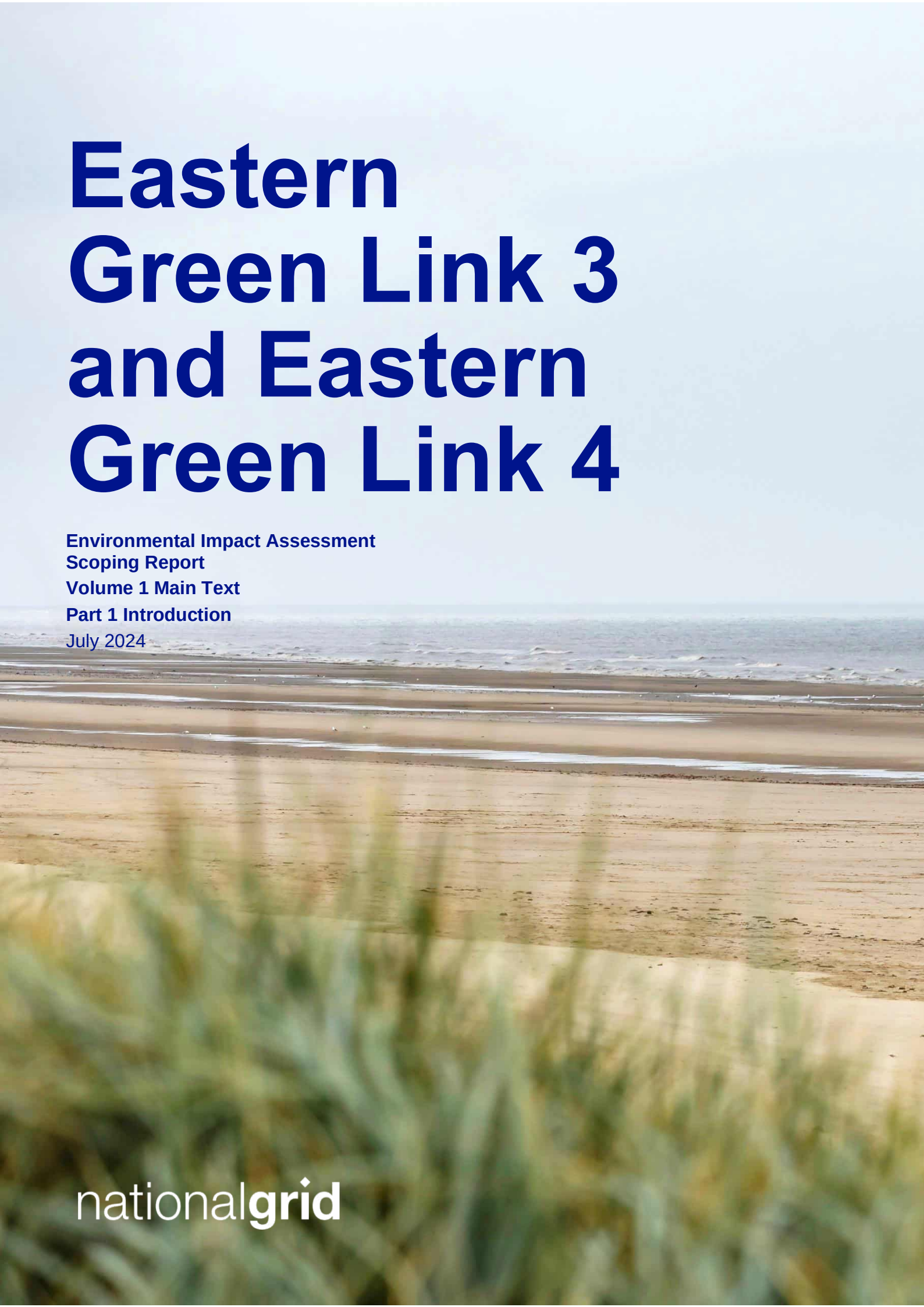
Eastern Green Link 3 and Eastern Green Link 4

Environmental Impact Assessment Scoping Report

Volume 1 Main Text

Part 1 Introduction

July 2024



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Glossary

Term	Definition
2WS	A 400 kV double circuit overhead line transmission route from Spalding Substation, in Spalding, to a Tee-Point along the 4ZM 400 kV double circuit overhead line transmission route.
4ZM	A 400 kV double circuit overhead line transmission route from West Burton Substation in Bassetlaw to the Burwell Substation in East Cambridgeshire via the Walpole Substation in Kings Lynn and West Norfolk.
Abnormal Indivisible Loads (AIL)	Large loads to be delivered to the construction site which by their nature cannot be broken into smaller multiple deliveries.
Above Ordnance Datum (AOD)	An Ordnance Datum or OD is a vertical datum used by an ordnance survey as the basis for deriving altitudes on maps. A spot height may be expressed as AOD. Usually mean sea level is used for the datum.
Access points	A location connecting a construction site to the public highway.
Access routes	Public highway used by construction traffic to access a construction site.
Accidents and safety	In the context of traffic and transport, the risk of accidents occurring due to a change in the character of traffic resulting from the Projects.
Acoustic environment	The sound with contribution from all sources, as modified by the current environment and associated conditions. This is related to the ambient sound, which is the totally encompassing sound in a given situation at a given time, usually composed of sound from many sources near and far.
Additional measures	Actions that will require further activity to achieve the anticipated outcome. Where additional measures are required, an assessment of the residual effects is subsequently undertaken.
Admiralty Chart	Nautical charts issued by the United Kingdom Hydrographic Office and subject to Crown Copyright.
Agricultural Land Classification (ALC)	A standardised method for classifying agricultural land according to its versatility, productivity, and workability, based upon inter-related parameters including climate, relief, soil characteristics and drainage. These factors form the basis for classifying agricultural land into one of five grades (with Grade 3 land divided into Subgrades 3a and 3b), ranked from excellent (Grade

Term	Definition
	1) to very poor (Grade 5). ALC is determined using the MAFF Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land,1988[1].
Agri-environment scheme	Government programme set up to help farmers manage their land in environmentally friendly way.
Air Quality Management Areas (AQMAs)	If a local authority finds any places where the Air Quality Objectives (AQO) are not likely to be achieved, it must declare an AQMA there. This area could be just one or two streets, or it could be much bigger. Then the local authority will put together a plan to improve the air quality - a Local Air Quality Action Plan (AQAP).
Air Quality Strategy Objectives	The AQS objectives are policy targets often expressed as a maximum ambient concentration not to be exceeded, either without exception or with a permitted number of exceedances, over a specified averaging period.
Air Quality Standards (AQS)	The AQS Regulations report limit values at differing averaging periods for certain pollutants. There are limits provided for the protection of human health for SO_2, NO_2, Benzene, CO and Pb. Target values have been set for the concentration of PM2.5.
Alternating current (AC)	The electrical current changes direction in a cycle. Mains electricity is alternating current.
Anchorage area	A place where boats and ships or other water vessels can safely drop anchor.
Anchor handling vessel or Anchor Handling Tug Supply (AHTS)	Anchor Handling Tug Supply (AHTS) vessels are mainly built to handle anchors for oil rigs, tow them to location, and use them to secure the rigs in place.
Ancient woodland	Land that has been continually wooded since at least 1600 in England. Regarded as irreplaceable habitat' in national planning guidance. Ancient woodland greater than 2ha is recorded on the National England Woodland Inventory.
Annex 1 habitat	Annex 1 Habitat refers to a habitat as defined under the EU Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.
Aquifer	Water-bearing rock or sediment below the soil layer.
Archaeological interest	A heritage asset with value from the potential to hold evidence about the past that can be retrieved though specialist investigation.

[1] Natural England. (1998). Agricultural Land Classification of England and Wales: Revised criteria for grading the quality of agricultural land (ALC011). [Online].

Term	Definition
Archaeological remains	The material remains of human activity from the earliest persons of human evolution to present. These may be buried traces of human activities, sites visible above ground, or moveable artifacts.
Architectural/Artistic Interest	A heritage asset with value from contemporary appreciation of a heritage asset's aesthetics.
Artificial ground	Deposits that have accumulated or been placed through human activity.
Associated development	Development pursuant to section 115(1b) of the Planning Act 2008, which is associated with a Nationally Significant Infrastructure Project (NSIP) or with development for which development consent is required pursuant to sections 35(1) and 35ZA of the Planning Act 2008. Associated development should be subordinate to, and necessary for, the construction and/or the effective operation of the Authorised development that is the subject of the Development Consent Order (DCO) application.
Authorised development	The development that will be described in Schedule 1 (authorised development) of the draft Development Consent Order.
Auger bore	A form of trenchless crossing in which a pit is created either side of the constraint or infrastructure being crossed and a bore is created by augering from one pit to the other.
Automatic Identification System (AIS)	An AIS-equipped system on board a ship presents the bearing and distance of nearby vessels in a radar-like display format.
Background sound/noise level	The A weighted sound pressure level that is exceeded by the residual sound at the assessment location for 90% of a given time interval, T, measured using time weighting F and quoted to the nearest whole number of decibels. This represents the underlying sound level in the absence of contributions from the sound source under assessment relating to the residual sound level but characterised by $L_{A90,T}$.
Baseline	The situation prevailing before the Projects are commenced (the current baseline), and also to the situation that would prevail in the future without the Projects (the projected future baseline).
Basic Noise Level (BNL)	A reference noise level at 10m from the nearside carriageway, calculated as a function of traffic flow, percentage of Heavy Goods Vehicles, average speed, road gradient and road surface.
Bathymetry	Bathymetry is the information that describes the topography of the seabed. It is an essential component in understanding the dynamics of the marine environment, both in terms of sediment transport but also in the prediction of tides, currents and waves.

Term	Definition
BCE	Before Common Era
Bellmouth	An access point from the public highway for construction purposes.
Best and Most Versatile (BMV) agricultural land	Defined as land of excellent (ALC Grade 1), very good (Grade 2) and good (Subgrade 3a) agricultural quality. BMV agricultural land is afforded a degree of protection against development within planning policy.
Biodiversity	The variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems.
Biodiversity Net Gain (BNG)	BNG is an approach to development which aims to leave nature in a measurably better state than it was before the project was completed. National Grid has made a commitment to delivering a BNG target of 10% above baseline on its development projects (as agreed with Ofgem).
Biodiversity Action Plan	A strategy for conserving and enhancing wild species and wildlife habitats in the UK.
Biosecurity	Measures aimed at preventing the spread of harmful organisms (e.g. viruses and bacteria) to crops and livestock in order to reduce the risk of transmission of infectious diseases.
Birds of Conservation Concern	Quantitative criteria are used to assess the population status of bird species found in the UK, which are placed on the red, amber or green list. With those on the red list being at most risk.
Bronze Age	-2,600 to -700 Before Common Era (BCE).
Cable	An insulated conductor designed for underground installation.
Cable Lay Barge	A Cable Laying Barge (cable layer or cable ship) is a sea-going vessel specially designed to lay underwater cables (telecommunications, electric power transmission, or other).
Cable Lay Vessel	A Cable Laying Vessel (cable layer or cable ship) is a sea-going vessel specially designed to lay underwater cables (telecommunications, electric power transmission, or other).
Cable Sealing End Compound (CSEC)	Electrical infrastructure used as the transition point between overhead lines and underground cables. A compound on the ground acts as the principal transition point.
CE	Common Era

Term	Definition
Chronic Health Effect	An adverse health effect that occurs as a result of long-term regular or continuous exposure to a causative factor (e.g. soil contamination).
Circuit	A set of wires along which current flows and returns. It is necessary to have a complete circuit for current to flow.
Code of Construction Practice (CoCP)	A CoCP sets out the standards and procedures to which a developer or contractor must adhere to manage the potential environmental impacts of construction works.
Concrete mattressing	A rectangular unit made of concrete blocks joined together by polypropylene ropes. The mattress is flexible in two dimensions and is available in a range of thicknesses to suit the conditions required. Concrete mattresses are used for the anchorage and protection of underwater pipelines and cables and for protecting the foundations of structures against water scouring.
Conductor	A material that allows electricity to flow through it. These are the wires or cables for overhead lines and underground cables.
Conservation Area	An area of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance as defined in Section 69(1)(a) in the Planning (Listed Building and Conservation Areas) Act 1990.
Construction Environmental Management Plan (CEMP)	The purpose of the CEMP is to outline how construction of the Projects will avoid, minimise or mitigate effects on the environment and surrounding area. The CEMP will detail the implementation of measures in accordance with environmental commitments outlined in the ES. It is a 'live' document which is to be reviewed and updated at regular intervals throughout the Projects' life cycle.
Construction Traffic Management Plan (CTMP)	A Construction Traffic Management Plan (CTMP) sets out the requirements for the management of construction traffic.
Contaminated land	Land where substances are causing or could cause significant harm to people, property or protected species or could cause significant pollution of surface waters or groundwater.
Converter Station	A converter station is part of a High Voltage Direct Current (HVDC) system and converts HVDC to High Voltage Alternating Current (HVAC) and vice versa.
Corridor	A broad area, within which a new underground cable could be routed.
County Wildlife Site	Non-statutory designated areas of land important for their wildlife and nature conservation value

Term	Definition
Countryside and Rights of Way Act 2000	The Countryside and Rights of Way Act 2000 (CROW Act) is an act to make provision for public access to the countryside; to amend the law relating to public rights of way; to enable traffic regulation orders to be made for the purpose of conserving an area's natural beauty; to make provision with respect to the driving of mechanically propelled vehicles elsewhere than on roads; to amend the law relating to nature conservation and the protection of wildlife; to make further provision with respect to areas of outstanding natural beauty; and for connected purposes.
Cumulative effects	There are two types of effect as identified in Advice Note 17 published by the Planning inspectorate[2]: in-combination effects and cumulative effects. The former occurs as a result of two or more impacts acting together (i.e. combined), to result in a new or changed effect on a single receptor. The latter arise as a result of the Projects in combination with other large-scale developments or projects.
Decibel (dB)	Noise is conventionally measured in decibels (dB). The ratio between the quietest audible sound and the loudest tolerable sound is a million to one in terms of the change in sound pressure. Due to this wide range, a scale based on logarithms is used in noise level measurement. The scale used is the dB scale which extends from 0 to 140dB corresponding to the intensity of the sound pressure level.
Demographic	Relating to the structure of populations.
Design and Control measures	Modifications to the location, design or operation of the Projects to mitigate against environmental impacts. These can be an inherent part of the project (primary), additional action post-consent (secondary), or actions resulting from processes external to the EIA (tertiary). This includes legislative requirements.
Development Consent Order (DCO)	The consent required for a Nationally Significant Infrastructure Project (NSIP) or for a project that has been deemed to be of national significance, pursuant to sections 35(1) and 35ZA of the Planning Act 2008.
Development Plan Document (DPD)	Development Plan Documents (DPDs) are planning policy documents which make up the Local Development Framework (LDF) within a local authority. They help to guide development within a local planning authority area by setting out the detailed planning policies, which planning officers use to make their decisions on planning applications.

[2] The Planning Inspectorate (2019) Advice Note 17: Cumulative effects assessment to nationally significant infrastructure projects. Available at: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advicenotes/advice-note-17/ (Accessed: 10/10/2022)

Term	Definition
Dewatering	The removal of groundwater (e.g. by pumping) to keep a below-ground works area dry. This can be used during construction of the underground cable sections.
Direct-buried	Direct burial of cables involves excavating trenches into which the cables are installed on a bed of sand or cement bound sand with the use of winches or power rollers. Sheet piling or timber is used to support the sides of the trenches during construction.
Direct effects	Direct effects are those that result directly from the Projects.
Direct Current (DC) electricity transmission	Electric power transmission in which the voltage is continuous. This is most commonly used for long distance point-to-point transmission
Direct Current Switching Station (DCSS)	A direct current switching station (DCSS) facilitates the option to connect and disconnect DC transmission lines or other components such as generation to and from the system through a series of switches providing redundancy in the network. The switching station will provide redundancy in the network by allowing connections to the northern and southern elements of the UK network while providing uninterrupted connections for maintenance and similar works.
Disaster	A disaster is a man-made/external hazard (such as an act of terrorism) or a natural hazard (such as an earthquake) with the potential to cause an event or situation that meets the definition of a major accident.
Distribution Network Operator (DNO)	A Distribution Network Operator is the company that owns and operates the overhead power lines and infrastructure that connects the National Grid electricity transmission system to properties and businesses. The DNOs in proximity to the Projects are Northern Power Grid (NPG), National Grid Electricity Distribution Plc (NGED) and UK Power Networks (UKPN).
Dredging vessels	Dredging vessels are used for the removal of sediments and debris from the bottom of lakes, rivers, harbours, and other water bodies. It is a routine necessity in waterways around the world because sedimentation—the natural process of sand and silt washing downstream—gradually fills channels and harbours.
Driver delay	Traffic delays to non-development traffic.
Ducting	The installation of ducts (pipes) within which a cable can be pulled through.
Dust	Generic term used to describe larger non-respirable airborne particulates (typically those which are deposited rapidly and normally associated with soiling / marking of property, cars, vegetation etc.).

