waste that will be generated during construction and describes how these wastes will be managed.
	5.15.8	The applicant should set out the arrangements that are proposed for managing any waste produced and prepare a report that sets out the sustainable management of waste and use of resources throughout any relevant demolition, excavation and construction activities.	Construction waste from the Transmission Project will be managed in accordance with duty of care requirements to ensure the secure storage of waste on site, transport by registered carriers and management of the waste at appropriately permitted waste facilities (refer to the Outline SWMP (document reference J1.6)).
	5.15.9	The arrangements described and a report setting out the sustainable management of waste and use of resources should include information on how re-use and recycling will be maximised in addition to the proposed waste recovery and disposal system for all waste generated by the development. They should also include an assessment of the impact of the waste arising from development on the capacity of waste management facilities to deal with other waste arising in the area for at least five years of operation.	Minimal quantities of waste will be generated during the operation of the Transmission Assets. On this basis, operational waste has been scoped out of the EIA process as confirmed in the Scoping Direction. Construction waste from the Transmission Project will be managed in accordance with the SWMP which will be developed in accordance with the Outline SWMP (document reference J1.6). The SWMP will identify the anticipated types and

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
			quantities of waste that will be generated during construction and describes how these wastes will be managed.
	5.15.10	The applicant is encouraged to refer to the Waste Prevention Programme for England: Maximising Resources Minimising Waste and 'Towards Zero Waste: Our Waste Strategy for Wales' and should seek to minimise the volume of waste produced and the volume of waste sent for disposal unless it can be demonstrated that this is the best overall environmental outcome.	The Outline SWMP (document reference J1.6) sets out the principles for how construction waste from the Project will be managed: it confirms that waste will be managed in accordance with the waste hierarchy with steps taken to be taken during detailed design to minimise waste and taking into account the Waste Prevention Programme for England where appropriate.
	5.15.11	If the applicant's assessment includes dredged material, the assessment should also include other uses of such material before disposal to sea, for example through re-use in the construction process.	A dredging and disposal – site characterisation plan (document reference J22) is provided with the application which considers marine disposal. Construction waste from the Transmission Project will be managed in accordance with the SWMP which will be developed in accordance with the Outline SWMP (document reference J1.6). The SWMP will identify the anticipated types and quantities of waste that will be generated during construction and describes how these wastes will be managed.
	5.15.12	The UK is committed to moving towards a more 'circular economy'. Where possible, applicants are encouraged to source materials from recycled or reused sources and use low carbon materials, sustainable sources and local suppliers. Construction best practices should be used to ensure that material is reused or recycled onsite where possible.	Information on materials used in the Transmission Assets is covered in Volume 1, Chapter 3: Project description of the ES (document reference F1.3). Construction waste from the Transmission Project will be managed in accordance with the SWMP which will be developed in accordance with the Outline SWMP (document reference J1.6). The SWMP will identify the anticipated types and quantities of waste that will be generated during construction and describes how these wastes will be managed.
	5.15.13	Applicants are also encouraged to use construction best practices in relation to storing materials in an adequate and protected place on site to prevent waste, for example, from damage or vandalism. The use of Building Information Management tools (or similar) to record the materials used in construction can help to reduce waste in future decommissioning of facilities, by identifying materials that can be recycled or reused.	Storage of materials will be managed in accordance with the CoCP, which will be developed in accordance with the Outline CoCP (document reference J1). The Outline SWMP (document reference J1.6) sets out the principles for how construction waste from the Transmission Assets will be managed: it confirms that waste will be managed in accordance with the waste hierarchy with steps taken to be taken during detailed design to minimise waste and taking into account the Waste Prevention Programme for England where appropriate.
Secretary of State decision making	5.15.14	The Secretary of State should consider the extent to which the applicant has proposed an effective system for managing hazardous and non-hazardous waste arising from the construction, operation and decommissioning of the proposed development.	The Outline SWMP (document reference J1.6) sets out the principles for how construction waste from the Transmission Assets will be managed: it confirms that waste will be managed in accordance with the waste hierarchy with steps taken during detailed design to minimise waste, taking into account the Waste Prevention Programme for England where appropriate. Construction waste from the Transmission Assets will also be managed in accordance with duty of care requirements to ensure the secure storage of waste on site, transport by registered carriers and management of the waste at appropriately permitted waste facilities. Minimal quantities of waste will be generated during the operation of the Transmission Assets. On this basis, operational waste has been scoped out of the EIA process as confirmed in the Scoping Direction.
	5.15.15	The Secretary of State should be satisfied that: • any such waste will be properly managed, both on-site and off-site. • the waste from the proposed facility can be dealt with appropriately by the waste infrastructure which is, or is likely to be, available. Such waste arisings should not have an adverse effect on the capacity of existing waste management facilities to deal with other waste arisings in the area. • adequate steps have been taken to minimise the volume of waste arisings, and of the volume of waste arisings sent for recovery or disposal, except where that is the best overall environmental outcome.	
	5.15.16	Where necessary, the Secretary of State should use requirements or obligations to ensure that appropriate measures for waste management are applied.	
	5.15.17	The Secretary of State may wish to include a condition on revision of waste management plans at reasonable intervals when giving consent.	
	5.15.19	The Secretary of State should have regard to any potential impacts on the achievement of resource efficiency and waste reduction targets set under the Environment Act 2021 or wider goals set out in the government's Environmental Improvement Plan 2023.	Minimal quantities of waste will be generated during the operation of the Transmission Assets. On this basis, operational waste has been scoped out of the EIA process as confirmed in the Scoping Direction.
5.16 Water quality and resources			

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
Applicant assessment	5.16.3	Where the project is likely to have effects on the water environment, the applicant should undertake an assessment of the existing status of, and impacts of the proposed project on, water quality, water resources and physical characteristics of the water environment, and how this might change due to the impact of climate change on rainfall patterns and consequently water availability across the water environment, as part of the ES or equivalent (see Section 4.3 and 4.10).	The Water Framework Directive coastal waters assessment is presented within Volume 2, Annex 2.2. (document reference F2.2.2) and the Onshore WFD Assessment is presented within Volume 3, Annex 2.1: Water Framework Directive Surface and Groundwater Assessment (document reference F3.2.1) of the ES. These include a description of the baseline environment and an assessment of the impacts on water quality, resources and physical characteristics. Climate change is considered in section 2.6.10 of Volume 3, Chapter 2: Hydrology and flood risk (document reference F3.2) and is also detailed within the FRA (Volume 3, Annex 2.3 of the ES, document reference F3.2.3) which takes into account increases in rainfall rates due to climate change to ensure the drainage design is able to accommodate increasing volumes of surface water runoff associated with the effects of climate change. Impacts in terms of groundwater are considered within section 1.11.3, 1.11.4, 1.11.5, 1.11.6, 1.11.8 of Volume 3, Chapter 1: Geology, hydrogeology and ground conditions of the ES (document reference F.3.1). Impacts in terms of surface water are considered within Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2). Climate change is considered in section 2.6.10 of Volume 3, Chapter 2 of ES and is also detailed within the FRA (Volume 3 Annex 2.3 of the ES) which takes into account increases in rainfall rates due to climate change to ensure the drainage design is able to accommodate increasing volumes of surface water runoff associated with the effects of climate change. Climate change is considered in section 2.6.10 of Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2) and is also detailed within the FRA (Volume 3 Annex 2.3 of the ES) which takes into account increases in rainfall rates due to climate change to ensure the drainage design is able to accommodate increasing volumes of surface water runoff associated with the effects of climate change.
	5.16.4	The applicant should make early contact with the relevant regulators, including the local authority, the Environment Agency and Marine Management Organisation, where appropriate, for relevant licensing and environmental permitting requirements.	The Consultation Report (document reference E1) describes the consultation process that the Applicants have followed both in terms of the non-statutory consultation and the statutory consultation, and publicity stages as required under sections 42, 47 and 48 of the Planning Act 2008. The consultation process is also outlined in Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2). The Hydrology and Flood Risk EWG included representatives from stakeholders including the Environment Agency, Lead Local Flood Authority (LLFA) (Lancashire County Council), and local authorities to discuss issues relating to hydrology and flood risk. It also sets out consultation with the MMO.
	5.16.5	Where possible, applicants are encouraged to manage surface water during construction by treating surface water runoff from exposed topsoil prior to discharging and to limit the discharge of suspended solids e.g. from car parks or other areas of hard standing, during operation.	The Outline CoCP (document reference J1) includes an Outline Surface Water and Groundwater Management Plan (document reference J1.9) and Outline Pollution Prevention Plan (document reference J1.4), which include information for managing surface water runoff during construction and protective measures to control the risk of pollution to groundwater during construction and operation. Details are provided in section 2.8 and Table 2.19 of Volume 3, Chapter 2: Hydrology and flood risk (document reference F3.2).
	5.16.6	Applicants are encouraged to consider protective measures to control the risk of pollution to groundwater beyond those outlined in River Basin Management Plans and Groundwater Protection Zones – this could include, for example, the use of protective barriers.	The WFD Assessment (Volume 3, Annex 2.1: Water Framework Directive surface and groundwater assessment of the ES) (document reference F3.2.1) has been undertaken in accordance with the Planning Inspectorate Advice Note 18 (Planning Inspectorate, 2017). The assessment considers the potential impact of the Transmission Assets within the intertidal infrastructure area and onshore infrastructure area during the construction, operation and maintenance, and decommissioning.
	5.16.7	The ES should in particular describe: • the existing quality of waters affected by the proposed project and the impacts of the proposed project on water quality, noting any relevant existing discharges, proposed new discharges and proposed changes to discharges	

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
		• existing water resources affected by the proposed project and the impacts of the proposed project on water resources, noting any relevant existing abstraction rates, proposed new abstraction rates and proposed changes to abstraction rates (including any impact on or use of mains supplies and reference to Abstraction Licensing Strategies) and also demonstrate how proposals minimise the use of water resources and water consumption in the first instance • existing physical characteristics of the water environment (including quantity and dynamics of flow) affected by the proposed project and any impact of physical modifications to these characteristics • any impacts of the proposed project on water bodies or protected areas (including shellfish protected areas) under the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 and source protection zones (SPZs) around potable groundwater abstractions • how climate change could impact any of the above in the future • any cumulative effects	The WFD assessment and the proposed measures adopted as part of the Transmission Assets have taken into account the requirements of the North Western RBMP and WFD to ensure all potential impacts on the water environment are mitigated to within acceptable levels including drinking water protected areas associated with public and private abstractions. Environment Agency, Fylde Council, Blackpool Council, South Ribble Borough Council and Preston City Council (and Lancashire County Council at the County level) have been consulted during the preparation of the WFD assessment. The impact on hydromorphological supporting conditions to the biological elements of ecological status have been considered in the WFD assessment. The document has undertaken an assessment of the water bodies and associated protected areas including designated shellfish waters and drinking water protected areas. Impacts to peak river flow, peak rainfall intensity and sea level rise as a result of climate change has been described and taken into account within Volume 3, Annex 2.3: Flood risk assessment of the ES. Where appropriate, mitigation measures have been applied. A cumulative impact assessment of the water environment has been undertaken in Volume 3, Chapter 1: Geology, hydrogeology and ground conditions of the ES (document reference F3.1) and Chapter 2: Hydrology and flood risk of the ES (document reference F3.2).
Mitigation	5.16.8	The Secretary of State should consider whether mitigation measures are needed over and above any which may form part of the project application. A construction management plan may help codify mitigation at that stage.	Hydrogeological resources, groundwater abstractions and SPZs are identified in section 1.6.5 of Volume 3, Chapter 1: Geology, hydrogeology and ground conditions of the ES (document reference F3.1) and in Volume 3, Annex 1.1: Phase 1 Geo-Environmental Preliminary Risk Assessment of the ES (document reference F3.1.1). Potential impacts on the environmental objectives of the Water Framework Directive are set out in Volume 3, Annex 2.1 of the ES (document reference F3.2.1). Impacts of climate change are provided in section 1.6.8, and a cumulative effect assessment is provided in section 1.13 of Volume 3, Chapter 1: Geology, hydrogeology and ground conditions of the ES (document reference F.3.1). Details of impacts on surface water receptors are set out in Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F.3.2). Discharges are assessed within Annex 2.2: Surface water abstraction licences, discharge consents and pollution incidents of the ES (document reference F3.2.2). Hydrogeological resources, groundwater abstractions and SPZs are identified in section 1.6.5 of Volume 3, Chapter 1: Geology, hydrogeology and ground conditions of the ES (document reference F3.1) and in Volume 3, Annex 1.1: Phase 1 Geo-Environmental Preliminary Risk Assessment of the ES (document reference F3.1.1). Potential impacts on the environmental objectives of the Water Framework Directive are set out in Volume 3, Annex 2.1 of the ES. Impacts of climate change are provided in section 1.6.8 and a cumulative effect assessment is provided in section 1.13 of Volume 3, Chapter 1: Geology, hydrogeology and ground conditions of the ES (document reference F.3.1). Details of impacts on surface water receptors are set out in Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2). Discharges are assessed within Annex 2.2: Surface water abstraction licences, discharge consents and pollution incidents of the ES.
	5.16.9	The risk of impacts on the water environment can be reduced through careful design to facilitate adherence to good pollution control practice. For example, designated areas for storage and unloading, with appropriate drainage facilities, should be clearly marked.	Details of the mitigation measures proposed to control impacts are set out in Table 1.14. of Volume 3 Chapter 1: Geology, Hydrogeology and Ground Conditions of the ES (document reference F.3.1) and the Outline Surface Water and Groundwater Management Plan (document refence J1.9).

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
	5.16.10	The impact on local water resources can be minimised through planning and design for the efficient use of water, including water recycling. If a development needs new water infrastructure, significant supplies or impacts other water supplies, the applicant should consult with the local water company and the EA or NRW.	Measures are provided within the Outline Operational Drainage Management Plan (document reference J10). Mitigation measures for construction and operational phases of the onshore substations and onshore export cable corridor are presented within the FRA (Volume 3, Annex 2.3: Flood Risk Assessment of the ES (document reference F3.2.3)). Measures are provided within the Outline Operational Onshore Substation Drainage Management Plan in line with CoT11 as detailed in section 1.8 of Volume 3, Chapter 1: Geology, hydrogeology and ground conditions of the ES (document reference F.3.1). Pollution prevention measures are provided within the Outline Pollution Prevention Plan (document reference J1.4)
Secretary of State decision making	5.16.11	Activities that discharge to the water environment are subject to pollution control. The considerations set out in Section 4.12 on the interface between planning and pollution control therefore apply. These considerations will also apply in an analogous way to the abstraction licensing regime regulating activities that take water from the water environment, and to the control regimes relating to works to, and structures in, on, or under controlled waters.	Measures to ensure discharges to the water environment are subject to pollution control are detailed within the Outline Operational Drainage Management Plan (document reference J10) and Volume 1, Annex 3.1: Outline CoCP of the ES which includes an Outline Onshore Pollution Prevention Plan (document reference J1.4). Potential impacts from pollution and contamination are assessed within section 2.11.2 of Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F.3.2).
	5.16.12	The Secretary of State will need to give impacts on the water environment more weight where a project would have an adverse effect on the achievement of the environmental objectives established under the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017.	Measures to ensure discharges to the water environment are subject to pollution control are detailed within the Operational Drainage Management Plan (document reference J10) and the Outline CoCP (document reference J1) Volume 1, Annex 3.1: Outline Code of Construction Practice of the ES which includes an Outline Onshore Pollution Prevention Plan (document reference J1.4).
	5.16.13	The Secretary of State must also consider duties under other legislation including duties under the Environment Act 2021 in relation to environmental targets and have regard to the policies set out in the Government's Environmental Improvement Plan 2023.	The Environmental Improvement Plan (2023) sets targets to reduce pollution . Pollution prevention and reduction is discussed further in the Outline CoCP (document reference J1), which includes an Outline Surface Water and Groundwater Management Plan (document reference J1.9) and Outline Pollution Prevention Plan (document reference J1.4).
	5.16.14	The Secretary of State should be satisfied that a proposal has regard to current River Basin Management Plans and meets the requirements of the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (including regulation 19). The specific objectives for particular river basins are set out in River Basin Management Plans. The Secretary of State must refuse development consent where a project is likely to cause deterioration of a water body or its failure to achieve good status or good potential, unless the requirements set out in Regulation 19 are met. A project may be approved in the absence of a qualifying Overriding Public Interest test only if there is sufficient certainty that it will not cause deterioration or compromise the achievement of good status or good potential.	The WFD assessment (Volume 3 Annex 2.1: Water Framework Directive Water Framework Directive surface and groundwater assessment of the ES) has considered the North Western RBMP 2022-2027. The WFD assessment has been undertaken to demonstrate that the Transmission Assets are compliant with the requirements of the WFD and the implementing legislation in England and Wales, i.e., Water Environment (Water Framework Directive) (England and Wales) Regulations 2017. The assessment and the proposed mitigation measures have taken into account the requirements of the RBMP, and in particular the environmental objectives of the water bodies affected, to ensure all potential impacts on the water environment are mitigated to within acceptable levels. Therefore, the achievement of the environmental objectives of the water bodies within the WFD study area will not be compromised as a result of the project activities associated with the Transmission Assets.
	5.16.15	The Secretary of State should also consider the interactions of the proposed project with other plans such as Water Resources Management Plans and Shoreline Management Plans.	The shoreline management plan is defined and discussed within the FRA Volume 3, Annex 2.3: Flood risk assessment of the ES and the potential impacts to Lytham St Annes dunes which are detailed within the shoreline management plan are discussed within section 2.11.4 of Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F.3.2).
	5.16.16	The Secretary of State should consider proposals to mitigate adverse effects on the water environment and any enhancement measures put forward by the applicant and whether appropriate requirements should be attached to any development consent and/or planning obligations are necessary.	The WFD assessment, and proposed mitigation measures within it, (Volume 3 Annex 2.1: Water Framework Directive surface and groundwater assessment of the ES) have taken into account the requirements of the RBMP, and in particular the environmental objectives of the water bodies affected, to ensure all potential

Section / topic	Paragraph reference	NPS requirement	Accordance with the NPS
			impacts on the water environment are mitigated to within acceptable levels. Therefore, the achievement of the environmental objectives of the water bodies within the WFD study area will not be compromised as a result of the project activities associated with the Transmission Assets.

1.2 NPS EN-3

Table 1.2: NPS EN-3

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
2 General assessment and technology specific information			
1.6 Infrastructure covered by this NPS			
Infrastructure covered by this NPS	1.6.3	Similarly, it will apply to offshore transmission infrastructure project in English waters which are directed into the NSIP regime under section 35 of the Planning Act 2008. This could include interconnectors, Multi-Purpose Interconnectors (MPIs) or 'bootstraps' to support the onshore network which are routed onshore. EN-5 also applies to offshore transmission infrastructure projects in England waters which are directed into the NSIP regime.	NPS EN-3 largely relates to renewable energy infrastructure and sets out assessment principles in relation to the consideration of renewable projects. For Transmission Assets, EN-1 and EN-5 are the primary policy for decision making. The relevant paragraphs of EN-1 are included above (along with a compliance assessment) and the relevant paragraphs, and an assessment of compliance, for EN-5 are included below. However, due to the Transmission Assets spanning offshore and onshore, EN-3 is also of some relevance to the project. The paragraphs of relevance within EN-3 have been included an assessment of compliance undertaken. These should be read in addition to those of EN-1 and EN-5. Where requirements within EN-3 have been considered either in EN-1 or EN-5, these have been crossed referred to in this tracker.
2.1 Introduction			
Introduction	2.1.4	The policies set out in this NPS are additional to those on generic impacts set out in EN-1. Applicants should show how their application meets the requirements in EN-1 and this NPS, applying the mitigation hierarchy, as well as any other legal and regulatory requirements. This includes the assessment principles as set out in Part 4 of EN-1, and the consideration of impacts as set out in Part 5 of EN-1.	The Planning Statement (document reference J28) sets out the compliance of the Transmission Assets with national and local policy. It is shown that the application is consistent with the relevant NPSs, in accordance with Section 104 of the Planning Act 2008. There is a presumption in favour of applications which accord with any relevant NPSs, in particular those projects for which a CNP has been established. The Applicants have applied the mitigation hierarchy to ensure that there are no effects arising from the Transmission Assets that should affect the strong presumption in favour of granting consent. As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5). Mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3).
	2.1.5	The Secretary of State should consider this NPS and EN-1 together. In particular, EN-1 sets out the government's conclusion that there is an urgent need for new major electricity infrastructure (see Part 3 of EN-1).	
	2.1.6	Section 3 of EN-1 includes assessments of the need for new major renewable electricity infrastructure. In the light of this, the Secretary of State should act on the basis that the need for infrastructure covered by this NPS has been demonstrated.	
	2.1.7	As stated in Section 4.2 of EN-1, to support the urgent need for new low carbon infrastructure, all onshore and offshore electricity generation covered in this NPS that does not involve fossil fuel combustion (that is, renewable generation, including anaerobic digestion and other plants that convert residual waste into energy, including combustion, provided they meet existing definitions of low carbon) are considered to be Critical National Priority (CNP) infrastructure.	
	2.1.8	The assessment principles outlined in Section 4 of EN-1 continue to apply to CNP infrastructure. Applicants must show how any likely significant negative effects would be avoided, reduced, mitigated or compensated for, following the mitigation hierarchy. Early application of the mitigation hierarchy is strongly encouraged, as is engagement with key stakeholders including SNCBs, both before and at the formal pre-application stage.	
2.2 Relationship with English and Welsh renewables policies			

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
Relationship with English and Welsh renewables policies	2.2.1	Policy set out in existing planning guidance in England and, for any proposed project located in Wales, in relevant planning policy and advice issued by the Welsh Government, will provide important information to applicants of nationally significant renewable energy projects.	Volume 1, Chapter 2 Policy and Legislative Context of the ES (document reference F1.2) sets out detail on UK renewable policies. Further details of the Transmission Assets compliance with UK renewable policies and guidance are set out in Section 5 of the Planning Statement (document reference J28) and Volume 1, Chapter 2 Policy and Legislative Context of the ES (document reference F1.2). The National Planning Policy Framework Tracker (document reference J28.1) and the Local Plan Policy Tracker (document reference J28.3) also provide analysis on how the Transmission Assets are in compliance, or broad compliance, with national and local planning policy. The Transmission Assets are located wholly within England and therefore planning policy and advice issued by the Welsh Government is not applicable.
	2.2.2	Applicants should take these policies and guidance (including any relevant targets) into account and explain how their proposals fit with guidance or, alternatively, why they depart from them.	
	2.2.3	The Secretary of State should also have regard to these policies and guidance (including any relevant targets) in their decision making.	
	2.2.4	Whether an application conforms to the guidance or targets will not necessarily be a reason for approving or rejecting the application.	
2.3 Factors influencing site selection and design			
National designations	2.3.6	When considering applications for CNP Infrastructure in sites with nationally recognised designations (such as SSSIs, National Nature Reserves, National Parks, the Broads, Areas of Outstanding Natural Beauty, Registered Parks and Gardens, and World Heritage Sites), the Secretary of State will take as the starting point that the relevant tests in Sections 5.4 and 5.10 of EN-1 have been met, and any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by the urgent need for this type of infrastructure.	See Sections 5.4 and 5.10 of EN-1 above for responses. The landfall overlaps with the Lytham St. Annes dunes SSSI. All designated features of this SSSI are located above MHWS and are therefore assessed in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). Additionally CoT44 (Volume 1, Annex 5.3 of the ES (document reference F1.5.3)) sets out that the installation of the onshore export cable corridor at Lytham St Annes SSSI and the St Anne's Old Link Golf Course will be undertaken by direct pipe trenchless installation technique. The exit pits associated with the direct pipe installation will be at least 100 m seaward of the western boundary of the SSSI to avoid direct impacts. Furthermore direct pipe or micro tunnel trenchless installation techniques will also be used to cross the River Ribble where the 400 kV grid connection corridor is proposed (CoT90, Volume 1, Annex 5.3 of the ES (document reference F1.5.3)), therefore avoiding impacts on the Ribble Estuary SSSI. Also, the Planning Statement (document reference J28) has assessed the impacts and benefits to designated sites. In any case the starting point for the Secretary of State is that any adverse effects on designated sites are clearly outweighed by the urgent need for CNP.
	2.3.7	The Secretary of State should have regard to the aims, goals and targets (including targets set under the Environment Act 2021) of the government's Environmental Improvement Plan (of which the 25 Year Environment Plan is the first), and other existing and future measures and targets in England, as well as Welsh policy, such as the Wales National Marine Plan, Planning Policy Wales and Technical Advice Note (TAN) 5, the Wellbeing of Future Generations Wales Act and compliance with the Environment Act 2021.	The Environment Act 2021 sets out a number of targets and those that are relevant to the Transmission Assets are considered throughout this document (document reference J26), in particular in response to paragraph 4.3.20 of NPS EN-1 above.
	2.3.8	In considering the impact on the historic environment as set out in Section 5.9 of EN-1 and whether the Secretary of State is satisfied that the substantial public benefits would outweigh any loss or harm to the significance of a designated heritage asset, the Secretary of State should take into account the positive role that large-scale renewable projects play in the mitigation of climate change, the delivery of energy security and the urgency of meeting the net zero target.	See responses to Section 5.9 of EN-1 above. All of the impacts on designated heritage assets identified with regard to the Transmission Assets represent less than substantial harm to the significance of those assets. The Transmission Assets will make a significant contribution to new renewable generation as it will contribute to the mix of new energy generation required in order to deliver a secure, reliable, affordable, and net zero consistent system.
Other locational considerations	2.3.9	As most renewable energy resources can only be developed where the resource exists and where economically feasible, and because there are no limits on the need established in Part 3	See responses to Part 3 of EN-1 above.

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
		of EN-1, the Secretary of State should not use a consecutive approach in the consideration of renewable energy projects (for example, by giving priority to the re-use of previously developed land for renewable technology developments).	Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4) and the Outline Design Principles document (document reference J3). Maximum parameters for the substation have been refined following statutory consultation.
Seabed leasing	2.3.10 to 2.3.12	The Crown Estate owns and manages the seabed out to the 12nm territorial limit in England, Wales and Northern Ireland. The seabed around Scotland is managed by Crown Estate Scotland. As well as owning the rights to explore and utilise waters up to 12nm, the Energy Act 2004 gives The Crown Estate rights to issue leases for development beyond the territorial limit and within the REZ. Applicants must obtain a lease from The Crown Estate or Crown Estate Scotland prior to placing any offshore structures on, or passing cables over, the seabed and its foreshore.	The Applicants are engaging independently with The Crown Estate on the Agreements for Lease in regards to the Transmission Assets.
Extensions	2.3.13 to 2.3.15	The Crown Estate may offer new leases in areas adjacent to existing consented wind farms. This could be to either the owner/operator of the existing site or to a different company from that operating the existing wind farm. These leases will form extensions to existing wind farms. Leases may be awarded subject to the company obtaining the necessary consents and may be subject to various constraining conditions, including the presence of an existing operational wind farm. The Secretary of State should be aware of the potential for applications for extensions to existing wind farms and that there may be constraints on such leases over which the applicant will have little or no control.	
Marine licensing	2.3.16 to 2.3.18	Marine Licences are required for all the marine elements of a proposed offshore development (up to Mean High Water Springs), including associated development such as the cabling, offshore substations that are required, and any other aspects of a development that the appropriate licensing authority, such as National Policy Statement for Renewable Energy Infrastructure (EN-3), the MMO or NRW, may consider licensable under s66 of the Marine and Coastal Access Act 2009. Under section 58 of the Marine and Coastal Access Act 2009 (MCAA) the MMO makes all authorisation or enforcement decisions in accordance with marine plans and the Marine Policy Statement (MPS), unless relevant considerations indicate otherwise. This is also reflected in the MMO's input for the Secretary of State's consideration during the Development Consent Order (DCO) process. Any DCO granted by the Secretary of State may include provisions deeming the grant of a Marine Licence for operations carried out wholly in England and English waters, or the Welsh Zone of the REZ.	This application for a DCO includes draft Marine Licences which have been discussed with the MMO and wherever possible the MMO's requested changes to the dML drafting have been accommodated. The Applicants have engaged with the MMO throughout the pre-application and the course of the Examination, and submitted draft SoCGs at Deadline 1 (S_D1_6.8_F01; REP1-053) and Deadline 3 (S_D1_6.8_F02; REP3-049). The final SoCG with the MMO is S_D1_6.8/F04 submitted at Deadline 6. A Marine Conservation Zone Assessment (document reference E4) accompanies the DCO application. Part 5 of the Marine and Coastal Access Act 2009 enables the designation of MCZs in England and Wales as well as UK offshore areas. Consideration of MCZs is required for any marine licence application or application for development consent within an MCZ which includes a deemed marine licence. Impacts on MCZs are considered in the Stage 1 MCZ Assessment (document reference: E4). There is no identified adverse effect on the integrity of a protected site or species, and in respect of the MCZ although the Applicants do not consider it necessary, a Stage 2 assessment and measures of equivalent environmental benefit have been provided on a 'without prejudice' basis.
	2.3.19	The MMO is responsible for the enforcement, ongoing management and discharge of licence conditions, for operations carried out in English waters and the Northern Ireland offshore region.	
	2.3.22	The Secretary of State should liaise closely with the MMO, NRW, Marine Scotland where relevant, on the proposed terms of any deemed Marine Licence.	
	2.3.23	Applicants must approach the Marine Licensing regulator (MMO in England and NRW in Wales) early in the pre-application process to ensure that they are aware of any needs for additional marine licence consents alongside their DCO application.	
	2.3.24	As part of marine licensing, impacts on marine protected areas (MPAs) will be considered. Further guidance on marine licensing is set out in Section 1.2 of EN-1.	
2.4 Climate change adaptation and resilience			

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
	2.4.1	Part 2 of EN-1 covers the government's energy and climate change strategy, including policies for mitigating climate change	See responses to Section 4.10, 5.6 and 5.8 of EN-1 above.
	2.4.2	Section 4.10 of EN-1 sets out generic considerations that applicants and the Secretary of State should take into account to help ensure that renewable energy infrastructure is safe and resilient to climate change, and that necessary action can be taken to ensure the operation of the infrastructure over its estimated lifetime.	
	2.4.3	Section 4.10 of EN-1 advises that the resilience of the project to climate change should be assessed in the Environmental Statement (ES) accompanying an application. For example, the impact of increased risk of drought as a result of higher temperatures should be covered in the water quality and resources section of the ES.	
	2.4.4	Section 5.6 Coastal Change and Section 5.8 Flood Risk of EN-1 set out generic considerations that applicants and the Secretary of State should take into account in order to manage coastal change and flood risks.	
Offshore wind	2.4.8	Whilst offshore wind farms will not be affected by flooding, applicants should demonstrate that any necessary land-side infrastructure (such as cabling and onshore substations) will be appropriately resilient to climate-change induced weather phenomena. Similarly, applicants should particularly set out how the proposal would be resilient to storms.	Volume 4, Chapter 1: Climate Change of the ES (document reference F4.1) provides an assessment of climate risk and resilience for the Transmission Assets. Further details are provided within Volume 4, Annex 1.2: Climate change risk assessment of the ES (document reference F4.1.2). Resilience to storms is discussed in Volume 2, Chapter 1: Physical processes of the ES in relation to the intertidal area (document reference F2.1). The resilience to flood risk of the onshore elements of the Transmission Assets is set out within Volume 3, Chapter 2: Hydrology and flood risk of the ES (document reference F3.2) and Volume 3, Annex 2.3: Flood risk assessment of the ES (document reference F3.2.3). See also Outline Operational Drainage Management Plan (document reference J10).
2.5 Consideration of good design for energy infrastructure			
Consideration of good design for energy infrastructure	2.5.1	Section 4.7 of EN-1 sets out the criteria for good design that should be applied to all energy infrastructure.	See response to Section 4.7 of EN-1 above.
	2.5.2	Proposals for renewable energy infrastructure should demonstrate good design, particularly in respect of landscape and visual amenity, opportunities for co-existence/co-location with other marine and terrestrial uses, and in the design of the project to mitigate impacts such as noise and effects on ecology and heritage.	The Applicants have committed to good design principles to be adopted through the detailed design phase. Where practicable, the Applicants have looked to provide a coordinated and aligned approach to the design and development of mitigation and enhancement measures. This has included, for example, a coordinated approach to the design at the onshore substation sites to incorporate ecological and landscape considerations, that will result in wider environmental gains. Onshore ecology effects are assessed in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.8 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). The outline landscape design is set out within the Outline Landscape Management Plan (document reference J2) and Outline Design Principles document (document reference J3). Heritage impacts in Volume 3, Chapter 5: Historic environment of the ES (document reference F3.5). Where the EIA process identifies any measures required to reduce noise, these have been identified and set out as Commitments, see section 8.8 of Volume 3, Chapter 8: Noise and vibration of the ES (document reference F3.8).

