

Offshore Wind Farm

ENVIRONMENTAL STATEMENT

Chapter 0 Glossary

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Glossary of Acronyms

	Air Navigation Service Provider
AIS	Automatic Identification System
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CEA	Cumulative Effects Assessment
ECP	England Coast Path
EIA	Environmental Impact Assessment
EPP	Evidence Plan Process
ETG	Expert Topic Group
FIR	Flight Information Region
FL	Flight Level
FSA	Formal Safety Assessment
FTE	Full time equivalent
g	Grams
GHGs	greenhouse gases
GVA	Gross Value Added
HRA	Habitat Regulation Assessment
HGV	Heavy Goods Vehicle
HVAC	High Voltage Alternative Current
HVAC	High Voltage Alternative Currently
HDPE	high-density polyethylene
HDD	Horizontal directional drill
kWh	kilowatt-hour
LQ	Location quotient
MGN	Marine Guidance Note
MCA	Maritime and Coastguard Agency
MCA	Maritime and Coastguard Agency
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs

μТ	Microtesla
mA/m ²	Milliampere per metre squared
mT	Millitesla
NSIP	Nationally Significant Infrastructure Project
NRA	Navigational Risk Assessment
ОСР	Offshore converter platform
OREI	Offshore Renewable Energy Installation
OSP	Offshore substation platform
PEIR	Preliminary Environmental Information Report
Ro-Ro	Roll-on roll-off
SAR	Search and Rescue
SSR	Secondary Surveillance Radar
SPZ1	Source Protection Zone 1
SPZ1	Source Protection Zone 1
SPZ2	Source Protection Zone 2
SPZ3	Source Protection Zone 3
SI	System of Units
TTSA	Traffic and Transport Study Area
TSS	Traffic Separation Scheme
UK	United Kingdom
VTS	Vessel Traffic Service
V/m	Volt per metre
WTG	Wind turbine generator
ZOI	Zone of Influence

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Term	Definition
Air Navigation Service Provider (ANSP)	A public or private entity managing air traffic on behalf of a company, region or country. NATS is the main ANSP in the UK.
Allision	The act of striking or collision of a moving vessel against a stationary object.
Amphidromic point	The centre of an amphidromic system; a nodal point around which a standing-wave crest rotates once each tidal period.
Aquifer	Geological strata that hold water.
Array area	The offshore wind farm area, within which the wind turbine generators, array cables, platform interconnector cable, offshore substation platform(s) and/or offshore converter platform will be located.
Array cables	Cables which link the wind turbine generators with each other, the offshore substation platform(s) and/or the offshore converter platform.
As-built	A term used for offshore wind farm developments that are operational and where the turbine array 'as built' is different to the worst case scenario in the Environmental Impact Assessment for the development (for example where a wind farm is built out with fewer turbines than the consented design envelope).
Astronomical tide	The predicted tide levels and character that would result from the gravitational effects of the earth, sun and moon without any atmospheric influences.
Automatic Identification System (AIS)	A system by which vessels automatically broadcast their identity, key statistics including location, destination, length, speed and current status, e.g., "under power". Most commercial vessels and United Kingdom (UK)/European Union (EU) fishing vessels over 15 m length are required to carry AIS.
Aviation archaeology	The remains of crashed aircraft and archaeological material associated with historic aviation activities.
Bathymetry	Topography of the seabed.
Beach	A deposit of non-cohesive sediment (e.g. sand, gravel) situated on the interface between dry land and the sea (or other large expanse of water) and actively 'worked' by present-day hydrodynamic processes (i.e. waves, tides and currents) and sometimes by winds.
Beam trawl	A trawl net whose lateral spread during trawling is maintained by a beam across its mouth.
Bedforms	Features on the seabed (e.g. Sandwaves, ripples) resulting from the movement of sediment over it.
Bedload	Sediment particles that travel near or on the bed.
Benthic	Relating to or occurring at the sea bottom.
Bentley Road improvement works	Works involving the widening and improvement of the carriageway along Bentley Road, required to facilitate heavy goods vehicles and abnormal indivisible load access to the onshore cable route and the onshore substation.
Bioelectric	Relating to electricity or electrical phenomena produced within living organisms.
Bony fish	Any of a major taxon (class Osteichthyes or superclass Teleostomi) comprising fishes with a bony rather than a cartilaginous skeleton.