Term	Definition
Early Medieval	410 to 1066 Common Era (CE).
Earth Wire	Wire strung between the tops of towers used for lightning and system protection. May also be used to carry telecommunication signals.
Easement	An easement is a right benefiting a piece of land (known as the dominant land) that is enjoyed over another piece of land owned by someone else (the servient land). Usually, an easement allows the owner of the dominant land to do something on the servient land, such as use a right of way, or run services over it.
Eastern Green Link 3 (EGL 3)	Eastern Green Link 3 (EGL 3) is being developed by National Grid Electricity Transmission (NGET) and Scottish Hydro Electric – Transmission (SHE-Transmission), who are operating and known as Scottish and Southern Electricity Networks Transmission (SSEN Transmission). EGL 3 comprises a 2 GW HVDC system linking Peterhead in Scotland and Norfolk in England. EGL 3 comprises the following Schemes: Scottish Onshore; Scottish Offshore; English Offshore; and English Onshore. Of these Schemes, it is only the English Offshore and English Onshore Schemes which form part of the 'Projects'.
Eastern Green Link 4 (EGL 4)	Eastern Green Link 4 (EGL 4) is being developed by National Grid Electricity Transmission (NGET) and Scottish Power Transmission (SPT) who are operating and known as Scottish Power Energy Networks (SPEN). EGL 4 comprises a 2 GW HVDC system linking Fife in Scotland and Norfolk in England. EGL 4 comprises the following Schemes: Scottish Onshore; Scottish Offshore; English Offshore; and English Onshore. Of these Schemes, it is only the English Offshore and English Onshore Schemes which form part of the 'Projects'.
Eastern Green Link 3 (EGL 3) Project (see also: EGL 3 and EGL 4)	The EGL 3 Proposed Development and any Associated development that will be subject to a Development Consent Order (DCO) application. The EGL 3 Project and the Eastern Green Link 4 (EGL 4) Project may be referred to jointly as 'the Projects'.
Eastern Green Link 4 (EGL 4) Project (see also: EGL 3 and EGL 4)	The EGL 4 Proposed Development and any Associated development that will be subject to a Development Consent Order (DCO) application. The EGL 4 Project and the Eastern Green Link 3 (EGL 3) Project may be referred to jointly as 'the Projects'.
Eastern Green Link 3 (EGL 3) Proposed Development	The converter station in the Walpole area of Norfolk which falls under the English Onshore Scheme of EGL 3 that will be Authorised development subject to a Development Consent Order (DCO) application as directed by the Secretary of State's Section 35 Direction dated 29 February 2024. The EGL 3

Term	Definition
	Proposed Development and the Eastern Green Link 4 (EGL 4) Proposed Development may be referred to jointly as 'the Proposed Developments'.
Eastern Green Link 4 (EGL 4) Proposed Development	The converter station in the Walpole area of Norfolk alone or together with the switching station and converter station in East Lindsey which fall under the English Onshore Scheme of EGL 4 that will be Authorised development subject to a Development Consent Order (DCO) application as directed by the Secretary of State's Section 35 Direction dated 29 February 2024. The EGL 4 Proposed Development and the Eastern Green Link 3 (EGL 3) Proposed Development may be referred to jointly as 'the Proposed Developments'.
Ecological feature	Habitats, species or ecosystems (including designated and non-designated sites).
Ecosystem	A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.
Effects	For the purposes of the EIA and this Scoping Report, the term 'effects' are the consequences of changes (e.g. habitat becomes degraded by changes in drainage pattern).
EIA Regulations	EIA is a legal requirement for certain public and private projects in EU countries under Directive 2014/52/EU. This directive is transposed into English legislation by the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (SI 2017/571).
Electricity System Operator (ESO)	The ESO plans and operates the transmission system in Great Britain but does not own the transmission assets such as the overhead lines and substations. These are developed, owned and maintained by National Grid Electricity Transmission (NGET) and other 'Transmission Owner' companies. Generation and interconnector customers apply to National Grid ESO when they wish to connect to the network. The ESO is a wholly independent company within the wider National Grid Group.
Electricity transmission system	The electricity transmission system is made up largely of 400kV, 275kV and 132kV assets connecting separately owned generators and interconnectors with the demand for electricity fed directly from the transmission system, and distribution systems. The 'transmission' classification applies to assets at 132kV or above in Scotland or offshore. In England and Wales, it relates to assets at 275kV and above. The electricity transmission system is designed to make sure there is sufficient transmission capacity to ensure that the system can be operated in an economic and efficient way by the ESO,

Term	Definition
	ensuring power can be moved from where it is generated to demand centres across Britain. This planning and development of the electricity transmission system is governed by the Security and Quality of Supply Standard (SQSS) which ensures that the network is developed and operated securely and is resilient to any foreseeable network faults and disruption.
Electromagnetic Compatibility	The interaction of electrical equipment with its electromagnetic environment and with other equipment.
Electromagnetic fields (EMF)	Electric fields are created by differences in voltage: the higher the voltage, the stronger will be the resultant field. Magnetic fields are created when electric current flows: the greater the current, the stronger the magnetic field. An electric field will exist even when there is no current flowing. If current does flow, the strength of the magnetic field will vary with power consumption but the electric field strength will be constant.
English Offshore Scheme	All components of EGL 3 and EGL 4 within the English marine environment up to the MHWS in England that will be subject to a Development Consent Order (DCO) application.
English Onshore Scheme	All components of EGL 3 and EGL 4 between the electricity transmission connection point in England and the Mean Low Water Spring (MLWS) in England that will be subject to a Development Consent Order (DCO) application.
Enhancement	Enhancement measures comprise additional measures which do not form part of the Projects for which development consent is being sought. NGETs commitment to delivering 10% BNG will likely result in additional tree planting, which would offer enhancement compared to the current baseline.
Environmental Gain (EG)	NGET has defined ‘Environmental Gain’ with Ofgem as being an amalgam of BNG and the status of Natural Capital (NC). This sees a simple formula being used to calculate overall EG.
Environmental Impact Assessment (EIA)	An EIA is a tool for systematically examining and assessing the impacts and effects of a development on the environment. The objective of the EIA is to identify any likely significant effects which may arise from a project and identify measures to prevent, reduce or offset any adverse effects.
Environmental Statement (ES)	The outcome of the EIA process is reported within a document called an Environmental Statement (ES).
European Protected Species	Animals and plants listed under the Habitats Directive and protected under the Conservation of Habitats and Species Regulations 2017, as amended.

Term	Definition
Fall pipe vessel	A fallpipe vessel (FPV) is a self-propelled vessel that is equipped with a flexible fallpipe. The vessel's design allows the fallpipe to be lowered into the water beneath the vessel allowing it to position rock with extreme accuracy down to a depth of 1,500 meters.
Fear and intimidation	In the context of traffic and transport, these may be experienced by people as a result of an increase in traffic volume and its proximity or the lack of protection caused by such factors as narrow pavement widths.
Fisheries Liaison Officer	Fisheries Liaison Officers liaise between fishing vessels and Clients, using local knowledge and fisheries experience to encourage co-operation and help ensure operations run smoothly and efficiently.
Flood Risk Assessment (FRA)	The FRA will assess the flood risk both to and from the Projects and demonstrate how that flood risk will be managed over the Projects' lifetime.
Flood Zone 1	Land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%).
Flood Zone 2	Land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (1% – 0.1%), or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding.
Flood Zone 3	Land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%), or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.
Frac-out	The unintentional return or inadvertent loss of drilling fluids from the borehole to the ground surface from points other than its entry and exit points, during a drilling operation.
Fragmentation	Breaking up of, for example, an area of land or habitat resulting in difficulties in accessing or using some or all of that land.
Future baseline	This is the theoretical situation that would exist in the absence of the Projects. This is based upon extrapolating the current baseline using technical knowledge of likely changes over the identified period (for example anticipated habitat change over time, climate change projections, traffic and waste volume growth over time, etc.).
Future Energy Scenarios (FES)	Published annually by the ESO to indicate future power requirements and where future connections may occur across the network.

Term	Definition
Gas Insulated Switchgear (GIS)	A Gas Insulated Switchgear (GIS) is the name for a unit that houses electrical components and circuits in a single gas tank with a compact footprint.
Geographic Information Systems (GIS)	GIS is a framework for gathering, managing and analysing data. It analyses spatial location data and organises layers of information into visualisations on maps.
Good practice measures	Actions that would occur with or without input from the Environmental Impact Assessment (EIA) feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements or actions that are considered to be standard practice used to manage commonly occurring environmental effects. These are referred to as 'tertiary measures' in accordance with the IEMA guidelines[3] and would form part of the Design and Control Measures for the Projects.
Graduated Swathes	Indicate the broad areas where the components of the new underground cables, converter stations, substations and landfall forming part of the English Onshore Scheme are likely to be located with the areas considered more likely to be developed shown as a darker colour.
Grid Supply Point (GSP)	A point of supply from the transmission system to a distribution network or transmission-connected load. Typically only large industrial loads are directly connected to the transmission system.
Grimsby to Walpole Project	Located in the Humber and East Midlands region of England, the Grimsby to Walpole Project will increase the capability of the electricity transmission system to carry clean green energy from the north of England to the Midlands and East Anglia. It is also required to connect and carry power from offshore windfarms, interconnectors, solar/battery storage proposals and high voltage direct current (HVDC) links that are planned to connect to the electricity transmission system... The Grimsby to Walpole Project is expected to comprise the construction and operation of approximately 140 km of new 400,000 volt (400 kV) overhead electricity transmission line. There will be associated works to connect the new route into substations at either end, and to alter existing infrastructure crossed by the route, including crossings of existing 400 kV transmission lines. Five new 400 kV substations are also needed as part of the Grimsby to Walpole Project.
Ground gas	A general term to include all gases occurring and generated within the ground whether originating from Made Ground or from natural soil or rock. Typically used to mean only potentially

[3] IEMA. (2016). Environmental Impact Assessment Guide to: Delivering Quality Development. Lincoln: IEMA

Term	Definition
	hazardous ground gases, such as carbon dioxide, methane, hydrogen sulphide, carbon monoxide and radon.
Groundwater Dependent Terrestrial Ecosystems	A category of wetlands whose vegetation is critically dependent on groundwater.
Guard vessel	During the construction stage of an offshore wind farm, a substation platform or a cable route, the construction site needs to be secured by a guard vessel. The vessel must constantly monitor marine traffic near the construction site visually and with radar and Automatic Identification System (AIS).
Habitat of Principal Importance (HPI)	Habitats identified as of principal importance for the purpose of conserving biodiversity in England, under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006[4]. These are based on the UK Biodiversity Action Plan Priority Habitats. The term is interchangeable with 'UK Priority BAP Habitat', 'Section 41 habitat', 'priority habitat' and 'NERCs 41 habitat'.
Habitats Regulations Assessment (HRA)	A HRA refers to the several distinct stages of assessment which must be undertaken in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended)[5] and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended)[6] as required under the Habitats Directive[7] to determine if a plan or project may affect integrity of the National Site Network (Special Protection Areas (SPAs), and potential SPAs (pSPAs), Special Areas of Conservation (SACs), and candidate or possible SACs (cSACs or pSACs); and Ramsar Sites) in the UK before deciding whether to undertake, permit or authorise the plan or project.
Habitat Suitability Index (HSI)	A technique used for evaluating the suitability of habitats for great crested newt in order to assess the likelihood of their presence or absence.
Habitat Suitability Modelling	A statistical technique that predicts the suitability of habitat for a given species e.g. bats. This can be used to assess distribution of a species from environmental variable data and presence records. Resulting in heat maps, identifying the most important flight paths and habitat connections for bats. The model identifies which of the environmental variables assessed (such as roads,

[4] UK Government. (2006). Natural Environment and Rural Communities Act 2006. [Online]. Available at: https://www.legislation.gov.uk/ukpga/2006/16/contents [Accessed: 13/02/2024]
[5] UK Government. (2017). The Conservation of Habitats and Species Regulations 2017. [Online]. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents/made [Accessed: 13/02/2024]
[6] UK Government. (2017). The Conservation of Offshore Marine Habitats and Species Regulations 2017. [Online]. Available at: https://www.legislation.gov.uk/uksi/2017/1013/contents/made [Accessed: 13/02/2024]
[7] European Union. (1992). Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. [Online].

Term	Definition
	the presence of woodland, or water) will most affect the distribution of a species.
Heavy Duty Vehicle / Heavy Goods Vehicle (HDV)	Goods vehicles and buses >3.5 t gross vehicle weight.
Hectare	Unit of area in the metric system equivalent to 10,000 square metres.
Heritage asset	A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage assets include designated heritage assets and assets identified by the local planning authority (including local listing).
Heritage significance	The significance of a heritage asset is the product of the value it holds for this and future generations as a result of its historic, archaeological, architectural or artistic interests.
High Water Springs or Mean High Water Springs (MHWS)	MHWS is the highest level that spring tides reach on the average over a period of time. The height of mean high water springs is the average throughout the year of two successive high waters during those periods of 24 hours when the range of the tide is at its greatest.
Historic buildings	Architectural, designed, or other structures with a significant historical value. These may include structures that have no aesthetic appeal or structures not usually thought of as buildings, such as milestones or bridges.
Historic Environment Records (HER)	These contain details on local archaeological sites and finds, historic buildings and historic landscapes and are regularly updated. This information is usually held in a database with a digital mapping system (Geographic Information System). There are over 80 HERs in England which are maintained and managed by local authorities.
Historic landscape	The current landscape, whose character is the result of the action and interaction of natural and/or human factors.
Historical Interest	A heritage asset with value from its association with past events or past people; or where a heritage asset is illustrative of a particular asset type, theme, or period.
Holford Rules	A series of guideline rules around overhead line routeing. The guidelines were initially developed in 1959 and have been reviewed on a number of occasions by NGET and by the other UK transmission licence holders. One of the reviews was against the Electricity Act 1989. The Guidelines provide a set of design criteria that have stood the test of time and become accepted

Term	Definition
	industry best practice in overhead line routeing. The guidelines now form an important part of national planning policy relating to the development of electricity networks, as set out in National Policy Statement EN-5[8].
Horizontal directional drilling (HDD)	A method of cable installation where the cable is drilled beneath a feature without the need for trenching.
Horlock Rules	A series of guideline rules for the siting and design of new substations, or substation extensions, converter stations and includes consideration of line entries and sealing end compounds (SECs). The guidelines were initially developed in 2003 and have been reviewed on a number of occasions by NGET, with a revised version issued in 2009. The Horlock Rules provide a set of principles which avoid, or reduce the environmental impacts associated with the development of substation infrastructure.
Hydromorphology	The physical character and water content of water bodies.
Impacts	For the purposes of the EIA and this Scoping Report, the term 'impacts' is used to describe the changes that arise as a result of the Projects (e.g. changes in drainage pattern).
In-combination effects	In-combination effects occur as a result of two or more impacts acting together (i.e. combined), to result in a new or changed effect on a single receptor
Index of Multiple Deprivation (IMD)	The IMD is the official measure of relative deprivation for small areas (neighbourhoods) in England. The IMD are calculated based on the following factors: income deprivation, employment, health and disability, education, skills and training, barriers to housing and services, crime and living environment.
Indicative Alignment	The alignment of the overhead lines and underground cables that has been identified through the options appraisal process to date.
Indirect and secondary effects	Indirect and secondary effects are those which are not caused immediately by the Projects but arise as a consequence of it. As such they would normally occur later in time or at locations farther away than direct effects. An example would be where water or gas pipes are damaged as a result of the Projects, and the consequences of that damage is fire or flood risk to other receptors.
Infiltration	Incident rainfall that percolates into the ground, rather than evaporating or running off.
Insulator	Insulators are part of an insulator set which in turn supports the conductors, which carry the electrical power and are at a high voltage, from the pylon steelwork which is taken to be at zero or

[8] National Policy Statement for Electricity Networks Infrastructure (EN-5).

Term	Definition
	earth potential (i.e. 0V). Insulators can be made of porcelain or toughened glass.
Inter-project effects	Arise as a result of the Projects in combination with other large-scale developments or projects.
Intra-project effects	Effects that occur as a result of two or more impacts acting together (i.e. combined, to result in a new or changed effects on a single receptor).
Interim Report	Produced to provide a record of archaeological features that have been excavated, showing where these features are and offering preliminary interpretation.
Intertidal area	The area that lies between Mean High Water Springs (MHWS) and Mean Low Water Springs (MLWS), where the terrestrial and marine planning regimes overlap.
Invasive non-native species	An invasive non-native species is any non-native animal or plant that has the ability to spread, causing damage to the environment, the economy, health, and way of life.
Iron Age	-800 Before Common Era (BCE) to 43 Common Era (CE).
Jack-up barge	A jack-up barge or a self-elevating unit is a type of mobile platform that consists of a buoyant hull fitted with a number of movable legs, capable of raising its hull over the surface of the sea. Often used as a base for servicing other structures such as offshore wind turbines, long bridges, and drilling platforms.
Joint bay	Underground structures constructed at regular intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts.
Kilometre	A unit of linear measurement (1,000 metres).
Kilovolts (kV)	A unit of electromotive force, equal to 1,000 volts.
$L_{Aeq\ T}$	The A-weighted L_{eq} sound level measured over a specified period of time.
Land cover	The surface cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use.
Landfall	The identified section of the intertidal area where the offshore and onshore components of the Projects meet and transition from submarine cables to land cables.
Landfall study area	A search area of 1 km around each of the identified preliminary landfall areas and associated preliminary offshore subsea cable routes.

Term	Definition
Landform	The shape and form of the land surface resulting from combinations of geology, geomorphology, slope, elevation and physical processes.
Land use	What land is used for, based on broad categories of functional land cover such as urban and industrial use and the different types of agricultural and forestry.
Landscape	An area, as perceived by people, the character of which is the result of the action and integration of natural and/or human factors.
Landscape character	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.
Landscape Character Area (LCA)	Discrete geographical areas of a particular landscape type with a broadly consistent character, which might include: pattern of topography, land use, vegetation cover, geology, cultural and ecological features, pattern of evolution, visual and perceptual qualities and habitats.
Landscape Character Type (LCT)	Generic, typically homogenous types of landscape that may occur in different parts of the country. They have similar geology, topography, drainage patterns, vegetation, land use, patterns of settlement and aesthetic character.
Landscape susceptibility	The ability of the landscape (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or features, or a particular aesthetic and perceptual aspect) to accommodate the Projects without undue consequences for the maintenance of the baseline situation.
Landscape value	The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons.
Light Duty Vehicle / Light Goods Vehicle (LGV)	Cars and small vans <3.5 t gross vehicle weight.
Likely Working Area	All working areas required to facilitate the construction of the English Onshore Scheme.
Limit of Deviation	Identify a maximum distance or measurement of variation within which the permanent works must be constructed. These comprise lateral (i.e., on the ground) and vertical limits (in relation to height).
Lincolnshire Connection Substation (LCS)	A new 400 kV substation, located in East Lindsey proposed by the Grimsby to Walpole Project.