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
			The Applicants have prepared the outline Design Principles (oDP) (document J3) to demonstrate compliance with best practice and policy guidance on good design. The oDP forms part of the certified suite of documents supporting the DCO application and provides a central, clear, and enforceable framework for post-consent detailed design with the discharging planning authority. The principles of the oDP seek to guide the design process towards design outcomes that ensure that the substation sites would fit sensitively into the local context; mitigate (as far as possible) adverse environmental effects and respects local communities. The Applicants' design approach has been informed by the National Infrastructure Commission's Design Principles for National Infrastructure (2020), updated during Examination to reflect the Project-Level Design Principles (May 2024), alongside lessons learned from recently consented DCO precedent projects. This structured approach ensures that the Transmission Assets respond directly to the key elements of good design set out in NPS EN-1. The Applicants believe that the Transmission Assets application has strongly responded to the criteria for good design, as illustrated by the following: • The Transmission Assets have been designed to be fit for purpose and efficient in delivering their operational role of connecting offshore generation to the national electricity transmission system. The Maximum Design Scenario (MDS), prepared in accordance with Advice Note Nine: Rochdale Envelope, establishes clear parameters that provide sufficient certainty for the EIA process while retaining appropriate flexibility, beneath the parameters set in the MDS, to accommodate final procurement, design and technology selection during post - consent detailed design. Functionality has been embedded from the outset of the Projects as part of the iterative site selection and refinement process, ensuring that the substation sites can be delivered safely, efficiently and with resilience. • The design approach incorporates measures to minimise environmental impacts, as set out in the EIA. Embedded mitigation has been integrated, insofar as possible at this stage of the Projects, into the substation sites and their immediate contexts. Both the strategic and project -level design principles, as outlined in the oDP (J3), promote sustainable construction methods and adaptability to technological innovation, thereby supporting the overarching vision for the Transmission Assets and contributing to national decarbonisation objectives. Consideration has also been given to energy efficiency, climate resilience and biodiversity enhancement as part of the iterative design process. • The Applicants are committed to ensuring that the final appearance of the substations is sensitively designed insofar as possible. Through the oDP (J3) and its project - level design principles and codes, discussed and informed by engagement with the local planning authorities, the Applicants are committed to delivering in collaboration with the discharging local authority, designs that reflect and integrate, as far as practicable, the key characteristics of the receiving landscape. Whilst recognising the primarily functional nature of electrical substation infrastructure, the project -level design principles will continue to guide the post-consent detailed design process, ensuring consistency with the principles secured through the DCO, while retaining flexibility to respond to technical and environmental considerations. A degree of flexibility in relation to layout will be explored during detailed design, subject to the appointment of technical partners, with the Applicants' Design Champions providing oversight. Appearance and landscape integration are treated as core design considerations. The illustrative landscape proposals, as documented in the oLMP (J2/F04), incorporate embedded landscape mitigation and proportionate design measures that are responsive to their setting, informed by consultation

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
			feedback and environmental constraints. As stated above, the oDP establishes central, clear, and enforceable framework for detailed design of the form, scale and landscape treatment (within the Order Limits), with final detailed designs to be reviewed and approved by the relevant planning authority in accordance with Requirement 4 of the DCO. • The Applicants' consenting strategy has been developed to provide appropriate flexibility in the design of the Transmission Assets, ensuring that the substations remain resilient and adaptable to future requirements. As stated above, the MDS establishes a robust framework for environmental assessment while accommodating the input of technology providers during the detailed design stage. This flexibility might encompass construction methods, final extent and layout, allowing the Transmission Assets to respond to advances in technology and supply chain input without undermining the principles of good design.
2.6 Flexibility in the project details			
Flexibility in the project details	2.6.1	Where details are still to be finalised, applicants should explain in the application which elements of the proposal have yet to be finalised, and the reason why this is the case.	See response to Section 4.3 of EN-1 above,
	2.6.2	Where flexibility is sought in the consent as a result, applicants should, to the best of their knowledge, assess the likely worst-case environmental, social and economic effects of the proposed development to ensure that the impacts of the project as it may be constructed have been properly assessed.	
	2.6.3	Full guidance on how applicants and the Secretary of State should manage flexibility is set out in Section 4.3 of EN-1.	
2.8 Offshore wind			
Introduction	2.8.1	As set out in the British Energy Security Strategy (BESS), the Government expects that offshore wind (including floating wind) will play a significant role in meeting demand and decarbonising the energy system. The ambition is to deploy up to 50GW of offshore wind capacity (including up to 5GW floating wind) by 2030, with an expectation that there will be a need for substantially more installed offshore capacity beyond this to achieve net zero carbon emissions by 2050.	The British Energy Security Strategy 2022 has been considered within the Planning Statement (document reference J28). The Transmission Assets, as an energy transmission Critical National Priority (CNP) infrastructure project will make a beneficial contribution to global efforts to reduce the effects of climate change and would represent a meaningful contribution achieving security of UK energy supplies by unlocking almost 2GW of new offshore wind generation. The Transmission Assets also facilitates the delivery of two renewable energy generation NSIPs. As such, the Transmission Assets will make a material contribution to reducing the UK's current shortfall in meeting the policy ambition 50GW of offshore wind electricity generation by 2030 which adds to the substantial weight in favour of the Transmission Assets. Project details are presented in Volume 1, Chapter 3: Project description of the ES (document reference F1.3). Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4) and the Outline Design Principles document (document reference J3). Maximum parameters for the substation have been refined following statutory consultation. In relation to the OWEIP, this is still being implemented through secondary legislation and guidance..
	2.8.2	To meet its objectives government considers that all offshore wind developments are likely to need to maximise their capacity within the technological, environmental, and other constraints of the development.	
	2.8.3 to 2.8.5	There are two main UK sea areas where offshore wind farms can be built: • in UK territorial waters, which generally extend up to 12 nautical miles (nm) from the coast; and • beyond the 12 nm limit where, under international law, the UK is able to construct wind farm installations or other structures to produce renewable energy in the Renewable Energy Zone (REZ) as declared in the Energy Act 2004. • Any reference within this NPS to offshore wind farm infrastructure includes all the elements which may be part of an offshore wind farm application including: – wind turbines; – all types of foundations (fixed bottom or floating); – onshore and offshore substations; – anemometry masts; – accommodation platforms; and – cabling (offshore transmission). • In addition, this section on offshore wind makes many references to cabling and offshore transmission. Applicants bringing forward proposals for that infrastructure should note all	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
		such references; cabling refers to all types of electricity network infrastructure including offshore transmission as well as the inter-array cables for a wind farm.	
Consenting process	2.8.6 to 2.8.10	For guidance on DCOs and Marine Licences, applicants and the Secretary of State should consult section 2.3.16 of this NPS. Given ambitions to deliver up to 50 GW of offshore wind by 2030, including up to 5 GW of floating wind, there is a need to speed up, and reduce delays in, the consenting process. The British Energy Security Strategy committed to implementing an Offshore Wind Environmental Improvement Package (OWEIP), which aims to streamline environmental assessments, decrease consenting times, and maintain marine environmental protections. The OWEIP includes measures to: • revise Marine Protected Area assessment guidance (including Habitats Regulations and Marine Conservation Zone (MCZ) Assessments) to streamline and simplify the information applicants must supply. • revise the Habitats Regulations and MCZ assessment process for offshore wind to facilitate the delivery of compensation measures whilst maintaining valued protection for wildlife. • facilitate the delivery of strategic environmental compensation measures to offset environmental effects and reduce delays to projects, including development of a library of compensation measures, through the Collaboration on Offshore Wind Strategic Compensation (COWSC) programme. • implement an industry-funded Marine Recovery Fund (MRF), into which developers can choose to contribute to meet their environmental compensation obligations. • mmcommon requirement for designing wind farms and offshore transmission infrastructure, providing greater certainty and speeding up the consenting process. • develop a strategic approach to environmental monitoring. Various aspects of the Offshore Wind Environmental Improvement Package (OWEIP) will be subject to public consultation and guidance will be produced in due course. The OWEIP applies to “the planning, construction, operation or decommissioning of offshore wind electricity infrastructure” and the identification of an area for such an activity. Infrastructure is defined in the Energy Act and includes offshore transmission infrastructure such as bootstraps.	
Offshore Wind: Applicant Assessment			
Factors influencing site selection and design	2.8.11 to 2.8.13	General factors influencing site selection by applicants are set out at Section 2.3 of this NPS. Specific considerations involved in the siting of an offshore wind development are additionally likely to be influenced by factors set out in the following paragraphs. The specific criteria considered by applicants, and the role that they play in site selection, will vary from project to project.	See Section 2.3 (above) for further details in addition to Section 4.5 of EN-1 (also above) for responses. Details of how the site was chosen, including consideration of Energy SEA 431 where relevant are presented in Volume 1, Chapter 4: Site Selection and Consideration of Alternatives (document reference F1.4).
	2.8.14 to 2.8.15	In proposing sites for offshore wind and/or offshore transmission infrastructure, NSIP applicants should demonstrate that their choice of site takes into account the government’s Offshore Energy SEA 4 and any successors to it. The government is undertaking a rolling Offshore Energy SEA programme, including a research programme and data collection to facilitate future strategic and project specific assessments to achieve the 50GW ambitions.	
Factors influencing site selection and design: Marine planning	2.8.16 to 2.8.19	Marine planning currently enables the increasing demands for use of the marine area to be balanced and managed in an integrated way that protects the marine environment whilst supporting sustainable development. Marine plans provide a transparent framework for consistent, evidence-based decision making and should be used by applicants to guide site selection. Marine plans will help applicants understand generic potential impacts of their proposal at an early stage e.g., in relation to other activities, or where there are marine protected areas. Further information is provided in Section 4.5 of EN-1.	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
		The cross-Government Marine Spatial Prioritisation Programme will review how marine plans, the wider planning regime, legislation and guidance may need to evolve to ensure a more holistic approach to the use of the seas, and that this is taken to maximise co-existence/co-location possibilities.	
Factors influencing site selection and design: Seabed leasing	2.8.20 to 2.8.24	The Crown Estate issues leases for offshore wind farms in tendering rounds. Applicants must obtain a lease prior to placing an offshore wind structure on, or passing transmission export cables over, the seabed and its foreshore (see section 2.3.10 of this NPS for information in seabed leasing and capacity extensions). Rounds 1, 2 and 3 are closed and sites leased in those rounds are either operational; in construction; consented but yet to be constructed; awaiting determination; or yet to apply for development consent. Leasing Round 4 is completed, with agreements for lease awarded in January 2023. To date, each offshore wind leasing round has been supported by a plan level HRA, which assesses the impact of the leasing round on protected sites. It should also be noted that aspects of plan level HRAs that remain relevant at the project level might be able to be relied upon to inform the project level HRA, reducing the project level effort required and reducing duplication. The assessment serves to provide a better understanding of the potential effects and identify measures which can be put in place to avoid, mitigate, or reduce those significant effects at a plan level. Where an assessment concludes that there will still be an adverse impact, a case for derogation can be considered. This must meet strict legal tests, which includes identifying compensatory measures.	The Applicants are engaging independently with The Crown Estate on the Agreements for Lease in regard to the Transmission Assets.
	2.8.25	Individual project lease agreements from The Crown Estate often include limits on development (such as a maximum generation capacity), which are used by The Crown Estate as a proxy to establish environmental effects at the plan level. Consistent with the Government's objectives in this NPS, project developers should seek to maximise their capacity within the technological, environmental, and other constraints of the project. At the development consent stage, the Secretary of State will use detailed maximum project parameters to assess environmental impacts, and these will be reflected in the DCO. Such parameters may differ from the limits on development assumed by The Crown Estate in the agreement for lease e.g., as a rule, the Secretary of State will not include a maximum capacity limit within the DCO. Future offshore development may occur in rounds, as piecemeal development or using any other development mechanism as required.	
Factors influencing site selection and design: Offshore-onshore network connection	2.8.34 to 2.8.43	As identified in paragraphs 3.3.65 – 3.3.83 and Section 4.11 of EN-1, and Section 2.12 of EN-5, a more co-ordinated approach to offshore-onshore transmission is required. The previous standard approach to offshore-onshore connection involved a radial connection between single wind farm projects and the shore. A coordinated approach will involve the connection of multiple, spatially close, offshore wind farms and other offshore infrastructure, wherever possible, as relevant to onshore network. This will include connections via multi-purpose interconnectors (MPIs), which combine the connection of offshore wind with the function of market-to-market interconnectors. Co-ordinated transmission proposals have principally been developed through, and as a consequence of, a process of ongoing reform38 including through strategic network planning, such as the Holistic Network Design for onshore-offshore transmission, as outlined in EN-5. Further details are provided in EN-5, section 2.12-2.15. As part of the transition to more co-ordinated transmission, it is anticipated that some proposals for transmission could be consented separately to those for the wind farm (array) application. For this to occur, an applicant will need to make a request to the Secretary of State. The Secretary of State would then decide whether to give direction under Section 35 of the Planning Act 2008.	See Paragraphs 3.3.65 - 3.3.83 and Section 4.11 of EN-1 above for responses and Section 2.12 of EN-5 below. 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 substations (and associated infrastructure), and onward connection to the National Grid at Penwortham, Lancashire. Following a request from the Applicants, on 4 October 2022 the Secretary of State issued a direction under section 35 of the Planning Act 2008 (document reference J24) that the Transmission Assets should be treated as 'development for which development consent is required'. Applications for development consent under the Planning Act 2008 are submitted to and examined by the Planning Inspectorate and determined by the relevant Secretary of State

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
		… The design of wind farms, and offshore transmission (including interconnection and Multi-Purpose Interconnector) projects should seek to be sufficiently flexible so that they are futureproofed as far as possible to enable future connections with different types of offshore transmission or wind farms respectively, where these are proposed to be spatially proximate.	
Factors influencing site selection and design: Other offshore infrastructure and activities	2.8.44 to 2.8.45	There may be constraints imposed on the siting or design of offshore wind farms because of the presence of other offshore infrastructure, such as oil and gas, Carbon Capture, Usage and Storage (CCUS), co-location of electrolysers for hydrogen production, marine aggregate dredging, telecommunications, or activities such as aviation and recreation. Given the scale of offshore wind deployment required to meet 2030 and 2050 ambitions, and the importance of the UK Continental Shelf (UKCS) in supporting progress towards net zero commitments there will be increasing demand on the UKCS which could give rise to conflicts. The occurrence of conflict between offshore development projects in the short term could restrict the capacity of the UKCS to support the variety of technologies required for the delivery of net zero.	The baseline environment considering other offshore infrastructure and activities is presented in section 9.6 of Volume 2, Chapter 9: Other sea users of the ES (document reference F2.9) and constraints have been considered within Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4). Consultation with potentially affected stakeholders has been carried out from the early stages of the Transmission Assets and continued throughout the pre-application consultation process as well as throughout Examination. Details of this are presented in the Consultation Report (document reference E1).
	2.8.46	Applicants should consult the government's Marine Plans (further detailed in Section 4.5 of EN-1) which are a useful information source of existing and known or potential activities and infrastructure.	See Section 4.5 of EN-1 for responses.
	2.8.47	Prior to the submission of an application involving the development of the seabed, applicants should engage with key stakeholders, such as The Crown Estate and statutory bodies to ensure they are aware of any current or emerging interests on or underneath the seabed which might give rise to a conflict with a specific application. This will ensure adequate opportunity to reduce potential conflicts and increase time to find a resolution.	Consultation with key stakeholders has been undertaken throughout the process of this application, details of which can be found in the Consultation Report document (document reference E1). Consultation has continued throughout the Examination process, and a Statement of Common Ground with the following key stakeholders has been submitted at Deadline 6; • Marine Coastguard Agency; • Spirit Energy; and • Trinity House.
	2.8.48	Applicants are encouraged to work collaboratively with those other developers and sea users on co-existence/co-location opportunities, shared mitigation, compensation and monitoring where appropriate. Where applicable, the creation of statements of common ground between developers is recommended. Work is ongoing between government and industry to support effective collaboration and to find solutions to facilitate to greater co-existence/co-location.	
	2.8.49	As an interested party, The Crown Estate may also provide further supporting information and evidence as part of the examination. This guidance is to encourage early engagement between parties with a potential overlap in their development plans so that a solution can be found that optimises the capacity of the UKCS to enable net zero.	
	2.8.50	The applicant will also need to consider impacts on civil and military radar and other aviation and defence interests (Section 5.5 of EN-1)	See Section 5.5 of EN.1 above for a response.
Factors influencing site selection and design: Marine protected areas	2.8.51 to 2.8.56	The UK Government has obligations to protect the marine environment with a network of well managed Marine Protected Areas (MPAs), which also includes Highly Protected Marine Areas (HPMAs). MCZs together with HPMAs, SACs SPAs, and Ramsar sites and marine elements of SSSIs form an ecologically coherent network of MPAs. The government has set a target for MPA condition under the Environment Act 2021. Given the scale of offshore wind deployment required to meet 2030 and 2050 ambitions, applicants will need to give close consideration to impacts on MPAs, either alone or in combination, and employ the mitigation hierarchy, and if necessary provide compensation (both individually and in combination with other plans or projects) which may be needed to approve their projects. It is likely that mitigation may include proactive measures to reduce the impact of deployment e.g., micrositing of offshore transmission routes to avoid vulnerable habitats, alternatives piling or trenching techniques, noise abatement technology, collision avoidance methods or, if necessary, compensation for habitat loss. See Section 2.8.80 for Offshore Wind Environmental Standards. Further guidance can be found in Sections 4.3 and 5.4 of EN-1. The British Energy Security Strategy included a commitment to introducing mechanisms to support strategic compensatory measures, including for projects already in the consenting	All designated sites with relevant benthic ecology features which have the potential to be impacted by the Transmission Assets as well as protected habitats and species within the benthic subtidal and intertidal ecology study area have been identified as IEFs (section 2.6.5 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES, document reference F2.2) and considered in the assessment where relevant in section 2.6.2 of Volume 2, Chapter 2. The HRA Stage 1 Screening report (document reference E3) identifies direct or indirect effects on European sites which could be affected, and those sites have been assessed in the HRA Stage 2 ISAA (document reference E2.1, E2.2 and E2.3). The HRA Stage 1 ISAA concludes that there will be no adverse effect on integrity of any European site as a result of the Transmission Assets alone or in-combination with other projects. The Information to Support Appropriate Assessment does not predict any adverse effects on integrity of any SAC, SPA or Ramsar and as such, no compensatory measures are considered necessary for the purposes of the HRA process.

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
		process (where possible), to offset environmental impacts and reduce delays to individual projects. Only once all feasible alternatives and mitigation measures have been employed, should applicants explore possible compensatory measures to make good any remaining significant adverse effects to site integrity. Applicants are expected to seek advice from SNCBs and Defra for projects in England, in conjunction with relevant regulators, Local Planning Authorities and/or landowners, on potential mitigation and/or compensation requirements at the earliest opportunity and comply with future statutory requirements and/or guidance once available.	Within the HRA three mitigation areas were proposed to reduce the effects of the Transmission Assets, and throughout the examination process the issue of compensation vs mitigation has been tested by the ExA In response to ExA Q2:9.1.9 Natural England state: “Lytham Moss and Newton-with-Scales were proposed by the Applicant to avoid or reduce impacts to FLL impacted by the temporary activities along the terrestrial cable route, they were not proposed to compensate for unavoidable residual impacts within the SPA. Therefore, our view is that it is acceptable to consider Lytham Moss and Newton-with-Scales as mitigation rather than compensation areas.” In addition, Natural England have been able to rule out AEoI for impacts at the landfall, therefore the remaining mitigation area at Fairhaven Saltmarsh is now considered as an alleviation measure with no need for compensatory measures. The MCZ Screening and Stage 1 Assessment Report (document reference E4) identified a single MCZ, the Fylde MCZ, with the potential to be affected (other than insignificantly) by the construction, operation and maintenance, and decommissioning of the Transmission Assets. A Stage 1 Screening Report (document reference E4) has been undertaken which has concluded that the conservation objective of maintaining the protected features of the Fylde MCZ in a favourable condition will not be hindered by the construction, operation and maintenance, and decommissioning phases of the Transmission Assets in isolation, or cumulatively with any other plan, project or activity. There is no identified adverse effect on the integrity of a protected site or species, and in respect of the MCZ although the Applicants do not consider it necessary, a Stage 2 assessment and measures of equivalent environmental benefit have been provided on a ‘without prejudice’ basis.
Factors influencing site selection and design: Green belts	2.8.57 to 2.8.58	Although offshore wind farms themselves will not have a direct impact on green belts, it is possible that some elements of these projects may be proposed on green belt land, such as electricity network infrastructure, and comprise inappropriate development which may impact on the openness of the green belt. For guidance on developing on green belts applicants should consult Section 5.11 of EN-1.	See Section 5.11 of EN-1 above for a response.
Technical considerations: Network connection	2.8.59	Applicants should consider important issues relating to network connection at Section 4.11 of EN-1 and in EN-5. In particular, applicants should proceed in a manner consistent with the regulatory regime for offshore transmission networks established by Ofgem. The co-ordination of transmission is supported by reforms and regulatory changes to enable this, including as part of the previous Offshore Transmission Network Review (OTNR).	See Paragraphs 3.3.65-3.3.83 and Section 4.11 of EN-1 above for responses and Sections 2.7, 2.8 and 2.12 of EN-5 below.
	2.8.60	As co-ordinated offshore transmission development may sometimes occur separate to that for wind farm development (under reforms including through strategic network design exercises - see next paragraph), it is expected that an initial agreement will be reached regarding connection with the offshore transmission network developer (or operator) and/or connection into the onshore transmission network.	
	2.8.61	For many wind farm projects, including those from The Crown Estate Leasing Round 4 onwards, connection agreements will be limited to connection points proposed through strategic network design exercises such as those undertaken by the National Grid Electricity System Operator, including the Holistic Network Design for offshore-onshore transmission. Please see section 2.7 and 2.8 of EN-5 for further details on strategic network designs.	
	2.8.62	Transmission cabling from offshore energy infrastructure can negatively impact (both during installation and over their lifetime) seabed habitats and protected sites.	
	2.8.63	It is expected that greater coordination of offshore-onshore transmission infrastructure is likely to reduce the cumulative environmental impacts and impacts on coastal communities by installing a smaller number of larger connections.	

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	2.8.64	Where applicants seek consent for offshore transmission infrastructure separately from proposals for offshore wind development, for example Multi-Purpose Interconnectors or subsea 'onshore' transmission also referred to as bootstraps, (see Glossary and 2.12.3 in EN-5), consideration should be given at a strategic level to the overall environmental impacts of the offshore development and transmission infrastructure.	
	2.8.65	Early planning can help avoid the location of either windfarm or transmission infrastructure pushing the other into areas where environmental impacts could be increased.	
	2.8.66	The location of arrays and transmission infrastructure should be assessed strategically (especially where they are not covered by the same consent or marine licence), and the mitigation hierarchy should be used to address any environmental impact.	
	2.8.67	In addition, the applicant is expected to define the precise route for offshore transmission infrastructure, including the wind farm export cable to the offshore transmission network connection point or onshore connection point, the onshore and offshore locations of any associated infrastructure such as substations or the location of bootstraps/ subsea 'onshore' transmission. Please refer to definitions of offshore transmission in EN-5 at 2.12.3 – 2.12.6.	An offshore cable corridor within which the specific infrastructure is proposed to be located has been identified and it is provided in the Offshore Order Limits and Grid Coordinates Plan (document reference B4). The onshore and offshore associated infrastructure are provided in Works Plans - Onshore and Intertidal (document reference B8) and Works Plan - Offshore (document reference B9). The maximum impacts of the cable during construction, operation, and decommissioning have been assessed in relation to the marine, coastal and onshore environment through the entire cable corridor and contained within Volume 2, Chapter 1: Physical process (document reference F2.1), Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (document reference F2.2); Volume 2, Chapter 3: Fish and shellfish ecology (document reference F2.3); Volume 3, Chapter 4: Marine mammals (document reference F2.4) and Volume 2, Chapter 5: Offshore ornithology (document reference F2.5) of the ES.
	2.8.68	The applicant should assess the effects of the offshore transmission and any associated infrastructure on the marine, coastal and onshore environment.	
	2.8.69	Where the applicant does not know the precise location of the offshore transmission cables and any associated infrastructure, a corridor should be identified within which the specific infrastructure is proposed to be located.	
	2.8.70 - 2.8.71	The ES for the proposed project should assess the effects of including this infrastructure within that corridor. Applicants are expected to demonstrate compliance with mitigation measures identified by The Crown Estate in any plan-level HRA produced as part of its leasing rounds and with any future statutory requirements, guidance or mitigation measures developed to deliver the commitments in the British Energy Security Strategy, including on Offshore Wind Environmental Standards (see 2.8.90 – 2.8.92 below) and other measures under the Offshore Wind Environmental Improvement Package which covers offshore wind electricity infrastructure.	
	2.8.72	Assessment of environmental effects of transmission infrastructure and any proposed offshore or onshore substations should assess effects both alone and cumulatively with other existing and proposed infrastructure.	The ES (document reference F1 – F4) considers the potential for likely significant effects as a result of the Transmission Assets both alone and cumulatively with other existing and proposed infrastructure.
	2.8.73	Applicants should include details on how avoidance has been achieved, good design principles have been followed and provide proposals for mitigation. If the development is in English and Welsh waters, they should also demonstrate that they have considered how their proposals can contribute towards environmental net gain. Further information is provided in Sections 4.3, and 4.5 to 4.7 of EN-1	
Technical considerations: Flexibility in the project details	2.8.74 to 2.8.75	Owing to the complex nature of offshore wind farm development, many of the details of a proposed scheme may be unknown to the applicant at the time of the application to the Secretary of State. Such aspects may include: • the precise location and configuration of turbines and associated development; • the foundation type and size; • the installation technique or hammer energy; • the exact turbine blade tip height and rotor swept area; • the cable type and precise cable or offshore transmission route; • the exact locations of offshore and/or onshore substations; • Guidance on how applicants should manage flexibility is set out at section 2.6 of this NPS and 4.3 of EN-1.	Volume 1, Chapter 3: Project description of the ES (document reference F1.3) sets out the project design envelope including the elements yet to be finalised, and each topic chapter assessment has taken a MDS approach, which considers the likely worst cast environmental, social and economic effects to ensure that a worst case scenario has been assessed. The Transmission Assets EIA has employed a Rochdale Envelope approach. This approach is consistent with the Planning Inspectorate's Advice Note Nine: Rochdale Envelope (Planning Inspectorate, 2018). This provides flexibility, while ensuring all potentially significant effects (positive or adverse) are assessed within the EIA process and reported in the Environmental Statement. This approach is generally accepted for offshore wind projects because it is a constantly evolving industry with a focus on being cost-effective.