Term	Definition
Cradle to (factory) gate	The extraction, manufacture and production of materials to the point at which they leave the factory gate of the final processing location.
Cable circuit (onshore)	The onshore export cables are comprised of cable 'circuits'. Each cable circuit is typically comprised of three power cables, as well as fibre cables and earth cables. It is expected that each circuit would compromise up to seven cables in total.
Cable construction compound	Area set aside to facilitate construction of the onshore cable route. Will be located adjacent to the onshore cable route, with access to the highway.
Cable ducts	Housing for the onshore export cables, typically comprising plastic high-density polyethylene (HDPE) pipes buried underground. Each cable circuit will require up to seven individual ducts (i.e. one per cable).
Circalittoral	A subtidal zone where light penetration is limited and therefore communities are dominated by faunal species.
Clay	Fine sediment with a typical particle size of less than 0.002mm.
Climate change	A change in global or regional climate patterns. Within this chapter this usually relates to any long-term trend in mean sea level, wave height, wind speed etc, due to climate change.
Climate change impact	An impact from a climate hazard which affects the ability of the receptor to maintain its functions or purpose.
Climate hazard	A weather or climate-related event or trend in climate variable, which has potential to do harm to receptors such as increased precipitation or storms.
Climate variable	A measurable, monitorable aspect of the weather or climate conditions, such as temperature and wind speed.
Climate vulnerability	Vulnerability is defined as the degree of response to a change in the environment and based on the capacity to accommodate or recover from change and considered to be a function of both sensitivity, which the potential to be affected by change, and exposure, both spatially and temporally, to climate hazards.
Closure depth	The depth that represents the 'seaward limit of significant depth change, but is not an absolute boundary across which there is no cross-shore sediment transport.
Clupeid	Any of various fishes of the family Clupeidae, which includes the herrings, sprats, sardines and shads.
CO₂e	Carbon dioxide equivalent is a metric measure that is used to compare emissions from various greenhouse gases (GHGs) on the basis of their global warming potential by converting amounts of other GHGs to the equivalent amount of carbon dioxide (CO ₂).
Coastal catchment	Land which drains directly to the coastal or estuarine waters, rather than through a river water body – not part of a river water body catchment.
Coastal processes	Collective term covering the action of natural forces on the shoreline and nearshore seabed.
Cohesive sediment	Sediment containing a significant proportion of clays, the electromagnetic properties of which causes the particles to bind together.

Term	Definition
Collision	The act or process of colliding (contact) between two moving objects.
Construction effects	Used to describe both temporary effects that arise during the construction phases as well as permanent effects that arise from the physical existence of development (for example new buildings).
Controlled airspace	Defined airspace within which pilots must follow Air Traffic Control instructions implicitly. In the UK, Classes A, C, D and E are areas of controlled airspace.
Crest	Highest point on a bedform or wave.
Crosswind	Perpendicular to the prevailing wind.
Crustacean	An arthropod of the large, mainly aquatic group Crustacea, such as a crab, lobster, shrimp, or barnacle.
Cumulative effects	Additional changes caused by North Falls in conjunction with other similar developments or as a combined effect of a set of developments.
Cumulative Effects Assessment (CEA)	Assessment of impacts as a result of the incremental changes caused by other similar (often significant) infrastructure projects together with North Falls.
Current	Flow of water generated by a variety of forcing mechanisms (e.g. waves, tides, wind).
Decommissioning	The period during which a development and its associated processes are removed from active operation.
Demersal	Living on or near the seabed.
Diadromous	Migrating between fresh and salt water.
Downwind	In the orientation of the prevailing wind.
Ebb tide	The falling tide, immediately following the period of high water and preceding the period of low water.
Economic value	Economic value (as measured by GVA) generated through the first round of capital expenditure, i.e. North Falls' spend prime contractors within each impact area of the study (direct GVA). This also includes GVA which is supported through the supply chain expenditure of these contractors (indirect GVA). This does not include induced effects (which are generated through the salary expenditure of employees whose jobs are supported by the development).
Elasmobranch	Any cartilaginous fish of the subclass Elasmobranchii which includes the sharks, rays and skates.
Electro-receptive	Ability to perceive electrical stimuli.
Employment offshore	Direct employment impacts associated with the first round of capital expenditure on offshore infrastructure, i.e. North Falls' spend on onshore infrastructure with prime contractors within each impact area of the study. As well as employment which is associated with the suppliers of companies that supply goods and services as part of the supply chain of the onshore infrastructure of North Falls.
Employment onshore	Direct employment impacts associated with the first round of capital expenditure on onshore infrastructure, i.e. North Falls' spend on onshore infrastructure with prime contractors within each impact area of the study. As