Term	Definition
Listed Building	A building or structure of special historical or architectural/artistic interest. Designated by the Department for Digital, Culture, Media and Sport. All buildings built before 1700 which survive in anything like their original condition are likely to be listed, as are most buildings built between 1700 and 1850.
Local Development Framework (LDF)	A set of spatial planning strategy documents which will guide future development within a local authority.
Local Geological Sites	A non-statutory designation for regionally important geological and geomorphological sites that have been identified as being of importance locally.
Local Nature Reserve	Sites dedicated by the local authority under Section 21 of the National Parks and Access to the Countryside Act 1949 for nature conservation which have wildlife or geological features that are of special interest locally.
Local planning authority	The public authority whose duty it is to carry out specific planning functions for a particular area.
Local Wildlife Site (LWS)	Non-statutory nature conservation sites of local value.
Low Water or Mean Low Water Springs (MLWS)	The height of MLWS is the average throughout a year of the heights of two successive low waters during those periods of 24 hours (approximately once a fortnight) when the range of the tide is greatest.
Lower Layer Super Output Area (LSOA)	LSOAs are a geographic hierarchy designed to improve the reporting of small area statistics in England and Wales.
Lowest Observed Adverse Effect Level (LOAEL)	This is the level above which adverse effects on health and quality of life can be detected.
Macroinvertebrate	Any invertebrate organism which can be seen with the naked eye.
Macrophyte	Aquatic plants that grow in or near water.
Made ground	Made ground is land where natural and undisturbed soils have largely been replaced by man-made or artificial materials.
Magnetic field	A measure of the force experienced by a moving electric charge, due to the motion of other charges.
Magnitude of change	A term that combines judgements about the size and scale off the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration.
Major accident	A major accident is an event that threatens immediate or delayed serious environmental effects to human health, welfare and/or the

Term	Definition
	environment and requires the use of resources beyond those of the client or its appointed representatives (i.e. contractors) to manage. Major accidents can be caused by disasters resulting from both man-made and natural hazards
Main river	Usually larger rivers and streams that the Environment Agency maintain and improve to manage flood risk.
Marine Conservation Zone	Marine areas that protect a range of nationally important, rare or threatened habitats and species.
Mean High Water Springs (MHWS) or High Water Springs	MHWS is the highest level that spring tides reach on the average over a period of time. The height of mean high water springs is the average throughout the year of two successive high waters during those periods of 24 hours when the range of the tide is at its greatest.
Mean Low Water Springs (MLWS) or Low Water Springs	The height of MLWS is the average throughout a year of the heights of two successive low waters during those periods of 24 hours (approximately once a fortnight) when the range of the tide is at its lowest.
Mechanical ploughing	A mechanical plough is a device towed along the seabed and is optimised to help deliver reductions in the cost of offshore wind installation and to minimise project risk by combining operations to reduce the time required to install subsea cables.
Medieval	1066 to 1540 Common Era (CE).
Mesolithic	-10,000 to -4,000 Before Common Era (BCE).
Metocean	Metocean conditions refer to the combined wind, wave and climate (etc.) conditions as found on a certain location.
Metre	A unit of linear measurement.
Micro bore	A type of trenchless crossing technique in which a pit is created wither side of the constraint or infrastructure being crossed and a micro bore is created from one pit to the other.
Mineral reserve	Mineral deposit whose extraction is economically feasible.
Mitigation	Mitigation is an alternative term used to refer to Design and Control Measures (modifications to the location, design or operation of the Projects to mitigate against environmental impacts) and typically comprises measures to avoid, prevent, reduce or if possible, offset the likely significant adverse effects on the environment. NGET has taken the approach of, where possible, embedding measures into the Projects' design to reduce effects, for example avoiding ancient woodland and veteran trees through appropriate design ensuring for example,

Term	Definition
	permanent infrastructure or construction working areas avoid such features.
Mobile elevating work platforms	A type of equipment that allows working at height comprising a working platform on an extending structure and chassis, with controls for operation.
Modern	1901 to present.
Mooring	Lassoing, tethering, tying, or otherwise securing your boat to a fixed object, such as a mooring buoy, rather than dropping an anchor to secure your vessel.
National Cycle Network (NCN)	The NCN is a UK-wide network of signed paths and routes for walking, cycling, wheeling and exploring outdoors.
National Grid Group	In addition to National Grid Electricity Transmission (NGET), the wider National Grid Group comprises several other businesses, including National Grid Ventures and National Grid Electricity Distribution. These businesses are not licenced Transmission Owners and do not develop the national transmission system.
National Grid Electricity Distribution Plc (NGED)	In June 2021 Western Power Distribution was acquired by National Grid Group. It remains a separate company from National Grid Electricity Transmission (NGET), operating within the wider National Grid Group and recently rebranded as National Grid Electricity Distribution. NGED is a Distribution Network Operator (DNO) operating in proximity to the Project.
National Grid Electricity Transmission (NGET)	NGET operates the national electricity transmission network across Great Britain and own and maintain the network in England and Wales, providing electricity supplies from generating stations to local distribution companies. NGET does not distribute electricity to individual premises, but its role in the wholesale market is vital to ensuring a reliable, secure, and quality supply to all. NGET is the Applicant for the Development Consent Order (DCO).
National Landscape (NL)	An NL is land protected by the Countryside and Rights of Way Act 2000 (CROW Act). It protects the land to conserve and enhance its natural beauty.
National Nature Reserve	Sites that are dedicated by the statutory country conservation agencies, under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981, for nature conservation and which have wildlife or geological features that are of special interest nationally.
National Policy Statement (NPS)	Government planning policy relating to the development of Nationally Significant Infrastructure Projects (NSIPs) is set out in the relevant National Policy Statement (NPS). NSIPs should be

Term	Definition
	developed in accordance with the relevant NPS. In the case of new electricity transmission routes, the relevant energy-related NPS' are EN-1; Overarching NPS for Energy[9], and EN-5; Electricity Networks[8].
National Site Network	Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) in the UK no longer form part of the EU's Natura 2000 ecological network. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 have created a national site network on land and at sea, including both the inshore and offshore areas in the UK. The national site network includes: • Existing SACs and SPAs; and • New SACs and SPAs designated under these Regulations. Designated Wetlands of International Importance (known as Ramsar sites) do not form part of the national site network. Many Ramsar sites overlap with SACs and SPAs and may be designated for the same or different species and habitats. All Ramsar sites remain protected in the same way as SACs and SPAs.
Nationally Significant Infrastructure Project (NSIP)	Project as defined in Part 3 of the Planning Act 2008, which must be consented by a Development Consent Order (DCO).
National Vegetation Classification	System of classifying natural habitat types in Great Britain according to their vegetation types.
Natural Capital (NC)	The total stock of natural resources and services provided by natural assets which benefit people.
Natural High Ground	Any extent along a watercourse or coastline which completes the line of continuous defence, but has not been modified in any way, so does not qualify as any of the other defence asset types.
Natural Superficial Deposits	Geologically recent deposits that consist of various sediments (clay, sand, gravel etc.) and sit on top of the bedrock.
Nautical Mile	A nautical mile is a unit of measurement used in air, marine, and space navigation, and for the definition of territorial waters. It is based on the circumference of the earth and is equal to one minute of latitude. It is slightly more than a statute (land measured) mile (1 nautical mile = 1.1508 statute miles). Nautical miles are used for charting and navigating.
Navigational dredging sites	Dredging sites to deepen berths and channels for the purpose of navigation. Navigational dredging will usually require a licence

[9] Overarching National Policy Statement for Energy (EN-1).

Term	Definition
	but there is an exemption available for low volume dredging and harbour authorities in certain circumstances.
Navigational Risk Assessment	Navigation (Marine) Risk Assessment identifies and assesses the hazards and risks affecting vessel navigation, before considering current controls to mitigate risks and further controls that could be adopted to minimise risk as low as reasonably practicable (ALARP).
Neolithic	-4,000 to -2,200 Before Common Era (BCE).
Nitrous Dioxide (NO_2)	Reddish brown gas (in high concentrations), respiratory irritant and precursor to photochemical processes which produce other pollutants, photochemical smog and contribute to global warming.
Nitrous Oxide (NOx)	Inert product of combustion, which does not contribute to local air pollution.
Noise and Vibration Management Plan	Noise and Vibration Management Plan (NVMP) incorporates the measures proposed and procedures for the management of noise and vibration arising from the construction of the Projects.
Noise Important Area	Determined via strategic noise maps and highlight the residential areas experiencing the highest 1% of noise levels from road and rail sources in England.
Non-Road Mobile Machinery (NRMM)	A broad category which includes mobile machines, and transportable industrial equipment or vehicles which are fitted with an internal combustion engine and not intended for transporting goods or passengers on roads.
Non-statutory consultation	Non-statutory consultations are consultations that are not held pursuant to Section 42 and 47 of the Planning Act 2008. For the Projects, these are held in 2024.
Non-statutory designated site	A site designated at a local level for its biodiversity and/or geological value. These are not underpinned by legislation.
Notice to Mariners	A notice to mariners advises mariners of important matters affecting navigational safety, including new hydrographic information, changes in channels and aids to navigation, and other important data. Over 60 countries which produce nautical charts also produce a notice to mariners.
Ofgem	The Office of Gas and Electricity Markets, supporting the Gas and Electricity Markets Authority, is the government regulator for the electricity and downstream natural gas markets in Great Britain.
Optical Ground Wire	A type of cable which runs between the tops of the pylons. The conductive part of the cable serves to bond adjacent pylons to

Term	Definition
	earth ground or ground potential, and shields the high-voltage conductors from lightning strikes. The optical fibres within the cable can be used for high-speed transmission of data.
Options appraisal	A robust and transparent process used to compare options and to assess the positive and negative effects they may have across a wide range of criteria including environmental, socio-economic, technical and cost factors. The outcome is to identify a Strategic Proposal for the Projects.
Options Identification and Selection	Work undertaken to determine the preferred corridor and preliminary routeing and siting options for the Projects. It is intended to demonstrate how NGETs statutory duties, licence obligations, policy considerations, environmental, socio-economic, technical, cost, and programme issues have been considered and provide information on the approach to the identification and appraisal of route corridors and siting locations.
Order Limits	The extent of the area within which the Projects may be constructed and operated.
Ordinary watercourse	Watercourses that are not main rivers, and that Lead Local Flood Authorities (LLFAs), district councils and Internal Drainage Boards (IDBs) maintain.
Outage	A period of interruption to electricity supply.
Outline Soils Management Plan	The Outline Soil Management Plan (OSMP) sets out principles and procedures for general good practice mitigation tailored to specific soil types, for the handling, storage and reinstatement of soil to be used for the Projects to minimise adverse effects on the nature and quality of the soil resource.
Overhead line	Infrastructure carrying electric current, strung from pylon to pylon.
Overhead Line Noise Assessment	An appraisal of the character and significance of overhead line noise as a material outcome of the Projects.
Palaeolithic	-1,000 000 to -10,000 Before Common Era (BCE).
Particulate matter (PM_{10} and $PM_{2.5}$)	PM is the term used to describe condensed phase (solid or liquid) particles suspended in the atmosphere. Their potential for causing health problems is directly linked to the size of the particles. PM_{10} is particulate matter with a diameter of 10 microns or less (also referred to as micrometres or 1/1000th of a meter). $PM_{2.5}$ is particulate matter 2.5 microns or less in diameter.
Pathway (for contamination)	A route or means by which a receptor could be, or is, exposed to or affected by a contaminant.

Term	Definition
Peak Particle Velocity	A measurement of vibration level, being the maximum rate of displacement of the vibration propagation medium (such as the ground) for a given event, such as the impact of a piling hammer, at specific locations.
Pedestrian amenity	The effect on the relative pleasantness of a pedestrian journey as a result of changes in traffic flow, traffic composition and pavement width / separation from traffic.
Pedestrian delay	The ability of people to crossroads as a result of changes in traffic volume, composition and speed, the level of pedestrian activity, visibility and general physical conditions.
Permanent effects	These are effects that will remain even when the Projects are complete, although these effects may be caused by environmental changes that are permanent or temporary.
Phytotoxic	Displaying toxicity towards plants.
Pipe jack	A type of trenchless crossing technique in which a pit is created wither side of the constraint or infrastructure being crossed and applying force to push a pipe through from one pit to the other.
Post Lay Burial	This is the final stage of the cable laying process where the subsea cable is buried.
Post Medieval	1540 to 1901 Common Era (CE).
Potential roost feature (PRF)	PRFs are features with the potential to be used as bat roosts. These can be associated with buildings, structures and trees.
Power control devices	Power control devices are designed to increase or decrease the apparent reactance of a line, thereby pushing power away from or pulling more power towards the circuit on which they are installed.
Pre-lay grapnel run	The Pre-lay Grapnel Run – or PLGR – occurs a few days before the installation. The ship dredges a grapnel to clear any obstacle that could obstruct the plough, such as fishing nets, ropes, lines.
Pre-sweep dredging	Before installation of a pipeline or cable, pre-sweeping of sand waves is usually required in order to level the seabed. One or more dredgers may do the pre-sweeping with pipe-laying vessels following behind. The pre-sweeping operation prepares a smooth enough seabed upon which to lay the pipeline or cable.
Preliminary Environmental Information Report (PEIR)	A report containing Preliminary Environmental Information (PEI) as set out in The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017[10].

[10] UK Government. (2017). The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. [Online]. Available at: https://www.legislation.gov.uk/uksi/2017/572/contents [Accessed: 13/02/2024].

Term	Definition
Primary measure	Measures which comprise modifications to the location, design or operation of the Projects made during the pre-application phase so are an inherent part of the Projects, and do not require additional action to be taken. Examples include locating a cable so as to avoid an effect on a designated site or sensitive receptor.
Priority Hazardous Substance	Substances which are toxic and persistent in the water environment, defined by the Water Framework Directive (WFD).
Projects ('the Projects')	The Projects is the collective term used to refer all elements of EGL 3 and EGL 4 which are the subject of this Scoping Report i.e. the English Onshore Scheme and the English Offshore Scheme. More specifically, the Projects comprise the 'Authorised' development and 'Associated' development for EGL 3 and EGL 4 that will be subject to a Development Consent Order (DCO) application. In some instances, the Projects are referred to individually, the 'EGL 3 Project' and the 'EGL 4 Project'.
Project Need Case	Sets out the reasons why the Projects are required.
Proposed Developments (see also: The Eastern Green Link 3 and Eastern Green Link 4 Proposed Developments)	Term used to describe the components of the Projects considered to constitute 'authorised development' in letters issued by NGET to the Secretary of State for Energy Security and Net Zero (the SoS), requesting directions under section 35 of the PA 2008 related to development forming part of the Projects.
Protected Lane	Country lanes and byways of historic and landscape value that make an important contribution to rural character, which have been designated as having 'Protected Lane' status in development planning policy.
Protected wreck	A shipwreck designated under the Protection of Wrecks Act 1973.
Public Rights of Way (PRoW)	These are designated routes under the CroW Act 2000, which the public can use at any time.
Public Rights of Way Management Plan	Public Rights of Way Management Plan (PRoWMP) sets out NGET's approach to managing Public Rights of Way throughout the duration of the Projects.
Pylon	Metal structure used to carry overhead electrical conductors, insulators and fittings.
Radon	A naturally occurring radioactive chemical element, which occurs as a gas.
Ramsar sites	Wetlands of international importance designated under the Ramsar Convention.

Term	Definition
Rating (electricity)	This term refers to the maximum amount of power that the equipment within a substation can safely operate in.
Rating level (noise)	The specific sound level, with the addition of character corrections to consider certain acoustic features that could potentially increase the significance of impact. If no acoustic features are present then the rating level is equal to the specific sound level.
Receptor	A component of the natural or man-made environment such as water or a building that is affected by an impact.
Reconductoring	The replacement of old conductors (wires), insulators, earthwires, etc on an existing overhead line and may also require pylon steelwork and foundations to be strengthened or replaced.
Registered Battlefield	Register of nationally significant military engagements maintained and designated by Historic England.
Registered Park and Garden	Sites of particular historic significance typically comprising gardens, grounds and other planned open spaces, such as town squares and identified on the Register of historic parks, gardens, grounds, and planned open spaces is maintained and designated by Historic England.
Reinstatement	Reinstatement generally refers to restoring conditions and features to their previous condition once construction work for the Projects are complete. For example, reinstating soil or land drains to ensure that ground conditions are the same as before the Projects commenced. With regards to habitat, tree and hedgerows that have been removed during construction works this refers to where such features would be re-instated to their original location or as close to that as possible, and original condition (except for example, where vegetation removed was diseased). For example, sections of hedgerow may need removing for a temporary period for construction works to install an access road. Where possible these would be reinstated once construction works are completed, and the temporary access removed. With reference to planting the terms 'reinstatement' and 'replacement' are used interchangeably within the DCO application and ES.
Riparian	Relating to or situated on the banks of a watercourse.
Road links	A linear spatial object that describes the geometry and connectivity of a road network between two points in the network.
Rochdale Envelope	The 'Rochdale Envelope' or 'Design Envelope' is an approach to consenting and Environmental Impact Assessment (EIA), named after a UK planning law case, which allows the promoters of

Term	Definition
	projects to broadly define their projects within agreed parameters to retain flexibility of design.
Rock placement vessel	A rock placement vessel or fallpipe vessel (FPV) is a self-propelled vessel that is equipped with a flexible fallpipe. The vessel's design allows the fallpipe to be lowered into the water beneath the vessel. Uniquely, the fallpipe vessel can position rock with extreme accuracy down to a depth of 1,500 meters.
Romano-British	43 to 410 Common Era (CE).
Root Protection Area (RPA)	A notional area of tree root spread (as calculated per BS5837) considered as the minimum volume necessary to ensure tree health and function.
Section 41 of Natural Environment and Rural Communities Act 2006	Section 41 of the Natural Environment and Rural Communities Act 2006 (NERC Act 2006) lists species and habitats of principal importance in England for the purpose of conserving biodiversity.
Sandbank	A raised area of sand within the sea or river which may also be visible a low tide.
Sandwave	A seabed structure formed by currents.
Sandwave dredging	The process of clearing sandwaves by dredging prior to cable installation.
Schedule 1 Species	Bird species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended)[11], for which it is an offence to intentionally or recklessly disturb birds and their young at, on or near an 'active' nest.
Scheduled Monument	Nationally important archaeological and heritage assets and sites protected by the Ancient Monuments and Archaeological Areas Act 1979[12]. Designated by the Department for Digital, Culture, Media and Sport. These can be above or below-ground and do not need to be ancient.
Scoping Opinion	In the context of Development Consent Order (DCO) applications, a Scoping Opinion is requested from the Planning Inspectorate on behalf of the relevant Secretary of State, to inform the requirements of EIA process and ultimately the ES which will be submitted as part of the application for development consent. Through the scoping process the views of the statutory consultees and other relevant organisations on the proposed scope of the EIA are sought.