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Technical considerations: Micrositing and microrouteing	2.8.76	Micrositing/microrouteing provides developers with flexibility to accommodate any unforeseen events, such as the discovery of previously unknown marine archaeology that it would be preferable to leave *in situ*. It can also be used to avoid sensitive habitats and designated environmental features.	Volume 1, Chapter 3 Project description of the ES (document reference F1.3) sets out the project design envelope including allowance for micrositing as informed by survey work. The archaeological review of geophysical data is included in section 8.6.4 of Volume 2, Chapter 8: Marine Archaeology of the ES (document reference F2.8) and in Volume 2, Appendix 8.1: Marine archaeology technical report of the ES (document reference F2.8.1). The outline offshore WSI for archaeology (document reference: J17, as per CoT63, Volume 1, Annex 5.3 of the ES (document reference F1.5.3)) provides provision for investigative work post-consent, and the assessment of impacts of any infrastructure is presented in section 8.11 of Volume 2, Chapter 8: Marine Archaeology of the ES.
	2.8.77	To inform micrositing/microrouteing applicants should undertake high-resolution survey work and make provision for investigative work, such as archaeological examination, to assess the impacts of any proposed cables or foundation placement on potential heritage assets.	
	2.8.78	Applicants should submit an outline archaeological Written Scheme of Investigation (WSI) as part of the DCO submission, with a commitment to complete a project specific WSI post-consent in consultation with Historic England.	The outline offshore WSI for archaeology (document reference J17, as per CoT63) is included within the draft DCO. In accordance with Requirement 11, a WSI post consent must be completed in consultation with Historic England. A signed SoCG with Historic England was submitted into Examination at Deadline 5 (REP5-088).
	2.8.79	Where the applicant requests micrositing or microrouteing tolerance, and insofar as it is reasonably possible to do so, the applicant should factor this tolerance into the environmental impact assessment of the development's worst-case scenario	Volume 1, Chapter 3 Project description of the ES (document reference F1.3) sets out the project design envelope including the elements yet to be finalised, and each topic chapter assessment has taken a MDS approach, which considers the likely worst case environmental, social and economic effects to ensure that a worst case scenario has been assessed including consideration for micrositing. The archaeological review of geophysical data is included in section 8.6.4 of Volume 2, Chapter 8: Marine Archaeology of the ES (document reference F2.8) and in Volume 2, Appendix 8.1: Marine archaeology technical report of the ES (document reference F2.8.1). The outline offshore WSI for archaeology (document reference: J17, as per CoT63) provides provision for investigative work post-consent, and the assessment of impacts of any infrastructure is presented in section 8.11 of Volume 2, Chapter 8: Marine Archaeology of the ES.
Technical considerations: Future monitoring	2.8.83	Where requested by the Secretary of State applicants are required to undertake environmental monitoring (e.g., ornithological surveys, geomorphological surveys, archaeological surveys) prior to and during construction and operation.	The Applicants will comply with any such requests made by the Secretary of State with regards to future monitoring. An Offshore In Principle Monitoring Plan (document reference J20) and an Outline Operations and Maintenance Plan (document reference J19) is included with the application which details the monitoring commitments made by the Applicants. The Offshore In Principle Monitoring Plan (J20/F05) and Outline Operations and Maintenance Plan (J19/F03) have been updated throughout the Examination, in consultation with the MMO and Natural England.
	2.8.84	Monitoring must measure and document the effects of the development and the efficacy of any associated mitigation or compensation.	
	2.8.85	This will enable an assessment of the accuracy of the original predictions and improve the evidence base for future mitigation and compensation measures, enabling better decision-making in future EIAs and HRAs.	
	2.8.86	Monitoring should be presented in formal reports which must be made publicly available. Monitoring data should be provided to The Crown Estate's Marine Data Exchange.	
	2.8.87	Where appropriate, applicants are also encouraged to consider monitoring collaboratively with other developers and sea users. Work is ongoing between government and industry to support effective collaboration and the development of monitoring at a strategic level.	
Technical considerations: Decommissioning	2.8.88	Section 105 of the Energy Act 2004 enables the Secretary of State to require the submission of a decommissioning programme for a proposed offshore wind farm, provided at least one of the statutory consents required (including one under the 2008 Act) has been given or has been applied for and is likely to be given.	The draft DCO (document reference C1/F09) includes details regarding offshore decommissioning and states that no offshore works may commence until a written decommissioning programme in compliance with any notice served upon the undertaker by the Secretary of State pursuant to section 105(2) (requirement to prepare decommissioning programmes) of the Energy Act 2004 has been submitted to the Secretary of State for approval.
	2.8.89	Where requested by the Secretary of State, applicants should submit a decommissioning programme, satisfying the requirements of s.105(8) of the Energy Act 2004 before any offshore	

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		construction works begin, to demonstrate a commitment to ensure any long-term environmental impacts are removed following decommissioning.	
Offshore wind environmental standards	2.8.90	As part of the Offshore Wind Environmental Improvement Package set out in the British Energy Security Strategy, government committed to establishing Offshore Wind Environmental Standards (OWES; previously referred to as Nature Based Design Standards) to accelerate deployment whilst offering greater protection of the marine environment. OWES aim to support developers to take a more consistent approach to avoiding, reducing, and mitigating the impacts of an offshore wind farm and/or offshore transmission infrastructure. The measures could apply to the design, construction, operation and decommissioning of offshore wind farms and offshore transmission (as defined in EN-5 at section 2.12).	The Applicants are aware of the requirements in NPS EN-3 to apply the guidance on environmental standards, once this final OEWS guidance is issued. The Applicants will review the guidance once available and determine how the Transmission Assets comply, and consider the guidance, where, if relevant, the Transmission Assets depart from the Offshore Wind Environmental Standards, providing reasoning for any departure including details of any agreements made with statutory consultees.
	2.8.92	Applicants should explain how their proposals comply with the guidance or, alternatively, the grounds on which a departure from them is justified. Any reasons for departure from the OWES should be fully detailed within the application documents, with details of any agreements made with statutory consultees.	
Impacts: Biodiversity and ecological conservation	2.8.95 to 2.8.98	Generic biodiversity and ecology effects and receptors are covered in detail in Section 5.4 of EN-1. The coastal change policy in Section 5.6 of EN-1 may also be relevant. Impacts on the physical environment may have indirect effects on marine biodiversity. In addition, applicants should have regard to the specific ecological and biodiversity considerations that relate to proposed offshore renewable energy infrastructure developments, namely: • fish (see Section 2.8.250 of this NPS). • intertidal and subtidal seabed habitats and species (see Section 2.8.233 of this NPS). • marine mammals (see Section 2.8.237 of this NPS). • birds (see Section 2.8.240 of this NPS); and • wider ecosystem impacts and interactions, and other relevant protected migratory species.	See Sections 5.4 and 5.6 of EN-1 above, for responses regarding generic biodiversity and ecology effects and receptors and coastal change policy. The specific ecological and biodiversity considerations that relate to proposed offshore elements of the Transmission Assets are addressed in their respective chapters as follows: • Fish (Volume 2, Chapter 3: Fish and Shellfish ecology, document reference F2.3) • Intertidal and subtidal seabed habitats and species (Volume 2, Chapter 2: Benthic subtidal and intertidal ecology, document reference F2.2). • Marine Mammals:(Volume 2, Chapter 4: Marine mammals, document reference F2.4). • Birds: (Volume 2, Chapter 5: Offshore Ornithology, document reference F2.5 and Volume 3, Chapter 4: Onshore and intertidal ornithology, document reference F3.4). • Wider ecosystem impacts and interactions and other relevant protected migratory species: Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3).
	2.8.99	Evidence from existing offshore wind farms demonstrates that it has been possible to locate wind farms and transmission cabling in ecologically sensitive areas where careful siting of turbines has been undertaken following appropriate ecological surveys and assessments.	
	2.8.100	However, with increasing deployment of offshore wind to 2030 and beyond, with a likely focus on deployment of fixed offshore wind in the shallow waters of the North Sea, it is likely that the cumulative impact of multiple wind farms and electricity networks infrastructure on the marine environment will increase impacts beyond identified thresholds for increasing numbers of species and habitats, leading to increased requirements for both mitigation and compensation for impacts to be acceptable.	
	2.8.101	Applicants must undertake a detailed assessment of the offshore ecological, biodiversity and physical impacts of their proposed development, for all phases of the lifespan of that development, in accordance with the appropriate policy for offshore wind farm EIAs, HRAs and MCZ assessments (See Sections 4.3 and 5.4 of EN-1).	The existing offshore ecology and biodiversity has been assessed throughout Volume 2, Chapters 1 – 5 (document reference F2.1 – F2.5). Further assessment is provided in the MCZ screening and stage 1 assessment report (document reference E4), the HRA stage 1 screening report (document reference E3) and the HRA stage 2 Information to Support Appropriate Assessment report (document reference E2). The HRA Stage 1 ISAA concludes that there will be no adverse effect on integrity of any European site as a result of the Transmission Assets alone or in-combination with other projects. As no significant risks to the achievement of the Fylde MCZ conservation objectives have been identified in the MCZ Stage 1 assessment, a Stage 2 assessment is not required. Although the Applicants do not consider it necessary, a Stage 2 assessment and measures of equivalent environmental benefit have been provided on a 'without prejudice' basis. Whilst the Applicants and Natural England are not agreed on the need for MEEB, and without prejudice to the Applicants position, the Applicants

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			prepared a MEEB assessment at Deadline 1 and the Applicants and Natural England agree with progressing the strategic compensation approach if the Secretary of State determines that MEEB for the Fylde MCZ are required (REP6-179).
	2.8.102	Applicants need to consider environmental and biodiversity net gain as set out in Section 4.6 of EN-1 and the Environment Act 2021.	See Section 4.6 of EN-1 for a response. Both potential positive and negative effects on marine ecology and biodiversity have been considered throughout Volume 2, Chapters 1 – 5 (document reference F2.1 – F2.5). A Marine Enhancement Statement has also been provided with the application (document reference J12)
	2.8.103	Applicants should assess the potential of their proposed development to have net positive effects on marine ecology and biodiversity, as well as negative effects.	
	2.8.104	Applicants should consult at an early stage of pre-application with relevant statutory consultees and energy not-for profit organisations/non governmental organisations as appropriate, on the assessment methodologies, baseline data collection, and potential avoidance, mitigation and compensation options which should be undertaken.	Consultation with relevant statutory stakeholders has been carried out from the early stages of the design process through the Evidence Plan Process (EPP) as detailed in the Consultation Report (document reference E1) and in Volume 2 of the ES (document reference F2). Following submission of the DCO Application, consultation with statutory stakeholders has continued throughout the Examination phase via Relevant Representations, Written Representations and Examining Authority Questions, which the Applicants have responded to at the relevant deadlines.
	2.8.105	In developing proposals applicants must refer to the most recent best practice advice originally provided by Natural England under the Offshore Wind Enabling Action Programme, and/or their relevant SNCB.	
	2.8.106	Any relevant data that has been collected as part of post-construction ecological monitoring from existing operational offshore wind farms should be referred to where appropriate.	Relevant data collected as part of post-construction monitoring from other offshore wind farms has informed the baseline presented in Volume 2 of the ES where appropriate (document reference F2).
	2.8.107	A range of research programmes are ongoing to investigate impacts of offshore wind farm development, including, but not limited to: BEIS SEA Research Programme, ORJIP, ScotMER, the ORE Catapult and OWEC. Applicants should explain why their decisions on siting, design, and impact mitigation are proportionate and well-targeted, referring to relevant scientific research and literature as appropriate.	Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4) and the Outline Design Principles document (document reference J3). Maximum parameters for the substation have been refined following statutory consultation.
	2.8.108	Applicants are expected to have regard to guidance issued in respect of Marine Licence requirements and consult at an early stage of pre-application with the MMO or NRW.	The MMO has been involved in stakeholder consultation from the outset as detailed in the Consultation Report (document reference E1). The Applicants have engaged with the MMO throughout the course of the Examination, and submitted draft SoCGs at Deadline 1 (S_D1_6.8_F01; REP1-053) and Deadline 3 (S_D1_6.8_F02; REP3-049). The final SoCG with the MMO is S_D1_6.8/F04 submitted at Deadline 6 (REP6-130).
	2.8.109	Applicants should have regard to duties in relation to Good Environmental Status (GES) of marine waters under the UK Marine Strategy and MPA target (including any interim target) in England, set under the Environment Act 2021.	Consideration of GES and HRA in relation to European sites is detailed in the HRA Stage 1 Screening Report (document reference E3) and the Information to support appropriate assessment parts 1-3 (document reference E2.1-2.3).
	2.8.110	The British Energy Security Strategy contains a commitment to reviewing the Habitats Regulation Assessment process for offshore wind farm developments, and powers are included in the Energy Act 2023 to implement this through secondary legislation. Further guidance will be published as a separate document setting out what information assessments must contain. Once final guidance is published, applicants will be expected to comply.	
Impacts: Physical environment	2.8.111	The construction, operation and decommissioning of offshore energy infrastructure, including the preparation and installation of the cable route and any electricity networks infrastructure can affect the following elements of the physical offshore environment, which can have knock on impacts on other biodiversity receptors: • water quality – disturbance of the seabed sediments or release of contaminants can result in direct or indirect effects on habitats and biodiversity, as well as on fish stocks thus affecting the fishing industry;	The impact on physical processes is discussed in Volume 2, Chapter 1: Physical processes chapter of the ES (document reference F2.1). The effect of primary scour to the seabed as a result of the Transmission Assets has been scoped out of the assessment as agreed with stakeholders. The only infrastructure capable of resulting in scour under the scope of the Transmission Assets relates to that of cable protection. However, cable protection measures will be subject to engineering design to ensure they minimise as much as practical the occurrence of scour, to such a degree that it will not impact upon seabed morphology. Secondary

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		• waves and tides – the presence of the turbines can cause indirect effects through change to wave climate and tidal currents on flood and coastal erosion risk management, marine ecology and biodiversity, marine archaeology and potentially coastal recreation activities; • scour effect – the presence of wind turbines and other infrastructure can result in a change in the water movements within the immediate vicinity of the infrastructure, resulting in scour (localised seabed erosion) around the structures. This can indirectly affect navigation channels for marine vessels, marine archaeology, and impact biodiversity and seabed habitats; • sediment transport – the resultant movement of sediments, such as sand across the seabed or in the water column, can indirectly affect navigation channels for marine vessels, and could affect sediment supply to sensitive coastal sites and impact biodiversity and seabed habitats; • suspended solids – the release of sediment during construction, operation and decommissioning can cause indirect effects on marine ecology and biodiversity; • sandwaves – the modification/clearance of sandwaves can cause direct physical (such as in affecting unknown archaeological remains) and ecological effects both at the seabed and within the water column due to disturbance and suspension of sediment, and potentially indirect effects (e.g.,changes to seabed morphology in water depths where waves can influence the seabed, which can in turn affect wave climate and sediment transport); and • water column – wind turbine structures can also affect water column features such as tidal mixing fronts or stratification due to a change in hydrodynamics and turbulence around structures.	scour has been considered within the assessment and Cumulative Effects Assessment (CEA) in Volume 2 Chapter 1: Physical Processes of the ES, as seen within section 1.10 and section 1.12. The potential impacts to sensitive species and habitats are assessed in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES (document reference F2.2).
	2.8.112	Applicant assessments are expected to include predictions of the physical effects arising from modifications to hydrodynamics (waves and tides), sediments and sediment transport, and sea bed morphology that will result from the construction, operation and decommissioning of the required infrastructure.	Numerical modelling used to support the ES is found within Volume 2, Annex 1.1: Physical processes associated modelling studies of the ES (document reference F2.1.1) which is comprised of: • Mona Offshore Wind Project, Environmental Statement, Volume 6, Annex 1.1: Physical processes technical report; and • Morgan Offshore Wind Project: Generation Assets, Environmental Statement, Volume 4, Annex 1.1: Physical Processes Technical Report. These modelling studies informed the assessment of effects that is presented for construction, operation and maintenance, and decommissioning in section 1.10 of Volume 2 Chapter 1: Physical Processes of the ES (document reference F2.1). Additionally data was drawn from a range of data sources to predict the impacts on physical processes (Table 1.5 of the ES chapter).
	2.8.113	Assessments should also include effects such as the scouring that may result from the proposed development and how that might impact sensitive species and habitats.	The effect of primary scour to the seabed as a result of the Transmission Assets has been scoped out of the assessment as agreed with stakeholders. The only infrastructure capable of resulting in scour under the scope of the Transmission Assets relates to that of cable protection. However, cable protection measures will be subject to engineering design to ensure they minimise as much as practical the occurrence of scour, to such a degree that it will not impact upon seabed morphology. Secondary scour has been considered within the assessment and Cumulative Effects Assessment (CEA) in Volume 2 Chapter 1: Physical Processes of the ES, as seen within section 1.10 and section 1.12. The potential impacts to sensitive species and habitats are assessed in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES (document reference F2.2).
	2.8.114	Applicants should undertake geotechnical investigations as part of the assessment, enabling the design of appropriate construction techniques to minimise any adverse effects.	Geophysical surveys and other site-specific resources have been used to support the assessment, as described in Table 1.6 of Volume 2 Chapter 1: Physical Processes of the ES (document reference F2.1).
Impacts: Intertidal and coastal habitats and species	2.8.115 to 2.8.118	The intertidal zone is the area between mean high water springs and mean low water springs.	The potential impacts to sensitive intertidal species and habitats are assessed in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of

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		Intertidal habitat and ecology are often recognised through statutory nature conservation designations. Coastal habitats (in the coastal fringe above the high-water mark) are also often protected, may also be affected and should undergo a similar review as part of the assessment detailed below. Export cable and other offshore transmission routes may cross the intertidal/coastal zone resulting in habitat loss, morphological change and temporary disturbance of intertidal flora and fauna.	the ES (document reference F2.2), Volume 3, Chapter 3: Onshore ecology and nature conservation (document reference F3.3) and Volume 3, Chapter 4; Onshore and intertidal ornithology of the ES (document reference F3.4).
	2.8.119	Applicant assessment of the effects of installing offshore transmission infrastructure across the intertidal/coastal zone should demonstrate compliance with mitigation measures in any relevant plan-level HRA including those prepared by The Crown Estate as part of its leasing round, and include information, where relevant, about: • any alternative landfall sites that have been considered by the applicant during the design phase and an explanation for the final choice; • any alternative cable installation methods that have been considered by the applicant during the design phase and an explanation for the final choice; • potential loss of habitat; • disturbance during cable installation, maintenance/repairs and removal (decommissioning); • increased suspended sediment loads in the intertidal zone during installation and maintenance/repairs; • potential risk from invasive and non-native species; • predicted rates at which the intertidal zone might recover from temporary effects, based on existing monitoring data; and • protected sites.	The MDS for export cable installation at the landfall has been considered throughout the assessment. This ensures that a reasonable assessment of the effects of the various impacts associated with this method are presented. Alternative landfall routes were considered during the site selection process during scoping, and are outlined in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4). A description of the activities which could result in habitat loss and disturbance from cable installation and maintenance and increased suspended sediments has been provided in the Volume 1, Chapter 3: Project description of the ES (document reference F1.3) and assessed in Volume 2, Chapter 2: Benthic Subtidal and Intertidal Ecology of the ES (document reference F2.2)). Habitat loss has been assessed in section 2.11.5 of Volume 2, Chapter 2: Benthic Subtidal and Intertidal Ecology of the ES, while impacts associated INNS are assessed in section 2.11.7 of Volume 2, Chapter 2: Benthic Subtidal and Intertidal Ecology of the ES. The predicted rates of recovery in the intertidal zone from temporary effects has been considered in the sensitivity of the intertidal biotopes and then used to determine the final significance of an impact (section 2.11 of Volume 2, Chapter 2: Benthic Subtidal and Intertidal Ecology of the ES). The impacts of cable installation are much reduced following the commitment to cable installation mitigation measures (Table 2.10 of Volume 2, Chapter 2: Benthic Subtidal and Intertidal Ecology of the ES), and the reduction in other parameters (including sandwave clearance and cable protection parameters). This update to the project design was made following stakeholder feedback, and review of further site specific data. Sites of conservation importance which may be directly or indirectly affected by the Transmission Assets have been identified in section 2.6.2 of Volume 2, Chapter 2: Benthic Subtidal and Intertidal Ecology of the ES and the relevant benthic features assessed in sections 2.11 and 2.13 of Volume 2, Chapter 2: Benthic Subtidal and Intertidal Ecology of the ES. The impacts (e.g. from sandwave clearance and placement of cable protection) upon sites of conservation importance which overlap with the Transmission Assets have been greatly reduced following refinement to the project design post- Preliminary Environmental Information Report (PEIR). An Outline Cable Burial Risk Assessment (document reference J14) and Outline Cable Specification and Installation Plan(s) (CSIP) (document reference J15), has been developed to further describe burial depths, cable protection, and monitoring. The assessment of potential construction, operation and maintenance, and decommissioning impacts are described in section 1.10 of Volume 2, Chapter 1: Physical Processes and includes the impact of increased suspended sediment loads and subsequent deposition during all project phases. Consideration of increased suspended sediment loads and subsequent deposition during all project phases in relation to European

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			sites is detailed in the HRA Stage 1 Screening Report (document reference E3) and the Information to Support Appropriate Assessment parts 1-3 (document reference E2.1-2.3).
Impacts: Subtidal habitats and species	2.8.120 to 2.8.122	The subtidal zone is the area below low water springs which remains submerged at low tide. Subtidal habitat and ecology are often recognised through statutory nature conservation designations. Offshore wind construction, maintenance and decommissioning activities can cause loss and temporary disturbance of subtidal habitat and benthic ecology.	The potential impacts to sensitive subtidal species and habitats are assessed in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES (document reference F2.2).
	2.8.123	The applicant should demonstrate compliance with mitigation measures identified by The Crown Estate in any plan-level HRA produced as part of its leasing round.	As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5), mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3). Consideration of the plan-level HRA is provided in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4).
	2.8.124	Applicants should follow guidelines for leasing transmission assets infrastructures, and any successor to it produced by The Crown Estate.	The Applicants are engaging independently with The Crown Estate and have followed their guidelines for Areas for lease in determining the location for the offshore export cables and landfall for the Transmission Assets.
	2.8.125	All work associated with cable installation including trenching, laying and surface protections are licenced through a Deemed Marine Licence as part of the DCO, with the exception of Welsh inshore waters,(defined as the region extending seaward 12 nautical miles from Mean High Water Springs (MHWS) to the territorial limit) where a Marine Licence cannot be deemed. In all offshore windfarm cases however, applicants should be aware that the operation and maintenance of cables after construction may require new Marine Licences.	This DCO application includes draft Marine Licences which have been discussed with the MMO and wherever possible the MMO's requested changes to the dML drafting have been accommodated. The Applicants have engaged with the MMO throughout the pre-application and Examination, and submitted draft SoCGs at Deadline 1 (S_D1_6.8_F01; REP1-053) and Deadline 3 (S_D1_6.8_F02; REP3-049). The final SoCG with the MMO is S_D1_6.8/F04 submitted at Deadline 6 (REP6-130).
	2.8.126	Applicant assessment of the effects on the subtidal environment should include: • loss of habitat due to foundation type including associated seabed preparation, predicted scour, scour protection and altered sedimentary processes, e.g. sandwave/boulder/UXO clearance; • environmental appraisal of inter-array and other offshore transmission and installation/maintenance methods, including predicted loss of habitat due to predicted scour and scour/cable protection and sandwave/boulder/UXO clearance; • habitat disturbance from construction and maintenance/repair vessels' extendable legs and anchors; • increased suspended sediment loads during construction and from maintenance/repairs; • predicted rates at which the subtidal zone might recover from temporary effects; • potential impacts from EMF on benthic fauna; • potential impacts upon natural ecosystem functioning; • protected sites; and • potential for invasive/non-native species introduction.	The project description has been refined with respect to further project definition as presented in Volume 1, Chapter 3: Project description of the ES. This refinement includes that the Offshore Substation Platforms (OSPs) relating to the Generation Assets and the booster station are not included in the Transmission Assets ES as outlined in the MDS table presented in Table 1.14. of Volume 2, Chapter 1: Physical Processes of the ES (document reference F2.1). It should also be noted that there are no inter-array cables associated with the Transmission Assets. The impact of suspended sediments, long term habitat loss, EMF from subsea cables, the introduction and spread of INNS and temporary habitat disturbance from cable installation and maintenance as well as anchors and vessel legs (i.e. jack-up legs) has been quantified in the MDS (Table 2.11 of Volume 2 Chapter 2: Benthic Subtidal and Intertidal Ecology (document reference F2.2)**)**. The effect of these impacts on the habitats within the Transmission Assets has then been assessed regarding the project alone throughout section 2.11 and cumulatively with other relevant projects in the region in section 2.13 of Volume 2, Chapter 2: Benthic Subtidal and Intertidal Ecology. The predicted rates of recovery in the subtidal zone from temporary effects has been considered in the sensitivity of the subtidal biotopes and then used to determine the final significance of an impact (section 2.11 of Volume 2 Chapter 2: Benthic Subtidal and Intertidal Ecology). Relevant

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			data collected as part of post-construction monitoring from other offshore wind farms has informed the assessment presented in section 2.6 of Volume 2 Chapter 2: Benthic Subtidal and Intertidal Ecology, which is a summary of the full baseline characterisation presented in Volume 2, Annex 2.1: Benthic subtidal and intertidal ecology technical report of the ES (document reference F2.2.1). Unexploded Ordnance (UXO) clearance for the Transmission Assets and for other projects in the region can cause increased SSCs and indentations on the seabed. However, these effects would be local, temporary and recoverable and, as such, effects are negligible and thus have been scoped out of the assessment with justification presented in Table 1.12 in Volume 2, Chapter 1: Physical Processes of the ES. The assessment of potential construction, operation and maintenance, and decommissioning impacts relating to Transmission Assets infrastructure are described in section 1.10 in Volume 2, Chapter 1: Physical Processes of the ES, and includes the impact of increased suspended sediment loads and subsequent deposition. Additionally, the recoverability of seabed features in the subtidal zone such as sandwaves are considered within section 1.10 of Volume 2, Chapter 1: Physical Processes of the ES.
Impacts: Marine mammals	2.8.127 to 2.8.128	Construction activities, including installing wind turbine foundations by pile driving, geophysical surveys, and clearing the site and cable route of unexploded ordinance (UXOs) may reach noise levels which are high enough to cause disturbance, injury, or even death to marine mammals. All marine mammals are protected under Part 3 of the Habitats Regulations (cetaceans within Schedule 2 and seal species within Schedule 4).	As set out in every ES chapter, mitigation measures have been developed to primarily avoid, then prevent, reduce or offset significant adverse environmental effects. Mitigation measures are detailed in Volume 1, Annex 5.3: Commitments register of the ES (document reference F1.5.3). All impacts on marine mammals are detailed in the ES Volume 2, Chapter 4: Marine mammals of the ES (document reference F2.4). All impacts on fish are detailed in ES Volume 3: Fish and shellfish ecology of the ES (document reference F2.3).
	2.8.129	If construction and associated noise levels are likely to lead to an offence under Part 3 of the Habitats Regulations (which would include deliberately disturbing, injuring or killing), applicants will need to apply for a wildlife licence to allow the activity to take place.	
	2.8.130	The development of offshore wind farms can also impact fish species (see paragraphs 2.8.245 – 2.8.249), which can have indirect impacts on marine mammals if those fish are prey species.	
	2.8.131	Where necessary, assessment of the effects on marine mammals should include details of: • likely feeding areas and impacts on prey species and prey habitat; • known birthing areas/haul out sites for breeding and pupping; • migration routes; • protected sites; • baseline noise levels; • predicted construction and soft start noise levels in relation to mortality, permanent threshold shift (PTS), temporary threshold shift (TTS) and disturbance; • operational noise; • duration and spatial extent of the impacting activities including cumulative/in-combination effects with other plans or projects; • collision risk; • entanglement risk; and • barrier risk.	The potential for effects on marine mammals has been assessed in section 4.11 of Volume 2 Chapter 4: Marine Mammals of the ES (document reference F2.4) and a detailed technical baseline, including likely feeding areas; known birthing areas/haul out sites; known migration or commuting routes has been presented within Volume 2, Annex 4.1: Marine mammal technical report of the ES (document reference F2.4.1) and in the ES chapter. Relevant protected areas to the Transmission Assets are discussed in Volume 2, Annex 4.1: Marine mammal technical report of the ES and in the chapter (section 4.6.2 of Volume 2 Chapter 4: Marine Mammals of the ES). Baseline sound levels; predicted received sound levels in relation to mortality, PTS and TTS and disturbance; soft-start sound levels according to proposed hammer and pile design; and operational sound have been considered within Volume 1, Annex 5.2: Underwater sound technical report of the ES (document reference F1.5.2). The duration and spatial extent of potentially disturbing activities, including cumulative effects with other plans or projects is presented in section 4.13. An assessment of in-combination effects is presented in the HRA Stage 2 ISAA (document reference E2.2). Collision risk has been considered within section 4.11.4 of Volume 2, Chapter 4: Marine Mammals of the ES. Where relevant, the potential for barrier effects has been considered.
	2.8.132	The scope, effort and methods required for marine mammal surveys and impact assessments should be discussed with the relevant SNCB.	