Term	Definition
	well indirect employment impacts which are associated with the suppliers of companies that supply goods and services as part of the supply chain of the onshore infrastructure of North Falls. This does not include induced effects.
Environmental Impact Assessment (EIA)	The process of evaluating the likely significant environmental effects of a proposed project or development over and above the existing environment.
Epibenthic	Relative to the flora and fauna living on the surface of the sea bottom.
Epifauna	Animals living on the surface of the seabed or attached to submerged objects, animals or plants.
Erosion	Wearing away of the land or seabed by natural forces (e.g. wind, waves, currents, chemical weathering).
Evidence Plan Process (EPP)	A voluntary consultation process with specialist stakeholders to agree the approach to the EIA and information to support the HRA through ETG meetings.
Evidence Plan Process	A voluntary consultation process with specialist stakeholders to agree the approach, and information to support, the EIA and HRA for certain topics.
Expert Topic Group (ETG)	A forum for targeted engagement with regulators and interested stakeholders through the EPP.
Five Estuaries	Five Estuaries Offshore Wind Farm.
Flight Information Region (FIR)	Airspace managed by a controlling authority with responsibility for ensuring air traffic services are provided to aircraft flying within it.
Flight Level (FL)	An aircraft altitude expressed in hundreds of feet at a standard sea level pressure datum of 1013.25 hectopascals.
Flood tide	The rising tide, immediately following the period of low water and preceding the period of high water.
Formal Safety Assessment (FSA)	A structured and systematic process for assessing the risks and costs (if applicable) associated with shipping activity.
Former array areas	The two distinct offshore wind farm areas (including the 'northern array area' and 'southern array area') assessed at scoping and PEIR stage.
Full-time equivalent (FTE) jobs	Full time equivalent is a unit that indicates the workload of an employed person. An FTE of 1.0 is equivalent to one full-time employee, whilst a part-time employee working half the hours a full-time employee does would be recorded as 0.5 FTE.
Future Case	The assessment of risk based on the predicted growth in future shipping densities and traffic types as well as foreseeable changes in the marine environment.
g CO ₂ e.kWh ⁻¹	Grams (g) of carbon dioxide equivalent (CO ₂ e) per kilowatt-hour (kWh) of electricity generated.
Gadoid	A bony fish of an order (Gadiformes) that comprises the cods, hakes, and their relatives.
Geoarchaeology	The application of earth science principles and techniques to the understanding of the archaeological record. Includes the study of soils and sediments and of natural physical processes that affect archaeological sites such as

Term	Definition
	geomorphology, the formation of sites through geological processes and the effects on buried sites and artefacts.
Geomagnetic field	The Earth's magnetic field.
Geomorphology	The study of landforms and the processes that shape them.
Glacial till	Poorly-sorted, non-stratified and unconsolidated sediment carried or deposited by a glacier.
Glacial/interglacial	A glacial period is a period of time within an ice age that is marked by colder temperatures and glacier advances. Interglacial corresponds to periods of warmer climate between glacial periods. There are three main periods of glaciation within the last 1 million years, the Elsterian, the Saalian and the Weichselian which ended about 12,000 years ago. The Holocene period corresponds to the current interglacial.
Gravel	Loose, rounded fragments of rock larger than sand but smaller than cobbles. Sediment larger than 2mm (as classified by the Wentworth scale used in sedimentology).
Gravid	Carrying eggs or young.
Gross Value Added (GVA)	The measure of the value of goods and services produced in an area, industry or sector of an economy. At the level of a firm, it is broadly equivalent to employment costs plus a measure of profit.
Groundwater	Water stored below the ground in rocks or other geological strata.
Habitat	The environment of an organism and the place where it is usually found.
Haul road	The track along the onshore cable route used to access different sections of the onshore cable route, the onshore substation and national grid substation connection works.
Hazard	A potential to threaten human life, health, property or the environment.
Heavy Goods Vehicle (HGV)	HGV is the term for any vehicle with a Gross Weight over 3.5 tonnes. This is also used as a proxy for HGVs and buses / coaches recognising the similar size and environmental characteristics of the respective vehicle types.
High water	Maximum level reached by the rising tide.
Historic seascape character	The attributes that contribute to the formation of the historic character of the seascape.
Holocene	The last 10,000 years of earth history.
Horizontal directional drill (HDD)	Trenchless technique to bring the offshore cables ashore at landfall. The technique will also be used for installation of the onshore export cables at sensitive areas of the onshore cable route.
Hydrodynamic	The process and science associated with the flow and motion in water produced by applied forces.
Impact	The changes resulting from an action which may be either positive or negative.
Indicative landfall HDD compound area	Area within which the landfall HDD compound will be located.