[11] UK Government. 1981. Wildlife and Countryside Act 1981. [Online]. Available at: https://www.legislation.gov.uk/ukpga/1981/69 [Accessed: 13/02/2024]

[12] UK Government. (1979). Ancient Monuments and Archaeological Areas Act 1979. [Online]. Available at: https://www.legislation.gov.uk/ukpga/1979/46 [Accessed: 13/02/2024]

Term	Definition
Scoping Boundary	The Scoping Boundary is defined at an early stage of a project at scoping, to represent the likely maximum extent of development at that time. Following the receipt of a Scoping Opinion and further design development, the Scoping Boundary will be refined and replaced by the Order Limits.
Scottish Offshore Scheme	All components of EGL 3 and EGL 4 within the Scottish marine environment up to the MHWS in Scotland.
Scottish Onshore Scheme	All components of EGL 3 and EGL 4 between the electrical transmission connection point in Scotland and Mean Low Water Springs (MLWS) in Scotland.
Seabed plough	Subsea cable ploughs are used for the process of pre-trenching cable routes and backfilling the seabed and are designed to work in a seabed consisting mostly of sands and clays, where the seabed is well known and understood.
Security and Quality of Supply Standard (SQSS)	The SQSS sets out a coordinated set of criteria and methodologies that the Transmission Licences shall use in the planning and operation of the national electricity transmission system.
Sensitivity	A term applied to specific receptors, combing judgements of the susceptibility of the receptors to the specific type of change or development proposed and the value related to that receptor.
Setting	The surroundings in which a heritage asset is experienced. 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 significance of an asset, may affect the ability to appreciate an asset, or may be neutral.
Severance	The separation of people from places and other people and places or impede pedestrian access to essential facilities.
Side-Scan Sonar surveys	Side-scan sonar produces a detailed picture of the seafloor or riverbed, regardless of water clarity. The system, which may be towed from a surface vessel or mounted on a ship's hull, emits fan shaped pulses down towards the seafloor across a wide angle, perpendicular to the path of the sensor through the water.
Significance	A measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic.
Significant Observed Adverse Effect Level (SOAEL)	This is the level above which significant adverse effects on health and quality of life occur.

Term	Definition
The Site	Term used describe all the land within the Scoping Boundary. The term will be used to describe all land within the Order Limits, which will replace the Scoping Boundary.
Site of Special Scientific Interest (SSSI)	An area of land designated by Natural England as being of special interest by reason of its flora, fauna or geological or physiographical features. SSSIs are designated and legally protected under the Wildlife and Countryside Act 1981 (as amended).
Siting Area	An area of land within which a converter station, substation or switching station could be sited.
Siting Zone	An area of land within which multiple Siting Areas could be located.
Soil association	Represent a group of soil series (soil types) which are typically found occurring together in the landscape.
Soil compaction	Degradation of soil structure, which can be caused by heavy loading, resulting in a reduction in the voids within the soil.
Soil stockpiles	Mounds of soil created through the storage of soil materials which have been stripped from an area of construction.
Source (of contamination)	A substance that is in, on or under the land and that has the potential to cause harm or to cause pollution of Controlled Waters.
Source Protection Zone	A defined area around a drinking water source that carries statutory protection from damaging activities.
Special Area of Conservation (SAC)	Protected areas in the UK designated under the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales.
Special Protection Area (SPA)	Protected areas for birds in the UK classified under the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales. Areas classified under regulation 15 of the Conservation of Habitats and Species Regulations 2017, which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds.
Species of Principal Importance (SPI)	Species identified as of principal importance for the purpose of conserving biodiversity in England, under Section 41 of the NERC Act 2006. These are based on the UK Biodiversity Action Plan Priority Species. The term is interchangeable with ‘UK

Term	Definition
	Priority BAP Species', 'Section 41 species', 'priority species' and 'NERCs 41 species'.
Specific sound level	The equivalent continuous A-weighted sound pressure level produced by a specific sound source (i.e. the sound source under assessment in accordance with BS 4142:2014) at the assessment location over a given reference time interval, Tr.
Statutory Consultation	Consultation required by law with defined stakeholders, as required under Section 42 to Section 44 of the Planning Act 2008. Statutory Consultation for the Projects is expected to take place in 2025.
Statutory designated site	A site which receives protection by means of legislation in recognition of its biodiversity and/or geological value.
Strategic Proposal	The outcome of the strategic options appraisal; the Strategic Proposal is then taken forward to the Options Identification and Selection stage.
Strategic Road Network (SRN)	The SRN is made up of motorways and trunk roads (the most significant 'A' roads).
Study Area	Area over which data has been collected and a technical assessment in the Environmental Impact Assessment (EIA) has been undertaken. The extent of the Study Area varies depending on the type of assessment and nature of the project.
Substation	Electrical equipment in an electric power system through which electrical energy is passed for transmission, transformation, distribution or switching.
Subsoil	The layer of soil under the topsoil on the surface of the ground, lacking in the levels of organic matter found in topsoil.
Super Grid Transformer	Used at substations along the electricity transmission system to increase or reduce voltage.
Superficial geology	Uncemented sediments, such as alluvium, immediately beneath the soil and above the bedrock.
Suspended Particulate Matter	Suspended particulate matter (SPM) are finely divided solids or liquids that may be dispersed through the air from combustion processes, industrial activities or natural sources.
Suspended sediment concentration	Is defined as the total value of both mineral and organic material carried in suspension by a river.
System Boundaries	A boundary splits the national electricity transmission system into two parts, crossing critical circuit paths that carry power between areas and where power flow limitations may be encountered. Boundaries help identify regions where reinforcement is most

Term	Definition
	needed by enabling analysis of power transfers between separated areas. They can be local boundaries, which are small areas of the Transmission System with a high concentration of generation, or wider boundaries, which are large areas containing significant amounts of both generation and demand.
Tee	The point at which two electrical routes connect together.
Temporary effects	These are effects that are related to environmental changes associated with a particular activity and that will cease when that activity finishes.
Tensioning site	A site where the new conductor is fed out from during construction. This also includes a tensioning winch to keep the conductor off the ground.
Tertiary measures	Measures that would occur with or without input from the EIA feeding into the development process. These include actions that will be undertaken to meet other existing legislative requirements or actions that are considered to be standard practice used to manage commonly occurring environmental effects, for example, standard control measures implemented during construction.
Three-ended connection	A three-ended connection is use of an additional circuit to build-in extra resilience into the electricity transmission network. Most High Voltage Direct Current (HVDC) electricity links are two-ended allowing power to be transported from where it is being generated to where it is needed. The control systems of a HVDC electricity link allow proportional and directional control of power flow which can be altered very quickly in response to network needs. The role of a third connection (circuit) is to provide additional flexibility in the network which would allow power flows to be rapidly re-routed in the event of an unplanned circuit outage thereby preventing some parts of the network becoming overloaded.
Topsoil	The uppermost layer of soil, usually with the highest concentration of nutrients, organic matter and microorganisms.
Traffic separation scheme	A maritime traffic management route system ruled by the International Maritime Organisation.
Tranquillity	A state of calm and quietude associated with peace, considered to be a significant asset of landscape.
Transboundary effects	Transboundary effects are those effects that would affect the environment in another state within the European Economic Area (EEA).
Transition joint bay	Buried concrete pad with joint connecting offshore and onshore cables located above Mean High Water Springs (MHWS).

Term	Definition
Tree Preservation Order (TPO)	A statutory designation protecting trees, administered by the relevant local planning authority.
Trenched	Installation of the cable using an open trench to lay the cable within before backfilling.
Trenchless	Installation of a cable below a constraint or other infrastructure without using a trench.
Underground Cable	An insulated conductor carrying electric current designed for underground installation.
Vessel Monitoring System	Vessel Monitoring System data tracks vessels in a similar way to an Automatic Identification System but this data has historically been restricted to government regulators or other fisheries authorities.
Vessel-side discharge methods	A method used for placing material after a subsea cable has been laid. Less precise than using a fall-pipe vessel.
Vibration	Vibration is an oscillatory motion. The magnitude of vibration can be defined in terms of displacement, i.e. how far from the equilibrium something moves, velocity (how fast something moves), or acceleration (the rate of change of velocity).
Visual effect	The change in the appearance of the townscape as a result of the development. This can be positive or negative.
Visualisation	A computer simulation, photomontage or other technique illustrating the predicted appearance of a project to aid engagement with consultees.
Visual receptor	Individuals and/or defined groups of people who have the potential to be affected by a project impacting upon their views.
Water jetting	High Pressure Water Jetting (also known as hydroblasting and water cutting) is an industrial tool capable of removing material and cleaning a wide variety of materials using extremely high-pressure jets of water, or a mixture of water and chemicals.
Working area	The working area refers to the area of land that is likely to form part of the construction site. This is not the same as the Scoping Boundary, as there may be parts of the Scoping Boundary that lie outside the working area.
Working width	The temporary working area required to install a cable which normally includes stock proof fencing, temporary drainage, access road, topsoil and sub soil storage and the cable trench.
World Heritage Site	A natural or man-made site, area, or structure recognised as being of outstanding international importance and therefore as

Term	Definition
	deserving special protection. Sites are nominated to and designated by the World Heritage Convention.
Zone of Influence (ZoI)	An identified geographical area around the Projects where there is a potential for impacts to occur.
Zone of Theoretical Visibility (ZTV)	The likely (or theoretical) extent of visibility of a development, usually shown on a map.

1. Introduction

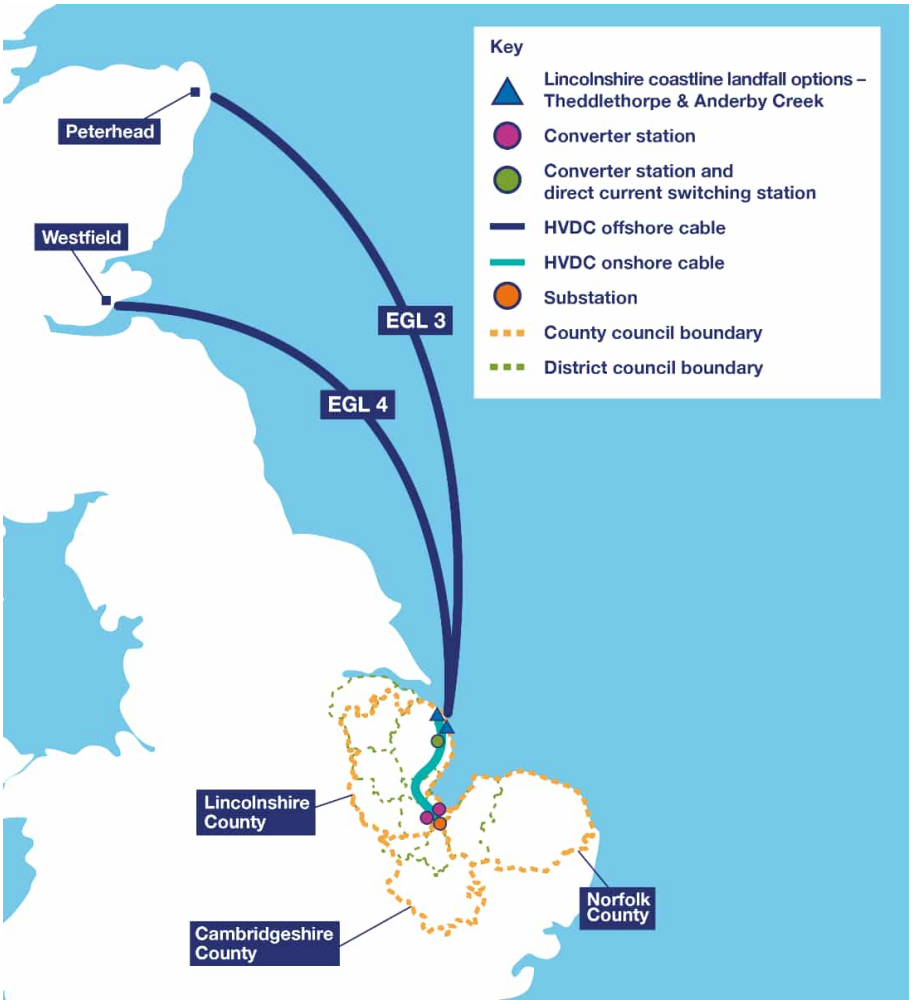
nationalgrid

1. Introduction

1.1 Overview

1.1.1 National Grid Electricity Transmission plc (NGET) and Scottish Hydro Electric Transmission Ltd (SHE-Transmission), who are operating and known as Scottish and Southern Electricity Networks Transmission (SSEN Transmission), are jointly developing proposals for a 2 Gigawatt (GW) High Voltage Direct Current (HVDC) link between Peterhead, Aberdeenshire in Scotland, and King's Lynn and West Norfolk, Norfolk in England, known as Eastern Green Link 3 (EGL 3). In parallel with EGL 3, NGET is also developing proposals with Scottish Power Transmission (SPT), who are operating and known as Scottish Power Energy Networks (SPEN) for a 2 GW HVDC link between Westfield, Fife in Scotland and King's Lynn and West Norfolk, Norfolk in England (**see Figure 1-1: Overview of EGL 3 and EGL 4**), known as Eastern Green Link 4 (EGL 4). Collectively, the entire extent of EGL 3 and EGL 4 i.e. between the connection points onshore in Scotland and the connection point onshore in England, are referred to as 'EGL 3 and EGL 4'.

Figure 1-1: Overview of EGL 3 and EGL 4



1.1.2 EGL 3 and EGL 4 are two proposed new electrical connections being developed by NGET, SSEN Transmission and SPEN as part of a major programme to reinforce the electricity transmission system between Scotland and England. EGL 3 and EGL 4 form part of 'The Great Grid Upgrade', which is building the significant new electricity network infrastructure required to reduce the UK's reliance on fossil fuels by connecting 50GW of offshore wind by 2030. The Great Grid Upgrade is the largest overhaul of the electricity grid in generations and will play a big part in the UK government's plan to boost homegrown power (Ref 1.1).

1.1.3 EGL 3 and EGL 4 are separate projects, independent of one another; however, they have a common landfall on the Lincolnshire coastline, a common connection point to the existing transmission network in Norfolk and they also follow the same onshore cable route for the majority of their length. Therefore, EGL 3 and EGL 4 are being consented by a single Development Consent Order, as two coordinated and predominantly co-located projects in England.

1.2 The role of National Grid Electricity Transmission plc

1.2.1 NGET owns, builds and maintains the national high voltage electricity transmission system throughout England and Wales. The licence areas for NGET are shown on **Figure 1-2: Transmission Operator Boundaries.** NGET is responsible for making sure electricity is transported safely and efficiently from where it is produced (such as wind farms, solar farms and power stations) to the local distribution network operators (DNOs) and for developing upgrades to the network as agreed with the industry regulator, the Office of Gas and Electricity Markets (OfGEM). The DNO boundaries relevant to the Projects are illustrated on **Figure 1-3: Distribution Network Operator Boundaries and Scoping Boundary for English Onshore Scheme.**

1.2.2 The National Grid Electricity System Operator (ESO) controls and operates the high voltage electricity transmission system in England and Wales. National Grid ESO is a legally separate business, balancing electricity supply and demand to ensure homes and businesses in Great Britain have the electricity they need 24/7. The planning and development of the electricity transmission system is governed by the Security and Quality of Supply Standards (SQSS) which ensure that the network is developed and operated securely and is resilient to any foreseeable network faults and disruption. It is currently proposed that the ESO will become a wholly separate entity in summer 2024 and will no longer form part of the National Grid Group of companies. The ESO facilitates several roles on behalf of the electricity industry, including making formal offers to connection applicants to the National Electricity Transmission System (NETS).