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			The scope and methods for marine mammals was discussed as part of the Marine Mammal EWG as detailed in section 4.3 of Volume 2, Chapter 4: Marine Mammals of the ES
	2.8.133	The applicant should discuss any proposed noisy activities with the relevant statutory body and must reference the joint JNCC and SNCB underwater noise guidance, and any successor of this guidance, in relation to noisy activities (alone and in-combination with other plans or projects) within SACs, SPAs, and Ramsar sites, in addition to the JNCC mitigation guidelines for piling, explosive use, and geophysical surveys. NRW has a position statement on assessing noisy activities which should also be referenced where relevant.	Potential sound as a result of UXO clearance activities and geophysical surveys has been discussed in section 4.11 of Volume 2 Chapter 4: Marine Mammals of the ES (document reference F2.4). Appropriate measures adopted as part of the Transmission Assets to reduce the magnitude of impact such that any residual significant effects from the Transmission Assets are reduced to non-significant levels, along with those specific to construction, operations and maintenance and decommissioning, are presented in section 4.8 of Volume 2 Chapter 4: Marine Mammals of the ES. The Applicants have also prepared an Outline MMMP (Document reference J18) which is secured within the deemed marine licences in the draft DCO (document reference C1/F09). The Outline MMMP will be implemented during UXO clearance to reduce the risk of injury to marine mammals key receptors. A SIP isn't deemed necessary due to limited noise impact (i.e., no piling).
	2.8.134	Where the assessment identifies that noise from construction and UXO clearance may reach noise levels likely to lead to noise thresholds being exceeded (as detailed in the JNCC guidance) or an offence as described in paragraph 2.8.127-2.8.129 above, the applicant must look at possible alternatives or appropriate mitigation.	
	2.8.135	The applicant should develop a Site Integrity Plan (SIP) or alternative assessments for projects in English and Welsh waters to allow the cumulative impacts of underwater noise to be reviewed closer to the construction date, when there is more certainty in other plans and projects.	
Impacts: Birds	2.8.136	Offshore wind farms have the potential to impact on birds through: • collisions with rotating blades; • direct habitat loss; • disturbance from construction activities such as the movement of construction/decommissioning/maintenance vessels and piling; • displacement during the operational phase, resulting in loss of foraging/roosting area; • impacts on bird flight lines (i.e. barrier effect) and associated increased energy use by birds for commuting flights between roosting and foraging areas • impacts upon prey species and prey habitat; and • impacts on protected sites.	Assessment of the relevant potential effects of the Transmission Assets on offshore ornithology are discussed in section 5.11 of Volume 2, Chapter 5: Offshore Ornithology of the ES (document reference F2.5).
	2.8.143	Applicants should discuss the scope, effort and methods required for ornithological surveys with the relevant statutory advisor, taking into consideration baseline and monitoring data from operational windfarms.	Throughout the Transmission Assets application, consultations with relevant statutory and non-statutory stakeholders have been carried out (e.g. via the Evidence Plan process EWG) and are presented in section 5.3 of Volume 2, Chapter 5: Offshore Ornithology of the ES (document reference F2.5). All consultation responses provided and changes suggested by the stakeholders are presented in the Consultation Report (document reference E1).
Impacts: Fish	2.8.147 to 2.8.149	Fish in the context of this NPS also includes elasmobranchs (sharks and rays) and shellfish (e.g., crabs). There is the potential for the construction and decommissioning phases, including activities occurring both above and below the seabed, to impact fish communities, migration routes, spawning activities and nursery areas of particular species. There are potential impacts associated with energy emissions into the environment (e.g. noise or electromagnetic fields (EMF)), as well as potential interaction with seabed sediments.	This is highlighted and considered in the construction phases of the MDS (section 3.9.1 of Volume 2, Chapter 3: Fish and shellfish ecology of the ES (document reference F2.3)) with the levels of impact on fish and shellfish receptors assessed in the assessment of significant effects (section 3.11 of Volume 2, Chapter 3 of the ES). Further assessment is provided in the MCZ screening and stage 1 assessment report (document reference E4), the HRA stage 1 screening report (document reference E3) and the HRA stage 2 information to support appropriate assessment report (document reference E2).
	2.8.150	The applicant should identify fish species that are the most likely receptors of impacts with respect to: • spawning grounds; • nursery grounds; • feeding grounds;	Important habitats for fish and shellfish, including spawning, nursery and migration routes have been considered in Volume 2, Annex 3.1: Fish and shellfish ecology technical report of the ES (document reference F2.3.1) and summarised in section 3.6 of Volume 2, Chapter 3: Fish and Shellfish Ecology of the ES (document reference F2.3). Effects on these have been assessed in section 3.11.

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		• over-wintering areas for crustaceans; • migration routes; and • protected sites.	
	2.8.151	Applicant assessments should identify the potential implications of underwater noise from construction and unexploded ordnance including, where possible, implications of predicted construction and soft start noise levels in relation to mortality, permanent threshold shift (PTS), temporary threshold shift (TTS) and disturbance, and addressing both sound pressure and particle motion) and EMF on sensitive fish species.	The implications of underwater sound during construction on fish and shellfish receptors have been examined in the assessment of effects of underwater sound from piling, Unexploded Ordnance (UXO) clearance and geophysical surveys impacting fish and shellfish receptors (section 3.11.3 of Volume 2 Chapter 3: Fish and Shellfish Ecology of the ES (document reference F2.3)) and underwater sound from all other activities (section 3.11.4 of Volume 2 Chapter 3: Fish and Shellfish Ecology of the ES). The effects of Electromagnetic Fields (EMFs) have been examined in the assessment of the effects (section 3.11.7).
Impacts: Commercial fisheries and fishing	2.8.153	The UK fishing industry is diverse. The type and significance of impacts will therefore vary depending on the section of the fleet affected. Applicants should consider both direct impacts on fishing activity and indirect impacts such as displacement (on both the industry and Marine Protected Sites) and the ability of fishers to relocate.	To ensure that potential impacts which may affect certain fleets/fisheries in different ways are fully assessed, a number of commercial fisheries receptor groups have been identified through review of data and feedback from stakeholder consultation. A total of eight key receptor groups have been defined. These have been categorised based on gear type, nature of fishing activity and nationality and are summarised in Table 6.9 of Volume 2 Chapter 6: Commercial Fisheries of the ES (document reference F2.6). Displacement of commercial fisheries into other areas have been assessed for all phases of the Transmission Assets (section 6.11.3 of Volume 2 Chapter 6: Commercial Fisheries of the ES).
	2.8.154	Applicants should undertake early consultation with a cross-section of the fishing industry, as well as MMO, SNCBs, relevant Inshore Fisheries and Conservation Authorities (IFCAs), Defra and Welsh Government, to identify impacts, and actively encourage input from active fishers to provide evidence of their use of the area to support the impact assessments.	Liaison with the fishing industry, via the Company Fisheries Liaison Officer (CFLO) and Fishing Industry Representative (FIR), is being adhered to in line with the good practice guidance outlined in section 6.2.2 of Volume 2, Chapter 6: Commercial Fisheries of the ES (document reference F2.6). Early engagement for the Transmission Assets specifically was established with fisheries stakeholders in November 2022 and will continue throughout the lifetime of the project (see section 6.8 of Volume 2, Chapter 6: Commercial Fisheries of the ES). To communicate the commitments and measures by the Transmission Assets to co-exist with the fishing industry and reduce impacts on commercial fisheries as far as practicably possible, the Applicants have committed to the development of a Fisheries Liaison and Co-existence Plan, which is secured within the deemed marine licence(s) within the draft Development Consent Order (DCO). An outline of this plan has been included with the DCO application (document reference J13).
	2.8.155	Where any part of a proposal involves a grid connection or transmission to shore or in the inshore area, appropriate inshore fisheries groups should also be consulted.	Consultation with relevant stakeholders (local, regional, national and international) has been undertaken for the Transmission Assets and is summarised in section 6.2.26 of Volume 2 Chapter 6: Commercial Fisheries of the ES (document reference F2.6), (see also Table 6.5), with further information in Volume 2, Annex 6.1: Commercial fisheries technical report of the ES (document reference F2.6.1) and the Consultation Report, which has been submitted as part of the DCO application.
	2.8.156	Offshore wind farms can have a negative impact on some fish stocks and fishing activity, and/or a positive impact on other fish stocks and/or other types of commercial fishing. Whilst the footprint of an offshore wind farm and any associated infrastructure may be a hindrance to certain types of commercial fishing activity such as trawling, other fishing activities, such as potting, may be able to take place within operational wind farms without unduly disrupting or compromising navigational safety.	Potential impacts to fish stocks arising from the Transmission Assets have been assessed in Volume 2, Chapter 3: Fish and shellfish ecology of the ES (document reference F2.3). Potential impacts on the commercial fisheries that target the fish stocks are assessed in section 6.11.5 of Volume 2 Chapter 6: Commercial Fisheries of the ES (document reference F2.6). Potential impacts to commercial fisheries have been described in section 6.11 of Volume 2 Chapter 6: Commercial Fisheries of the ES, and cumulative effects are described in section 6.13.

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			The Generation Assets are being taken forward as separate DCO applications and have not been assessed within this chapter (see Volume 1, Chapter 1: Introduction of the ES).
	2.8.157	Applicant assessments should include robust baseline data and detailed surveys of the effects on fish stocks of commercial interest, and any potential reduction or increase in such stocks that will result from the presence of the wind farm development and of any safety zones (see paragraph 2.8.152 – 2.8.164 of this NPS). The assessments should also provide evidence regarding any likely benefits or constraints on fishing activity within the project's boundaries.	Volume 2, Chapter 3: Fish and shellfish ecology of the ES (document reference F2.3) outlines the potential impacts on fish stocks, including those of commercial interest. Baseline fisheries activity data has been collated from official sources and through consultation, as described in section 6.7 and Volume 2, Annex 6.1: Commercial fisheries technical report of the ES (document reference F2.6.1). Likely constraints associated with the Transmission Assets are assessed in section 6.11 of Volume 2 Chapter 6: Commercial Fisheries of the ES (document reference F2.6).
	2.8.158	Applicants will be expected to undertake dialogue with the fishing industry during the planning and design of individual offshore wind farm and transmission proposals to maximise the potential for co-existence/co-location and reduce potential displacement.	Consultation with relevant stakeholders (local, regional, national and international) has been undertaken for the Transmission Assets and is summarised in section 6.2.26 of Volume 2 Chapter 6: Commercial Fisheries of the ES (document reference F2.6), (see also Table 6.5), with further information in Volume 2, Annex 6.1: Commercial fisheries technical report of the ES (document reference F2.6.1) and the Consultation Report, which has been submitted as part of the DCO application.
	2.8.159	Applicants should consider guidance on best practice for fisheries liaison, which has been jointly agreed by the renewables industry and fishing community.	Liaison with the fishing industry, via the Company Fisheries Liaison Officer (CFLO) and Fishing Industry Representative (FIR), is being adhered to in line with the good practice guidance outlined in section 6.2. Early engagement for the Transmission Assets specifically was established with fisheries stakeholders in November 2022 and will continue throughout the lifetime of the project (see section 6.8 of Volume 2 Chapter 6: Commercial Fisheries of the ES (document reference F2.6). To support coordination and communication of the commitments and measures proposed as part of the Transmission Assets application, and to enable co-existence with the fishing industry while minimising impacts on commercial fisheries as far as practicable, the Applicants have committed to the development of a Fisheries Liaison and Co-existence Plan, which is secured within the deemed marine licence(s) within the draft DCO. An outline of this plan has been included with the Application (document reference J13).
	2.8.160	In some circumstances, transboundary issues may be a consideration as fishing vessels from other coastal states may fish in waters within which offshore wind farms are sited. Applicants should seek advice from Defra in such circumstances.	Transboundary issues have been described in section 6.14 of Volume 2, Chapter 6: Commercial Fisheries of the ES (document reference F2.6), where consideration has been given to both UK and non-UK fishing fleets.
	2.8.161	In some circumstances, applicants may seek declaration of safety zones around wind turbines and other infrastructure, although these might not be applied until after consent to the wind farm has been granted.	During construction of the Transmission Assets, rather than complete closure of the Transmission Assets Order Limits, it is proposed that advisory exclusion zones of 500 m will be present around vessels installing subtidal export cables. Implications from the implementation of advisory exclusion zones on commercial fishing have been presented in section 6.11 of Volume 2 Chapter 6: Commercial Fisheries of the ES (document reference F2.6). Advisory exclusion zones will be committed to within the Fisheries Liaison and Co-existence Plan which is secured within the deemed marine licence(s) in the draft DCO. An outline of this plan has been included with the DCO application (document reference J13).
	2.8.162	The declaration of a safety zone excludes or restricts activities within the defined sea areas including commercial fishing.	
	2.8.163	Where there is a possibility that safety zones will be sought, applicant assessments should include potential effects on commercial fishing.	
	2.8.164	Where the precise extents of potential safety zones are unknown, a realistic worst-case scenario should be assessed. Applicants should consult the Maritime and Coastguard Agency (MCA) as part of this process.	
Impacts: Marine historic environment	2.8.165	Heritage assets and other remains of past human activity may exist offshore and within the intertidal area (the area between mean high and mean low water).	The marine historic environment baseline, including consideration of geophysical and geotechnical surveys along with an assessment of likely significant effects, is presented in Volume 2, Chapter 8: Marine archaeology of the ES (document reference F2.8).

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			Throughout the Transmission Assets project consultations with relevant statutory and non-statutory stakeholders have been carried out (e.g. via the Evidence Plan process EWG) and are presented in section 8.3 of Volume 2, Chapter 8: Marine archaeology of the ES (document reference F2.8). All consultation responses provided and changes suggested by the stakeholders are presented in the Consultation Report (document reference E1). The outline offshore WSI for archaeology (document reference J17, as per CoT63) presents the archaeological mitigation required for the Transmission Assets.
	2.8.166	This can include evidence of pre-historic human activity and submerged prehistoric landscapes which existed prior to sea level rises, as well as maritime wreck sites, remains of crashed aircraft and associated cultural material.	
	2.8.167	The marine historic environment can be affected by offshore wind farm and offshore transmission development in two principal ways: • from direct effects arising from the physical siting of the development itself such as the installation of wind turbine foundations and electricity cables, or the siting of plant required during the construction phase of development; and • from indirect changes to the physical marine environment (such as scour, coastal erosion or sediment deposition) caused by the proposed infrastructure itself or its construction (see the policy on physical environment at paragraphs 2.8.111 of this NPS).	
	2.8.168	Applicants should consult with the relevant statutory consultees, such as Historic England or Cadw, on the potential impacts the marine historic environment at an early stage of development during pre-application, taking into account any applicable guidance (e.g., offshore renewables protocol for archaeological discoveries).	
	2.8.169	Assessment of potential impacts upon the historic environment should be considered as part of the Environmental Impact Assessment process undertaken to inform any application for consent.	
	2.8.170	Desk based studies to characterise the features of the historic environment that may be affected by a proposed development and assess any likely significant effects should be undertaken by competent archaeological experts.	
	2.8.171	These studies should consider any geotechnical or geophysical surveys that have been undertaken to aid the wind farm and/or offshore transmission design.	
	2.8.172	Whilst it should be possible for a development project to avoid designated heritage assets, the knowledge currently available about the historic environment in the inshore and offshore areas is limited, as much of the seafloor around our coasts and at sea has yet to be mapped or explored fully.	
	2.8.173	Applicants are required to determine how any known heritage assets might best be avoided.	
	2.8.174	The applicant will be expected to conduct all necessary examination and assessment exercises using a variety of survey techniques to plan the development so as to optimise opportunities for avoidance.	
	2.8.175	Once a site has been chosen, it may be necessary to undertake further archaeological assessment, including field evaluation investigations prior to construction, to understand a known site's significance and full extent, and, to identify as yet unknown heritage assets when considering the options for detailed site development, in accordance with an archaeological written scheme of investigation included with the application.	
	2.8.176	Assessment may also include the identification of any beneficial effects on the marine historic environment, for example through improved access or the contribution to new knowledge that arises from investigation.	The overarching EIA methodology is presented in Volume 1, Chapter 5: Environmental Assessment Methodology (document reference F1.5). The methodology for determining whether an effect may be adverse or beneficial is summarised in Table 8.18 of Volume 2, Chapter 8: Marine archaeology of the ES (document reference F2.8). This methodology has been applied in the assessment of significant effects (section 8.11 of Volume 2, Chapter 8: Marine Archaeology of ES). See Section 5.9 of EN-1 above for a response regarding the interaction of the Transmissions Assets and the historic environment.
	2.8.177	Where elements of a proposed project (whether offshore or onshore) may interact with historic environment features that are located onshore, applicants should assess the effects in accordance with Section 5.9 in EN-1.	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
Impacts: Offshore wind impacts – navigation and shipping	2.8.178	Offshore wind farms and offshore transmission will occupy an area of the sea or sea bed. For offshore wind farms in particular is inevitable that there will be an impact on navigation in and around the area of the site. This is relevant to both commercial and recreational users of the sea who may be affected by disruption or economic loss because of the proposed offshore wind farm and/or offshore transmission.	Location of sea lanes are presented in section 7.6.1 of Volume 2 Chapter 7: Shipping and navigation of the ES and impact on vessel routeing measures in section 7.11.2. Impacts on navigation are described in section 7.11 (of Volume 2 Chapter 7: Shipping and Navigation of the ES (document reference F2.7)) and a navigation risk assessment (NRA) produced in Volume 2, Annex 7.1: Navigation risk assessment of the ES (document reference F2.7.1). Impacts on vessel routeing are assessed in section 7.11.3 of Volume 2 Chapter 7: Shipping and navigation of the ES for ferries and commercial shipping. Impacts on adverse weather conditions are assessed within section 7.11.4. Impacts on recreational craft are described throughout section 7.11.9 (Volume 2 Chapter 7: Shipping and navigation of the ES).
	2.8.179	To ensure safety of shipping, applicants should reduce risks to navigational safety to as low as reasonably practicable (ALARP), as described in Section 2.8.331 of this NPS.	Impacts on navigation are described in section 7.11 of Volume 2 Chapter 7: Shipping and Navigation of the ES (document reference F2.7) and an NRA produced in Volume 2, Annex 7.1: Navigation risk assessment (document reference F2.7.1). The NRA for the Transmission Assets has concluded that there are no unacceptable risks and that all risks have been reduced to Broadly Acceptable or ALARP.
	2.8.180	There is a public right of navigation over navigable tidal waters, and International Law foreign vessels have the right of innocent passage through the UK's territorial waters.	A summary of key legislation and policy is contained in section 7.2 of Volume 2 Chapter 7: Shipping and navigation of ES (document reference F2.7). Further, the relevant policy and legislation for the Transmission Assets are described in more detail within Volume 1, Chapter 2: Policy and legislation context of the ES (document reference F1.2). A Marine Policy Tracker (document reference J28.2) has been prepared which details the relevant paragraphs and provides an assessment of compliance.
	2.8.181	Beyond the seaward limit of the territorial sea, shipping has the freedom of navigation although offshore infrastructure and the imposition of safety zones can hinder this.	Impacts to navigation are described in section 7.11 of Volume 2 Chapter 7: Shipping and Navigation of ES (document reference F2.7) and an NRA is provided in Volume 2, Annex 7.1: Navigation risk assessment of the ES (document reference F2.7.1).
	2.8.182	Impacts on navigation can arise from the wind farm or other infrastructure and equipment creating a physical barrier during construction and operation.	
	2.8.183	There may be some situations where reorganisation of shipping traffic activity might be both possible and desirable when considered against the benefits of the wind farm and/or offshore transmission application, and such circumstances should be discussed with the government officials, including Secretary of State and Maritime and Coastguard Agency (MCA), and other stakeholders, including Trinity House, as The General Lighthouse Authority consultee, and the commercial shipping sector. It should be recognised that alterations might require national endorsement and international agreement and that the negotiations involved may take considerable time and do not have a guaranteed outcome.	Consultation has been undertaken through the Marine Navigation Engagement Forum (MNEF), individual meetings, and written correspondence which are summarised in section 7.3 of Volume 2 Chapter 7: Shipping and navigation of ES (document reference F2.7). Through this engagement, feedback has been received on the impacts of the Transmission Assets on different receptors, and as a result, substantial alterations were made to the Transmission Assets design to minimise these impacts, including the removal of surface-piercing structures.
	2.8.184	Applicants should engage with interested parties in the navigation sector early in the pre-application phase of the proposed offshore wind farm or offshore transmission to help identify mitigation measures to reduce navigational risk to ALARP, to facilitate proposed offshore wind development. This includes the MMO or NRW in Wales, MCA, the relevant General Lighthouse Authority, such as Trinity House, the relevant industry bodies (both national and local) and any representatives of recreational users of the sea, such as the Royal Yachting Association (RYA), who may be affected. This should continue throughout the life of the development including during the construction, operation and decommissioning phases.	The NRA for the Transmission Assets (Volume 2, Annex 7.1: Navigation risk assessment of the ES (document reference F2.7.1)) has concluded that there are no unacceptable risks and that all risks have been reduced to Broadly Acceptable or ALARP. A Statement of Common Ground with the following key shipping stakeholders has been submitted at Deadline 6; • Marine Coastguard Agency; and • Trinity House.
	2.8.185	Engagement should seek solutions that allow offshore wind farms, offshore transmission, and navigation and shipping users of the sea to co-exist successfully.	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
	2.8.187	Prior to undertaking assessments, applicants should consider information on internationally recognised sea lanes, which is publicly available.	Location of sea lanes are presented in section 7.6.1 of Volume 2 Chapter 7: Shipping and navigation of the ES (document reference F2.7) and impact on vessel routeing measures in section 7.11.2.
	2.8.188	Applicants should refer in assessments to any relevant, publicly available data available on the Maritime Database.	Datasets used to undertake this assessment are described in section 7.5.1 of Volume 2 Chapter 7: Shipping and navigation of the ES (document reference F2.7).
	2.8.189	Applicants must undertake a Navigational Risk Assessment (NRA) in accordance with relevant government guidance prepared in consultation with the MCA and the other navigation stakeholders listed above.	Impacts to navigation are described in section 7.11 of Volume 2 Chapter 7: Shipping and Navigation of the ES (document reference F2.7) and an NRA produced in Volume 2, Annex 7.1: Navigation risk assessment of the ES (document reference F2.7.1). The NRA for the Transmission Assets has concluded that there are no unacceptable risks and that all risks have been reduced to Broadly Acceptable or ALARP.
	2.8.190	The navigation risk assessment will for example necessitate: • a survey of vessel traffic in the vicinity of the proposed wind farm; • a full NRA of the likely impact of the wind farm on navigation in the immediate area of the wind farm in accordance with the relevant marine guidance; and • cumulative and in-combination risks associated with the development and other developments (including other wind farms in the same area of sea.	Vessel traffic surveys were conducted between 2021 and 2023 in compliance with the requirements under Maritime Coastguard Agency (MCA) Marine Guidance Note (MGN) 654 (MCA, 2021), survey findings are presented in section 7.6.1 of Volume 2 Chapter 7: Shipping and navigation of the ES (document reference F2.7). The NRA is presented in Volume 2, Annex 7.1: Navigation risk assessment of the ES (document reference F2.7.1) and has been produced in accordance with MGN654. The cumulative impacts of the Transmission Assets on vessel routeing, collision and contact, in combination with multiple developments, are examined in section 7.13 of Volume 2 Chapter 7: Shipping and navigation of the ES.
	2.8.191 - 2.8.192	In some circumstances applicants may seek declaration of a safety zone around wind turbines and other infrastructure. Although these might not be applied until after consent to the wind farm has been granted. The declaration of a safety zone excludes or restricts activities within the defined sea areas including navigation and shipping.	Applied risk controls, including potential advisory safety zones are described in section 7.8 of Volume 2, Chapter 7: Shipping and navigation of ES (document reference F2.7) and in the safety zone statement (document reference: J33), Consideration of potential safety zones has been carried out with the NRA presented in Volume 2, Annex 7.1: Navigation rRisk Assessment of the ES (document reference F2.7.1).
	2.8.193	Where there is a possibility that safety zones will be sought, applicant assessments should include potential effects on navigation and shipping.	
	2.8.194	Where the precise extents of potential safety zones are unknown, a realistic worst-case scenario should be assessed. Applicants should consult the MCA for advice on maritime safety, and refer to the government guidance on safety zones as a part of this process.	
	2.8.195	Applicants should undertake a detailed Navigational Risk Assessment, which includes Search and Rescue Response Assessment and emergency response assessment prior to applying for consent. The specific Search and Rescue requirements will then be discussed and agreed post-consent.	Impacts on search and rescue are described in section 7.11.6 of Volume 2 Chapter 7: Shipping and navigation of the ES (document reference F2.7). The NRA is presented in Volume 2, Annex 7.1: Navigation risk assessment of the ES (document reference F2.7.1) and has been produced in accordance with MGN654.
Impacts: Other offshore infrastructure and activities	2.8.196	The scale and location of future offshore wind development around England and Wales means that development has occurred, and will continue to occur, in or close to areas where there is other offshore infrastructure.	The potential impact on existing or permitted infrastructure or activities and, where applicable, an assessment of their likely significance, considering each phase of the development process (i.e. construction, operations and maintenance, and decommissioning) is provided in section 9.11 of Volume 2 Chapter 9: Other sea users of the ES (document reference F2.9). Relevant guidance from the Marine Plans is included in Table 9.2 of Volume 2, Chapter 9: Other seas users of ES (document reference F2.9). A Marine Policies Tracker also forms Appendix 2 of the Planning
	2.8.197	Where a potential offshore wind farm is proposed close to existing operational offshore infrastructure, or has the potential to affect activities for which a licence has been issued by government, the applicant should undertake an assessment of the potential effects of the proposed development on such existing or permitted infrastructure or activities.	
	2.8.198	The assessment should be undertaken for all stages of the lifespan of the proposed wind farm in accordance with the appropriate policy and guidance for offshore wind farm EIAs.	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
	2.8.199	Applicants should use marine plans (paragraph 2.8.27 of this NPS and Section 4.5 of EN-1) in considering which activities may be most affected by their proposal and thus where to target their assessment.	Statement (document reference J28.2) detailing the relevant plans and policies, with an assessment of compliance.
	2.8.200	Applicants should engage with interested parties in the potentially affected offshore sectors early in the pre-application phase of the proposed offshore wind farm, with an aim to resolve as many issues as possible prior to the submission of an application. (see paragraphs 2.8.56 and 2.8.273/4 and 2.8.267 of this NPS for further guidance).	Consultation with potentially affected stakeholders has been carried out from the early stages of the Transmission Assets and has continued throughout the pre-application consultation process. Details of this are presented in Table 9.3 of Volume 2 Chapter 9: Other sea users of the ES (document reference F2.9). A comprehensive list of all consultation responses received can be accessed in the Consultation Report (document reference E1).
	2.8.201.	Such stakeholder engagement should continue throughout the life of the development including construction, operation and decommissioning phases where necessary	
	2.8.203	Such engagement should be taken to ensure that solutions are sought that allow offshore wind farms and other uses of the sea to co-exist successfully.	
Impacts: Seascape and visual effects	2.8.204	Applicants should address impact on seascape in addition to the landscape and visual effects discussed in Section 5.10 of EN-1.	See Section 5.10 of NPS EN-1 above for response.
Mitigation	2.8.213	Applicants must always employ the mitigation hierarchy, in particular to avoid as far as is possible the need to find compensatory measures for coastal, inshore and offshore developments affecting SACs SPAs, and Ramsar sites and/or MCZs. It is essential that applicants involve SNCBs, other statutory environmental bodies (e.g. Historic England) and Defra, in conjunction with the relevant regulators, as early as possible in the planning process to enable discussions of what is and isn't a significant and/or adverse effect, subsequent implications, and, if required, mitigation and/or compensation.	As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5). Mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3). In line with the mitigation hierarchy a range of project approaches and parameters were outlined in Volume 1, Chapter 3: Project description of the ES (document reference F1.3) and in Volume 1, Chapter 4: Site selection of the ES (document reference F1.4). Consultation has been carried out from the early stages of the Transmission Assets and has continued throughout the pre-application consultation process. A comprehensive list of all consultation responses received can be accessed in the Consultation Report (document reference E1). An ISAA report has been produced, setting out the findings of the HRA process undertaken for the Transmission Assets to ensure compliance with the Habitats Regulations (document references E2.1, 2.2, 2.3). Parts 2 (document reference: E2.2) and 3 (document reference: E2.3) of the ISAA consider whether the Transmission Assets could have adverse effects, either alone or in-combination with other plans or projects, on the integrity of 25 designated European sites and three Ramsar sites for which the potential for likely significant effects could not be excluded in the HRA Stage 1 Screening Report (document reference: E3). The consideration of the potential for adverse effects on the integrity of European sites has been made with reference to the overall ecological functions and the lasting preservation of the constitutive characteristics of the sites. The assessment set out in Parts 2 and 3 of the ISAA concludes that there would be no adverse effect on the integrity of any of the designated sites assessed, either from the Transmission Assets alone, or in combination with other plans and projects.
	2.8.214	At the earliest possible stage, alternative ways of working and use of technology should be employed to avoid environmental impacts. For example, construction vessels may be rerouted to avoid disturbing seabirds. Where impacts cannot be avoided, measures to reduce and mitigate impacts should be employed, for example using trenching techniques or noise abatement technology.	
	2.8.215	Applicants should undertake a review of up-to-date research and all potential avoidance, reduction and mitigation options presented for all receptors.	
	2.8.216	Only once all feasible avoidance, reduction and mitigation measures have been employed, should applicants explore possible compensatory measures to compensate for any remaining significant adverse effects to site integrity.	
	2.8.217	Where several developers are likely to have cumulative impacts on the same species or feature it may be appropriate to collaborate on mitigation and compensation measures (see paragraphs 2.8.273 and following below for further guidance on compensation)	