Term	Definition
Indirect effects	Effects that result indirectly from North Falls as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects.
Induced employment and gross value added	Employment and gross value added which is not directly caused by the expenditure associated with a project. These are impacts associated with local expenditure as a result of those whose incomes are derived from the direct and indirect impacts of the intervention.
Infauna	The animals living within the sediments of the seabed.
Infralittoral	A subtidal zone, above the circalittoral zone in which light penetration enables plant growth.
Interconnector cable	Former cable between the northern and southern array areas.
Interconnector cable corridor	The corridor of the seabed between the northern and southern array areas and which is no longer needed following the removal of the northern array area.
Intertidal	Area on a shore that lies between Mean High Water Springs (MHWS) and Mean Low Water Springs (MLWS).
Intertidal survey area	The area within which the intertidal survey was conducted to inform the benthic characterisation report (Appendix 10.1, Volume 3.3).
Jointing bays	Underground structures, constructed at regular intervals along the onshore cable route to connect the sections of cable together so that each cable is a continuous length, as well as facilitating the installation of the cables into the buried cable ducts.
King Charles III England Coast Path (ECP)	The King Charles III England Coast Path will be the longest managed coastal path in the world. It will go all the way around the coast of England and will be around 2,700 miles long when it is complete. The trail is opening in sections. An opening celebration for the King Charles III Coast Path was held in Great Yarmouth in September 2023. In the East, the following sections are open to the public (as of July 2022): Tilbury to Southend-on-Sea, Southend-on-Sea to Wallasea Island, Maldon to Salcott, Hopton-on-Sea to Sea Palling and Sea Palling to Weybourne. The government announced in February 2022 that the King Charles III England Coast Path will be fully walkable by the end of 2024.
Landfall	The location where the offshore export cables come ashore at Kirby Brook.
Landfall compound	Compound at landfall within which HDD or other trenchless technique would take place.
Landfall search area	The area considered at PEIR, comprising the Essex coast between Clacton- on-Sea and Frinton-on-Sea within which landfall is located.
Leakage	An economic effect that occurs when benefits occur outside the study area.
Light Vehicle (LV)	The term 'light vehicle' is used to describe the range of vehicles that would be used by construction employees, i.e. cars, vans, pick-ups, minibuses, etc.
Likely Significant Effects	It is a requirement of Environmental Impact Assessment Regulations to determine the likely significant effects of North Falls on the environment which should relate to the level of an effect and the type of effect.

Term	Definition
Link boxes	Underground chambers or above ground cabinets next to the onshore export cables housing low voltage electrical earthing links.
Local onshore infrastructure and services	For the purposes of this assessment onshore infrastructure and services includes health services and housing infrastructure.
Location quotient (LQ)	Location quotient is a measure of a region's industrial specialisation relative to a larger region (e.g. Great Britain). A LQ of 1.0 indicates that both regions have the same level of specialisation, whereas a LQ > 1.0 means that the smaller region has a higher concentration of a particular sector than is seen in the larger region.
Long-term	Refers to a time period of decades to centuries.
Low water	The minimum height reached by the falling tide.
Magnitude (of impact)	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short term or long term in duration'. Also known as the 'degree' or 'nature' of change.
Main River	Usually larger rivers and streams. The Environment Agency carries out maintenance, improvement or construction work on Main Rivers to manage flood risk.
Marine Guidance Note (MGN)	A system of guidance notes issued by the Maritime and Coastguard Agency (MCA) which provide significant advice relating to the improvement of the safety of shipping at sea, and to prevent or minimise pollution from shipping.
Marine isotope stage	Marine isotope stages are alternating warm and cool periods in the Earth's paleoclimate, deduced from oxygen isotope data reflecting changes in temperature derived from data from deep sea core samples.
Maritime archaeology	The remains of boats and ships and archaeological material associated with prehistoric and historic maritime activities.
Marshalling port	Marshalling ports (also known as staging ports) are used to collect and store wind turbine components prior to loading them on to wind turbine installation vessels. Able Seaton Port in the North East and the Port of Leith in Scotland are examples of marshalling ports.
Mean High Water Springs	Mean High Water Springs is the average height throughout the year, of two successive high waters, during a 24-hour period in each month when the range of the tide is at its greatest (Spring tides).
Mean sea level	The average level of the sea surface over a defined period (usually a year or longer), taking account of all tidal effects and surge events.
Megaripples	Bedforms with a wavelength of 0.6 to 10.0m and a height of 0.1 to 1.0m. These features are smaller than sandwaves but larger than ripples.
Mesolithic	10000 to 4000 BC The Middle Stone Age, falling between the Palaeolithic and Neolithic and marking the beginning of a move from a hunter gatherer society towards a food producing society.
Micro-siting	Small scale refinement to the location of offshore infrastructure during detailed design to avoid key constraints.