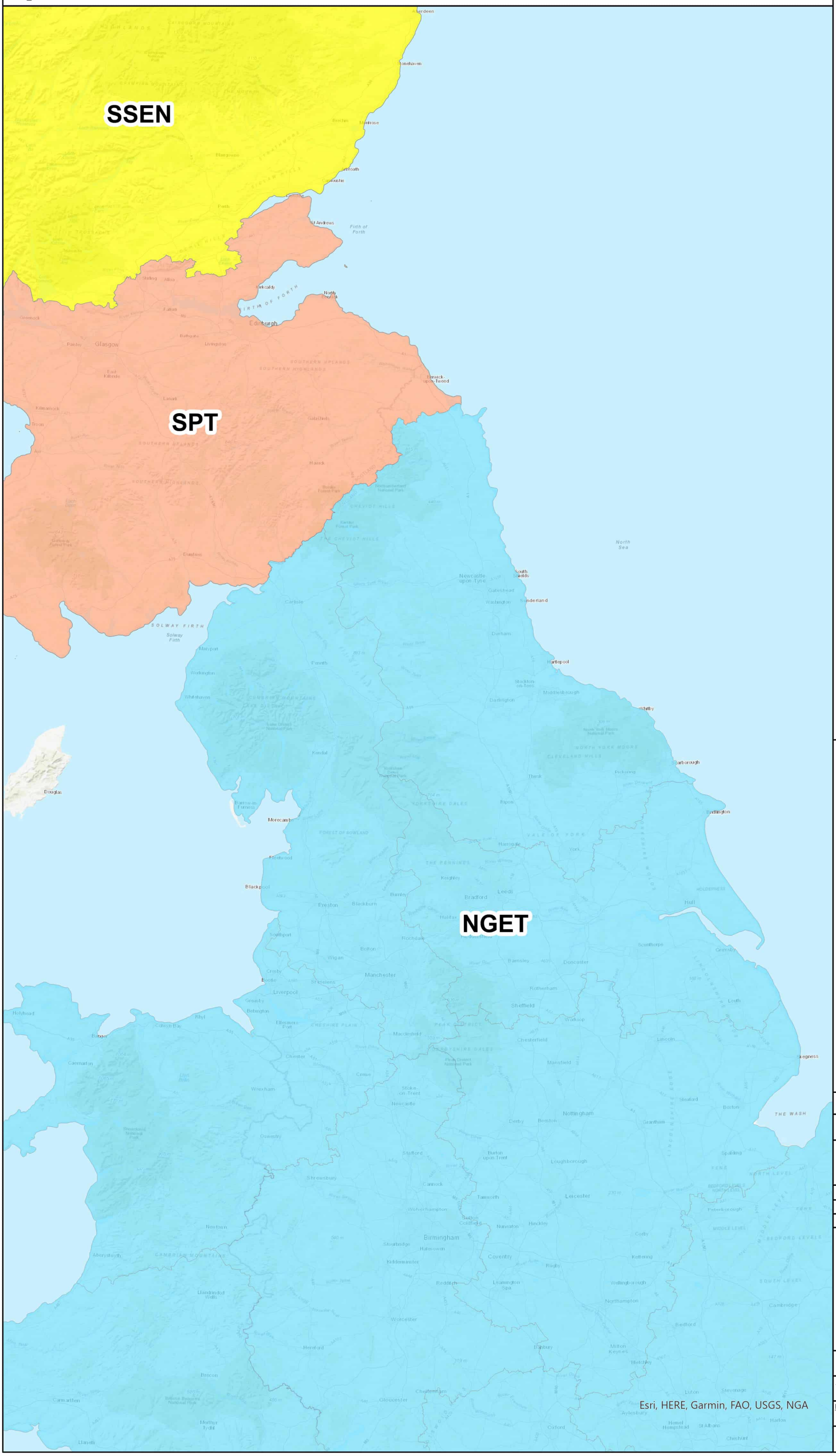
1.2.3 Under the Electricity Act 1989, NGET holds a transmission licence, under which it has a legal duty to develop and maintain an efficient, coordinated and economical electricity system. NGET's transmission system in England and Wales consists of approximately 7,250 km of overhead lines and a further 1,450 km of underground cables, operating at 400 kilo volts (kV) and 275 kV. The 275 kV grid was developed in the 1950s to provide a national electricity transmission system, and then developed further from the mid-1960s, at 400 kV to increase its power carrying capacity. The overhead lines and underground cables connect over 300 substations to form a highly interconnected network. The substations provide points of connection to the local distribution networks, which operate at voltages from 132 kV down to 240 V (the voltage at which electrical power is distributed to domestic consumers).

1.2.4 NGET is also required, under Section 38 of the Electricity Act 1989, to comply with the provisions of Schedule 9 of the Act. Schedule 9 requires licence holders such as NGET, in developing proposals to transmit electricity to:

> Schedule 9(1)(a) '…*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
>
> Schedule 9(1)(b) '…*do what [it] 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'*.

1.2.5 SSEN Transmission is the Transmission Owner (TO) for northern Scotland and SPEN is the TO for central and southern Scotland (as shown on **Figure 1-2: Transmission Operator Boundaries)**. Similar to NGET, both SSEN Transmission and SPEN are responsible for ensuring electricity is transmitted safely and efficiently from generation to user. As transmission license holders under the Electricity Act 1989, both SPEN and SSEN Transmission also have a number of statutory duties to comply with the provisions of Schedule 9 of the Electricity Act 1989 including those outlined above.

Figure 1-2
Transmission Operator License Areas



Legend

Transmission Operator Boundaries

- Scottish and Southern Electricity Transmission
- Scottish Power Energy Networks
- National Grid Electricity Transmission

Notes

This drawing is scaled at paper size A3, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.

Coordinate System: British National Grid
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Kilometres

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Title

Figure 1-2
Transmission Operator License Areas

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Figure Number
Figure 1-2

Drawing Reference
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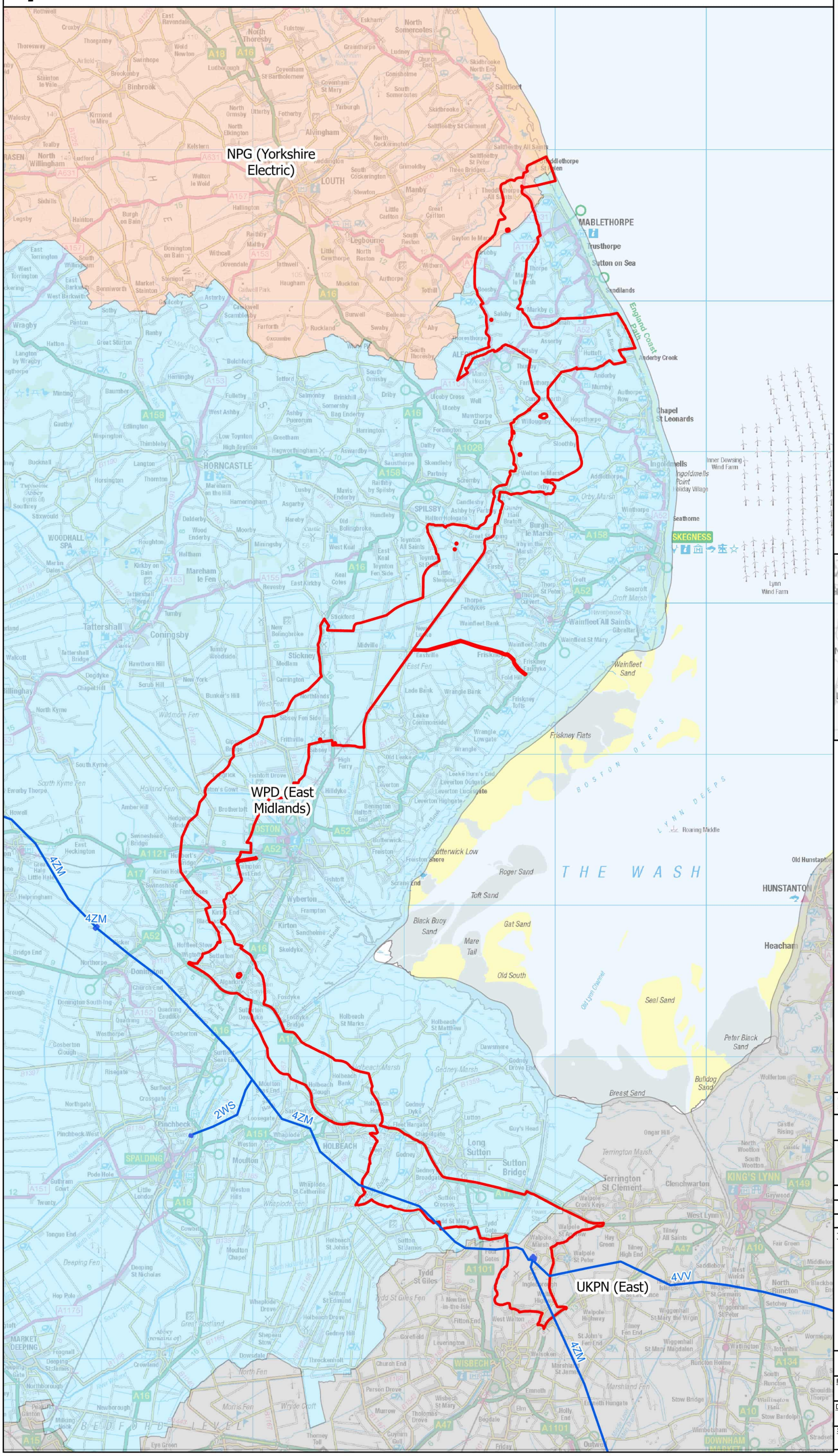
Figure 1-3
Distribution Network Operator Boundaries and English Onshore Scheme Scoping Boundary



Legend

- Existing 400kV Overhead Line
- Existing Walpole Substation Site
- Scoping Boundary

Distribution Network Operator Boundaries

- National Power Grid (NPG) (Yorkshire Electric)
- UK Power Networks (UKPN) (East)
- Western Power Distribution (WPD) (East Midlands)

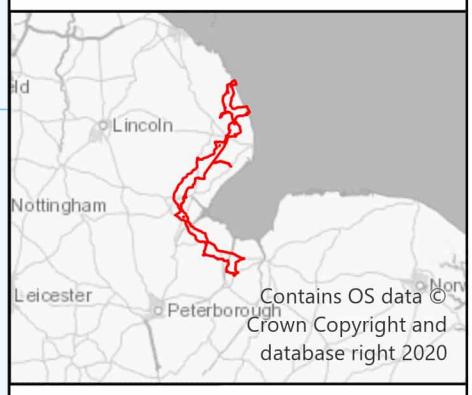


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Figure 1-3
Distribution Network Operator Boundaries and English Onshore Scheme Scoping Boundary

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Figure Number	Drawing Reference	Scale	Sheet Size	Sheet	Issue
Figure 1-3	EGL-WSP-CONS-XX_DR-G-030 P01	1:250,000	A3	SHEET 1 OF 1	1

1.3 Background to and need for the Projects

1.3.1 The electricity industry in Great Britain is undergoing unprecedented change. The Climate Change Act 2008 (as amended) now commits the UK Government by law to reducing greenhouse gas emissions by at least 100% from the 1990 baseline by 2050. This 2050 target is commonly known as 'Net Zero'. The Scottish Government's target is to become Net Zero by 2045, five years ahead of the rest of the UK.

1.3.2 The Government's recent British Energy Security Strategy (Ref 1.2) outlines the ambition to increase generation of energy from offshore wind to 50 GW by 2030 – more than enough to power every home in the UK. This has led to a shift towards offshore renewable generation of power away from coal power generation in the north and Midlands. The UK is also transporting more power between countries across the North Sea, using interconnectors. These factors have driven a change in the energy landscape across the UK, in particular the East of England including the Yorkshire and Humber, East Midlands, and Norfolk regions of England where reinforcement of the network (overhead lines, pylons, cables and other infrastructure that transports electricity around the country) is required to deliver this change.

1.3.3 As the volume of renewable energy generation connecting to the transmission system in Scotland continues to grow there is a need to increase cross-border transmission capability to ensure this energy is economically and efficiently transmitted from where it is generated to where it is needed. EGL 3 and EGL 4 are part of the continued co-ordinated development of significant cross-border transmission routes that are needed due to the significant and increasing levels of North-South power flows. As noted above EGL 3 and EGL 4 are part of The Great Grid Upgrade and along with a number of other projects will support the UK's Net Zero target by reinforcing the electricity transmission network and facilitating the connection of sources of electricity, allowing clean energy to be carried on the network.

1.3.4 Future Energy Scenarios (FES) are produced annually by the ESO. These are developed in consultation with industry stakeholders to identify what 'credible futures' might exist, when considering the rate at which the UK may decarbonise, the impact of de-carbonisation of supply and how consumer behaviour will impact demand. The ESO undertakes power system modelling of future power flow requirements across the transmission system and identifies parts of the system where insufficient capacity exists to accommodate these future power flows. This work is published annually in the Electricity Ten Year Statement (ETYS).

1.3.5 Where there is a requirement for additional transmission network capacity, the TOs propose to the ESO a range of reinforcements that could deliver the identified reinforcements. SSEN Transmission is the TO for Northern Scotland and SPEN is the TO for the central belt and South of Scotland. SSEN Transmission and SPEN own, build and maintain the high voltage electricity transmission system within their respective regions of Scotland (both offshore and onshore). NGET is the TO for England and Wales and is responsible for consenting the offshore works in English waters and all onshore works in England (see **Figure 1-2: Transmission Operator Boundaries**).

1.3.6 The ESO undertakes a cost benefit analysis (CBA) to determine if a reinforcement is economic and should be progressed by the relevant TO. This is the Network Options Assessment (NOA) process, with a NOA report published in January each year. The ESO, through the NOA publication, make recommendations to the TO as to which

investments should be progressed when considering the range of possible futures that may occur.

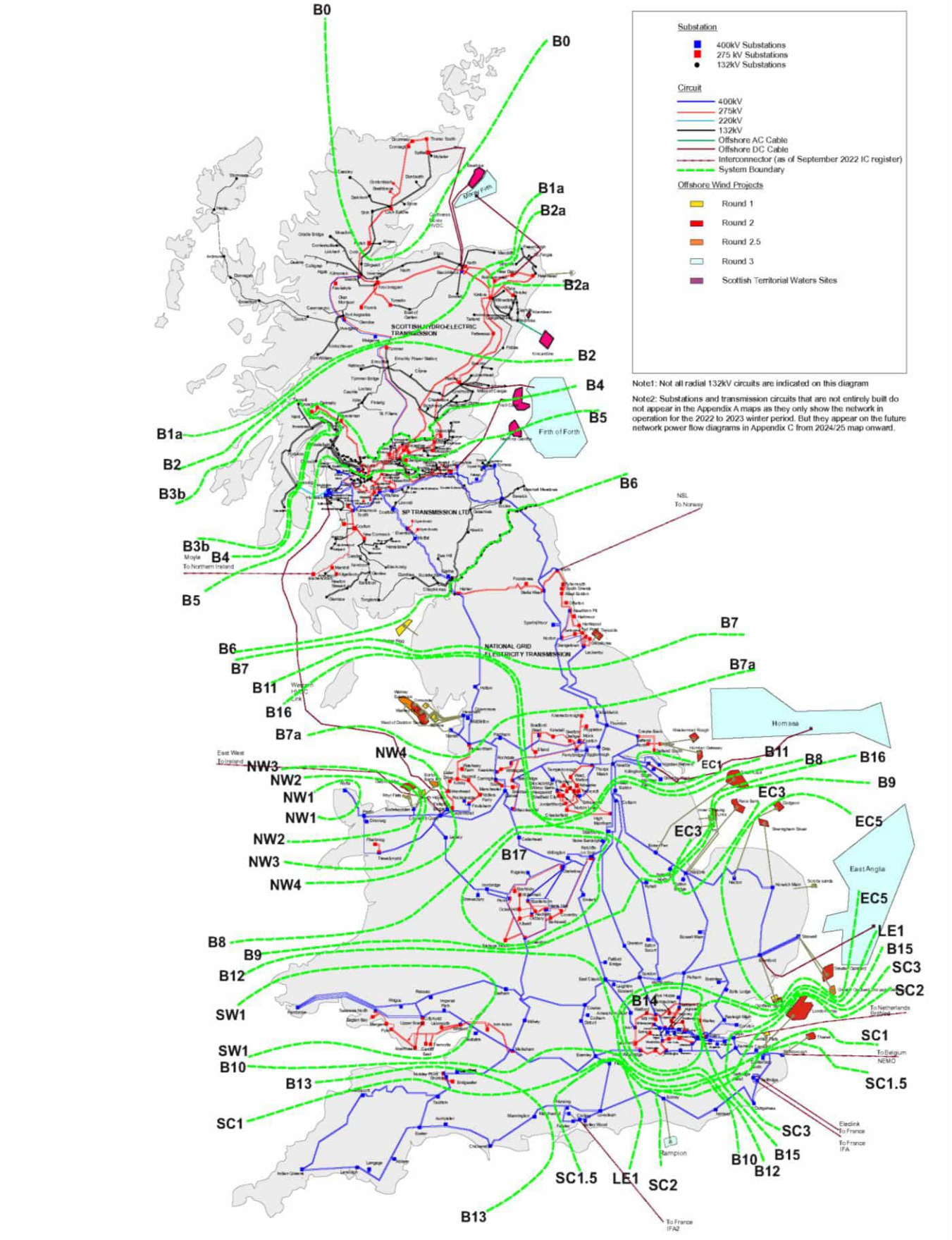
1.3.7 The ETYS 2023 (Ref 1.3) has identified that significantly higher power flows will occur in the Northern English and East of England network which includes the transmission network between the Scottish border and the Midlands. This will put pressure on the existing network such that reinforcement of the network in the Humber, East Midlands, East of England and East Anglia areas has been identified as necessary to ensure optimal operation of the transmission system and reliable economic long-term supply.

1.3.8 The 2021/2022 NOA (Ref 1.4) recommended that network reinforcements should be developed to resolve the issues associated with network transmission boundaries B6, B7a and B8. The network transmission boundaries across the UK are shown in **Figure 1-4: Network Transmission Boundaries** (Ref 1.5). These recommendations referred to the construction of two new 2 GW subsea HVDC links on the East Coast between Scotland and England. These two new links comprise a new 2 GW subsea HVDC link between Peterhead and the South Humber region; and a new 2 GW subsea HVDC link between southeast Scotland (subsequently confirmed to be Fife) and the South Humber region. These new HVDC links, are part of the continued co-ordinated development of significant cross-border transmission routes that is needed due to the significant and increasing levels of north-south power flows.