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Mitigation: Biodiversity and ecological conservation	2.8.218 to 2.8.220	Mitigation will be possible in the form of careful design of the development itself and the construction techniques employed. General mitigation requirements and considerations are set out in Section 5.4 of EN-1. See paragraphs 2.8.90 and 2.8.298 of this NPS for further guidance on Offshore Wind Environmental Standards to enable developments to mitigate their impacts on the marine environment.	As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5). Mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3).
	2.8.221	Applicants must develop an ecological monitoring programme to monitor impacts during the pre-construction, construction and operational phases to identify the actual impacts caused by the project and compare them to what was predicted in the EIA/HRA.	An Offshore In Principle Monitoring Plan (document reference J20) and an Outline Operations and Maintenance Plan (document reference J19) is included with the application which details the monitoring commitments made by the Applicants.
	2.8.222	Should impacts be greater than those predicted, an adaptive management process may need to be implemented and additional mitigation required, to ensure that so far as possible the effects are brought back within the range of those predicted.	
	2.8.223	Monitoring should be of sufficient standard to inform future decision-making. Increasing the understanding of the efficacy of alternatives and mitigation will deliver greater certainty on applicant requirements.	
Mitigation: Physical environment	2.8.224	Applicants are expected to have considered the best ecological outcomes in terms of potential mitigation. These might include: • avoidance of areas sensitive to physical effects; • consideration of micro-siting of both the array and cables; • alignment and density of the array; • design of foundations; • ensuring that sediment moved is retained as locally as possible; • the burying of cables to a necessary depth; • using scour protection techniques around offshore structures to prevent scour effects, or designing turbines to withstand scour, so scour protection is not required or is minimised.	In the first instance through the cable routing of the offshore export cables and selection of landfall relating to the Transmission Assets, the applicants have sought to avoid areas that would be most susceptible to construction, operation and maintenance, and decommissioning activities (such as cable installation). This is presented in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4). It should be noted that no foundation structures, inter-array cables or interconnector cables are included within the Transmission Assets, this is in line with refinements made to the project description as presented in Volume 1, Chapter 3: Project description of the ES (document reference F1.3). A number of in-built mitigation measures are included as commitments within the Transmission Assets, which have been developed through consultation with relevant stakeholders and engineering design (all commitments are detailed in Volume 1, Annex 5.3: Commitments register, document reference F1.5.3). Consultation has been carried out from the early stages of the Transmission Assets and has continued throughout the pre-application consultation process. A comprehensive list of all consultation responses received and can be accessed in the Consultation Report (document reference E1).
	2.8.225	Applicants should consult the statutory consultees on appropriate mitigation and monitoring.	
Mitigation: Intertidal and coastal habitats and species	2.8.227	Landfall and cable installation and decommissioning methods should be designed appropriately to minimise effects on intertidal/coastal habitats, taking into account other constraints.	The procedures associated with the installation and decommissioning of landfall and cable installation are considered with respect to best practice techniques and relevant guidance, within the Environmental Statement, in particular within Volume 1, Chapter 3: Project description (document reference F1.3) which details that the direct pipe trenchless methodology will be used between the beach and TJBs. The methods of cable installation and decommissioning and a quantification of the associated impacts on benthic receptors is presented in the MDS in Table 2.12 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES (document reference F2.2).
	2.8.228	Where applicable, use of horizontal directional drilling techniques (HDD) should be considered as a method to avoid impacts on sensitive habitats and species.	
	2.8.229	Where HDD is proposed, the applicant should provide a mitigation plan to account for the possibility that HDD fails.	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
	2.8.230	The applicant should explain their justification for the alternative plan and ensure this is the least impactful method possible.	The Applicants are committed to development of and adherence to an Outline Offshore Cable specification and installation plan (CSIP) (CoT45, Table 2.11) (document reference J15). This will minimise the impacts to all benthic intertidal receptors. CoT19 (Table 2.11 of Volume 2, Chapter 2 of the ES) highlights the Applicants' commitment to using non-impact methods for all trenchless crossings to minimise the impact of construction beyond the immediate location of work.
	2.8.231	Where cumulative effects on intertidal habitats are predicted as a result of the cumulative impact of multiple cable routes, applicants of various schemes are encouraged to work together to ensure that the number of cables crossing the intertidal/coastal zone are minimised, and installation and decommissioning phases are coordinated to ensure that disturbance is also reasonably minimised.	Outlined in section 2.12.1 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES (document reference F2.2), the CEA has been undertaken to take into account the impact associated with the Transmission Assets together with other projects and plans. The cumulative assessment has been undertaken to specifically consider the Transmission Assets together with the Morecambe Offshore Windfarm: Generation Assets (Scenario 1), the Transmission Assets together with Morgan Offshore Wind Project: Generation Assets (Scenario 2) and the Transmission Assets together with both the Morgan Offshore Wind Project: Generation Assets and the Morecambe Offshore Windfarm: Generation Assets (Scenario 3). This assessment has been undertaken before the cumulative assessment for the other Tier 1-3 developments. No significant cumulative effects on benthic intertidal receptors are predicted for any of the cumulative scenarios.
	2.8.232	It is expected that a more co-ordinated approach to offshore-onshore transmission will be delivered. See paragraphs 2.8.34 of this NPS.	Morgan OWL and Morecambe OWL (the Applicants), are jointly seeking a single consent for transmission assets comprising aligned offshore export cable corridors to landfall and aligned onshore export cable corridors to separate onshore substations (and associated infrastructure), and onward connections to the National Grid at Penwortham, Lancashire.
Mitigation: Subtidal habitats and species	2.8.233	Applicants should design construction, maintenance and decommissioning methods appropriately to minimise effects on subtidal habitats, taking into account other constraints.	The measures adopted as part of the Transmission Assets to reduce the potential for impacts on benthic subtidal and intertidal ecology have been outlined in Table 2.10 of Volume 2, Chapter 2: Benthic Subtidal and Intertidal Ecology of the ES (document reference F2.2). These include development of and adherence to an Offshore CSIP (document reference J15) and Outline CBRA (document reference J14). The impacts of the construction, operation and maintenance and decommissioning phases of the Transmission Assets are planned to be mitigated using the measures identified in section 2.8 of Volume 2, Chapter 2: Benthic Subtidal and Intertidal Ecology of the ES, which includes cable burial as the preferred method for cable protection (CoT54, Volume 1, Annex 5.3 of the ES (document reference F1.5.3)). The project alone assessment MDS includes the impact of cable crossings where relevant (Table 2.11 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES). Cumulative effects have been quantified and their significance assessed in section 2.13 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES including the impact of cables from other projects. There are no other cables routes which overlap with the landfall and significant cumulative (or alone) effects are not predicted on intertidal or subtidal receptors.
	2.8.234	Mitigation measures which applicants are expected to have considered include: • surveying and micrositing of the turbines, designing array layout, or re-routing of the export and inter-array cables to avoid adverse effects on sensitive/protected habitats, biogenic reefs or protected species; • reducing as much as possible the amount of infrastructure that will cause habitat loss in sensitive/protected habitats; • burying cables at a sufficient depth, taking into account other constraints, to allow the seabed to recover to its natural state; and • the use of anti-fouling paint could be minimised on subtidal surfaces in certain environments, to encourage species' colonisation on the structures, unless this is within a soft sediment MPA and thus would allow colonisation by species that would not normally be present.	
	2.8.235	Where cumulative impacts on subtidal habitats are predicted as a result of multiple cable routes, applicants for various schemes are encouraged to work together to ensure that the number of cables crossing the subtidal zone is minimised and installation/decommissioning phases are coordinated to ensure that disturbance is reasonably minimised.	Morgan OWL and Morecambe OWL (the Applicants), are jointly seeking a single consent for transmission assets comprising aligned offshore export cable corridors to landfall and aligned onshore export cable corridors to separate onshore substations (and associated infrastructure), and onward connections to the National Grid at Penwortham, Lancashire. As outlined in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES, the CEA has been undertaken to take into account the impacts associated with the Transmission Assets together with other projects and plans. The cumulative assessment has been undertaken to specifically

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
			consider the Transmission Assets together with the Morecambe Offshore Windfarm: Generation Assets (Scenario 1), the Transmission Assets together with Morgan Offshore Wind Project: Generation Assets (Scenario 2) and the Transmission Assets together with both the Morgan Offshore Wind Project: Generation Assets and the Morecambe Offshore Windfarm: Generation Assets (Scenario 3). This assessment has been undertaken before the cumulative assessment for the other Tier 1-3 developments. No significant cumulative effects on benthic subtidal receptors are predicted for any of the cumulative scenarios. A review of the CEA and In-combination assessment was submitted at Deadline 5 (REP5-099) which confirmed no change to the conclusions of the ES following the addition of projects to the cumulative assessment during the Examination phase. The same is true for the conclusions of the in-combination assessment.
	2.8.236	It is expected that a more co-ordinated approach to offshore-onshore transmission will be delivered going forward. See paragraphs 2.8.34 of this NPS.	Morgan OWL and Morecambe OWL (the Applicants), are jointly seeking a single consent for transmission assets comprising aligned offshore export cable corridors to landfall and aligned onshore export cable corridors to separate onshore substations (and associated infrastructure), and onward connections to the National Grid at Penwortham, Lancashire. The Transmission Assets application has required unprecedented transparency and cooperation between two entirely separate commercial entities, Morgan OWL and Morecambe OWL, to deliver the Government's aim for a co-ordinated approach to transmission networks. as set out inThis is an approach facilitated by the Offshore Transmission Network Review (OTNR) and Holistic Network Design (HND) and which NPS EN-1 explains "*has the potential to reduce the network infrastructure costs as well as the cumulative environmental impacts and impacts on coastal communities*" (para 3.3.71 of NPS EN-1).
Mitigation: Marine mammals	2.8.238	Where noise impacts cannot be avoided, other mitigation should be considered, including alternative installation methods and noise abatement technology, spatial/temporal restrictions on noisy activities, alternative foundation types.	Potential sound as a result of piling has not been assessed as with the removal of the Morgan OSPs, the Morecambe OSPs and the Morgan Offshore Booster Station, there is no piling associated with the Transmission Assets. Potential sound as a result of UXO clearance activities, geophysical and geotechnical surveys and vessels has been discussed in Volume 2, Chapter 4: Marine mammals of the ES (document reference F2.4) and Volume 2, Chapter 3: Fish and shellfish ecology of the ES (document reference F2.3). The Applicants have prepared an Outline MMMP (CoT64) (Table 4.12) (document reference: J18) which is secured within the deemed marine licences in the draft DCO. The Outline MMMP (document reference: J18) will be implemented during UXO clearance to reduce the risk of injury to marine mammals key receptors, and includes measures in line with JNCC guidelines, including Marine Mammal Observers (MMOb), Passive Acoustic Monitoring (PAM) and soft starts (where possible). The Outline MMMP (CoT64) (Table 4.12) (document reference: J18) establishes a process of investigating options to manage underwater sound levels, in consultation with the licensing authority and SNCBs with agreement prior to construction. The Outline MMMP (document reference J18) has been updated throughout the Examination to remove high order UXO clearance, in consultation with the MMO and Natural England.
	2.8.239	Applicants should undertake a review of up-to-date research and all potential mitigation options presented as part of the application, having consulted the relevant JNCC mitigation guidelines.	The latest available data and research have been examined in in Volume 2, Chapter 4: Marine mammals of the ES (document reference F2.4) and Volume 2, Chapter 3: Fish and shellfish ecology of the ES (document reference F2.3) with measures adopted as part of the project set out in

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
			sections 4.8 and 3.8, respectively. Mitigation measures are further detailed in Volume 1, Annex 5.3: Commitments register of the ES (document reference F1.5.3).
Mitigation: Birds	2.8.240	Aviation and navigation lighting should be minimised and/or on demand (as encouraged in EN-1 Section 5.5) to avoid attracting birds, taking into account impacts on safety. Subject to other constraints, wind turbines should be laid out within a site, in a way that minimises collision risk.	Marking and lighting for aviation will be agreed post consent with the appropriate bodies including the CAA and MOD with regard to the relevant guidance outlined below (refer to section 11.8 of Volume 3, Chapter 11: Aviation and radar of the ES (document reference F3.11)).
Mitigation: Fish	2.8.245	EMF in the water column during operation, is in the form of electric and magnetic fields, which are reduced by use of armoured cables for inter-array and export cables.	Specifications have been examined in the MDS (section 3.9.1 of Volume 2 Chapter 3: Fish and shellfish ecology of the ES (document reference F2.3)) and the assessment of the limited effects of electromagnetic fields examined (section 3.11.7). Proposed monitoring requirements are set out in section 3.11.10.45 of Volume 2 Chapter 3: Fish and Shellfish Ecology of the ES.
	2.8.246	Burial of the cable increases the physical distance between the maximum EMF intensity and sensitive species. However, what constitutes sufficient depth to reduce impact may depend on the geology of the seabed.	
	2.8.247	It is unknown whether exposure to multiple cables and larger capacity cables may have a cumulative impact on sensitive species. It is therefore important to monitor EMF emissions which may provide the evidence to inform future EIAs.	
	2.8.249	Construction of specific elements can also be timed to reduce impacts on spawning or migration. Underwater noise mitigation can also be used to prevent injury and death of fish species.	Measures adopted as part of the project to reduce potential impacts are set out in section 3.8 of Volume 2 Chapter 3: Fish and shellfish ecology of the ES (document reference F2.3).
Mitigation: Commercial fisheries and fishing	2.8.250	Any mitigation proposals should result from the applicant having detailed consultation with relevant representatives of the fishing industry, IFCAs, the MMO and the relevant Defra policy team in England and NRW and the relevant Welsh Government policy team in Wales.	Consultation is an important aspect of the assessment of potential impacts on commercial fisheries for the Transmission Assets and any related mitigation. Early engagement for the Transmission Assets specifically was established with fisheries stakeholders in November 2022 and will continue throughout the lifetime of the project (see section 6.8 of Volume 2 Chapter 6: Commercial Fisheries of the ES (document reference F2.6)). A Fisheries Liaison and Co-existence Plan, which is secured within the deemed marine licence(s) in the draft DCO. An outline of this plan is being developed by the Applicants through ongoing consultation with fisheries stakeholders and has been included with the Application (Document Reference J13).
	2.8.251	Mitigation should be designed to enhance, where reasonably possible, any potential medium and long-term positive benefits to the fishing industry, commercial fish stocks and the marine environment.	Mitigation measures are detailed in section 6.4 and considered throughout the assessment in section 6.11 of Volume 2, Chapter 6: Commercial Fisheries of the ES (document reference F2.6) and table 6.10 (Document Reference J33).
Mitigation: Marine historic environment	2.8.252	The avoidance of important heritage assets to ensure their protection in situ, is the most effective form of protection.	Mitigation measures to be adopted include the provision of Archaeological Exclusion Zones (AEZs) around all anomalies from the site-specific geophysical survey data identified as having medium and high archaeological potential. These are presented in the Offshore Historic Environment Plan (document reference B17) with further details in section 8.6.4 of Volume 2, Chapter 8: Marine Archaeology of ES (document reference F2.8). Temporary Archaeological Exclusion Zones (TAEZs) may be applied if previously unknown and appropriately significant archaeological assets are discovered. These TAEZs will then be reviewed and implemented as AEZs or removed. Volume 1, Chapter 3 Project description of the ES (document reference F1.3) sets out the project design envelope including allowance for micrositing. An outline offshore WSI for archaeology (document reference: J17, as per CoT63) provides provision for mitigation and a programme of archaeological work post-consent.
	2.8.253	This can be achieved through the implementation of exclusion zones around known and potential heritage assets which preclude development activities within their boundaries.	
	2.8.254	These boundaries can be drawn around either discrete sites or more extensive areas identified in the Environmental Statement produced to support an application for consent.	
	2.8.255	The ability of the applicants to microsite specific elements of the proposed development during the construction phase should be an important consideration by the Secretary of State when assessing the risk of damage to archaeology.	
	2.8.256	Where requested by the applicant, the Secretary of State should consider granting consents which allow for micrositing/microrouteing (see paragraphs 2.8.76 following above) within a specified tolerance.	
	2.8.257	To ensure a programme of archaeological works has been secured, an outline WSI, covering the entirety of the defined project area and full duration of the project, that complies with the policy in this NPS, should be submitted within the application.	

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	2.8.258	This allows changes to be made to the precise location of infrastructure during the construction phase so that account can be taken of unforeseen circumstances, such as the discovery of marine archaeological remains.	
Mitigation: Offshore wind impacts – navigation and shipping	2.8.259	Mitigation measures will include site configuration, lighting and marking of projects to take account of any requirements of the General Lighthouse Authority.	Aids to navigation (marking and lighting) will be deployed in accordance with international maritime regulations and the latest relevant available standard industry guidance as advised by Trinity House or MCA. This will include a buoyed construction area around cable laying operations, cable repairs and during cable maintenance as per CoT46 in the Commitments Register (Volume 1, Annex 5.3, document reference F1.5.3)
Mitigation: Other offshore infrastructure and activities	2.8.261	Detailed discussions between the applicant for the offshore wind farm and the relevant consultees should have progressed as far as reasonably possible prior to the submission of an application. As such, appropriate mitigation should be included in any application, and ideally agreed between relevant parties.	As per Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES, the Transmission Assets have been sited to minimise conflicts with other sea users where possible. In cases where conflict has been highlighted through consultation (Table 9.3 of Volume 2, Chapter 9: Other sea users of the ES (document reference F2.9)), mitigation measures have been proposed to reduce or negate impacts (Table 9.12 of Volume 2, Chapter 9: Other sea users of the ES). Full details of all statutory and non-statutory consultation undertaken for the Transmission Assets are outlined in the Consultation Report (document reference E1).
	2.8.262	In some circumstances, the Secretary of State may wish to consider the potential to use requirements involving arbitration as a means of resolving how adverse impacts on other commercial activities will be addressed	
Compensatory measures	2.8.265	With increasing deployment of offshore wind farms and offshore transmission, environmental impacts upon SACs SPAs, and Ramsar sites and MCZs (individually and as part of a network) may not be addressed by avoidance, reduction, or mitigation alone, therefore compensatory measures (through derogation for SACs SPAs, Ramsar sites, and MCZs may be required at a plan or project level where adverse effects on site integrity and/or on conservation objectives cannot be ruled out.	An ISAA report has been produced, setting out the findings of the HRA process undertaken for the Transmission Assets to ensure compliance with the Habitats Regulations (document references E2.1, 2.2, 2.3). Parts 2 (document reference: E2.2) and 3 (document reference: E2.3) of the ISAA consider whether the Transmission Assets could have adverse effects, either alone or in-combination with other plans or projects, on the integrity of 25 designated European sites and three Ramsar sites for which the potential for likely significant effects could not be excluded in the HRA Stage 1 Screening Report (document reference: E3). The consideration of the potential for adverse effects on the integrity of European sites has been made with reference to the overall ecological functions and the lasting preservation of the constitutive characteristics of the sites. The assessment set out in Parts 2 and 3 of the ISAA concludes that there would be no adverse effect on the integrity of any of the designated sites assessed, either from the Transmission Assets alone, or in combination with other plans and projects. The relevant SNCBs have been consulted on the HRA throughout the preapplication phase, as evidenced in the Consultation report (document reference: E1).
	2.8.266	For many receptors, the scale of offshore wind and offshore transmission developments, and potential in-combination effects, means compensation could be required and applicants must refer to the latest Defra compensation guidance when making their assessments.	
	2.8.267	If, during the pre-application stage, SNCBs indicate that the proposed development is likely adversely to impact a protected site, the applicant should include with their application such information as may reasonably be required to assess potential derogations under the Habitats Regulations or the Marine and Coastal Access Act 2009.	
	2.8.268	Where such an indication is given later in the development consent process, the applicant should share this information as soon as reasonably practical.	
	2.8.270	Provision of such information will not be taken as an acceptance of adverse impacts, and if applicants dispute the likelihood of adverse effects they can provide this information as part of their application, 'without prejudice' to the Secretary of State's final decision on the impacts of the potential development.	
	2.8.271	If, in these circumstances, an applicant does not supply information required for the assessment of a potential derogation, consent may be refused as there will be no expectation that the Secretary of State will allow the applicant the opportunity to provide such information following the examination.	
	2.8.272	It is vital that applicants consider the need for compensation as early as possible in the design process, as 'retrofitting' compensatory measures will introduce delays and uncertainty to the consenting process. Applicants are encouraged to include all compensatory measures considered, with reasoning for why they have been discounted.	
	2.8.273	Applicants should work closely at an early stage in the pre-application process with SNCBs, and Defra, in conjunction with the relevant regulators, Local Planning Authorities, National Park Authorities, landowners and other relevant stakeholders to develop a compensation plan for all protected sites adversely affected by the development.	

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	2.8.274	Before submitting an application, applicants should seek the views of the SNCB and Defra, as to the suitability, securability and effectiveness of the compensation plan to ensure that the overall coherence of the National Site Network for the impacted SAC/SPA/MCZ feature is protected. Consultation should also take place throughout the pre-application phase with key stakeholders (e.g. via the evidence plan process and use of expert topic groups).	
	2.8.275	In cases where such views are provided, the applicant should include a copy of this information with the compensation plan in their application for further consideration by the Examining Authority and Secretary of State.	
Offshore wind: Secretary of State decision making			
Technical considerations: Network connection	2.8.285	When considering grid connection issues, the Secretary of State should be mindful of the requirements of the regulatory regime for onshore and offshore electricity networks, and consider how this affects the proposal put forward by the applicant.	The Secretary of State for the Department for Business, Energy and Industrial Strategy (BEIS) (the department which preceded the Department for Energy Security and Net Zero) has directed that the Transmission Assets are to be treated as development for which development consent is required under the Planning Act 2008, as amended (referred to in this document as 'the Planning Act 2008'), as set out in Volume 1, Chapter 1: Introduction to the ES (document reference F1.1). The direction is provided in document reference J24: Direction by the Secretary of State under section 35 of the Planning Act 2008. As such, paragraphs 2.8.285 – 2.8.287 are not relevant for the Transmission Assets. Section 1.3 of this document contains a NPS EN-5 tracker which demonstrates compliance with NPS EN-5 as required by 2.8.288 – 2.8.290.
	2.8.286	A proposed offshore electricity transmission cable connecting the wind farm or wind farms with the onshore electricity network (noting that this may be an offshore transmission connection point), and any offshore electricity substations that may be required, may constitute associated development, depending on their scale and nature in relation to the offshore wind farm(s).	
	2.8.287	Where the Secretary of State is satisfied that such offshore infrastructure does constitute associated development and can form part of the application, it should be considered by the Secretary of State in accordance with this NPS.	
	2.8.288	However, some proposals for transmission could be consented separately to the windfarm (array), see paragraphs 2.8.38 following above and paragraph 1.3 in EN-1.	
	2.8.289	The Secretary of State should assess the onshore element(s) of the grid connection (e.g. electric lines, substations) in accordance with the guidelines and requirements contained in EN-5.	
	2.8.290	Depending upon the scale and type of this onshore development, elements of it could constitute either associated development or an energy NSIP in its own right.	
Technical considerations: Future monitoring	2.8.295	Owing to the complex nature of offshore wind development, and the difficulty in establishing the evidence base for marine environmental recovery, the Secretary of State should, where appropriate, request the applicant undertake environmental monitoring (e.g. ornithological surveys, geomorphological surveys, archaeological surveys) prior to and during construction and operation.	Relevant and required surveys have been carried out for the offshore elements of the proposal and the results are contained within Volume 2 of the ES (document reference F2). The Applicants will comply with any such requests made by the Secretary of State with regards to future monitoring. An Offshore In Principle Monitoring Plan (document reference J20) is included with the application which details the monitoring commitments made by the Applicants.
	2.8.296	The Secretary of State may consider that monitoring of any impact is appropriate.	
Offshore wind environmental standards	2.8.298	Once the OWES Guidance is issued, the Secretary of State will expect applicants to have applied the relevant measures to their application.	The Transmission Assets application has reviewed the requirements in NPS EN-3 paragraphs 2.8.90-2.8.92 to consider the relevant Offshore Wind Environmental Standards (OWES) to support developers to take a more consistent approach to avoiding, reducing, and mitigating the impacts of an offshore wind farms and/or offshore transmission infrastructure and has taken any existing guidance into account. It is noted, however, Defra will consult on a series of OWES before drafting clear OWES Guidance.
	2.8.299	The Secretary of State will consider an application for development consent in accordance with the OWES Guidance and/or its targets. Whether an application conforms to the OWES Guidance and/or targets (or any justification for departing from them) is likely to be material to the decision on development consent and, where relevant, will inform the Secretary of State's Habitats Regulations Assessment and Marine Conservation Zone assessment	
Impacts: Biodiversity and ecological conservation	2.8.302	The Secretary of State should consider the effects of a proposed development on marine ecology and biodiversity, considering all relevant information made available by the applicant.	The existing ecology is laid out in the baseline environment sections with an assessment of the potential effects of the Transmission Assets contained within Volume 2 of the ES (document reference F2).
	2.8.303	The Secretary of State should be satisfied that, in the development of their proposal, the applicant has made appropriate, and extensive, use of up-to-date evidence from previous deployments and research results from scientific peer reviewed papers, and the programmes listed in paragraph 2.8.107 and assessed through HRA/MCZ processes (including the mitigation hierarchy), the impact on any protected species or habitats, as well as having regard	The consideration of the potential for adverse effects on the integrity of European sites has been made with reference to the overall ecological functions and the lasting preservation of the constitutive characteristics of the sites.

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		to requirements set out in 5.4.39 of EN-1 (e.g. the Environment Act) and Good Environmental Status under the UK Marine Strategy.	The assessment set out in Parts 2 and 3 of the ISAA concludes that there would be no adverse effect on the integrity of any of the designated sites assessed, either from the Transmission Assets alone, or in combination with other plans and projects. Based on the information presented in section 1.8 of the MCZ screening and stage 1 assessment report, which includes assessments on the relevant broadscale habitats of the Fylde MCZ (i.e., subtidal sand and subtidal mud), it is concluded that the conservation objective of maintaining the subtidal sand and subtidal mud protected features of the Fylde MCZ in a favourable condition will not be hindered by the construction, operation and maintenance, and decommissioning phases of the Transmission Assets in isolation, or cumulatively with any other plan, project or activity. As no significant risks to the achievement of the Fylde MCZ conservation objectives have been identified in the MCZ Stage 1 assessment, a Stage 2 assessment is not required. Although the Applicants do not consider it necessary, a Stage 2 assessment and measures of equivalent environmental benefit have been provided on a 'without prejudice' basis. Whilst the Applicants and Natural England are not agreed on the need for MEEB, and without prejudice to the Applicants position, the Applicants prepared a MEEB assessment at Deadline 1 and the Applicants and Natural England agree with progressing the strategic compensation approach if the Secretary of State determines that MEEB for the Fylde MCZ are required (REP6-179). The Environmental Status of coastal waters is set out within Volume 2, Annex 2.2: Water Framework Directive coastal waters assessment of the ES.
	2.8.304	The designation of an area as a protected site (including SACs SPAs, and Ramsar sites, MCZs and SSSIs) does not necessarily restrict the construction or operation of offshore wind farms or offshore transmission in, near, or through that area (see also Sections 4.3 and 5.4 of EN-1). However, it may make consent for such construction more difficult to secure.	
	2.8.305	Where adverse effects on site integrity/conservation objectives are predicted, the Secretary of State should consider the extent to which the effects are temporary or reversible, and the timescales for recovery. The Secretary of State should also consider the extent to which the effects may impede achievement of the MPA target (including any interim target) set under the Environment Act 2021.	
	2.8.306	See paragraphs 2.8.90 and 2.8.298 of this NPS for further guidance on offshore wind environmental standards.	
Impacts: Physical environment	2.8.307 to 2.8.308	As set out in paragraphs 2.8.111 of this NPS the direct effects on the physical environment can have indirect effects on a number of other receptors. Where indirect effects are predicted, the Secretary of State should refer to relevant sections of this NPS and EN-1.	No significant direct or indirect effects have been identified for the physical environment as a result of the Transmission Assets in Volume 2, Chapter 1: Physical processes (document reference F2.1). Justification for the location of the Transmission Assets, including a description of the design alternatives considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4) .
	2.8.309	The Secretary of State must be satisfied that the design of the wind farm, offshore transmission and methods of construction, including use of materials, are such as to reasonably minimise the potential for impact on the physical environment. This could involve, for instance, the exclusion of certain foundations because of their impacts or minimising quantities of rock that are used to protect cables whilst taking into account other relevant considerations such as safety.	
Impacts: Fish	2.8.310	The use of external cable protection has been suggested as a mitigation for EMF (by increasing the distance between fish species and individual cables). However, the Secretary of State should also consider any negative impacts from external cable protection on benthic habitats, and a balance between protection of various receptors must be made, with all mitigation and alternatives reviewed.	The impact of EMF from subsea cables has been assessed in Volume 2 Chapter 2: Benthic Subtidal and Intertidal Ecology (document reference F2.2) and Volume 2, Chapter 3: Fish and shellfish ecology (document reference F2.3). No significant direct or indirect effects have been identified for benthic habitats or fish and shellfish as a result of the Transmission Assets.
Impact: Intertidal and coastal habitats and species	2.8.311	The Secretary of State should be satisfied that cable installation and decommissioning has been designed sensitively, considering intertidal/coastal habitats	Details on cable installation and its relationship and impact upon intertidal habitats is contained within Volume 2, Chapter 2: Benthic Subtidal and Intertidal Ecology of the ES (document reference F2.2).
Impact: Marine mammals	2.8.312	The Secretary of State should be satisfied that the preferred methods of construction, in particular the construction method needed for the proposed foundations and the preferred foundation type, where known at the time of application, are designed reasonably to minimise significant impacts on marine mammals.	Potential sound as a result of piling has not been assessed as with the removal of the Morgan OSPs, the Morecambe OSPs and the Morgan Offshore Booster Station, there is no piling associated with the Transmission Assets. Transmission Assets project parameters relevant to marine mammals have been set out in Table 4.12 of Volume 2, Chapter 4: Marine Mammals of the
	2.8.313	Unless suitable noise mitigation measures can be imposed by requirements to any development consent the Secretary of State may refuse the application.	