Term	Definition
Migration free breeding season	The breeding season for migratory seabird species is defined as a wider breeding season and a narrower window known as the migration free breeding season. In a given species, the timing of breeding will vary depending on the location of the breeding area; with the start of breeding usually later in more northerly locations. Thus, while birds at some colonies are beginning to nest, others may still be migrating to breeding sites. A core or migration free breeding season is defined as the period when all or the majority of breeding adults of a given species are present at breeding colonies.
Milliampere per metre squared (mA/m²)	The ampere is the unit of electric current in the International System of Units (SI). One milliampere per metre squared represents a current of 1 mA glowing through a conductor with a cross-sectional area of 1m.
Millitesla (mT) / Microtesla (μT)	Units of measurement of magnetic flux density.
Movement	A two-way trip (i.e. the arrival and departure from site) for the transfer of employees or goods.
National Grid connection point	The grid connection location for the Project. National Grid are proposing to construct new electrical infrastructure (a new substation) to allow the Project to connect to the grid, and this new infrastructure will be located at the National Grid connection point.
National Grid substation connection point	Infrastructures required to connect the Project to the National Grid connection point.
National Grid substation connection works	Infrastructure required to connect the Project to the National Grid connection point.
National Landscape	In 2023 Natural England rebranded Areas of Outstanding National Beauty and National Landscapes.
Nationally Significant Infrastructure Project (NSIP)	Nationally Significant Infrastructure Projects are major infrastructure developments in England and Wales which are consented by DCO. These include proposals for offshore renewable energy projects with an installed capacity of over 100MW in England.
Navigational Risk Assessment (NRA)	A document which assesses the hazards to shipping and navigation of a proposed Offshore Renewable Energy Installation (OREI) based upon the FSA.
Neap tide	A tide that occurs when the tide-generating forces of the sun and moon are acting at right angles to each other, so the tidal range is lower than average.
Nearshore	The zone which extends from the swash zone to the position marking the start of the offshore zone).
Neolithic	4000 to 2000 BC Constituting the final stage of the Stone Age, it was preceded by the Mesolithic and followed by the Bronze Age.
Non-local workforce / workers	Refers to the workforce required to work on the North Falls project whose usual place of residence is located outside of the local area (see Section 31.3 for more information on what constitutes the local area).
North Falls	North Falls Offshore Wind Farm, including all onshore and offshore infrastructure.
Numerical modelling	Refers to the analysis of coastal processes using computational models.

Term	Definition
Offshore	Area seaward of nearshore in which the transport of sediment is not caused by wave activity.
Offshore converter platform	Should an offshore connection to an HVDC interconnector cable be selected, an offshore converter platform would be required/ This is a fixed structure located within the array area, containing HVAC and HVDC electrical equipment to aggregate the power from the wind turbine generators, increase the voltage to a more suitable level for export and convert the HVAC power generated by the wind turbine generators into HVDC power for export to shore via a third party HVDC interconnector cable.
Offshore Above-sea Development	Visible (above sea level) offshore project components. This includes the proposed wind turbines generators and offshore substation platforms.
Offshore cable corridor	The corridor of seabed from array areas to the landfall within which the offshore export cables will be located.
Offshore converter platform (OCP)	Should an offshore connection to an third party HVDC interconnector cable be selected, an offshore converter platform would be required. This is a fixed structure located within the array area, containing HVAC and HVDC electrical equipment to aggregate the power from the wind turbine generators, increase the voltage to a more suitable level for export and convert the HVAC power generated by the wind turbine generators into HVDC power for export to shore via an third party HVDC interconnector cable.
Offshore export cables	The cables which bring electricity from the offshore substation platform to the landfall.
Offshore platform(s)	Fixed structure(s) located within the array area, which may be an offshore converter platform or an offshore substation platform.
Offshore Preliminary Environmental Information Report (PEIR) boundary	The boundary encompassing the offshore cable corridor and array area, as considered within the PEIR.
Offshore project area	The overall area of the array areas and the offshore cable corridor.
Offshore Renewable Energy Installation (OREI)	As defined by Marine Guidance Note 654 (Merchant and Fishing) Safety of Navigation: Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response (Maritime and Coastguard Agency (MCA), 2021). For the purposes of this report and in keeping with the consistency of the Environmental Impact Assessment (EIA), OREI can mean offshore wind turbines and the associated electrical infrastructure including offshore substations.
Offshore substation platform(s) (OSP)	Fixed structure(s) located within the array area, containing HVAC electrical equipment to aggregate the power from the wind turbine generators and increase the voltage to a more suitable level for export to shore via offshore export cables.
Onshore archaeological DBA study area	A desk-based assessment study area incorporating the onshore cable corridor(s) and onshore substation zone plus a buffer.
Onshore cable corridor(s)	Onshore corridor(s) considered at PEIR within which the onshore cable route, as assessed at ES, is located.
Onshore cable route	Onshore route within which the onshore export cables and associated infrastructure would be located.