1.3.9 In July 2022 the ESO published the Pathway to 2030 Holistic Network Design (HND) report (Ref 1.6) and the NOA 2021/22 Refresh (Ref 1.7). The HND helps to unlock the UK Government's ambition for 50 GW of offshore wind by 2030, by setting out a single, integrated transmission network design approach that supports large scale delivery of electricity generated from offshore wind, to where it is needed across Great Britain. The NOA 2021/2022 Refresh forms part of the suite of documents that make up the HND, replaces the 2021/2022 NOA and incorporates the recommended offshore network design set out in the HND. The ESO’s HND and 2021/2022 NOA Refresh restated the recommendations for development of two new 2 GW subsea HVDC links on the East Coast between Scotland and South Humber region.

1.3.10 The ESO published the Beyond 2030 report which builds on top of the Holistic Network Design and makes a set of network recommendations throughout the 2030s. The report restated the recommendations for development of EGL 3 and EGL 4.

Figure 1-4: Network Transmission Boundaries



1.4 The Projects

1.4.1 This Scoping Report is written with specific regard to the English Onshore Scheme and the English Offshore Scheme (i.e. the 'Projects'). The following definitions are relevant to this EIA Scoping Report:

- "English Onshore Scheme" – All components of EGL 3 and EGL 4 between the electricity transmission connection point in England and the Mean Low Water Spring (MLWS) in England.
- "English Offshore Scheme" – All components of EGL 3 and EGL 4 within the English marine environment up to the Mean High-Water Springs (MHWS) in England.
- "the Projects" – is the collective term used to refer all elements of EGL 3 and EGL 4 which are the subject of this Scoping Report i.e. the English Onshore Scheme and the English Offshore Scheme. More specifically, the Projects comprise the 'Authorised' development and 'Associated' development for EGL 3 and EGL 4 that will be subject to a Development Consent Order (DCO) application. In some instances, the Projects are referred to individually, the 'EGL 3 Project' and the 'EGL 4 Project'.
- "EGL 3" – EGL 3 comprises a 2 GW HVDC system linking Peterhead in Scotland and Norfolk in England. EGL 3 comprises the following Schemes: Scottish Onshore; Scottish Offshore; English Offshore; and English Onshore. EGL 3 and EGL 4 may be referred to jointly as 'EGL 3 and EGL 4'.
- "EGL 4" – EGL 4 comprises a 2 GW HVDC system linking Fife in Scotland and Norfolk in England. EGL 4 comprises the following Schemes: Scottish Onshore; Scottish Offshore; English Offshore; and English Onshore. EGL 4 and EGL 3 may be referred to jointly as 'EGL 3 and EGL 4'
- "Scottish Onshore Scheme" - All components of EGL 3 and EGL 4 between the electricity transmission connection point in Scotland and the MLWS in Scotland.
    - For EGL 3 these include a proposed converter station located to the west of Peterhead at Netherton from which an underground HVDC cable would route to a proposed landfall at Sandford Bay. The proposed converter station would be connected to a substation by underground HVAC cables. The substation connects EGL 3 to the existing Scottish transmission system.
    - For EGL 4 these include a proposed converter station located in Westfield from which there would be underground HVDC cable to a proposed landfall at Kinghorn. The converter station would be connected to a substation by underground HVAC cables. The substation connects EGL 4 to the existing Scottish transmission system.
- "Scottish Offshore Scheme" - All components of EGL 3 and EGL 4 within the Scottish marine environment up to the MHWS in Scotland.
    - For EGL 3 these include approximately 144 km of subsea HVDC cable from the intersection with the EGL 3 Offshore Elements, at the marine boundary between English and Scottish territorial waters, to the MHWS mark at a proposed landfall at Sandford Bay. The submarine cable system would consist of two HVDC cables and a fibre optic cable.

- For EGL 4 these include approximately 106 km of subsea HVDC cable from the intersection with the EGL 4 Offshore Elements, at the marine boundary between English and Scottish territorial waters, to the MHWS mark at a proposed landfall at Kinghorn, Fife, Scotland. The submarine cable system would consist of two HVDC cables and a fibre optic cable for control and monitoring purposes.

1.4.2 The onshore and offshore scheme components of EGL 3 and EGL 4, which will be consented by one DCO are illustrated in **Figure 1-5: Overview of the EGL 3 and EGL 4 Transmission Links**. The Scoping boundary for the Projects is shown on **Figure 1-6: The Projects Scoping Boundary**.

Figure 1-5: Overview of the EGL 3 and EGL 4 Transmission Links

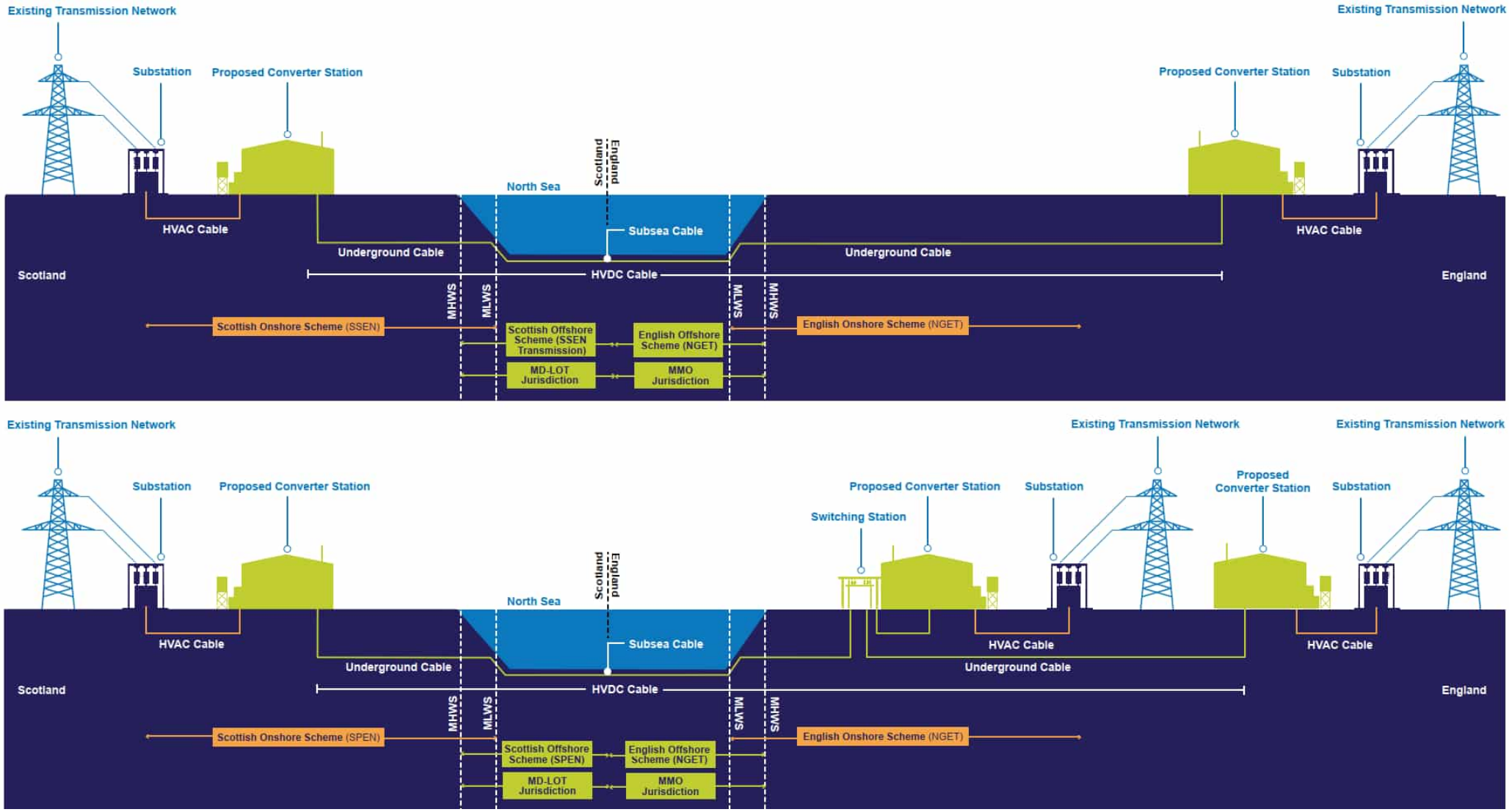
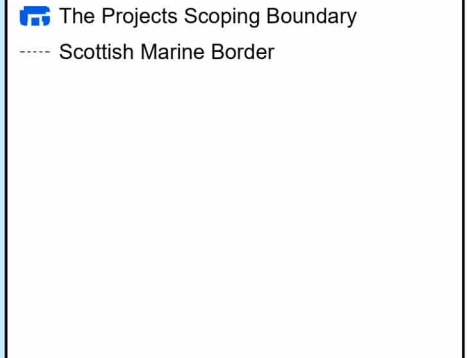


Figure 1-6
The Projects Scoping Boundary

Legend
- English Onshore Scheme Scoping Boundary
- English Offshore Scheme Scoping Boundary
- The Projects Scoping Boundary
- Scottish Marine Border



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Kilometres

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Title
Figure 1-6
The Projects Scoping Boundary

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Figure Number: Figure 1-6

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Summary of the English Onshore Scheme

1.4.3 The English Onshore Scheme is sited within Lincolnshire and Norfolk. The most northerly elements of the English Onshore Scheme would be located along the Lincolnshire coast in East Lindsey, and the most southerly elements would be in vicinity of the existing Walpole substation in King's Lynn and West Norfolk. The location of the English Onshore Scheme is illustrated by the Scoping Boundary in **Figure 1-7: English Onshore Scoping Boundary**.

1.4.4 The key elements of the English Onshore Scheme are shown in **Figure 1-8: Key Elements of the English Onshore Scheme**, and are summarised below. A detailed breakdown of the English Onshore Scheme is provided within **Part 2, Chapter 4: English Onshore Scheme.**

Elements of the Projects

1.4.5 The principal elements of the Projects i.e. those which would constitute the 'authorised development' in a DCO and for which development consent is now sought, comprise:

- EGL 3 Project
  - A new converter station, in the vicinity of the existing Walpole substation in King's Lynn and West Norfolk.
- EGL 4 Project
  - A new converter station, in the vicinity of the existing Walpole substation in King's Lynn and West Norfolk.
  - A new converter station in the East Lindsey area of Lincolnshire, in the vicinity of one of two 400 kV Lincolnshire Connection substations (LCS)), proposed by the Grimsby to Walpole Project[13].
  - A new switching station in the vicinity of one of the proposed LCS in East Lindsey (described in this report as the Direct Current Switching Station (DCSS)).

1.4.6 The remaining elements of the Projects would be considered to constitute 'associated development' under Section 115 of the Planning Act 2008 (PA 2008) and under the current 'Guidance on associated development applications for major infrastructure projects' (DCLG 2013). These elements of the Projects comprise:

HVDC underground cables

1.4.7 A new HVDC underground cables landfall, ending at mean low water springs (MLWS), located on the Lincolnshire coast. At the current stage of the Projects, two options have been identified for the landfall, both of which are considered within this Scoping Report.

[13] The Grimsby to Walpole Project is an entirely separate project, also being developed by NGET to reinforce the electricity transmission system as part of The Great Grid Upgrade. The Grimsby to Walpole Project will establish a new (wholly or largely overhead line) 400 kV transmission connection between five new substations. Two of these new substations are the two proposed 400 kV LCS north and northeast of Alford, in East Lindsey, which are required to provide new points on the network where connections for customers and other planned transmission connections can be made. One of these substations is the new Walpole substation (also known as Walpole B substation) in King's Lynn and West Norfolk. The new Walpole substation is a common connection point for both the EGL 3, EGL 4 and Grimsby to Walpole projects and the need for this new substation exists as a part of either EGL 3 and EGL 4 or the Grimsby to Walpole Project and therefore will form part of their respective DCOs.

From north to south, the first option would be a landfall at Theddlethorpe, located approximately 4.5 km north Mablethorpe in East Lindsey, and the second option would be a landfall at Anderby Creek, located approximately 1.8 km north of Anderby Creek in East Lindsey. Both the EGL 3 Project and EGL 4 Project will connect into the chosen landfall.

EGL 3 Project

- Approximately 100 km of new underground HVDC cable, from the landfall point (at either Theddlethorpe or Anderby Creek) to the proposed EGL 3 converter station in the vicinity of the existing Walpole substation in King's Lynn and West Norfolk;

EGL 4 Project

- Approximately 11 km of new underground HVDC cable, from the landfall point (at either Theddlethorpe or Anderby Creek) to the proposed EGL 4 DCSS in the vicinity of one of the proposed LCS considered as part of the NGET Grimsby to Walpole Project;
- Approximately 0.2 km of new underground HVDC cable, from the DCSS to a proposed converter station in the vicinity of the proposed LCS; and
- Approximately 90 km of new underground HVDC cable, from the DCSS to the proposed EGL 4 converter station in the vicinity of the existing Walpole substation in King's Lynn and West Norfolk.

HVAC Cable

EGL 3 Project

- Approximately 5 km of new underground HVAC cable, between the EGL 3 Walpole converter station and a new 400 kV Walpole substation in the vicinity of the existing Walpole substation in King's Lynn and West Norfolk;

EGL 4 Project

- Approximately 5 km of new underground HVAC cable, between the LCS converter station and one of the proposed LCS considered as part of the NGET Grimsby to Walpole Project; and
- Approximately 5 km of new underground HVAC cable, between the EGL 4 Walpole converter station and a new 400 kV Walpole substation in the vicinity of the existing Walpole substation in King's Lynn and West Norfolk.

Substation

1.4.8 A new 400 kV substation (in proximity to the existing Walpole substation in King's Lynn and West Norfolk (described in this report as the 'new Walpole substation' but also known as 'Walpole B substation'). The new Walpole substation is a common connection point for both the EGL 3 Project, the EGL 4 Project and the Grimsby to Walpole Project and the need for this new substation exists as a part of either EGL 3 and EGL 4 or the Grimsby to Walpole Project and therefore will form part of their respective DCOs.

Overhead Lines

1.4.9 Supplementary works to existing 400 kV overhead lines and local changes to the lower voltage distribution networks to facilitate the construction of the new onshore transmission connections in England.

Sections and Terms of the English Onshore Scheme

1.4.10 A full description of the English Onshore Scheme is provided in **Part 2, Chapter 4: English Onshore Scheme.** Given the extent of the Scoping Boundary for the English Onshore Scheme, for the purposes of describing the English Onshore Scheme in this Scoping Report, the following route sections and terms are used:

Landfalls (Theddlethorpe and Anderby Creek).

- This term is used to refer to the area along the Lincolnshire coast which contains the interface between the EGL 3 and EGL 4 offshore elements and onshore elements. As noted in **Paragraph 1.4.7** two potential landfall areas have been identified (Theddlethorpe and Anderby Creek) and therefore, both are captured within the northeastern extent of the Scoping Boundary.

Section 1: Landfalls – Bilsby

- This is the term used to refer to the elements of the Projects (underground HVDC cables) located within the Scoping Boundary between the landfall areas and Bilsby.

Section 2: Bilsby – Weston le Marsh

- This is the term used to refer to the elements of the Projects (underground HVDC cables) located within the Scoping Boundary between Bilsby and Weston le Marsh.

Section 3: Weston le Marsh – Little Steeping

- This is the term used to refer to the elements of the Projects (underground HVDC cables) located within the Scoping Boundary between Weston le Marsh and Little Steeping.

Section 4: Little Steeping – Sibsey Northlands

- This is the term used to refer to the elements of the Projects (underground HVDC cables) located within the Scoping Boundary between Little Steeping and Sibsey Northlands.

Section 5: Sibsey Northlands – Hubbert's Bridge

- This is the term used to refer to the elements of the Projects (underground HVDC cables) located within the Scoping Boundary between Sibsey Northlands and Hubbert's Bridge.

Section 6: Hubbert's Bridge – Moulton Seas End

- This is the term used to refer to the elements of the Projects (underground HVDC cables) located within the Scoping Boundary between Hubbert's Bridge and Moulton Seas End.

Section 7: Mouton Seas End – Foul Anchor

- This is the term used to refer to the elements of the Projects (underground HVDC cables) located within the Scoping Boundary between Mouton Seas End and Foul Anchor.

Section 8: Foul Anchor – Walpole

- This is the term used to refer to the elements of the Projects (underground HVDC cables) located within the Scoping Boundary between Foul Anchor and Walpole.

Walpole Stations Area

- This is the term used to refer to the elements of the Projects (EGL 3 converter station, EGL 4 converter station and new Walpole substation, the underground HVAC cables and supplementary works to existing 400 kV overhead lines) located within the Scoping Boundary in the vicinity of the existing Walpole substation.

LCS Converter Station Area

- This is the term used to refer to the elements of the Projects (DCSS, LCS converter station and the underground HVAC cables) in the vicinity of one of the LCS proposed as part of the Grimsby to Walpole Project in East Lindsey.

1.4.11 These areas above are also shown on **Figure 1-7: English Onshore Scheme Scoping Boundary** and **Figure 1-8: Key Elements of the English Onshore Scheme**.

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Figure 1-7
English Onshore Scheme Scoping Boundary

Landfalls: Theddlethorpe

Section 1: Landfalls – Bilsby

Landfalls: Anderby Creek

Section 2: Bilsby – Welton le Marsh

Section 3: Welton le Marsh – Little Steeping

Section 4: Little Steeping – Sibsey Northlands

Section 5: Sibsey Northlands – Hubbert's Bridge

Section 6: Hubbert's Bridge – Moulton Seas End

Section 7: Moulton Seas End – Foul Anchor

Section 8: Foul Anchor – Walpole

Legend

- Scoping Boundary
- Section Lines

Notes

This drawing is scaled at paper size A3, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.