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	2.8.314	The conservation status of cetaceans and seals are of relevance and the Secretary of State should be satisfied that cumulative and in-combination impacts on marine mammals have been considered.	ES (document reference F2.4) (Maximum Design Scenario considered for the assessment of potential impacts on marine mammals). Measures adopted as part of the Transmission Assets are set out in section 4.8 of Volume 2 Chapter 4: Marine Mammals of the ES, which include a measure to develop and adhere to detailed MMMPs which will be developed in accordance with the Outline MMMP (document reference J18) and in line with the latest research and JNCC mitigation guidelines. The detailed MMMPs will be developed as part of a stepped strategy post consent and following the mitigation hierarchy - avoid, reduce, mitigate. An assessment of cumulative effects presented in section 4.13 of Volume 2, Chapter 4: Marine Mammals of the ES (document reference F2.4) and an assessment of in-combination effects is presented in the HRA Stage 2 ISAA (document reference E2.2).
Impact: Birds	2.8.315	The Secretary of State must be satisfied that the collision risk and displacement assessments have been conducted to a satisfactory standard having had regard to the advice from the relevant statutory advisor.	Collision risk and barrier effects are scoped out of the assessment as with the removal of the Morgan OSPs, the Morecambe OSPs and the Morgan Offshore Booster Station, there is no sea surface piercing infrastructure associated with the Transmission Assets. An assessment of the impacts and effects of the Transmission Assets has been undertaken within the ES, including Volume 2, Chapter 5: Offshore ornithology of the ES (document reference F2.5) and Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4).
	3.8.316	The conservation status of seabirds is of relevance and the Secretary of State should take into account the views of the relevant statutory advisors, and be satisfied that cumulative and in-combination impacts on seabird species have been considered.	
Impact: Subtidal habitats and species	2.8.317	The Secretary of State should be satisfied that activities have been designed considering sensitive subtidal environmental aspects, and discussions with the relevant conservation bodies have taken place.	The effect of impacts related to the design of the Transmission Assets have been assessed in section 2.11 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES (document reference 2.2). This included the consideration of the sensitivity of the relevant subtidal habitats and the consideration of mitigation where necessary. With respect to offshore enhancements to be included as part of the Transmission Assets, these are described in Marine Enhancement Statement (document reference J12). An evidence plan (EPP) has been set up with the statutory nature conservation bodies (SNCBs) and other consultees to consult on the project on topics such as sensitive subtidal environmental aspects (see section 2.3). As part of this process an expert working group (EWG) for benthic ecology, physical processes and fish and shellfish ecology was established to facilitate this consultation. SoCGs with the MMO (S_D1_6.8/F04) and Natural England (S_D6_6.28) have been submitted at Deadline 6, following consultation throughout the Examination phase.
Impact: Commercial fisheries and fishing	2.8.318	The Secretary of State should be satisfied that the site selection process has been undertaken in a way that reasonably minimises adverse effects on fish stocks, including during peak spawning periods and the activity of fishing itself.	As detailed in Volume 1, Annex 4.2: Site selection and refinement of offshore infrastructure (document reference F1.4.2), the siting of the offshore export cable corridors has avoided key herring spawning areas to the northwest of the Transmission Assets. The potential impacts arising from the Transmission Assets have been discussed with statutory bodies during consultation. The Applicants are taking and will continue to take steps to minimise the effects upon the industry in the area through appropriate mitigation, where required (see section 6.8 of Volume 2, Chapter 6: Commercial Fisheries of the ES (document reference F2.6)). To communicate the commitments and measures by the Transmission Assets to co-exist with the fishing industry and reduce impacts on commercial fisheries as far as practicably possible,

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			the Applicants have committed to the development of a Fisheries Liaison and Co-existence Plan, which is secured within the deemed marine licence(s) in the draft DCO. An outline of this plan has been included with the Application.
	2.8.319	The Secretary of State should consider the extent to which the proposed development occupies any recognised important fishing grounds, and whether the project would prevent or significantly impede protection of sustainable commercial fisheries or fishing activities.	The Applicants have considered the extent to which the Transmission Assets will overlap with recognised fishing grounds and have carried out consultation with fishing stakeholders, in order to fully understand any potential impacts (see section 6.3 of Volume 2, Chapter 6: Commercial fisheries of the ES (document reference F2.6)). The results of this assessment are presented in this chapter (see section 6.11 of Volume 2 Chapter 6: Commercial fisheries of the ES). During construction of the Transmission Assets, rather than complete closure of the Transmission Assets Order Limits, it is proposed that advisory exclusion zones of 500 m will be present around vessels installing subtidal export cables. Implications from the implementation of advisory exclusion zones on commercial fishing have been presented in section 6.11 of Volume 2 Chapter 6: Commercial Fisheries of the ES (document reference F2.6). Advisory exclusion zones will be committed to within the Fisheries Liaison and Co-existence Plan which is secured within the deemed marine licence(s) in the draft DCO. An outline of this plan has been included with the DCO application (document reference J13).
	2.8.320	Where the Secretary of State considers the wind farm or offshore transmission would significantly impede protection of sustainable fisheries or fishing activity at recognised important fishing grounds, this should be attributed a correspondingly significant weight.	
	2.8.321	The Secretary of State should consider adverse or beneficial impacts on different types of commercial fishing on a case-by-case basis.	Potential impacts to commercial fisheries have been described in section 6.11 of Volume 2 Chapter 6: Commercial fisheries of the ES, and cumulative effects are described in section 6.13 of Volume 2, Chapter 6: Commercial fisheries of the ES. Each potential impact within these assessments has been assessed separately for each identified receptor group (Table 6.9 of Volume 2, Chapter 6: Commercial fisheries of the ES (document reference F2.6)) and phase of the Transmission Assets.
	2.8.323	The Secretary of State will need to consider the extent to which disruption to the fishing industry, whether short term during pre-construction (e.g. surveying) or construction or long term over the operational period, including that caused by the future implementation of any safety zones, has been mitigated where reasonably possible.	A range of mitigation options has been explored with the fishing industry representatives and stakeholders of the fishing community, where disruption is anticipated (see section 6.8 and 6.11 of Volume 2, Chapter 6: Commercial fisheries of the ES (document reference F2.6)). During construction of the Transmission Assets, rather than complete closure of the Transmission Assets Order Limits, it is proposed that advisory exclusion zones of 500 m will be present around vessels installing subtidal export cables. Implications from the implementation of advisory exclusion zones on commercial fishing have been presented in section 6.11 of Volume 2 Chapter 6: Commercial Fisheries of the ES (document reference F2.6). Advisory exclusion zones will be committed to within the Fisheries Liaison and Co-existence Plan which is secured within the deemed marine licence(s) in the draft DCO. An outline of this plan has been included with the DCO application (document reference J13).
	2.8.324	Where an offshore wind farm or offshore transmission could affect a species of fish that is of commercial interest, but is also of ecological value, the Secretary of State should refer to Section 2.8.147 following of this NPS with regard to the latter.	Potential impacts on commercially important fish and shellfish resources via the construction, operations and maintenance, and decommissioning phases of the Transmission Assets have been assessed in section 6.11.5 of Volume 2, Chapter 6: Commercial Fisheries of the ES (document reference F2.6). Overall, it is concluded there will be no significant effects arising from the Transmission Assets during the construction, operation and maintenance, or decommissioning phases in relation to commercial fisheries.
Impact: Marine historic environment	2.8.325	The Secretary of State should be satisfied that any proposed offshore wind farm and/ or offshore transmission project has appropriately considered and mitigated for any impacts to the historic environment, including both known heritage assets, and discoveries that may be made during the course of development	Information on the marine historic environment is presented within Volume 2, Chapter 8: Marine archaeology of the ES (document reference F2.8). Overall, it is concluded there will be no significant effects arising from the Transmission Assets during the construction, operation and maintenance, or decommissioning phases in relation to the marine historic environment.

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Impact: Navigation and shipping	2.8.326	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.	Relevant IMO routeing measures, including the essential sea lanes such as TSSs, are considered in the NRA (Volume 2, Annex 7.1: Navigation risk assessment of the ES (document reference F2.7.1)). Locations of sea lanes are presented in section 7.6.14 of Volume 2, Chapter 7: Shipping and navigation of ES (document reference F2.7) and impacts on vessel routeing measures in section 7.11.2 of the chapter. The assessment found that the Transmission Assets would not interfere with the use of recognised sea lanes essential to international navigation.
	2.8.327	The use of recognised sea lanes essential to international navigation means: a) anything that constitutes the use of such a sea lane for the purposes of article 60(7) of the United Nations Convention on the Law of the Sea 1982; and b) any use of waters in the territorial sea adjacent to Great Britain that would fall within paragraph (a) if the waters were in a REZ.	
	2.8.328	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 ferries74 and recreational users of the sea.	Impacts on vessel routeing for ferries and commercial shipping are set out in section 7.11.3 of Volume 2, Chapter 7: Shipping and navigation of the ES (document reference F2.7). Adverse weather conditions are assessed within section 7.11.4 of the chapter. The NRA for the Transmission Assets has concluded that there are no unacceptable risks and that all risks have been reduced to Broadly Acceptable or ALARP. Volume 1, Chapter 4: Site selection and consideration of alternatives (document reference F1.4) of the ES provides details on the site selection process.
	2.8.329	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. Where a proposed offshore wind farm is likely to affect less strategically important shipping routes, the Secretary of State should take a pragmatic approach to considering proposals to minimise negative impacts.	
	2.8.330	Where a proposed offshore wind farm is likely to affect less strategically important shipping routes, the Secretary of State should take a pragmatic approach to considering proposals to minimise negative impacts.	
	2.8.331	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.	Impacts to navigation are described in section 7.11 of Volume 2, Chapter 7: Shipping and Navigation (document reference F2.7) and an NRA has been produced in Volume 2, Annex 7.1: Navigation risk assessment (document reference F2.7.1) of the ES. The NRA for the Transmission Assets has concluded that there are no unacceptable risks and that all risks have been reduced to Broadly Acceptable or ALARP.
	2.8.332	The Secretary of State should be satisfied that the scheme has been designed to minimise the effects on recreational craft and that appropriate mitigation measures, such as buffer areas, are built into applications to allow for recreational use outside of commercial shipping routes.	Impacts on recreational craft are described throughout section 7.11.9 of Volume 2, Chapter 7: Shipping and Navigation of the ES (document reference F2.7). Applied mitigations are identified in section 7.8 of the chapter, and this includes the use of Safety Zones or advisory passing distances to mitigate impacts which pose a risk to surface navigation. The assessment concluded that there would be no significant impacts to recreational activity as a result of the Transmission Assets.
	2.8.333	In view of the level of need for energy infrastructure, where an adverse effect on the users of recreational craft has been identified, and where no reasonable mitigation is feasible, the Secretary of State should weigh the harm caused with the benefits of the scheme.	
	2.8.334	The Secretary of State should make use of advice from the MCA, who will use the NRA described in paragraphs 2.8.189 and 2.8.190 above.	Relevant stakeholders have been consulted throughout, including the MCA. A summary of the consultation activity undertaken is provided in section 7.3 of Volume 2, Chapter 7: Shipping and navigation of the ES (document reference F2.7).
	2.8.335	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.	Impacts to navigation are described in section 7.11 of Volume 2, Chapter 7: Shipping and Navigation of ES (document reference F2.7) and an NRA has been produced in Volume 2, Annex 7.1: Navigation Risk Assessment of the ES (document reference F2.7.1). The NRA for the Transmission Assets has concluded that there are no unacceptable risks and that all risks have been reduced to Broadly Acceptable or ALARP.
	2.8.336 - 2.8.337	The Secretary of State may include provisions, compliant with national maritime legislation and United Nations Convention on the Law of the Sea (UNCLOS), within the terms of a	The Applicants have applied risk controls, including safety zones, which are described in section 7.8 of Volume 2, Chapter 3: Fish and shellfish

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
		development consent as respects rights of navigation so far as they pass through waters in or adjacent to Great Britain which are between the mean low water mark and the seaward limits of the territorial sea. The provisions may specify or describe rights of navigation which: • are extinguished; • are suspended for the period that is specified in the DCO; • are suspended until such time as may be determined in accordance with provisions contained in the DCO; and • are exercisable subject to such restrictions or conditions, or both, as are set out in the DCO.	ecology (document reference F2.3) and Volume 7, Annex 7.1: Navigation risk assessment (document reference F2.7.1) of the ES. Additional risk control options are discussed Volume 7, Annex 7.1: Navigation risk assessment of the ES.
	2.8.338	The Secretary of State should specify the date on which any such provisions are to come into force, or how that date is to be determined.	
	2.8.339	The Secretary of State should require the applicant to publish any provisions that are included within the terms of the DCO, in such a manner as appears to the Secretary of State to be appropriate for bringing them, as soon as is reasonably practicable, to the attention of persons likely to be affected by them.	
	2.8.340	The Secretary of State should include provisions as respects rights of navigation within the terms of a DCO only if the applicant has requested such provision be made as part of their application for development consent.	
Impacts: Other offshore infrastructure and services	2.8.341	There are statutory requirements concerning automatic establishment of navigational safety zones relating to offshore petroleum developments.	Safety zones and advisory clearance distances are one of the measures adopted in Table 9.12 of Volume 2, Chapter 9: Other Sea Users (CoT66) of the ES (document reference F2.9) to ensure compatibility with offshore petroleum receptors. This is in line with Section 21, Part 3 of the Petroleum Act 1987.
	2.8.342	Where a proposed offshore wind farm potentially affects other offshore infrastructure or activity, a pragmatic approach should be employed by the Secretary of State.	Section 9.11 of Volume 2, Chapter 9: Other Sea Users of the ES (document reference F2.9) describes the impact assessment undertaken for the Transmission Assets, and Table 9.12 identifies measures adopted to minimise negative impacts and reduce risks. Overall, it is concluded there will be no significant effects arising from the Transmission Assets during the construction, operation and maintenance, or decommissioning phases in relation to other sea users.
	2.8.343	Much of this infrastructure is important to other offshore industries as is its contribution to the UK economy.	
	2.8.344	In such circumstances, the Secretary of State should expect the applicant to work with the impacted sector to minimise negative impacts and reduce risks to as low as reasonably practicable.	
	2.8.345	As such, the Secretary of State should be satisfied that the site selection and site design of a proposed offshore wind farm and offshore transmission has been made with a view to avoiding or minimising disruption or economic loss or any adverse effect on safety to other offshore industries. Applicants will be required to demonstrate that risks to safety will be reduced to as low as reasonably practicable.	As per Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES, the Transmission Assets have been sited to minimise conflicts with other sea users where possible. In cases where conflict has been highlighted through consultation (Table 9.3 of Volume 2 Chapter 9: Other Sea Users of the ES (document reference F2.9)), mitigation measures have been proposed to reduce or negate impacts (Table 9.12). Overall, it is concluded there will be no significant effects arising from the Transmission Assets during the construction, operation and maintenance, or decommissioning phases in relation to other sea users.
	2.8.346	The Secretary of State should not consent applications which pose intolerable risks to safety after mitigation measures have been considered.	Full risk assessments for both the Transmission Assets alone and in-combination with other projects, plans and activities are presented in sections 9.11 and 9.13 of Volume 2, Chapter 9: Other Sea Users of ES (document reference F2.9) respectively. These assessments demonstrate that there will be no significant impact on the future viability of any existing or approved/licensed offshore infrastructure or activity.
	2.8.347	Where a proposed development is likely to affect the future viability or safety of an existing or approved/licensed offshore infrastructure or activity, the Secretary of State should give these adverse effects substantial weight in its decision-making.	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
	2.8.348	Providing proposed schemes have been carefully designed, and that the necessary consultation with relevant bodies and stakeholders has been undertaken at an early stage, mitigation measures may be possible to negate or reduce effects on other offshore infrastructure or operations to a level sufficient to enable the Secretary of State to grant consent	As per Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES, the Transmission Assets have been sited to minimise conflicts with other sea users where possible. In cases where conflict has been highlighted through consultation (Table 9.3 of Volume 2 Chapter 9: Other Sea Users of the ES (document reference F2.9)), mitigation measures have been proposed to reduce or negate impacts (Table 9.12). Overall, it is concluded there will be no significant effects arising from the Transmission Assets during the construction, operation and maintenance, or decommissioning phases in relation to other sea users. Consultation has continued throughout the Examination process, and a Statement of Common Ground with the following key stakeholders has been submitted at Deadline 6; • Marine Coastguard Agency (REP6-127); • Spirit Energy (REP6-159); and • Trinity House (REP6-126).
Impacts: Seascape and visual effects	2.8.349	The Secretary of State should assess the proposal in accordance with the policy set out in the landscape and visual impacts Section 5.10 of EN-1.	See response to 5.10 of EN-1 above.
	2.8.352	Where adverse effects are anticipated either during the construction or operational phases, in coming to a judgement the Secretary of State should consider the extent to which the effects are temporary or reversible.	

1.3 NPS EN-5

Table 1.3: NPS EN-5

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
1 Introduction			
1.1 Background			
Background	1.1.1	The security and reliability of the UK's current and future energy supply is highly dependent on having an electricity network which will enable the new electricity generation, storage, and interconnection infrastructure that our country needs to meet the rapid increase in electricity demand required to transition to net zero, while maintaining energy security.	The Transmission Assets, as an energy transmission Critical National Priority (CNP) infrastructure project will make a beneficial contribution to global efforts to reduce the effects of climate change and would represent a meaningful contribution to achieving security of UK energy supplies by unlocking almost 2GW of new offshore wind generation from 2 separate NSIPs, thereby reducing the UK's current shortfall in meeting the policy ambition of 50GW of offshore wind electricity generation by 2030. This application accords with these requirements as a key mechanism for meeting emissions targets is the use of renewables, including offshore wind. Volume 1, Chapter 2: Policy and Legislative Context of the ES (document reference F1.2), sets out the need for and adherence of the project to policy and legislation, and Volume 4, Chapter 1: Climate Change of the ES (document reference F4.1) provides an assessment of the project on climate change. The Planning Statement (document reference J28) also provides a clear explanation on need and how the Transmission Assets will contribute to achieving the government's objectives for the energy system.
	1.1.2	A significant amount of new network infrastructure is required in the near term to directly support the government's ambition to deploy up to 50GW of offshore wind capacity (including up to 5GW floating wind) by 2030. There is an expectation that there will be a need for substantially more installed offshore capacity beyond this to achieve net-zero by 2050.	
	1.1.3	The electricity network infrastructure to support the government's offshore wind ambition is as important as the offshore wind generation infrastructure. Without the development of the necessary networks to carry offshore wind power to where it is needed in the UK, the offshore wind ambition cannot be achieved.	
	1.1.4	In addition to offshore wind, new networks infrastructure is needed in support of the development of generation by other technologies, including those in EN-3.	
	1.1.5	As identified in EN-1, government has concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure. This includes: for electricity grid infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations. This is not limited to those associated specifically with a particular generation technology, as all new grid projects will contribute towards greater efficiency in constructing, operating and connecting low carbon infrastructure to the National Electricity Transmission System. These are viewed by the government as being CNP infrastructure and should be progressed as quickly as possible.	
	1.1.6	To support the above, the network must be effectively planned to ensure that the appropriate investment and right kind of technology is brought online at the right time, in the right places.	
	1.1.7	To facilitate this, strategic network planning exercises set out to ensure strategic and co-ordinated onshore and offshore transmission network planning, considering the networks as a whole, with individual transmission projects subsequently brought forward in line with these network designs.	
	1.1.8	This approach aims to ensure network development can allow decarbonisation targets to be met in the most efficient and timely manner. It considers and seeks to strike an appropriate balance between costs to consumers, timely delivery and the minimisation of community and environmental impacts of new network infrastructure from an early stage of network planning.	
	1.1.9	This National Policy Statement (NPS), taken together with the Overarching NPS for Energy (EN-1), provides the primary policy for decisions taken by the Secretary of State on applications it receives for electricity networks infrastructure (see Section 1.6 of this NPS).	The submitted Planning Statement (document reference J28) clearly explains how the Transmission Assets has taken into account all relevant paragraphs of NPS EN-1 as the primary policy for decision-making for this type of development proposal.
	1.1.10	The way in which NPSs guide the Secretary of State's decision making, and the matters which the Secretary of State is required by the Planning Act 2008 (the 2008 Act) to take into account in considering applications, are set out in Sections 1.1 and 4.1 of EN-1.	
	1.1.11	Applicants should ensure that their applications, and any accompanying supporting documents and information, are consistent with the instructions and guidance given to applicants in this NPS, EN-1 and any other NPSs that are relevant to the application in question.	The application has been prepared in strict compliance with The Planning Inspectorate, (2017), Advice Note Six: Preparation and submission of application documents.
1.3 Relationship with EN-1			
Relationship with EN-1	1.3.1 to 1.3.2	This NPS is part of a suite of energy infrastructure NPSs. It should be read in conjunction with EN-1 and EN-3.	Policies set out in NPS EN-1 are detailed in the policy tracker for NPS EN-1 above.

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
		NPS does not seek to repeat the material set out in EN-1 or EN-3. EN-1 applies to all applications covered by this NPS unless stated otherwise. The policy in EN-3 on offshore wind in particular contains details relevant to offshore transmission.	
1.4 Geographical coverage			
Geographical coverage	1.4.1	Set out geographical coverage for the NPS.	The Transmission Assets are located in England and English Waters and fall within the scope of NPS EN-5.
1.7 Appraisal of Sustainability and Habitats Regulations Assessment			
Appraisal of Sustainability and Habitats Regulations Assessment	1.7.1 to 1.7.2	All the NPSs have been subject to an Appraisal of Sustainability (AoS) required by the 2008 Act and the Environmental Assessment of Plans and Programmes Regulations 2004. A Habitats Regulations Assessment (HRA) has also been prepared in accordance with the Conservation of Habitats and Species Regulations 2017 and the Conservation of Offshore Marine Habitats and Species Regulations 2017. These are published alongside this NPS and available at https://www.gov.uk/government/consultations/planning-for-new-energy-infrastructure-revisions-to-national-policy-statements.	An ISAA report has been produced, setting out the findings of the HRA process undertaken for the Transmission Assets to ensure compliance with the Habitats Regulations (document references E2.1, 2.2, 2.3). The assessment set out in Parts 2 and 3 of the ISAA concludes that there would be no adverse effect on the integrity of any of the designated sites assessed, either from the Transmission Assets alone, or in combination with other plans and projects. As such, no compensatory measures are considered necessary for the purposes of the HRA process.
2 Assessment and Technology Specific Information			
2.1 Introduction			
Introduction	2.1.1	As set out in Section 1.3, this NPS is additional to EN-1. Therefore, applicants and the Secretary of State should consider this NPS and EN-1 together. Applicants should show how their application meets the requirements in EN-1 and this NPS, applying the mitigation hierarchy, as well as any other legal and regulatory requirements. This includes the assessment principles as set out in Part 4 of EN-1, and the consideration of impacts as set out in Part 5 of EN-1. In addition, for offshore-onshore transmission, applicants and the Secretary of State should consider relevant policy in EN-3, as identified in sections 2.12 – 2.15 below.	The relevant sections of NPS EN-1 and EN-3 have been considered above. Detailed assessments are provided within all chapters of Volumes 1 to 4 of the ES (document reference F1 to F4). As set out in every ES chapter, mitigation measures have been developed to primarily avoid, then prevent, reduce or offset significant adverse environmental effects. Mitigation measures adopted as part of the Transmission Assets are provided in Volume 1, Annex 5.3: Commitments register of the ES (document reference F1.5.3). Additional policy on those factors included in EN-5 are addressed, where relevant, within this table. As required by Requirement 22 of Schedules 2A and 2B of the draft Development Consent Order (C1/F097), the Applicants will submit a detailed Decommissioning Plan for approval by the relevant planning authority within 6 months of permanent cessation of commercial operation of Project A or Project B onshore works (as relevant). Requirement 22(3) secures that the Applicants must implement the decommissioning plan as approved. The Applicants have not included overhead lines within the project design envelope. All cables will be buried underground, as per CoT12, (full wording for which is set out in Volume 1, Annex 5.3: Commitments Register). As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5). Mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3).
	2.1.2	When evaluating the impacts of electricity networks infrastructure in particular, all of the generic impacts detailed in EN-1 are likely to be in play, even if only during specific phases of the development (such as construction), or at one specific part of the development (such as a substation).	
	2.1.3	This NPS has additional policy on: factors influencing site selection and design; biodiversity and geological conservation; landscape and visual; noise and vibration; Electric and Magnetic Fields; and Sulphur Hexafluoride.	
	2.1.4	Decommissioning of electricity networks is not specifically covered in this NPS. Generally, nationally significant electricity networks are likely to have an ongoing function, but will be subject to maintenance, reinforcement works and for assets to be replaced when they come to the end of their lifespan.	
	2.1.5	As stated in Section 4.2 of EN-1, to support the urgent need for new low carbon infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations, are considered to be CNP infrastructure. This is not limited to those associated specifically with a particular generation technology, as all new grid projects will contribute towards greater efficiency in constructing, operating and connecting low carbon infrastructure to the National Electricity Transmission System.	
	2.1.6	The assessment principles outlined in Section 4 of EN-1 continue to apply to CNP infrastructure. Applicants must show how any likely significant negative effects would be avoided, reduced, mitigated or compensated for, following the mitigation hierarchy. Early application of the mitigation hierarchy is strongly encouraged, as is engagement with key stakeholders including SNCBs, both before and at the formal pre-application stage.	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
2.2 Factors influencing site selection and design			
Factors influencing site selection and design	2.2.1	The Secretary of State should bear in mind that the initiating and terminating points – or development zone – of new electricity networks infrastructure is not substantially within the control of the applicant.	The main factors determining the siting of the components of the Transmission Assets are described in Volume 1, Chapter 4: Site Selection and Consideration of Alternatives of the ES (document reference F1.4). The point of connection is ultimately a matter for NESO, as they identify where there is capacity within their network and then subsequently offer connections. Both the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm were scoped into the 'Pathways to 2030' workstream under the OTNR. The OTNR aims to consider, simplify, and wherever possible facilitate a collaborative approach to offshore wind projects connecting to the UK electricity transmission network. 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 connecting the offshore two wind farms to the electricity transmission network at Penwortham in Lancashire. This point of interconnection was identified by NGES as representing the optimal location considering a range of criteria (i.e. technical, cost, environmental and deliverability factors). Morgan OWL and Morecambe OWL (the Applicants), being in agreement with the output from the HNDR, 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 substations (and associated infrastructure), and onward connection to the National Grid at Penwortham, Lancashire.
	2.2.2	Siting is determined by: the location of new generating stations or other infrastructure requiring connection to the network, and/or system capacity and resilience requirements determined by the Electricity System Operator.	
	2.2.3	These twin constraints, coupled with the government's legislative commitment to net zero by 2050, strategic commitment to new interconnectors with neighbouring North Seas countries and an ambition of up to 50GW of offshore wind generation by 2030, means that very significant amounts of new electricity networks infrastructure is required, including in areas with comparatively little build-out to date.	
	2.2.4	However, a strategic and holistic approach to onshore and offshore network planning, as set out in paragraphs 2.7 – 2.8, will identify the most efficient way of meeting decarbonisation targets and should reduce the overall amount of network infrastructure required.	
	2.2.5	Additionally, applicants retain control in managing the identification of routing and site selection between the identified initiating and terminating points or within the development zone.	
	2.2.6	Moreover, the locational constraints identified above do not, of course, exempt applicants from their duty to consider and balance the site-selection considerations set out below, much less the policies on good design and impact mitigation detailed in sections 2.4-2.9.	
	2.2.7	The connection between the initiating and terminating points of a proposed new electricity line will often not be via the most direct route. Siting constraints, such as engineering, environmental or community considerations will be important in determining a feasible route.	The main factors determining the siting the of the components of the Transmission Assets, including engineering, environmental or community considerations are described in Volume 1, Chapter 4: Site Selection and Consideration of Alternatives of the ES (document reference F1.4). The ES sets out how the environmental impacts of the proposal have been considered and ensured, geographically, that by co-locating the projects as far as possible, impacts are confined to smaller areas than if they had not been coordinated. In respect of impacts on agricultural land from the cable corridor, by aligning the two corridors together, there is a single area that is affected – the Applicants recognise that is potentially more intensive than it would be if there were two separate cable corridors, but by containing development within a single area fewer landowners are impacted. Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.8 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). The outline landscape design is set out within the Outline Landscape Management Plan (document reference J2) and Outline Design Principles (oDP) document (document reference J3). The principles of the oDP seek to guide the design process towards design outcomes that ensure that the substation sites would fit sensitively into the local context; mitigate (as far as possible) adverse environmental effects and respect local communities.
	2.2.8	There will usually be a degree of flexibility in the location of the development's associated substations, and applicants should consider carefully their location, as well as their design.	
	2.2.9	In particular, the applicant should consider such characteristics as the local topography, the possibilities for screening of the infrastructure and/or other options to mitigate any impacts. (See Section 2.10 below and Section 5.10 in EN-1.)	
	2.2.10	As well as having duties under Section 9 of the Electricity Act 1989, (in relation to developing and maintaining an economical and efficient network), applicants must take into account Schedule 9 to the Electricity Act 1989, which places a duty on all transmission and distribution licence holders, in	The main factors determining the siting of the components of the Transmission Assets, including engineering, environmental or community