Term	Definition
Onshore export cables	The cables which bring electricity from the offshore substation. These comprise High Voltage Alternative Currently (HVAC) cables and auxiliary cables, buried underground.
Onshore PEIR boundary	The boundary encompassing the Project landfall, onshore cable route and onshore substation, as considered within the PEIR.
Onshore project area	The boundary within which all onshore infrastructure required for the Project will be located (i.e. landfall; onshore cable route, accesses, construction compounds; onshore substation and 400kV onshore cable route).
Onshore scoping area	The boundary within which all onshore infrastructure required for the Project will be located, as considered within the North Falls EIA Scoping Report.
Onshore substation	A compound containing electrical equipment required to transform and stabilise electricity generated by the Project so that it can be connected to the National Grid.
Onshore substation construction compound	Area set aside to facilitate construction of the onshore substation. Will be located adjacent to the onshore substation (location not yet defined).
Onshore substation works area	Area within which all temporary and permanent works associated within the onshore substation are located, including onshore substation, construction compound, access, landscaping, drainage and earthworks.
Onshore substation zone	The area considered at PEIR, within which the onshore substation will be located.
Ordinary Watercourse	Other rivers are called 'Ordinary Watercourses'. Lead local flood authorities, district councils and internal drainage boards carry out flood risk management work on Ordinary Watercourses.
Otter trawl	A trawl net fitted with two 'otter' boards which maintain the horizontal opening of the net.
Ovigerous	Carrying or bearing eggs.
Palaeochannel	Remnants of rivers or stream channels that flowed in the past and have been currently filled or buried by younger fluviatile sediments.
Palaeoenvironmental analysis	The study of sediments and the organic remains of plants and animals to reconstruct the environment of a past geological age.
Palaeogeographic features	Features seen within sub-bottom profiler data (buried) and multibeam bathymetry data (sea floor) interpreted as representing prehistoric physical landscape features such as former river channels (palaeochannels).
Palaeolithic	500000 to 10000 BC The Old Stone Age defined by the practice of hunting and gathering and the use of chipped flint tools. This period is usually divided into Lower, Middle and Upper Palaeolithic.
PEIR offshore project area	The boundary encompassing the offshore cable corridor and array areas, as considered within the PEIR.
Pelagic	Living in the water column.
Piscivorous	Feeding on fish.

Term	Definition
Planning Inspectorate	The Planning Inspectorate deals with planning appeals, national infrastructure planning applications, examinations of local plans and other planning-related and specialist casework.
Platform interconnector cable	Cable connecting the offshore substation platforms (OSP) or the OSP and offshore converter platform (OCP).
Pleistocene	An epoch of the Quaternary Period (between about 2 million and 10,000 years ago) characterised by several glacial ages.
Prehistoric Period	Broad term encompassing the Palaeolithic, Mesolithic, Neolithic, Bronze Age and Iron Age.
Preliminary Environmental Information Report (PEIR)	The PEIR presented findings of the assessment to allow an informed view to be developed of North Falls, the assessment approach that was undertaken, and the preliminary conclusions on the likely significant effects of North Falls and environmental measures proposed.
Primary Surveillance Radar (PSR)	A radar system that measures the bearing and distance of targets using the detected reflections of radio signals.
Principal Aquifer	These are layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.
Quaternary Period	The last 2 million years of earth history incorporating the Pleistocene ice ages and the post-glacial (Holocene) Period.
Radio Detection and Ranging (Radar)	An object-detection system which uses radio waves to determine the range, altitude, direction or speed of objects.
Receptor	These are as defined in Regulation 5(2) of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and include population and human health, biodiversity, land, soil, water, air, climate, material assets, cultural heritage and landscape that may be at risk from exposure to pollutants which could potentially arise as a result of the Project.
Regular Operator	Commercial operator whose vessel(s) are observed to transit through a particular region on a regular basis.
Relevant Highway Authorities	The term relevant highway authorities for the Project includes all highway authorities within the traffic and transport study area, namely, Essex County Council and National Highways.
Requirement	Requirements are similar to planning conditions in Town and Country Planning Act decisions, specifying conditions and restrictions on the development and matters for which detailed approval needs to be obtained before the development can be lawfully begun.
Resident based earnings	Income earned by individuals who reside in a particular area.
Risk	The combination of the frequency and the severity of the consequence.
Risk severity	Expected harm or adverse effect that may occur due to exposure to the Risk.