Coordinate System: British National Grid
Sheet X Centroid Coordinate: 540,239.88 Sheet Y Centroid Coordinate: 350,760.07

0 1.25 2.5 5
Kilometres

Issue	Date	Remarks	Drawn	Checked	Approved
1	19/04/2024	DRAFT	NM	BS	JB

Title

Figure 1-7
English Onshore Scheme Scoping Boundary

nationalgrid

Figure Number
Figure 1-7

Drawing Reference
EGL-WSP-CONS-XX-DR-G-005 P01

Scale	Sheet Size	Sheet	Issue
1:250,000	A3	SHEET 1 OF 1	1

N

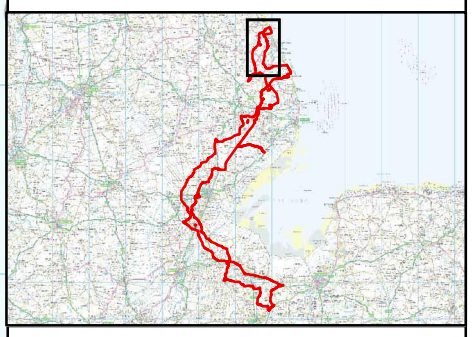
Figure 1-7
English Onshore Scheme Scoping Boundary

Landfalls: Theddlethorpe

Section 1: Landfalls – Bilsby

Legend

- Scoping Boundary
- Section Lines



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This drawing is scaled at paper size A3, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.

Coordinate System: British National Grid
Sheet X Centroid Coordinate: 547,727.70 Sheet Y Centroid Coordinate: 383,838.45

0 500 1,000 Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	19/04/2024	DRAFT	NM	BS	JB

Title

Figure 1-7
English Onshore Scheme
Scoping Boundary

nationalgrid

Figure Number: Figure 1-7

Drawing Reference: EGL-WSP-CONS-XX-DR-G-005 P01

Scale	Sheet Size	Sheet	Issue
1:40,000	A3	SHEET 1 OF 9	1

N

Figure 1-7
English Onshore Scheme Scoping Boundary

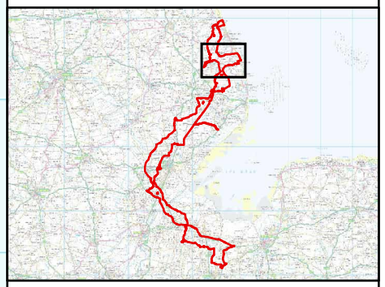
Section 1: Landfalls – Bilsby

Section 2: Bilsby – Welton le Marsh

Landfalls: Anderby Creek

Legend

- Scoping Boundary
- Section Lines



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Coordinate System: British National Grid
Sheet X Centroid Coordinate: 549,681.26 Sheet Y Centroid Coordinate: 376,797.41

0 500 1,000
Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	19/04/2024	DRAFT	NM	BS	JB

Title

Figure 1-7
English Onshore Scheme
Scoping Boundary

nationalgrid

Figure Number
Figure 1-7

Drawing Reference
EGL-WSP-CONS-XX-DR-G-005 P01

Scale	Sheet Size	Sheet	Issue
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N

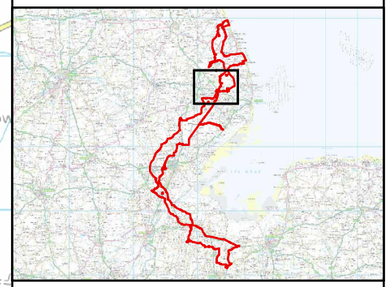
Figure 1-7
English Onshore Scheme Scoping Boundary

Section 2: Bilsby – Welton le Marsh

Section 3: Welton le Marsh – Little Steeping

Legend

- Scoping Boundary
- Section Lines



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Coordinate System: British National Grid
Sheet X Centroid Coordinate: 545,886.60 Sheet Y Centroid Coordinate: 368,517.06

0 500 1,000
Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	19/04/2024	DRAFT	NM	BS	JB

Title

Figure 1-7
English Onshore Scheme
Scoping Boundary

nationalgrid

Figure Number
Figure 1-7

Drawing Reference
EGL-WSP-CONS-XX-DR-G-005 P01

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N

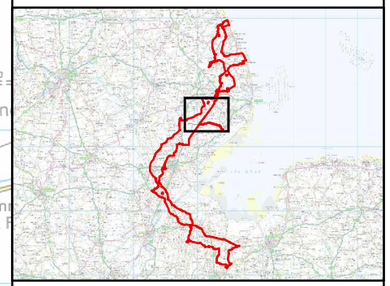
Figure 1-7
English Onshore Scheme Scoping Boundary

Section 3: Welton le Marsh – Little Steeping

Section 4: Little Steeping – Sibsey Northlands

Legend

- Scoping Boundary
- Section Lines



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Coordinate System: British National Grid
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0 500 1,000
Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	19/04/2024	DRAFT	NM	BS	JB

Title

Figure 1-7
English Onshore Scheme
Scoping Boundary

nationalgrid

Figure Number			
Figure 1-7			
Drawing Reference			
EGL-WSP-CONS-XX-DR-G-005 P01			
Scale	**Sheet Size**	**Sheet**	**Issue**
1:40,000	A3	SHEET 4 OF 9	1

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Figure 1-7
English Onshore Scheme Scoping Boundary

Section 4: Little Steeping – Sibsey Northlands

Section 5: Sibsey Northlands – Hubbert's Bridge

Legend

- Scoping Boundary
- Section Lines

Notes

This drawing is scaled at paper size A3, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.

Coordinate System: British National Grid
Sheet X Centroid Coordinate: 532,424.03 Sheet Y Centroid Coordinate: 354,574.71

0 500 1,000
Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	19/04/2024	DRAFT	NM	BS	JB

Title

Figure 1-7
English Onshore Scheme
Scoping Boundary

nationalgrid

Figure Number
Figure 1-7

Drawing Reference
EGL-WSP-CONS-XX-DR-G-005 P01

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N

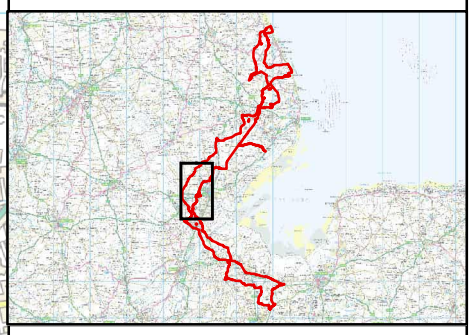
Figure 1-7
English Onshore Scheme Scoping Boundary

Section 5: Sibsey Northlands – Hubbert's Bridge

Section 6: Hubbert's Bridge – Moulton Seas End

Legend

- Scoping Boundary
- Section Lines



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This drawing is scaled at paper size A3, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.

Coordinate System: British National Grid
Sheet X Centroid Coordinate: 529,178.87 Sheet Y Centroid Coordinate: 344,459.51

0 500 1,000
Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	19/04/2024	DRAFT	NM	BS	JB

Title

Figure 1-7
English Onshore Scheme
Scoping Boundary

nationalgrid

Figure Number: Figure 1-7

Drawing Reference: EGL-WSP-CONS-XX-DR-G-005 P01

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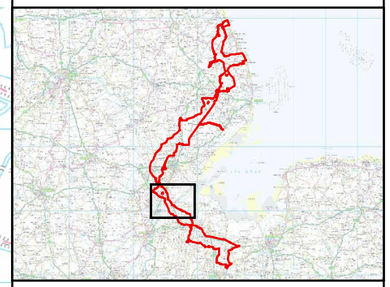
Figure 1-7
English Onshore Scheme Scoping Boundary

Section 6:
Hubbert's Bridge –
Moulton Seas End

Section 7:
Moulton Seas End
– Foul Anchor

Legend

- Scoping Boundary
- Section Lines



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Coordinate System: British National Grid
Sheet X Centroid Coordinate: 532,318.38 Sheet Y Centroid Coordinate: 332,990.87

0 500 1,000 Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	19/04/2024	DRAFT	NM	BS	JB

Title

Figure 1-7
English Onshore Scheme
Scoping Boundary

nationalgrid

Figure Number
Figure 1-7

Drawing Reference
EGL-WSP-CONS-XX-DR-G-005 P01

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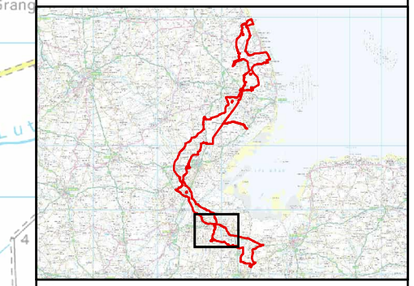
Figure 1-7
English Onshore Scheme Scoping Boundary

Section 7:
Moulton Seas End
– Foul Anchor

Legend

- Scoping Boundary
- Section Lines



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This drawing is scaled at paper size A3, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.

Coordinate System: British National Grid
Sheet X Centroid Coordinate: 538,540.55 Sheet Y Centroid Coordinate: 323,440.27

0 500 1,000
Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	19/04/2024	DRAFT	NM	BS	JB

Title

Figure 1-7
English Onshore Scheme
Scoping Boundary

nationalgrid

Figure Number
Figure 1-7

Drawing Reference
EGL-WSP-CONS-XX-DR-G-005 P01

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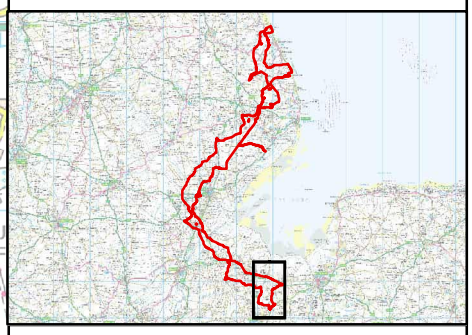
Figure 1-7
English Onshore Scheme Scoping Boundary

Section 7:
Moulton Seas End
– Foul Anchor

Section 8:
Foul Anchor
– Walpole

Legend

- Scoping Boundary
- Section Lines



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Coordinate System: British National Grid
Sheet X Centroid Coordinate: 549,036.04 Sheet Y Centroid Coordinate: 317,511.22

0 500 1,000
Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	19/04/2024	DRAFT	NM	BS	JB

Title

Figure 1-7
English Onshore Scheme
Scoping Boundary

nationalgrid

Figure Number
Figure 1-7

Drawing Reference
EGL-WSP-CONS-XX-DR-G-005 P01

Scale	Sheet Size	Sheet	Issue
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Figure 1-8
Key Elements of the English Onshore Scheme

Landfalls: Theddlethorpe

Landfalls: Anderby Creek

Section 1: Landfalls – Bilsby

Section 2: Bilsby – Welton le Marsh

Section 3: Welton le Marsh – Little Steeping

Section 4: Little Steeping – Sibsey Northlands

Section 5: Sibsey Northlands – Hubbert's Bridge

Section 6: Hubbert's Bridge – Moulton Seas End

Section 7: Moulton Seas End – Foul Anchor

Section 8: Foul Anchor Walpole

Legend

- Existing 400kV Overhead Line
- Existing Substation Site
- Section Lines
- Scoping Boundary
- Lincolnshire Connection Substation (LCS) Converter Station Station and Direct Current Switching Station (DCSS) Siting Zone
- Walpole Substation and Converter Stations Preferred Siting Zone
- Theddlethorpe Preferred Landfall
- Anderby Creek Preferred Landfall

Notes

This drawing is scaled at paper size A3, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.

Coordinate System: British National Grid
Sheet X Centroid Coordinate: 538638.51E Sheet Y Centroid Coordinate: 351514.06N

0 1 2 4 6 Kilometres

Issue	Date	Remarks	Drawn	Checked	Approved
1	23/07/2024	DRAFT	NM	BS	JB

Title

Figure 1-8
Key Elements of the English Onshore Scheme

nationalgrid

Figure Number: Figure 1-8

Drawing Reference: EGL-WSP-CONS-XX_DR-G-032 P01

Scale	Sheet Size	Sheet	Issue
1:250,000	A3	SHEET 1 OF 10	1

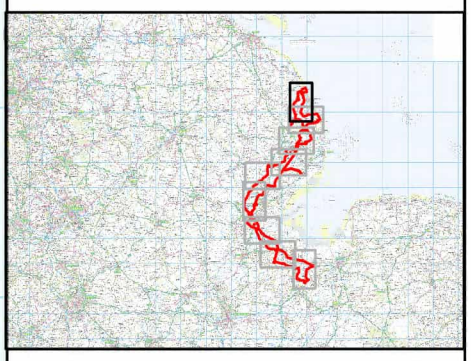
Figure 1-8
Key Elements of the English Onshore Scheme

Legend

- Section Lines
- Scoping Boundary
- Lincolnshire Connection Substation (LCS) Converter Station Station and Direct Current Switching Station (DCSS) Siting Zone
- Theddlethorpe Preferred Landfall

Landfalls: Theddlethorpe

Section 1: Landfalls – Bilsby



Notes

This drawing is scaled at paper size A3, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.

Coordinate System: British National Grid
Sheet X Centroid Coordinate: 547727.7E Sheet Y Centroid Coordinate: 383838.45N

0 500 1,000 Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	23/07/2024	DRAFT	NM	BS	JB

Title

Figure 1-8
Key Elements of the English Onshore Scheme

nationalgrid

Figure Number: Figure 1-8

Drawing Reference: EGL-WSP-CONS-XX_DR-G-032 P01

Scale	Sheet Size	Sheet	Issue
1:40,000	A3	SHEET 2 OF 10	1

Figure 1-8
Key Elements of the English Onshore Scheme

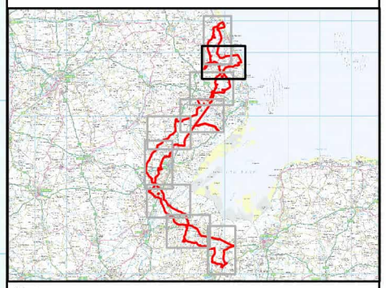
Section 1: Landfalls – Bilsby

Section 2: Bilsby – Welton le Marsh

Landfalls: Anderby Creek

Legend

- Section Lines
- Scoping Boundary
- Lincolnshire Connection Substation (LCS) Converter Station Station and Direct Current Switching Station (DCSS) Siting Zone
- Anderby Creek Preferred Landfall



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This drawing is scaled at paper size A3, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.

Coordinate System: British National Grid
Sheet X Centroid Coordinate: 549681.26E Sheet Y Centroid Coordinate: 376797.41N

0 500 1,000
Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	23/07/2024	DRAFT	NM	BS	JB

Title

Figure 1-8
Key Elements of the English Onshore Scheme

nationalgrid

Figure Number
Figure 1-8

Drawing Reference
EGL-WSP-CONS-XX_DR-G-032 P01

Scale	Sheet Size	Sheet	Issue
1:40,000	A3	SHEET 3 OF 10	1

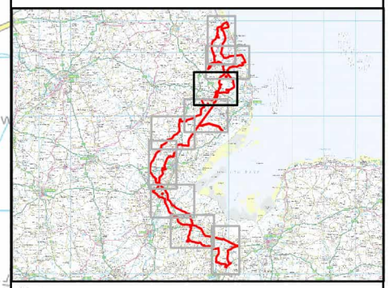
Figure 1-8
Key Elements of the English Onshore Scheme

Section 2: Bilsby – Welton le Marsh

Section 3: Welton le Marsh – Little Steeping

Legend

- Section Lines
- Scoping Boundary



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Coordinate System: British National Grid
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0 500 1,000 Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	23/07/2024	DRAFT	NM	BS	JB

Title

Figure 1-8
Key Elements of the English Onshore Scheme

nationalgrid

Figure Number
Figure 1-8

Drawing Reference
EGL-WSP-CONS-XX_DR-G-032 P01

Scale	Sheet Size	Sheet	Issue
1:40,000	A3	SHEET 4 OF 10	1

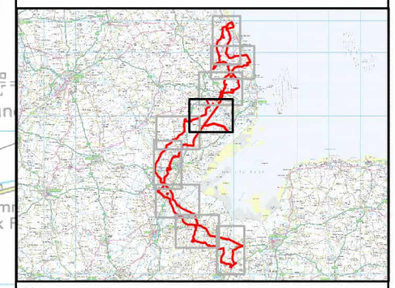
Figure 1-8
Key Elements of the English Onshore Scheme

Section 3: Welton le Marsh – Little Steeping

Section 4: Little Steeping – Sibsey Northlands

Legend

- Section Lines
- Scoping Boundary



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Coordinate System: British National Grid
Sheet X Centroid Coordinate: 542875.09E Sheet Y Centroid Coordinate: 359998.68N

0 500 1,000 Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	23/07/2024	DRAFT	NM	BS	JB

Title

Figure 1-8
Key Elements of the English Onshore Scheme

nationalgrid

Figure Number: Figure 1-8

Drawing Reference: EGL-WSP-CONS-XX_DR-G-032 P01

Scale	Sheet Size	Sheet	Issue
1:40,000	A3	SHEET 5 OF 10	1

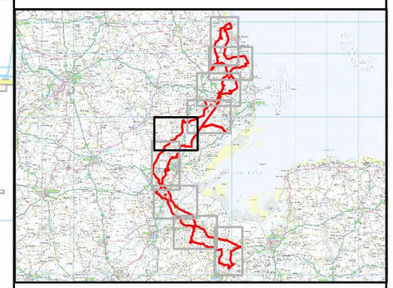
Figure 1-8
Key Elements of the English Onshore Scheme

Section 4: Little Steeping – Sibsey Northlands

Section 5: Sibsey Northlands – Hubbert's Bridge

Legend

- Section Lines
- Scoping Boundary



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Coordinate System: British National Grid
Sheet X Centroid Coordinate: 532424.03E Sheet Y Centroid Coordinate: 354574.71N

0 500 1,000
Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	23/07/2024	DRAFT	NM	BS	JB

Title

Figure 1-8
Key Elements of the English Onshore Scheme

nationalgrid

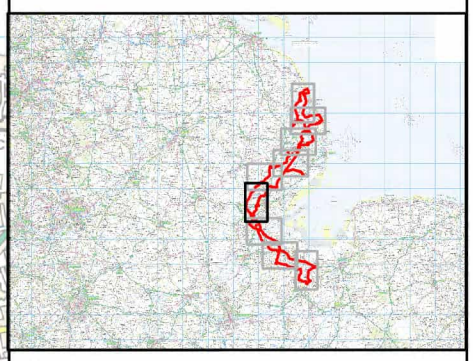
Figure Number			
Figure 1-8			
Drawing Reference			
EGL-WSP-CONS-XX_DR-G-032 P01			
Scale	**Sheet Size**	**Sheet**	**Issue**
1:40,000	A3	SHEET 6 OF 10	1

Figure 1-8
Key Elements of the English Onshore Scheme

Section 5: Sibsey Northlands – Hubbert's Bridge

Section 6: Hubbert's Bridge – Moulton Seas End

Legend
- Section Lines
- Scoping Boundary



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Coordinate System: British National Grid
Sheet X Centroid Coordinate: 529178.87E Sheet Y Centroid Coordinate: 344459.51N

0 500 1,000
Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	23/07/2024	DRAFT	NM	BS	JB

Title

Figure 1-8
Key Elements of the English Onshore Scheme

nationalgrid

Figure Number
Figure 1-8

Drawing Reference
EGL-WSP-CONS-XX_DR-G-032 P01

Scale	Sheet Size	Sheet	Issue
1:40,000	A3	SHEET 7 OF 10	1

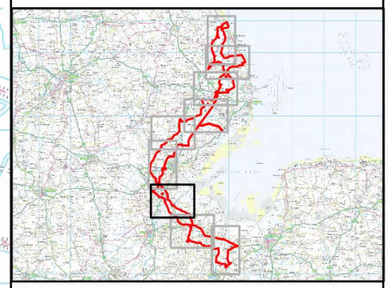
Figure 1-8
Key Elements of the English Onshore Scheme

Section 6:
Hubbert's Bridge –
Moulton Seas End

Section 7:
Moulton Seas End
– Foul Anchor

Legend

- Existing 400kV OHL
- Section Lines
- Scoping Boundary



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This drawing is scaled at paper size A3, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.