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
		formulating proposals for new electricity networks infrastructure, to "have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and …do what [they] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects."	considerations are described in Volume 1, Chapter 4: Site Selection and Consideration of Alternatives of the ES (document reference F1.4). Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.8 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10). The outline landscape design is set out within the Outline Landscape Management Plan (document reference J2) and Outline Design Principles document (document reference J3).
	2.2.11	Depending on the location of the proposed development, statutory duties under Section 85 of the Countryside and Rights of Way Act 2000, Section 11A of the National Parks and Access to the Countryside Act 1949 (as amended by Section 62 of the Environment Act 1995), and Section 17A of the Norfolk and Suffolk Broads Act 1988 may be relevant. Applicants should note amendments to each of these provisions contained in Section 245 of the Levelling Up and Regeneration Act 2023.	Legislation relevant to the assessment of land use and recreation, including the CRoW Act 2000 are set out in section 6.2 of Volume 3, Chapter 6: Land use and recreation of the ES (document reference F3.6). The Onshore Order Limits does not coincide with any National Parks. As such, provisions set out in the National Parks and Access to the Countryside Act 1949 (as amended by Section 62 of the Environment Act 1995) have not been considered further in Volume 3, Chapter 6: Land use and recreation of the ES (document reference F3.6).
2.3 Climate change adaptation and resilience			
Climate change adaptation and resilience	2.3.1	Section 4.10 of EN-1 sets out the generic considerations that applicants and the Secretary of State should take into account in order to ensure that electricity networks infrastructure is resilient to the effects of climate change.	Section 4.10 of NPS EN-1 is considered above.
	2.3.2	As climate change is likely to increase risks to the resilience of some of this infrastructure, from flooding for example, or in situations where it is located near the coast or an estuary or is underground, applicants should in particular set out to what extent the proposed development is expected to be vulnerable, and, as appropriate, how it has been designed to be resilient to: - flooding, particularly for substations that are vital to the network; and especially in light of changes to groundwater levels resulting from climate change; - the effects of wind and storms on overhead lines; - higher average temperatures leading to increased transmission losses; - earth movement or subsidence caused by flooding or drought (for underground cables); and - coastal erosion – for the landfall of offshore transmission cables and their associated substations in the inshore and coastal locations respectively.	Volume 4, Chapter 1: Climate Change of the ES (document reference F4.1) provides an assessment of climate risk for the relevant elements of the Transmission Assets. Details of this are provided within Volume 4, Annex 1.2: Climate change risk assessment of the ES (document reference F4.1.2). Climate change has been taken into account in the characterisation of the Hydrology and flood risk baseline and future baseline environment. Climate change with regard to flooding is also considered in the FRA (see Volume 3, Annex 2.3: Flood Risk Assessment of the ES) and the Outline Operational Drainage Management Plan (document reference J10).
	2.3.3	Section 4.10 of EN-1 advises that the resilience of the project to the effects of climate change must be assessed in the Environmental Statement (ES) accompanying an application. For example, future increased risk of flooding would be covered in any flood risk assessment (see Sections 5.8 in EN-1). Consideration should also be given to coastal change (see sections 5.6 in EN1).	Sections 4.10, 5.6 and 5.8 of EN-1 have been considered above.
2.4 Consideration of good design for energy infrastructure			
Consideration of good design for energy infrastructure	2.4.1	The Planning Act 2008 requires the Secretary of State to have regard, in designating an NPS, and in determining applications for development consent to the desirability of good design.	The Applicants have prepared the outline Design Principles (oDP) (document J3) to demonstrate compliance with best practice and policy guidance on good design. The oDP forms part of the certified suite of documents supporting the DCO application and provides a central, clear, and enforceable framework for post-consent detailed design with the discharging planning authority. The principles of the oDP seek to guide the design process towards design outcomes that ensure that the substation sites would fit sensitively into the local context; mitigate (as far as possible) adverse environmental effects and respect local communities. The Applicants' design approach has been informed by the National Infrastructure Commission's Design Principles for National Infrastructure (2020), updated during Examination to reflect the Project-Level Design Principles (May 2024), alongside lessons learned from recently consented DCO precedent projects. This structured approach ensures that the
	2.4.2	Applicants should consider the criteria for good design set out in EN 1 Section 4.7 at an early stage when developing projects.	
	2.4.3	However, the Secretary of State should bear in mind that electricity networks infrastructure must in the first instance be safe and secure, and that the functional design constraints of safety and security may limit an applicant's ability to influence the aesthetic appearance of that infrastructure.	
	2.4.4	While the above principles should govern the design of an electricity networks infrastructure application to the fullest possible extent – including in its avoidance and/or mitigation of potential adverse impacts (particularly those detailed in Sections 2.9 below) – the functional performance of the infrastructure in respect of security of supply and public and occupational safety must not thereby be threatened.	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
			Transmission Assets respond directly to the key elements of good design set out in NPS EN-1. The Applicants believe that the Transmission Assets application has strongly responded to the criteria for good design, as illustrated by the following: • The Transmission Assets have been designed to be fit for purpose and efficient in delivering their operational role of connecting offshore generation to the national electricity transmission system. The Maximum Design Scenario (MDS), prepared in accordance with Advice Note Nine: Rochdale Envelope, establishes clear parameters that provide sufficient certainty for the EIA process while retaining appropriate flexibility, beneath the parameters set in the MDS, to accommodate final procurement, design and technology selection during post-consent detailed design. Functionality has been embedded from the outset of the Projects as part of the iterative site selection and refinement process, ensuring that the substation sites can be delivered safely, efficiently and with resilience. • The design approach incorporates measures to minimise environmental impacts, as set out in the EIA. Embedded mitigation has been integrated, insofar as possible at this stage of the Projects, into the substation sites and their immediate contexts. Both the strategic and project -level design principles, as outlined in the oDP (J3), promote sustainable construction methods and adaptability to technological innovation, thereby supporting the overarching vision for the Transmission Assets and contributing to national decarbonisation objectives. Consideration has also been given to energy efficiency, climate resilience and biodiversity enhancement as part of the iterative design process. • The Applicants are committed to ensuring that the final appearance of the substations is sensitively designed insofar as possible. Through the oDP (J3) and its project-level design principles and codes, discussed and informed by engagement with the local planning authorities, the Applicants are committed to delivering in collaboration with the discharging local authority, designs that reflect and integrate, as far as practicable, the key characteristics of the receiving landscape. Whilst recognising the primarily functional nature of electrical substation infrastructure, the project -level design principles will continue to guide the post-consent detailed design process, ensuring consistency with the principles secured through the DCO, while retaining flexibility to respond to technical and environmental considerations. A degree of flexibility in relation to layout will be explored during detailed design, subject to the appointment of technical partners, with the Applicants' Design Champions providing oversight. Appearance and landscape integration are treated as core design considerations. The illustrative landscape proposals, as documented in the oLMP (J2/F04), incorporate embedded landscape mitigation and proportionate design measures that are responsive to their setting, informed by consultation feedback and environmental constraints. As stated above, the oDP establishes a central, clear, and enforceable framework for detailed design of the form, scale and landscape treatment (within the Order Limits), with final detailed designs to be reviewed and approved by the relevant planning authority in accordance with Requirement 4 of Schedules 2A and 2B of the draft DCO. • The Applicants' consenting strategy has been developed to provide appropriate flexibility in the design of the Transmission Assets, ensuring that the substations remain resilient and adaptable to future requirements. As stated above, the MDS establishes a robust framework for environmental assessment while accommodating the

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
			input of technology providers during the detailed design stage. This flexibility might encompass construction methods, final extent and layout, allowing the Transmission Assets to respond to advances in technology and supply chain input without undermining the principles of good design.
2.5 Environmental and Biodiversity Net Gain			
Environmental and Biodiversity Net Gain	2.5.1	When planning and evaluating the proposed development's contribution to environmental and biodiversity net gain, it will be important – for both the applicant and the Secretary of State – to supplement the generic guidance set out in EN-1 (Section 4.6) with recognition that the linear nature of electricity networks infrastructure can allow for excellent opportunities to: i. reconnect important habitats via green corridors, biodiversity stepping zones, and reestablishment of appropriate hedgerows; and/or ii. connect people to the environment, for instance via footpaths and cycleways constructed in tandem with environmental enhancements.	The mechanisms through which overall net benefit to biodiversity would be delivered as part of the Transmission Assets are described in the Outline Biodiversity Benefit Management Plan (document reference J11/F06) which has been provided as part of the application for development consent and provides information on the habitat connectivity provided by the project. A Biodiversity Benefit Supporting Statement (S_D5_11) provides further details on the biodiversity approach being taken. The impacts on, and mitigation, for impacts on habitat connectivity are discussed in Volume 3, Chapter 3: Onshore ecology and nature conservation of the ES (document reference F3.3). No overhead lines are proposed as part of the Transmission Assets. All cables will be buried underground, as per CoT12, (full wording in Volume 1, Annex 5.3: Commitments Register). Nevertheless, measures to conserve biodiversity and opportunities for biodiversity benefit in terms of ornithological interest are discussed in Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4).
2.6 Land Rights and Land Interests			
Land Rights and Land Interests	2.6.1	In order to be lawfully able to install, inspect, maintain, repair, adjust, alter, replace or remove an electricity line (above or below ground), its related equipment (such as monopoles, pylons/transmission towers, transformers and cables), and/or its associated mitigation or enhancement schemes, applicants must: i. own the land on, over, or under which the relevant activity is to take place; or ii. hold sufficient rights over or interests in that land (typically in the form of an easement); or iii. have permission for the activity from the present owner or occupier of that land (typically in the form of a wayleave).	The Applicants are seeking voluntary agreements from those parties with an interest in land, as a pre-requisite and preference over exercising compulsory purchase powers. The draft DCO (document reference C1/F09) which accompanies the application, does seek the ability for the Applicants to acquire rights and/or land compulsorily. This includes rights and/or acquisition of land for the construction, operation, maintenance and decommissioning of electrical infrastructure, such as new substations, and for associated mitigation effects such as for landscape enhancement or biodiversity net gain (see Outline Ecological Management Plan, document reference: J6) and biodiversity benefit (see outline Biodiversity Benefit Management Plan, document reference: J11/F06). The Applicants' approach to installing infrastructure using temporary possession powers ensures that the land over which permanent rights and restrictions are needed will be limited to the areas where the cables are actually located. The dDCO also seeks the ability to undertake surveys, for example, environmental surveys and surveys for the purpose of assessing ground conditions.
	2.6.2	Where the applicant does not own or wish to own the land in question, it should try to reach a voluntary agreement giving it sufficient rights and/or permissions to undertake the relevant work	
	2.6.3	As a last resort, where it does not succeed in reaching the agreement that it requires, the network company may, as part of its application to the Secretary of State, seek to acquire rights compulsorily over the land in question by means of a provision in the DCO.	
	2.6.4	In such cases (i.e. where the compulsory acquisition of rights is sought) permanent arrangements are strongly preferred over voluntary wayleaves (which could, for example, be terminable on notice by the landowner) in virtue of their greater reliability and economic efficiency and reflecting the importance of the relevant infrastructure to the nation's net zero goals.	
	2.6.5	The applicant may also seek the compulsory acquisition of land. This will not normally be necessary where lines and cables are installed but may be sought where other forms of electricity networks infrastructure (such as new substations) are required.	
	2.6.6	As detailed in Section 4.1.8 of EN-1, where the use of land at a specific location is required to facilitate the development by providing for mitigation, landscape enhancement and biodiversity net gain, an applicant may, as part of its application to the Secretary of State, seek the compulsory acquisition of that land, or rights over that land. The Secretary of State will consider any such application under the provisions of the Planning Act 2008 and any associated guidance.	
	2.6.7	Ahead of securing land rights or interests for transmission infrastructure development itself, an applicant will, in many cases, need to obtain access to land to conduct technical and environmental surveys to inform their development proposals. Some of these will be seasonal species surveys	

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		meaning there are limited opportunities during the course of the year in which they can be undertaken; timely access for surveys can have a significant impact on overall project timelines.	
2.7 Holistic planning			
Holistic planning	2.7.1	EN-1 explains in Section 4.10 that the Planning Act 2008 aims to create a holistic planning regime, such that the cumulative effects of the same project can be considered together. Co-ordinated applications typically bring economic efficiencies and reduced environmental impact.	Both the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm were scoped into the 'Pathways to 2030' workstream under the OTNR. The OTNR aims to consider, simplify, and wherever possible facilitate a collaborative approach to offshore wind projects connecting to the UK electricity transmission network. 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 connecting the two offshore wind farms to the electricity transmission network at Penwortham in Lancashire. This point of interconnection was identified by NGES as representing the optimal location considering a range of criteria (i.e., technical, cost, environmental and deliverability factors). Morgan OWL and Morecambe OWL (the Applicants), being in agreement with the output from the HNDR, 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 substations (and associated infrastructure), and onward connection to the National Grid at Penwortham, Lancashire.
	2.7.2	Accordingly, the government envisages that, wherever reasonably possible, applications for new generating stations and their related infrastructure should be contained in a single application to the Secretary of State. However, a consolidated approach of this kind may not always be possible, nor represent the most efficient strategy for delivery of new infrastructure.	
	2.7.3	This could be, for example, due to the differing lengths of time needed to prepare the applications for submission to the Secretary of State, or because a network application relates to multiple generation projects (which could be onshore or offshore), or because the works involved are strategic reinforcements required for a number of reasons.	
	2.7.4	It may also be the case that the networks infrastructure application and the application for a related generating station will of necessity come from different legal entities, or from entities subject to different commercial and regulatory frameworks.	
	2.7.5	It will also be common for applications to be submitted for the general purpose of reinforcing the network, which will be critical to deliver especially in light of the drive towards net zero, including the ambition for up to 50GW of offshore wind by 2030, and a CNP (see EN-3).	
2.8 Strategic Network Planning			
Strategic Network Planning	2.8.1	A more strategic approach to network planning will ensure that network development keeps pace with renewable generation and anticipates future system needs. Strategic network planning, such as through the Holistic Network Design and its follow up exercises or through forthcoming Centralised Strategic Network plans, helps reduce the overall impact of infrastructure by identifying opportunities for coordination, where appropriate, and taking a holistic view of both the onshore and offshore network. Network plans will take account of environmental and community impacts, alongside deliverability and economic cost, from the outset.	Both the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm were scoped into the 'Pathways to 2030' workstream under the OTNR. The OTNR aims to consider, simplify, and wherever possible facilitate a collaborative approach to offshore wind projects connecting to the UK electricity transmission network. 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 connecting the two offshore wind farms to the electricity transmission network at Penwortham in Lancashire. This point of interconnection was identified by NGESO as representing the optimal location considering a range of criteria (i.e., technical, cost, environmental and deliverability factors). The point of connection is ultimately a matter for NGESO, as they identify where there is capacity within their network and then subsequently offer connections. Morgan OWL and Morecambe OWL (the Applicants), being in agreement with the output from the HNDR, 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 substations (and associated infrastructure), and onward connection to the National Grid at Penwortham, Lancashire. Across the UK, there is a broad pattern that where an area is not designated, it is likely to be densely populated. The Applicants therefore have looked to balance these considerations of the environment and
	2.8.2	A strategic approach to network planning proposed through the Centralised Strategic Network Planning (CSNP) process will identify strategic investments intended to facilitate achieving net zero and decarbonisation targets.	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
			community. The Applicants determined that they could use engineering solutions to minimise impacts on the sand dunes. The Applicants further highlight that there are likely going to be fewer landing sites available when making coordinated applications. The Applicants have undertaken a site selection process based on the output of the HNDR process to identify the location and refine the design of the key elements of the Transmission Assets, including through early engagement with a range of stakeholders. The aim was to identify locations and routes (for the offshore export cable corridor, landfall location, onshore cable corridors and onshore substations) that were environmentally acceptable, deliverable and consentable, whilst also enabling the benefits in the long term of the lowest energy cost to be passed to the consumer. Details of this are presented in Volume 1, Chapter 4: Site selection and alternatives of the ES (document reference F1.4). Detailed assessments are provided within all chapters within Volumes 1 to 4 of the ES (document reference F1 to F4). As set out in every ES chapter, mitigation measures have been developed to primarily avoid, then prevent, reduce or offset significant adverse environmental effects. Mitigation measures adopted as part of the Transmission Assets are provided in Volume 1, Annex 5.3: Commitments register of the ES (document reference F1.5.3).
2.9 Applicant assessment			
Impacts	2.9.1	This section should be read in conjunction with Part 5 (Generic Impacts) of EN-1. The impacts identified in Part 5 of EN-1, and below, are not intended to be exhaustive.	Information on all relevant impacts included within EN-1, EN-3 and EN-5 have been provided throughout the ES.
	2.9.2	Applicants must provide information on relevant impacts as directed by this NPS and the Secretary of State.	
Impacts: Biodiversity and geological conservation	2.9.5	The applicant will need to consider whether the proposed line will cause such problems at any point along its length and take this into consideration in the preparation of the ES (see Section 4.3 of EN-1).	See Section 4.3 of EN-1 above for a response.
	2.9.6	Particular consideration should be given to feeding and hunting grounds, migration corridors and breeding grounds, where they are functionally linked to sites designated or allocated under the 'national site network' provisions of the Conservation of Habitats and Species Regulations.	Volume 3, Chapter 4: Onshore and intertidal ornithology of the ES (document reference F3.4) includes the following. • The baseline ornithological environment, both onshore and intertidal, is described within section 4.6 of the chapter. • The process of identifying designated sites has been undertaken and results presented in section 4.6.2 of the chapter. • The assessment of the potential significant effects of the Transmission Assets for bird interests are identified and considered in section 4.11. Important areas of onshore and intertidal ornithology are considered in: Volume 3 Annex 4.1: Breeding birds technical report of the ES (document reference F3.4.1); Volume 3, Annex 4.2: Wintering and migratory birds technical report of the ES (document reference F3.4.2) and Volume 3, Annex 4.3: Intertidal birds technical report of the ES (document reference F3.4.3).
Impacts: Landscape and visual impact	2.9.9	New substations, sealing end compounds (including terminal towers), and other above-ground installations that serve as connection, switching, and voltage transformation points on the electricity network may also give rise to adverse landscape and visual impacts.	The potential landscape and visual effects of the Transmission Assets are identified in section 10.6 of Volume 3 Chapter 10: Landscape and visual resources of the ES (document reference F3.10) and assessed in section 10.11. This includes consideration of the onshore substations. Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.8 of Volume 3 Chapter 10: Landscape and visual resources of the ES (document reference F3.10)
	2.9.11	Landscape and visual benefits may arise through the reconfiguration, rationalisation, or undergrounding of existing electricity network infrastructure. Though mitigation of the landscape and visual impacts arising from overhead lines and their associated infrastructure is usually possible, it	The Applicants have not included overhead lines within the project design envelope. All cables will be buried underground, as per CoT12, (full wording in Volume 1, Annex 5.3: Commitments Register).

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		may not always be so, and the impossibility of full mitigation in these cases does not countermand the need for overhead lines.	Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.8 of Volume 3 Chapter 10: Landscape and visual resources of the ES (document reference F3.10
	2.9.18	The Horlock Rules – guidelines for the design and siting of substations – were established by National Grid in 2009 in pursuance of its duties under Schedule 9 to the Electricity Act 1989. These principles should be embodied in applicants' proposals for the infrastructure associated with new overhead lines.	The principles embedded in the Horlock Rules are relevant to the Transmission Assets. The Applicants have not included overhead lines within the project design envelope. All cables will be buried underground, as per CoT12, (full wording in Volume 1, Annex 5.3: Commitments Register). Justification for the location of the Transmission Assets, including a description of the design and/or environmental constraints considered as part of the iterative design process, is set out in Volume 1, Chapter 4: Site selection and consideration of alternatives of the ES (document reference F1.4/ES01). This chapter also provides further information at Table 4.6 on how the Horlock Rules have been integrated throughout the development of Transmission Assets, including how in the process of identifying the onshore substation search area, environmental designations and built up commercial and residential areas were excluded from the 8km search area, for example. Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.8 of Volume 3 Chapter 10: Landscape and visual resources of the ES (document reference F3.10). The outline landscape design is set out within the Outline Landscape Management Plan (document reference J2) and Outline Design Principles document (document reference J3).
	2.9.19	In brief, the Horlock Rules state that applicants should: • Consider environmental issues from the earliest stage to balance the technical benefits and capital cost requirements for new developments against the consequential environmental effects in order to keep adverse effects to a reasonably practicable minimum. • Seek to avoid altogether internationally and nationally designated areas of the highest amenity, cultural or scientific value by the overall planning of the system connections. • Protect as far as reasonably practicable areas of local amenity value, important existing habitats and landscape features including ancient woodland, historic hedgerows, surface and ground water sources and nature conservation areas. • Take advantage of the screening provided by land form and existing features and the potential use of site layout and levels to keep intrusion into surrounding areas to a reasonably practicable minimum. • Keep the visual, noise and other environmental effects to a reasonably practicable minimum. • Consider the land use effects of the proposal when planning the siting of substations or extensions. • Consider the options available for terminal towers, equipment, buildings and ancillary development appropriate to individual locations, seeking to keep effects to a reasonably practicable minimum. • Use space effectively to limit the area required for development consistent with appropriate mitigation measures and to minimise the adverse effects on existing land use and rights of way, whilst also having regard to future extension of the substation. • Make the design of access roads, perimeter fencing, earth-shaping, planting and ancillary development an integral part of the site layout and design, so as to fit in with the surroundings. • In open landscape especially, high voltage line entries should be kept, as far as possible, visually separate from low voltage lines and other overhead lines so as to avoid a confusing appearance. Study the inter-relationship between towers and substation structures and background and foreground features so as to reduce the prominence of structures from main viewpoints. Where practicable the exposure of terminal towers on prominent ridges should be minimised by siting towers against a background of trees rather than open skylines.	
Undergrounding and subsea cables	2.9.22	However, undergrounding will not be required where it is infeasible in engineering terms, or where the harm that it causes (see section 2.11.4) is not outweighed by its corresponding landscape, visual amenity and natural beauty benefits. Regardless of the option, the scheme through its design, delivery, and operation, should seek to further the statutory purposes of the designated landscape. These enhancements may go beyond the mitigation measures needed to minimise the adverse effects of the scheme.	The Transmission Assets consist of wholly buried / underground cabling, and no overhead lines are proposed as per CoT12, (full wording in Volume 1, Annex 5.3: Commitments Register). Volume 1, Chapter 4: Site Selection and consideration of alternatives (document reference F1.4) details the Applicants decisions in burying the subsea cables and undergrounding of onshore cables. Across the UK, there is a broad pattern that where an area is not designated, it is likely to be densely populated. The Applicants therefore have looked to balance these considerations of the environment and community. The Applicants determined that they could use engineering solutions to minimise impacts on the sand dunes. The Applicants further highlight that there are likely going to be fewer landing sites available when making coordinated applications. All Environmental Statement chapters associated with sub-surface intervention assess the effect of buried cables in particular:
	2.9.23	Additionally, cases will arise where – though no part of the proposed development crosses a designated landscape – a high potential for widespread and significant adverse landscape and/or visual impacts along certain sections of its route may result in recommendations to use undergrounding for relevant segments of the line or alternatively consideration of using a route including subsea cabling.	
	2.9.24	In these cases, and taking account of the fact that the government has not laid down any further rule on the circumstances requiring use of underground or subsea cables, the Secretary of State must weigh the feasibility, cost, and any harm of the undergrounding or subsea option against: • The adverse implications of the overhead line proposal;	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
		• The cost and feasibility of re-routing overhead lines or mitigation proposals for the relevant line section; and • The cost and feasibility of the reconfiguration, rationalisation, and/or use of underground or subsea cabling of proximate existing or proposed electricity networks infrastructure.	Volume 3, Chapter 6: Land use and recreation of the ES (document reference F3.6), which includes the following: The potential impacts of the Transmission Assets with respect to agricultural land, including best and most versatile soils are identified in section 6.6 and assessed in section 6.11. Measures adopted as part of the Transmission Assets to mitigate potential impacts on land use and recreation are provided in section 6.8 of this chapter of the ES. This includes the preparation of a Soil Management Plan in general accordance with the Outline Soil Management Plan (document reference J1.7), which has been submitted with the DCO application. The measures to be implemented as part of the Soil Management Plan seek to minimise impacts on soil health and protect and maintain soil quality during construction of the Transmission Assets. The Outline Soil Management Plan (document reference J1.5) has been informed using a combination a published ALC and soils data and site specific surveys (hand auger boring) undertaken in accordance with 1988 ALC criteria to confirm the quality of agricultural land within the Onshore Order Limits. The measures proposed within the Outline Soil Management Plan (document reference J1.7) are in accordance with the Department for Environmental, Food and Rural Affairs (Defra) Construction Code of Practice for Sustainable Use of Soils on Construction Sites (Defra, 2009). The baseline assessment for landscape and visual resources is provided in section 10.6 of Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10) which considers landscape character, visual receptors, residential areas, designated landscapes and valued landscapes. Measures adopted as part of the Transmission Assets to mitigate potential impacts on landscape and visual resources are provided in section 10.8 Volume 3, Chapter 10: Landscape and visual resources of the ES (document reference F3.10).
	2.9.25	In such cases the Secretary of State should only grant development consent for underground or subsea sections of a proposed line over an overhead alternative if they are satisfied that the benefits accruing from the former proposal clearly outweigh any extra economic, social, or environmental impacts that it presents, the mitigation hierarchy has been followed, and that any technical obstacles associated with it are surmountable. In this context it should consider: • The landscape and visual baseline characteristics of the setting of the proposed route, in particular, the impact on high sensitivity visual receptors (as defined in the current edition of the Landscape Institute's Guidelines for Landscape and Visual Impact Assessment), residential areas, designated landscapes, valued landscapes, designated heritage assets and Heritage Coasts (including, where relevant, impacts on the setting of designated features and areas), noting the policy in EN-1 section 5.4.53 on regional and local designations; • The additional cost of the proposed underground or sub-sea alternatives, including their significantly higher lifetime cost of repair and later uprating; • The potentially very disruptive effects of undergrounding on local communities, habitats, archaeological and heritage assets, marine environments, soil (including peat soils), hydrology, geology, and, for a substantial time after construction, landscape and visual amenity. (Undergrounding an overhead line will mean digging a trench along the length of the route, and so such works will often be disruptive – albeit temporarily – to the receptors listed above than would an overhead line of equivalent rating); • The potentially very disruptive effects of subsea cables on the seabed and the species that live in and on it, including physical damage to and full loss of seabed habitats; • Cable protection can also be required where cables cross each other, or where they cannot be buried deep enough to protect them from becoming exposed. Such protection causes additional impacts that are often greater than those of the cable itself due to the large areas covered. There can also be issues where subsea cables make landfall, as much coastal land is protected habitat with environmental and heritage designations and landfall connections could cause additional disruption to coastal communities and the environment; The applicant's commitment, as set out in their ES, to mitigate the potential detrimental effects of undergrounding works on any relevant agricultural land and soils (including peat soils), particularly regarding Best and Most Versatile land, including development and implementation of a Soil Resources and Management Plan. Such a commitment must guarantee appropriate handling of soil, backfilling, and return of the land to the baseline Agricultural Land Classification (ALC), thus ensuring no loss or degradation of agricultural land. Such a commitment should be based on soil and ALC surveys in line with the 1988 ALC criteria and due consideration of the Defra Construction Code of Practice for Sustainable Use of Soils on Construction Sites.	
	2.9.26	All high voltage transmission lines have the potential to generate noise under certain conditions.	The Transmission Assets consist of wholly buried / underground cabling, and no overhead lines are proposed, as per CoT12, (full wording in Volume 1, Annex 5.3: Commitments Register).
Impacts: Noise and vibration	2.9.27	Line noise is most commonly caused by corona noise when the conductor surface electric stress exceeds the inception level for corona discharge activity which is released as acoustic energy and radiates into the air as sound. Transmission line conductors are normally designed to operate below this threshold.	
	2.9.28	Surface contamination on a conductor or accidental damage during transport or installation can cause local enhancement of electric stress and initiate discharge activity leading to the generation of additional noise.	
	2.9.29	The highest noise levels generated by a line generally occur during rain.	
	2.9.30	Water droplets may collect on the surface of the conductor and initiate corona discharges with noise levels being dependent on the level of rainfall. Fog may also give rise to increased noise levels, although these levels are lower than those during rain.	