Term	Definition
Ro-Ro ships (Ro-Ro)	Roll-on roll-off ships are cargo ships designed to carry wheeled cargo, such as cars, motorcycles, trucks, semi-trailer trucks, buses, trailers, and railroad cars, that are driven on and off the ship.
Safety zones	A marine zone outlined for the purposes of safety around a possibly hazardous installation or works / construction area.
Sand	Sediment particles, mainly of quartz with a diameter of between 0.063mm and 2mm. Sand is generally classified as fine, medium or coarse.
Sandwave	Bedforms with wavelengths of 10 to 100m, with amplitudes of 1 to 10m.
Scoping Opinion	A Scoping Opinion is adopted by the Secretary of State for North Falls.
Scoping Report	A report that is designed to ascertain which issues the Environmental Impact Assessment process should cover.
Scour protection	Protective materials to avoid sediment being eroded away from the base of the wind turbine generator foundations and offshore substation platform(s) or / and offshore converter platform (OCP) foundations as a result of the flow of water.
Sea level	Generally, refers to 'still water level' (excluding wave influences) averaged over a period of time such that periodic changes in level (e.g. due to the tides) are averaged out.
Seabed features	Features seen on the seafloor in the sidescan sonar or multibeam bathymetry data which are interpreted to represent heritage assets, or potential heritage assets. Also includes magnetic anomalies which may represent shallow buried ferrous material of archaeological interest.
Seabed prehistory	Archaeological remains on the seabed corresponding to the activities of prehistoric populations that may have inhabited what is now the seabed when sea levels were lower.
Sea-level rise	The general term given to the upward trend in mean sea level resulting from a combination of local or regional geological movements and global climate change.
Search and Rescue (SAR)	The search and provision of aid to people who are in distress or imminent danger.
Secondary A Aquifer	These are permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.
Secondary B Aquifer	These are predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers.
Secondary Surveillance Radar (SSR)	A radar system that transmits interrogation pulses and receives transmitted responses from suitably equipped targets.
Secretary of State	The person who makes the decision to grant development consent.
Sediment	Particulate matter derived from rock, minerals or bioclastic matter.
Sediment transport	The movement of a mass of sediment by the forces of currents and waves.

Term	Definition
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value associated to that receptor.
Serious Collision	A collision resulting in serious injury for which a person is detained in hospital as an "in-patient", or any of the following injuries whether or not they are detained in hospital: fractures, concussion, internal injuries, crushing, burns (excluding friction burns), severe cuts, severe general shock requiring medical treatment and injuries causing death 30 or more days after the accident.
Setting	The NPPF identifies setting as that which encompasses an asset's surroundings in which it is experienced. The extent of setting is not fixed and can contribute both positively and negatively to the heritage significance of an asset.
Shore platform	A platform of exposed rock or cohesive sediment exposed within the intertidal and subtidal zones.
Short-term	Refers to a time period of months to years.
Significance	A measure of the importance of the environmental effect, defined by criteria specific to the environmental aspect.
Significant effects	It is a requirement of the EIA Regulations to determine the likely significant effects of the development on the environment which should relate to the level of an effect and the type of effect. Where practicable, significant effects should be mitigated.
Significant wave height	The average height of the highest of one third of the waves in a given sea state.
Silt	Sediment particles with a grain size between 0.002mm and 0.063mm, i.e. coarser than clay but finer than sand.
Slight Collision	A collision resulting in a slight injury of a minor character such as a sprain (including neck whiplash injury), bruise or cut which are not judged to be severe, or slight shock requiring roadside attention. This definition includes injuries not requiring medical treatment.
Source Protection Zone 1 (SPZ1)	Inner protection zone - defined as the 50-day travel time from any point below the water table to the abstraction source. This zone has a minimum radius of 50 metres.
Source Protection Zone 2 (SPZ2)	Outer protection zone - defined by a 400-day travel time from a point below the water table. This zone has a minimum radius of 250 or 500 metres around the abstraction source, depending on the size of the abstraction.
Source Protection Zone 3 (SPZ3)	Source catchment protection zone - defined as the area around an abstraction source within which all groundwater recharge is presumed to be discharged at the abstraction source.
Spring tide	A tide that occurs when the tide-generating forces of the sun and moon are acting in the same directions, so the tidal range is higher than average.
Stakeholder engagement	Refers to the voluntary engagement undertaken in addition to the statutory consultation requirements under the Planning Act 2008.
Storm surge	A rise in water level on the open coast due to the action of wind stress as well as atmospheric pressure on the sea surface.

Term	Definition
Study area	Area where potential impacts from the Project could occur, as defined for each individual EIA topic.
Surface water flooding	Surface water flooding occurs when rainwater does not drain away through normal drainage systems or soak into the ground, but lies on or flows over the ground instead.
Surge	Changes in water level as a result of meteorological forcing (wind, high or low barometric pressure) causing a difference between the recorded water level and the astronomical tide predicted using harmonic analysis.
Suspended sediment	The sediment moving in suspension in a fluid kept up by the upward components of the turbulent currents or by the colloidal suspension.
Swell waves	Wind-generated waves that have travelled out of their generating area. Swell characteristically exhibits a more regular and longer period and has flatter crests than waves within their fetch.
Swim bladder	A gas-filled sac present in the body of many bony fish, used to maintain and control buoyancy.
Temporal scope	The temporal scope covers the time period over which changes to the environment and the resultant effects are predicted to occur and are typically defined as either being temporary or permanent.
Temporary construction compound	Area set aside to facilitate construction of the onshore cable route. Will be located adjacent to the onshore cable route, with access to the highway where required.
Temporary or permanent effects	Effects may be considered as temporary or permanent. In the case of socio- economics, any effects occurring during the Project's development and construction phase are defined as temporary, whilst any effects occurring over the Project's assumed lifetime are defined as permanent.
Thalweg	A line connecting the lowest points of successive cross-sections along the course of a valley or river.
The Project or 'North Falls'	North Falls Offshore Wind Farm, including all onshore and offshore infrastructure.
Tidal current	The alternating horizontal movement of water associated with the rise and fall of the tide.
Tidal range	Difference in height between high and low water levels at a point.
Tide	The periodic rise and fall of the water that results from the gravitational attraction of the moon and sun acting upon the rotating earth.
Traffic and Transport Study Area (TTSA)	Area where potential impacts from the Project could occur, as defined for each individual EIA topic.
Traffic Separation Scheme (TSS)	A traffic-management route-system ruled by the International Maritime Organization (IMO). The traffic-lanes (or clearways) indicate the general direction of the vessels in that zone; vessels navigating within a TSS all sail in the same direction or they cross the lane in an angle as close to 90 degrees (°) as possible.
Transition joint bay	Underground structures that house the joints between the offshore export cables and the onshore export cables.

Term	Definition
Trenchless crossing	Use of a technique to install limited lengths of cable below ground without the need to excavate a trench from the surface, used in sensitive areas of the onshore cable route to prevent surface disturbance. Includes techniques such as Horizontal Directional Drilling.
Trenchless crossing compound	Areas within the onshore cable route which will house trenchless crossing (e.g. HDD) entry or exit points.
Uncontrolled Airspace	Defined airspace in which Air Traffic Control does not exercise exclusive authority but may provide basic information services to aircraft in radio contact. In the UK, Class G is uncontrolled airspace.
Unique Vessel	An individual vessel identified on any particular calendar day, irrespective of how many tracks were recorded for that vessel on that day. This prevents vessels being over counted. Individual vessels are identified using their Maritime Mobile Service Identity (MMSI).
Unproductive Strata	These are predominantly rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.
Vehicle (HGV, Traffic) trips	A two-way trip (i.e. the arrival and departure from site) for the transfer of employees or goods.
Vessel Traffic Service (VTS)	A service implemented by a Competent Authority designed to improve the safety and efficiency of vessel traffic and to protect the environment. The service should have the capability to interact with the traffic and to respond to traffic situations developing in the VTS area.
Volt per metre (V/m)	The standard unit of electric field strength.
Vulnerability	Risk x receptor sensitivity in relation to shipping hazards (discussed further in ES Appendix 15.1)
Wave climate	Average condition of the waves at a given place over a period of years, as shown by height, period, direction etc.
Wave height	The vertical distance between the crest and the trough.
Wind turbine generator (WTG)	Power generating device that is driven by the kinetic energy of the wind.
Workplace based earnings	Income earned by an individual based on their location of employment.
Zone of Influence (ZOI)	The area surrounding North Falls which could result in likely significant effects.
400kV onshore cable route	Onshore route within which the 400kV onshore cables and associated infrastructure would be located.
400kV onshore cables	The cable circuits which take the electricity from the onshore substation on to the national grid connection point. These comprise High Voltage Alternative Current (HVAC) cables, buried underground.





HARNESSING THE POWER OF NORTH SEA WIND

North Falls Offshore Wind Farm Limited

A joint venture company owned equally by SSE Renewables and RWE.

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