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	2.9.37	Audible noise effects can also arise from substation equipment such as transformers, quadrature boosters and mechanically switched capacitors.	Representative noise emitting plant items have been assessed as part of the operational noise assessment detailed in Volume 3, Annex 8.3: Operational noise of the ES (document reference F3.8.3). The assessment has been undertaken assuming upper-range sound power levels for main plant items. The significance of the effects following adoption of these measures is presented in section 8.11 of Volume 3, Chapter 8: Noise and vibration of the ES (document reference F3.8).
	2.9.38	Transformers are installed at many substations and generate low frequency hum. Whether the noise can be heard outside a substation depends on a number of factors, including transformer type and the level of noise attenuation present (either engineered intentionally or provided by other structures).	The tonality at low frequency arising from the operation of transformers and other high voltage plant has been considered within the assessment in Volume 3, Chapter 8: Noise and vibration of the ES (document reference F3.8). A noise emission spectrum for the transformers in 1/3-octave bands has been adopted to ensure the tonality at 100 Hz (and subsequent harmonics) is properly considered within the assessment. Full details are provided in Volume 3, Annex 8.3: Operational noise of the ES.
	2.9.39	For the assessment of noise from substations, standard methods of assessment and interpretation using the principles of the relevant British Standards are satisfactory.	The assessment of operational noise impacts has been undertaken using the principles outlined in BS 4142:2014+A1:2019 – Methods for rating and assessing industrial and commercial sound (British Standards Institution, 2019). Details of the assessment can be found in Volume 3, Annex 8.3: Operational noise of the ES (document reference F3.8.3). The significance of the effects following adoption of these measures is presented in section 8.11 of Volume 3, Chapter 8: Noise and vibration of the ES (document reference F3.8).
	2.9.43	The Secretary of State is likely to regard it as acceptable for the applicant to use a methodology that demonstrably addresses these criteria.	The methodology used and the assessment of the noise and vibration impacts due to the Transmission Assets are presented in Volume 3, Annex 8.2: Construction Noise and Vibration of the ES (document reference F3.8.2) and Volume 3, Annex 8.3: Operational Noise of the ES (document reference F3.8.3). The cumulative noise and vibration impacts with other proposed developments are considered in section 8.13 of Volume 3, Chapter 8: Noise and vibration of the ES (document reference F3.8). The outline Noise and Vibration Management Plan (oNVMP)(J1.3/F03) sets out the key management and monitoring procedures that will be adopted during the onshore site preparation works and construction of the Transmission Assets. The main objective is to minimise noise and vibration impacts on nearby residents and other sensitive receptors to acceptable levels in accordance with British Standard (BS) 5228:2009+A1:2014 or other relevant guidance agreed in consultation with the relevant planning authority.
Impacts: Electric and Magnetic Fields (EMFs)	2.9.44	Power frequency EMFs arise from generation, transmission, distribution and use of electricity and will occur around power lines and electric cables and around domestic, office or industrial equipment that uses electricity.	Electro-magnetic fields (EMFs) are part of the natural world, and are also produced wherever electricity is generated, transmitted or used. The UK Government has adopted the 1998 Guidelines for Limiting Exposure to Electromagnetic Fields produced by the International Commission on Non-ionising Radiation Protection (ICNIRP). The ICNIRP guidance provides occupational and public exposure limits for EMF. This guidance was subsequently updated in the form of the 2020 Guidelines for Limiting Exposure to Electromagnetic Fields (100 kHz to 300 GHz). The 2020 ICNIRP guidance provides occupational and public exposure limits for EMF radiation.
	2.9.45	EMFs comprise electric and magnetic fields. Electric fields are the result of voltages applied to electrical conductors and equipment. Fences, shrubs and buildings easily block electric fields. Magnetic fields are produced by the flow of electric current; however, unlike electric fields, most materials do not readily block magnetic fields. The intensity of both electric fields and magnetic fields diminishes with increasing distance from the source.	
	2.9.46	All overhead power lines produce EMFs. These tend to be highest directly under a line and decrease to the sides at increasing distance. Although putting cables underground eliminates the electric field,	

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		they still produce magnetic fields, which are highest directly above the cable. EMFs can have both direct and indirect effects on human health, aquatic and terrestrial organisms.	EMF strengths drop rapidly with distance from the source. The distances will depend on voltage but, in general, levels set for health protection are achieved within a few metres. Underground cables do not produce an external electric field at ground level that would be of concern to public health due to the shielding of the cable sheath and burial material. For the substation connection levels set for health protection would be achieved at the perimeter fence. Furthermore, the location and surrounding land uses do not place people in prolonged exposure even at this distance, e.g., no adjacent dwellings. All the electrical infrastructure associated with the offshore and onshore elements of the Transmission Assets would be designed to comply with current guidelines on levels of public exposure and design of electrical infrastructure. On this basis, it was agreed with the Planning Inspectorate that effects associated with EMFs would not be significant and would be scoped out of the EIA process. With regard to EMF impacts, the project will adopt the International Commission on Non-ionizing Radiation Protection (ICNIRP) guidelines and Government voluntary Code of Practice on EMF public exposure. Such considerations are inherent to the detailed engineering considerations of cable specification and routing. Relevant public EMF exposure guideline limits are noted in NPS EN-5 and would be complied with by the project. These guidelines are long-standing and have a high safety margin. The levels of exposure that they require would not pose a risk to public health and arescoped out of the ES. Volume 1, Annex 5.1 (document reference F1.5.1) has had regard to the risk perceptions associated with EMFs of the Transmission Assets on the local area and this is presented in section 1.11.9 of the Annex.
	2.9.47	The direct effects occur in terms of impacts on the central nervous system resulting in its normal functioning being affected. Indirect effects occur through electric charges building up on the surface of the body producing a microshock on contact with a grounded object, or vice versa, which, depending on the field strength and other exposure factors, can range from barely perceptible to being an annoyance or even painful.	
	2.9.48	To prevent these known effects, the International Commission on Non-Ionizing Radiation Protection (ICNIRP) developed health protection guidelines in 1998 for both public and occupational exposure. These are expressed in terms of the induced current density in affected tissues of the body, ‘basic restrictions’, and in terms of measurable ‘reference levels’ of electric field strength (for electric fields), and magnetic flux density (for magnetic fields). The relationship between the (measurable) electric field strength or magnetic flux density and induced current density in body tissues requires complex dosimetric modelling.	
	2.9.49	The reference levels are such that compliance with them will ensure that the basic restrictions are not reached or exceeded. Exceeding the reference levels does not necessarily mean that the basic restrictions will not be met; this would be a trigger for further investigation into the specific circumstances.	
	2.9.50	For protecting against indirect effects, the ICNIRP 1998 guidelines give an electric field reference of 5kV m-1 for the general public and keeping electric fields below this level would reduce the occurrence of adverse indirect effects for most individuals to acceptable levels. When this level is exceeded, there is a suite of measures that may be called upon in particular situations, including provision of information, earthing and screening, alongside limiting the field. In some situations, there may be no reasonable way of eliminating indirect effects.	
	2.9.51	The levels of EMFs produced by power lines in normal operation are usually considerably lower than the ICNIRP 1998 reference levels. For electricity substations, the EMFs close to the sites tend to be dictated by the overhead lines and cables entering the installation, not the equipment within the site.	
	2.9.52	The Stakeholder Advisory Group on extremely low frequency electric and magnetic fields (ELF EMFs) (SAGE) was set up to provide advice to government on possible precautionary measures that might be needed to limit public exposure to electric and magnetic fields associated with electricity supply. The government response to recommendations made in SAGE’s first interim assessment sets out those measures that will be taken as a result of the recommendations.	
	2.9.53	The National Institute for Health Protection’s (NIHP) Centre for Radiation, Chemical and Environmental Hazards (CRCE) provides advice on standards of protection for exposure to non-ionizing radiation, including the ELF EMFs arising from the transmission and use of electricity.	
	2.9.54	In March 2004, the National Radiological Protection Board (now part of NIHP CRCE), published advice on limiting public exposure to electromagnetic fields. The advice recommended the adoption in the UK of the EMF exposure guidelines published by ICNIRP in 1998.	
	2.9.55	These guidelines also form the basis of the Control of Electromagnetic Fields at Work Regulations 2016. Resulting from these recommendations, government policy is that exposure of the public should comply with the ICNIRP 1998 guidelines. The electricity industry has agreed to follow this policy. Applications should show evidence of this compliance as specified in 2.10.11.	
	2.9.56	The balance of scientific evidence over several decades of research has not proven a causal link between EMFs and cancer or any other disease. The NIHP CRCE keeps under review emerging scientific research and/or studies that may link EMF exposure with various health problems and provides advice to the Department of Health and Social Care on the possible need for introducing further precautionary measures.	
	2.9.57	The Department of Health and Social Care’s Medicines and Healthcare Products Regulatory Agency does not consider that transmission line EMFs constitute a significant hazard to the operation of pacemakers.	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
	2.9.58	There is little evidence that exposure of crops, farm animals or natural ecosystems to transmission line EMFs has any agriculturally significant consequences.	
	2.9.59	Sulphur Hexafluoride (SF6) is an insulating and arc-suppressant gas used in high-voltage switchgear for electricity networks.	
	2.9.60	It is also an extraordinarily potent greenhouse gas, and fugitive emissions from electricity networks infrastructure are an object of increasing environmental concern, especially in light of the UK's commitment to net zero by 2050.	
Impacts: Sulphur Hexafluoride	2.9.59 and 2.9.60	Sulphur Hexafluoride (SF6) is an insulating and arc-suppressant gas used in high-voltage switchgear for electricity networks. It is also an extraordinarily potent greenhouse gas, and fugitive emissions from electricity networks infrastructure are an object of increasing environmental concern, especially in light of the UK's commitment to net zero by 2050.	The Applicants can confirm that sulphur hexafluoride (SF6) will be used within the Gas Insulated Switchgear (GIS) proposed for the Applicants' 275kV and 400kV substations. While Morgan OWL has committed to the use of GIS, Morecambe OWL has retained the flexibility to adopt either GIS or air insulated switchgear (AIS). The final quantity of SF6 to be used will depend on the selected switchgear design as well as the number of required circuits, both of which will be confirmed during detailed design. As such, the Applicants are not able to confirm the volume of SF6 to be used. As stated in Volume 1, Annex 3.3: Sulphur Hexafluoride Report (document reference F1.3.3), the current assumed worst-case scenario is that the GIS technology to be used for the onshore substations will be SF6 reliant. This is due to SF6-free switchgear alternatives being an emerging market. At the 275kV and 400kV voltage levels required for the Applicants' transmission systems and national grid connections, the SF6 free solutions are not yet available at the scale and reliability required for significant national infrastructure. To date, no SF6 free GIS solutions have received full type testing certification or established a sufficient operational track record at these voltage levels. Given the long lead times associated with procurement, design and certification of high-voltage substation equipment, it is not practical to rely on technologies that are not yet proven or commercially viable. During the decommissioning phase of the Transmission Assets, any SF6 will be extracted and removed by certified personnel using appropriate recovery systems. The gas will either be re-used in other installations or transferred to licensed facilities for recycling or destruction in accordance with the relevant environmental regulations in place at the time. Decommissioning plans will be developed and implemented during the decommissioning phase of the Projects. As required by Requirement 22 of Schedules 2A and 2B of the draft Development Consent Order (C1/F09), the Applicants will submit a detailed Decommissioning Plan for approval by the relevant planning authority within 6 months of permanent cessation of commercial operation of Project A or Project B onshore works (as relevant). This plan will include procedures for the safe handling, removal and disposal of SF6 in line with industry best practice and relevant legislation. Requirement 22(3) secures that the Applicants must implement the decommissioning plan as approved.
	2.9.61and 2.9.62	Applicants should at the design phase of the process consider carefully whether the proposed development could be reconceived to avoid the use of SF_6-reliant assets. Where the development cannot be so conceived, the applicant must provide evidence of their reasoning on this point. Such evidence will include, for instance, an explanation of the alternatives considered, and a case why these alternatives are technically infeasible or require bespoke components that are grossly disproportionate in terms of cost.	
	2.9.63	In particular, an accounting of the cost differential between the SF6- reliant asset and the appropriate SF6-free alternative should be provided.	
	2.9.64	Where applicants, having followed the above procedure, do propose to put new SF6-reliant assets onto the electricity system, they should design a plan for the monitoring and control of fugitive SF6 emissions consistent with the Fluorinated gas (F-gas) Regulation and its successors.	
2.12 Special assessment principles for offshore-onshore transmission			

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
Special assessment principles for offshore-onshore transmission	2.12.3	A substantial amount of new onshore network infrastructure, including network reinforcements, is required to enable transmission of the domestic and international offshore power flows coming onshore or power being exported to neighbouring North Seas countries.	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 two offshore wind farms to the National Grid electricity transmission network at Penwortham in Lancashire, and this DCO application is to consent the Transmission Assets for both the Morgan Offshore Wind Project and Morecambe Offshore Windfarm. The Planning Statement (document reference J28) identifies that the Transmission Assets are considered an energy transmission CNP infrastructure project. They will make a beneficial contribution to global efforts to reduce the effects of climate change and would represent a meaningful contribution achieving security of UK energy supplies by unlocking the potential for offshore wind generation from the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm. Following a request from the Applicants, on 4 October 2022 the Secretary of State issued a direction under section 35 of the Planning Act 2008 (document reference J24) that the Transmission Assets should be treated as 'development for which development consent is required'. Applications for development consent under the Planning Act 2008 are submitted to and examined by the Planning Inspectorate and determined by the relevant Secretary of State. As set out in Annex 5.2 to the Applicants response to Hearing Action Points (document S_D1_5.2), the Applicants are two wholly independent Joint Ventures (JVs) and commercial competitors. They were competing for sites during the Round 4 bidding process (and ultimately remain competitors). It is noted that competition is a design feature and core foundational principle of the UK electricity industry to minimise cost to the consumer, so should be viewed as an inherent positive. Despite being arms-length competitors, subsequent to Round 4, the Applicants have agreed to work together to deliver the recommendation of the HND and NPS policy on collaboration. This collaboration is unprecedented in the industry because all other examples of coordinated projects were essentially a single JV or consortium established at the outset to deliver more than one project (for example Dogger Bank Creyke Beck or the Sheringham Shoal and Dudgeon Extension Projects). In those examples there was commonality of ownership, commercial goals and strategy. In contrast to those examples, the Applicants are not working together because it is a commercial strategy or necessarily in their commercial best interests. Before they discovered they were to be 'neighbours' in the Irish Sea, there was no contact between the Applicants. Instead, and in contrast to previous situations, the Applicants are collaborating to support and deliver on the UK's aim for better co-ordination on offshore transmission to best balance cost, technical, environmental and community factors. Indeed, in the past arms-length developers have actively sought spatial separation between projects to minimise the potential for interaction.
	2.12.4	As identified in EN-1, it is important that the network planning for offshore transmission is much more closely co-ordinated with the planning and development of the onshore transmission network than previously. This includes all types of offshore transmission including interconnectors, multi-purpose interconnectors (MPIs) and subsea 'onshore' transmission or 'bootstraps' reinforcing the onshore transmission network.	
	2.12.5	The above offshore-onshore transmission co-ordination work is undertaken through a process of ongoing reform with the key outcomes including the Holistic Network Design and its subsequent follow up exercises for offshore-onshore transmission and subsequent strategic network planning exercises such as the Centralised Strategic Network Plan led by National Grid Electricity System and/or the Future Systems (once established).	
	2.12.6	In addition, a more co-ordinated approach to designing offshore transmission is expected to be adopted compared with the previous standard approach of radial routes to shore. This applies to spatially close groups of offshore windfarms, subsea 'onshore' transmission or bootstraps, interconnectors and multi-purpose interconnectors.	
	2.12.7	As highlighted in EN-1 government has concluded that there is a CNP for the provision of nationally significant low carbon infrastructure. This includes for electricity grid infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations. This is not limited to those associated specifically with a particular generation technology, as all new grid projects will contribute towards greater efficiency in constructing, operating and connecting low carbon infrastructure to the National Electricity Transmission System. This includes infrastructure identified in the Holistic Network Design and subsequent strategic network design exercises, see Section 2.13 below.	
	2.12.8	As part of the transition to a more coordinated approach, it is anticipated that some proposals for transmission may be consented separately to those for the windfarm (array) application.	
Critical National Priority	2.12.9	For this to occur, an applicant will need to make a request to the Secretary of State. The Secretary of State would then decide whether to give a direction under Section 35 of the Planning Act 2008 (see paragraph 1.6.4 and EN-1, paragraphs 1.3.7 and 3.2.9-3.2.10).	Following a request from the Applicants, on 4 October 2022 the Secretary of State issued a direction under section 35 of the Planning Act 2008 (document

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
Consenting process	2.12.10	In some instances, applications comprising packages of co-ordinated offshore transmission infrastructure could be brought forward through the use of Section 35 powers.	reference J24) that the Transmission Assets should be treated as 'development for which development consent is required'.
	2.12.11	A Section 35 direction by the Secretary of State could also be given in respect of interconnector and 'bootstrap' projects where the NSIP consenting route is sought by the applicants of those projects.	
2.13 Offshore-onshore transmission: Applicant assessment			
Consideration of strategic network design	2.13.3	The work of the HND and its subsequent follow up exercises considered the objectives for designs to be economic and efficient, deliverable and operable, minimise impact on the environment and minimise the impact on the local communities for the offshore transmission aspects. Through this work steps have already been taken to reduce avoidable cumulative impacts. Assessment of projects coming forward from this design should acknowledge these prior steps.	Both the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm were scoped into the 'Pathways to 2030' workstream under the OTNR. The OTNR aims to consider, simplify, and wherever possible facilitate a collaborative approach to offshore wind projects connecting to the UK electricity transmission network. 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 50GW 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 connecting the offshore two wind farms to the electricity transmission network at Penwortham in Lancashire. This point of interconnection was identified by NGESO as representing the optimal location considering a range of criteria (i.e., technical, cost, environmental and deliverability factors). The point of connection is ultimately a matter for NESO, as they identify where there is capacity within their network (with input from NGET) and then subsequently offer connections. Morgan OWL and Morecambe OWL (the Applicants), being in agreement with the output from the HNDR, 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 substations (and associated infrastructure), and onward connection to the National Grid at Penwortham, Lancashire. The projects are therefore delivering on the Government's expectations for coordination, as set out in paragraph 3.3.71 of EN-1 and these paragraphs of EN-5. Across the UK, there is a broad pattern that where an area is not designated, it is likely to be densely populated. The Applicants therefore have looked to balance these considerations of the environment and community. The Applicants determined that they could use engineering solutions to minimise impacts on the sand dunes. The Applicants further highlight that there are likely going to be fewer landing sites available when making coordinated applications. The Applicants have undertaken a site selection process based on the output of the HNDR process to identify the location and refine the design of the key elements of the Transmission Assets, including through early engagement with a range of stakeholders. The aim was to identify locations and routes (for the offshore export cable corridor, landfall location, onshore cable corridors and onshore substations) that were environmentally acceptable, deliverable and consentable, whilst also enabling the benefits in the long term of the lowest energy cost to be passed to the consumer. Details of this are presented in Volume 1, Chapter 4: Site selection and alternatives of the ES (document reference F1.4). As detailed in REP1-039, an alternative route, involving an alternative Point of Interconnection (PoI) at or near Stanah has been suggested by some IPs, including the suggestion that the onshore substations should be located at Hillhouse Technology Local Enterprise Zone (LEZ), adjacent to the NGET
	2.13.4	It is recognised that proposed projects which have progressed through strategic network design exercises have been considered for strategic co-ordination through those exercises. However, any opportunities for subsequent local co-ordination between projects, irrespective of whether they have been through those exercise, should be considered in project development. This is in addition to considerations on co-ordinating delivery in construction, see section 2.14.2.	
	2.13.5	In addition, it is recognised that the HND and subsequent network design exercises, may on occasion, identify a radial solution, i.e. a direct route from an offshore wind farm to shore, not proposed to co-ordinate with another project at the time of network design.	
	2.13.6	In the case of infrastructure identified through the HND, and subsequent network design exercises applicants should identify any variations to or developments from that work and justify these in accordance with the same objectives or criteria above, i.e. economic and efficient, deliverable and operable, minimise impact on the environment and minimise the impact on the local communities, giving these four criteria equal weight.	
	2.13.7	On occasion, network designs may be amended as necessary as a result of new information or other changes (such as where a project within a coordinated design is no longer being progressed).	
	2.13.8	Any such changes approved through an appropriate change control process are likely to result in information that is important and relevant consideration	
	2.13.9	Radial offshore transmission options to single windfarms should only be proposed where options assessment work identifies that a coordinated solution is not feasible. For projects which had firm connection agreements in place prior to completion of the HND (formerly known as 'Early Opportunities' projects), co-ordinated design work should be brought forward by applicants.	
	2.13.10	The identification of co-ordinated solution options, and any radial option, should consider the criteria for designs to be deliverable and operable, economic and efficient, minimise impact on the environment and minimise impact on the local communities. Options should seek to identify the most appropriate balance between these criteria.	
Coordinated approach, including for Early Opportunities' projects with firm connections agreements prior to the Holistic Network Design	2.13.11	The coordinated solutions assessed should seek to be ambitious in the degree of co-ordination, wherever possible. This includes taking account of geographically proximate projects including opportunities to connect wind farms and multi-purpose interconnectors and/or bootstraps with each other that are planned or foreseen in the near future. Evidence should demonstrate that this has been considered in the assessment of options.	
	2.13.12	Applicants bringing forward offshore transmission projects are expected to consider future demand when considering the location and route of their proposals. This may involve consenting offshore platforms, converter stations or substations which facilitate future coordination.	
	2.13.13	If, through the coordinated options assessment work, a radial route is deemed to be the only feasible solution, applicants should evidence each co-ordination option and the accompanying assessment. These assessments should detail the application of the criteria identified above versus the radial counterfactual. In these instances, the Secretary of State should have regard to the need case set out in Section 3.3 of EN-1.	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
	2.13.14	Co-ordinated transmission proposals, including multi-purpose interconnectors and other types of offshore transmission (see Glossary), are expected to reduce the overall environmental and community impacts associated with bringing offshore transmission onshore compared to an uncoordinated, radial approach. These reduced impacts could, for example, relate to: fewer landing sites and reduced landfall impacts; reduced overall cable length and impacts; and fewer cable corridors and reduced impacts from these.	Stanah substation (which is part of NETS, the transmission network owned by NGET including existing overhead lines). Any form of alternative Point of Interconnection into the NETS which is proposed, would be a change to the Point of Interconnection for the Projects, as identified by NESO in the HND and secured in connection agreements with NESO. NGET were engaged in the preparation of the HNDR by NESO and the upgrade works between Stanah and Penwortham are reinforcement works to the NETS (for which NGET have responsibility for); subsequently there was a full understanding of a potential connection at or near Stanah when the HNDR was prepared. Therefore, the Applicants' position is that the Point of Interconnection for the Transmission Assets (i.e at or around Stanah compared to Penwortham) is primarily a matter for NESO (in consultation with NGET) as part of the HND and subsequent connection offer process. Ultimatley a project with a different POI would be an entirely different project, and one which is not within the gift or control of the Applicants. Detailed assessments are provided within all chapters within Volumes 1 to 4 of the ES (document reference F1 to F4). As set out in every ES chapter, mitigation measures have been developed to primarily avoid, then prevent, reduce or offset significant adverse environmental effects. Mitigation measures adopted as part of the Transmission Assets are provided in Volume 1, Annex 5.3: Commitments register of the ES (document reference F1.5.3). In summary; The Transmission Assets has a coordinated and aligned site selection process. If each project proposed a separate and independent radial connection, this would result in two separate disassociated site selection processes with limited awareness of decisions made by the other promoter leading to disparity in constraints considered, different BRAG scoring, and differing definition of land parcels. • The Transmission Assets have aligned their guiding principles for site selection to coordinate the location of infrastructure. If each project proposed its own radial connection for their onshore export cables to independently located onshore substations, the cable routes would be spread across the landscape to their respective onshore substation locations with the onward 400 kV cables both needing to go to Penwortham National Grid substation. There would have been no alignment of guiding principles for siting infrastructure and limited awareness of decisions made by the other project resulting in dis-jointed impacts across a wider area, with more extensive effects on communities. As stated above, each project's infrastructure would be as far as possible from the other to avoid interactions and potential cumulative effects, thereby proliferating infrastructure across a larger area and across multiple communities. • The Applicants have an aligned land strategy for the projects. If each project was being developed separately with the same PoI at Penwortham and due to the competitive nature of land process, each developer would likely be seeking to secure larger areas to protect their development from the other, resulting in greater impacts and land take. • There is one DCO application for the Transmission Assets. If not coordinated, each project would have prepared and submitted their own DCO application for its separate radial connection with its own documentation and EIA. This would have resulted in twice the volume of documentation, differing EIA assessment, and differing approaches to mitigation which is likely to overwhelm already constrained local authority / stakeholder resource. • The Applicants, along with the respective Generation Assets, have undertaken a coordinated engagement approach. If uncoordinated, then each project would have separate project engagement with landowners, communities and stakeholders resulting in consultation fatigue and confusion
	2.13.15	Similarly, the related onshore infrastructure required in conjunction with the offshore transmission to enable offshore wind to be connected at its onshore grid connection point is expected to reduce the overall environmental and community impacts. This is in comparison with that which would be required for radial connections from single offshore windfarms to the shore.	
Impacts	2.13.16	For onshore infrastructure, reduced impacts could, for example, relate to fewer or co-located substations and converter stations and transmission lines as well as demonstrating how environmental and community impacts have been avoided as far as possible.	
	2.13.17	Applicants are expected to be able to indicate how co-ordination including reduction in impacts have been considered drawing on work of others, including that led or enabled by National Grid Electricity System Operator (ESO).	
	2.13.18	For those projects not covered by the strategic network planning undertaken by the ESO and which have received a connection agreement, applicants should seek to demonstrate the reduced overall impacts from co-ordination (as identified at section 2.13.14 above) and how the onshore connection locations have been identified. These projects are expected to demonstrate the reductions in environmental and community impact achieved through coordination compared with radial solutions.	
	2.13.19	There may be exceptional circumstances where multiple coordinated solutions have been explored and all those solutions would lead to adverse impacts (for example adverse effects on an environmentally protected site) and where these could be avoided through radial connections. In these circumstances radial connections may be more appropriate. Evidence of the co-ordinated solutions assessed, and likely adverse impacts would need to be provided by the applicant to clearly substantiate this. This includes demonstration of consideration of alternative co-ordination solutions which may not be in proximate locations.	
	2.13.20	Applicants should refer to policy text in EN-3 (including section 2.8) and EN-1 (including sections 4.4 and 5.4) regarding consideration of impacts and cumulative impacts in the environment, as well as policy text in the remainder of this policy statement regarding consideration of impacts onshore.	
Coastal connections	2.13.21	The sensitivities of many coastal locations and of the marine environment as well as the potential environmental, community and other impacts in neighbouring onshore areas must be considered in the identification onshore connection points.	
	2.13.22	Onshore connection points for offshore transmission bringing power from offshore wind farms must be considered as part of the overall offshore transmission network design and in conjunction with the onshore network by the body responsible for the design.	
	2.13.23	Onshore connection locations for offshore transmission must seek to minimise environmental and other impacts, both onshore and in the marine environment and including to local communities.	

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
			in the local community over different developer messages around different projects being promoted at the same time. The Applicants' approach of not seeking independent and separate radial connections and coordinating site selection and location of the onshore substations, has resulted in minimising environmental and community impacts for all the reasons outlined above, and avoided infrastructure proliferation in line with NPS EN-5.
2.14 Offshore-onshore transmission: mitigation			
Offshore-onshore transmission: mitigation	2.14.1	Adverse impacts on Marine Protected Areas (MPAs) have caused consenting delays, and in some cases a need for compensatory measures under the Conservation of Habitats and Species Regulations 2017 and the Conservation of Offshore Habitats and Species Regulations 2017, or measures of equivalent environmental benefit under the Marine and Coastal Access Act 2009. Therefore, applicants should consider and address routing and avoidance/minimisation of environmental impacts both onshore and offshore at an early stage in the development process. Applicants should also facilitate delivery of strategic compensation measures where appropriate (see paragraphs 2.8.276 -2.8.283 of EN-3).	All relevant nearby or overlapping MCZs have been identified in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the ES (document reference F2.2), with the relevant qualifying features of these sites identified as Important Ecological Features (IEFs) and given specific consideration where relevant in the assessment of effects (section 2.11 of Volume 2, Chapter 2 of the ES). Additionally, an MCZ Screening and Stage 1 Assessment Report (document reference: E4) has been undertaken to determine if a full MCZ assessment is required. The MCZ Screening and Stage 1 Assessment Report concluded that the Transmission Assets has the potential to affect the interest features of the Fylde MCZ and this site was taken forward for a full MCZ Stage 1 Assessment which determined that the Transmission Assets would not hinder the conservation objectives of the MCZ (document reference: E4).
	2.14.2	In the assessments of their designs, applicants should demonstrate: • how environmental, community and other impacts have been considered and how adverse impacts have followed the mitigation hierarchy i.e. avoidance, reduction and mitigation of adverse impacts through good design • how enhancements to the environment post construction will be achieved including demonstrating consideration of how proposals can contribute towards biodiversity net gain (as set out in Section 4.5 of EN-1 and the Environment Act 2021), as well as wider environmental improvements in line with the Environmental Improvement Plan and environmental targets (paragraph 4.2.29 of EN-1) • how the construction planning for the proposals has been co-ordinated with that for other similar projects in the area on a similar timeline • how enhancements to the landscape and environmental assets may contribute to overall landscape and townscape quality as set out in EN-1 4.6.13 and 5.10.23 • how the mitigation hierarchy has been followed, in particular to avoid the need for compensatory measures for coastal, inshore and offshore developments affecting SACs SPAs, and Ramsar sites and MCZs as set out in EN-3 2.8 • For designated landscapes the principal mitigation measure, as established by the Holford Rules, should be to seek to avoid landfall in these areas	The ES (document reference F1 – F4) undertakes a thorough assessment including environmental, social and economic receptors. The assessment allows the weighing of impacts, both adverse and beneficial, to assist in the decision-making process. Each topic chapter within ES lays out the topic baseline environment and all relevant information used to inform the associated assessment of significant effects and potential for cumulative effects. These can be used to allow weighing of impacts and benefits in the decision-making process. This application demonstrates how the project meets the requirements of the NPSs in its application of the mitigation hierarchy, as established in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5. As set out in Volume 1, Chapter 5: Environmental assessment methodology (document reference F1.5). Mitigation measures are measures developed to avoid, prevent, reduce or, if possible, offset significant adverse environmental effects. In some cases, measures are proposed that would create or enhance beneficial environmental or social effects; these are referred to as enhancement measures. In addition to the topic chapters and annexes, a full list of all measures proposed to avoid, prevent, reduce or, if possible, offset the identified significant adverse effects is provided in Volume 1, Annex 5.3: Commitments Register (document reference F1.5.3). Information to inform this decision is provided within Volume 3, Chapter 3: Onshore ecology and nature conservation (document reference F3.3) of the ES, the outline Biodiversity Benefit Management Plan (document reference J11/F06), the Outline Landscape Management Plan (document reference J3) and the Marine Enhancement Statement (document reference J12). The Transmission Assets application has required unprecedented transparency and cooperation between two entirely separate commercial entities, Morgan OWL and Morecambe OWL, to deliver the Government's aim for a co-ordinated approach to transmission networks. as set out inThis is an

Section/topic	Paragraph reference	NPS requirement	Accordance with the NPS
			approach facilitated by the Offshore Transmission Network Review (OTNR) and Holistic Network Design (HND) and which NPS EN-1 explains "*has the potential to reduce the network infrastructure costs as well as the cumulative environmental impacts and impacts on coastal communities*" (para 3.3.71 of NPS EN-1). Refer to S_D1_5.2 for further information on the Applicants' position in respect of co-ordination of construction.
2.15 Offshore-onshore transmission: Secretary of State decision-making			
Offshore-onshore transmission: Secretary of State decision-making	2.15.1	Coordinated approaches to delivering offshore and onshore transmission to minimise overall environmental, community, and other impacts, as set out above, must be considered. The Secretary of State must be satisfied that applicants have explained the steps they have taken to do this, the options that have been considered and the approach they have taken to coordination as set out in above at section 2.13. This evidence is expected to draw substantially on the work under the Offshore Transmission Network Review and relevant strategic network design exercises, together with any additional supporting evidence applicants consider relevant. The Secretary of State should also be satisfied that options for coordination have been considered and evaluated appropriately.	See section 2.13 of EN-3 above for response.

2 References

Department for Energy Security & Net Zero (2023a) Overarching National Policy Statement for Energy (NPS EN-1). Available: EN-1 Overarching National Policy Statement for Energy (publishing.service.gov.uk) Accessed September 2024.

Department for Energy Security & Net Zero (2023b) National Policy Statement for Renewable Energy Infrastructure (NPS EN-3). Available: National Policy Statement for Renewable Energy Infrastructure (EN-3) (publishing.service.gov.uk) Accessed September 2024.

Department for Energy Security & Net Zero (2023c) National Policy Statements for Electricity Networks Infrastructure (NPS EN-5). Available: National Policy Statement for Electricity Networks Infrastructure (EN-5) (publishing.service.gov.uk) Accessed September 2024.

Fylde Borough Council, 2019. Fylde Biodiversity Supplementary Planning Document. Available at: https://new.fylde.gov.uk/wp-content/uploads/2019/09/Fylde-Biodiversity-SPD-Adopted-11-September-2019-FINAL.pdf. Accessed August 2024.

Lancashire County Council, 2000. Lancashire Landscape Character Assessment. Available at: https://www.lancashire.gov.uk/media/152746/characterassesment.pdf Accessed August 2024.