Coordinate System: British National Grid
Sheet X Centroid Coordinate: 532318.38E Sheet Y Centroid Coordinate: 332990.87N

0 500 1,000
Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	23/07/2024	DRAFT	NM	BS	JB

Title

Figure 1-8
Key Elements of the English Onshore Scheme

nationalgrid

Figure Number
Figure 1-8

Drawing Reference
EGL-WSP-CONS-XX_DR-G-032 P01

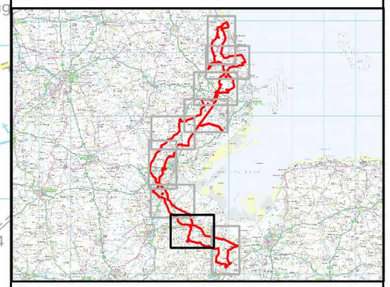
Scale	Sheet Size	Sheet	Issue
1:40,000	A3	SHEET 8 OF 10	1

Figure 1-8
Key Elements of the English Onshore Scheme

Section 7:
Moulton Seas End
– Foul Anchor

Legend

- Existing 400kV OHL
- Scoping Boundary



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Coordinate System: British National Grid
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0 500 1,000
Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	23/07/2024	DRAFT	NM	BS	JB

Title

Figure 1-8
Key Elements of the English Onshore Scheme

nationalgrid

Figure Number			
Figure 1-8			
Drawing Reference			
EGL-WSP-CONS-XX_DR-G-032 P01			
Scale	**Sheet Size**	**Sheet**	**Issue**
1:40,000	A3	SHEET 9 OF 10	1

Figure 1-8
Key Elements of the English Onshore Scheme

Section 7:
Moulton Seas End
– Foul Anchor

Section 8:
Foul Anchor
– Walpole

WALP1
WALP1B
WALP4

4ZM
4VV

Legend
- Existing Substation Site
- Overhead Line 400kV
- Section Lines
- Scoping Boundary
- Walpole Substation and Converter Stations Preferred Siting Zone

Notes
This drawing is scaled at paper size A3, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.

Coordinate System: British National Grid
Sheet X Centroid Coordinate: 549036.04E Sheet Y Centroid Coordinate: 317511.22N

0 500 1,000
Metres

Issue	Date	Remarks	Drawn	Checked	Approved
1	23/07/2024	DRAFT	NM	BS	JB

Title

Figure 1-8
Key Elements of the English Onshore Scheme

nationalgrid

Figure Number
Figure 1-8

Drawing Reference
EGL-WSP-CONS-XX_DR-G-032 P01

Scale	Sheet Size	Sheet	Issue
1:40,000	A3	SHEET 10 OF 10	1

Summary of the English Offshore Scheme

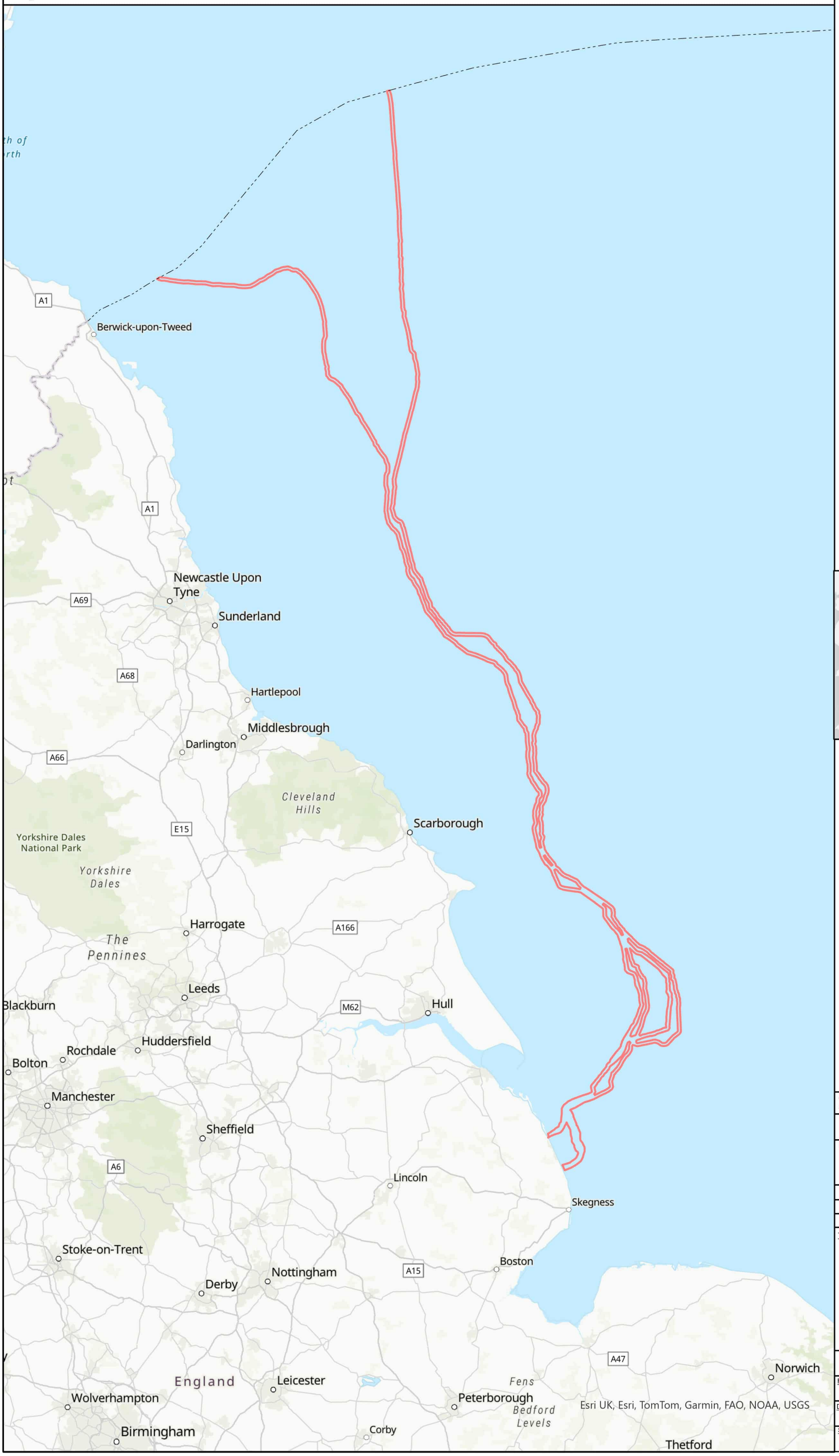
1.4.12 The English Offshore Scheme is sited within the English marine environment, through inshore and offshore waters, and up to MHWS in England. The most northerly elements of the English Offshore Scheme would be located at the boundary of English Waters where it meets Scottish Waters, and the most southerly elements would be located at MHWS at either Theddlethorpe or Anderby Creek, at landfall. The location of the English Offshore Scheme is illustrated by the Scoping Boundary in **Figure 1-9: English Offshore Scheme Scoping Boundary.**

1.4.13 The key elements of the English Offshore Scheme are summarised below; however, a detailed breakdown of the English Offshore Scheme is provided within **Part 3, Chapter 20: English Offshore Scheme.**

- **EGL 3**: Approximately 436 km of subsea HVDC cable from the MHWS mark at a proposed landfall at either Theddlethorpe or Anderby Creek, Lincolnshire, England to where it meets the marine boundary between English and Scottish waters. The submarine cable system would consist of two HVDC cables and a fibre optic cable.
- **EGL 4**: Approximately 422 km of subsea HVDC cable from the MHWS mark at a proposed landfall at either Theddlethorpe or Anderby Creek, Lincolnshire, England to where it meets the marine boundary between English and Scottish waters. The submarine cable system would consist of two HVDC cables and a fibre optic cable for control and monitoring purposes.

Figure 1-9
English Offshore Scheme Scoping Boundary

Legend
English Offshore Scoping Boundary
Scottish Marine Border



Notes
This drawing is scaled at paper size A3, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.

Coordinate System: British National Grid
Sheet X Centroid Coordinate: 507128.79E Sheet Y Centroid Coordinate: 522817.83N

0 5 10 20 30
Kilometres

Issue	Date	Remarks	Drawn	Checked	Approved
1	27/06/2024	DRAFT	NM	BS	JB

Title

Figure 1-9
English Offshore Scheme
Scoping Boundary

nationalgrid

Figure Number
Figure 1-9

Drawing Reference
EGL-WSP-CONS-XX-DR-G-029 P01

Scale	Sheet Size	Sheet	Issue
1:1,250,000	A3	SHEET 1 OF 1	1

1.5 Intention to apply for development consent

1.5.1 As an electricity transmission licence holder in relation to transmission of electricity in England and Wales, NGET has specific duties to uphold in relation to the desirability of preserving amenity of certain aspects of the environment and to mitigate the effects of its activities on the environment under Section 38 and Schedule 9 of the Electricity Act 1989.

1.5.2 NGET is responsible for gaining consent for both the English Onshore and English Offshore Schemes.

1.5.3 Whilst none of the components of the Projects fall within the definition or thresholds of a 'Nationally Significant Infrastructure Project' (NSIP) defined under Part 3 of the PA 2008, NGET considers elements of the Projects to be of national significance. As such, following engagement with the relevant Local Planning Authorities (LPA) in Lincolnshire and Norfolk, NGET sought separate directions on 01 February 2024 under Section 35 (s35) of the PA 2008 from the Secretary of State (SoS) for elements of the Projects to be treated as a development for which development consent under the PA 2008 is required. The aspects of the Projects which would constitute the 'authorised development' in the DCO, and for which development consent is sought, comprise:

- a converter station in the Walpole area of Norfolk (EGL 3); and
- a converter station in the Walpole area of Norfolk, together with a DCSS and an onshore converter station in East Lindsey (EGL 4).

1.5.4 The remaining components of the Projects would be considered to constitute 'associated development' under Section 115 of the PA 2008 and under the current 'Guidance on associated development applications for major infrastructure projects' (DCLG 2013). Two separate directions were issued, one for EGL 3 and another for EGL 4; however, both requests specifically state that a single application for development consent will be made i.e. a single DCO for both EGL 3 and EGL 4. The directions for both EGL 3 and EGL 4 were made on 29 February 2024, and both directions stated the following:

"The Secretary of State is of the opinion that the Direction should be issued because—

- *The Proposed Project is of national significance, taking into account that it forms part of a 2 Gigawatt transmission reinforcement project that will transmit low carbon electricity from its generation in Scotland to England.*
- *The Proposed Project could play an important role in enabling an energy system that meets the UK's commitment to reduce carbon emissions and the Government's objectives to create a secure, reliable and affordable supply for consumers.*
- *Progressing the development through the Planning Act 2008 development consent process would provide the certainty of a single, unified consenting process and fixed timescales."*

1.5.5 NGET intends to submit an application for a DCO under Section 37 of the Planning Act 2008 to the Planning Inspectorate. The application will comprise details of all development proposals and will be accompanied by an Environmental Statement (ES) conforming to Regulation 14 of the Infrastructure Planning (Environmental Impact

Assessment) Regulations 2017 (hereafter referred to as 'the EIA Regulations') and other relevant policies and legislation (see **Part 1, Chapter 2: Planning Act 2008 and Policy Overview**).

1.6 The need for Environmental Impact Assessment

1.6.1 EIA is a process required by UK law which brings together information about the likely significant effects of a development. The legal basis for EIA lies in European Community Directive 85/337/EEC (Ref 1.8) (the 'EIA Directive'). The EIA Directive is transposed into UK law through several pieces of legislation.

1.6.2 In relation to NSIPs, EIA is required for certain developments under the EIA Regulations.

1.6.3 The four stages of the DCO EIA process include:

1. Screening (discretionary).
2. Scoping (discretionary) (this stage).
3. Preparation of Preliminary Environmental Information.
4. Preparation of an ES.

1.6.4 Under the EIA Regulations, EIA is mandatory for development projects defined under Schedule 1. Those development projects defined in Schedule 2 only require EIA if they are likely to have significant effects on the environment by virtue of their nature, size or location.

1.6.5 It is not considered that any individual component of the Projects explicitly falls under Schedule 1 or 2 of the EIA Regulations. Schedule 3 of the EIA Regulations sets out the selection criteria for screening Schedule 2 development and thereby determining whether a project is likely to have significant effects, for which an EIA would subsequently be required. Having considered the criteria in Schedule 3, NGET proposes to undertake an EIA having given regard to the whole of Schedule 3 but specifically:

> Characteristics of development
>
> 1.- (1) The characteristics of development must be considered with particular regard
>
> to—
>
> (a) the size and design of the whole development;
>
> (b) cumulation with other existing development and/or approved development;
>
> and
>
> Location of development
>
> 2.- (1) The environmental sensitivity of geographical areas likely to affected by development, must be considered with particular regard to—
>
> (a) the existing and approved land use;

(b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;

(c) the absorption capacity of the natural environment, in particular:

(i) wetlands, riparian areas, river mouths;

(ii) coastal zone and the marine environment;

(iv) nature reserves and parks;

(v) European sites and other areas classified or protected under national legislation; and

(viii) landscapes and sites of historical, cultural or archaeological significance.

1.6.6 Considering the nature and size of the Projects, an EIA will be undertaken and therefore in line with Regulation 8(1)(b) of the EIA Regulations, NGET hereby provides notice that the application for a DCO will be accompanied by an ES.

1.7 Purpose and structure of the Scoping Report

1.7.1 This Scoping Report sets out the proposed content, methodologies to be adopted and the anticipated likely significant environmental effects that are proposed to be considered in the EIA. It supports a request by NGET, under Regulation 10 of the EIA Regulations for a written Scoping Opinion from the SoS, administered by the Planning Inspectorate on behalf of the SoS, to inform the ES which will be submitted as part of the DCO application.

1.7.2 The opinion of the SoS is being sought specifically on:

- The environmental aspects that should be included in the EIA;
- The relevant elements of the Projects and the resultant likely significant effects;
- Those effects not likely to be significant that do not need to be considered further;
- The approach to setting the study areas for each aspect;
- The data that has been gathered (and will be gathered);
- The assessment methods that will be used to determine likely significant effects; and
- The approach to determining the design and control measures that could be incorporated into the Projects to avoid, prevent, reduce or, if necessary, offset significant effects.

1.7.3 The Scoping Report has been produced in accordance with the EIA Regulations, as well as having due regard to Planning Inspectorate Advice Note Seven (Ref 1.9). A list of other Advice Notes considered is provided in **Part 1, Chapter 2: Planning Act 2008 and Policy Overview. Table 1-1** identifies where the information set out in Regulation 10(3) of the EIA Regulations and Planning Inspectorate Advice Note Seven can be found within this Scoping Report

Table 1-1 Compliance with Regulation 10(3) and Planning Inspectorate Advice Note Seven

Source of requirement	Suggested information to be included within the Scoping Report	Location within this Scoping Report
Regulation 10(3) of the EIA Regulations	(a) a plan to sufficiently identify the land;	The Projects Scoping Boundary is shown on **Figure 1-6 The Projects Scoping Boundary.** The English Onshore Scheme Scoping Boundary is shown on **Figure 1-7 English Onshore Scheme Scoping Boundary** The English Offshore Scheme Scoping Boundary is shown on **Figure 1-9 English Offshore Scheme Scoping Boundary**
	(b) a description of the proposed development including its location and technical capacity	**Part 1, Chapter 1 Introduction** **Part 2, Chapter 4 English Onshore Scheme** **Part 3, Chapter 20 English Offshore Scheme**
	(c) an explanation of the likely significant effects of the development on the environment	This is presented within each of the technical aspect chapters: **Part 2, Chapter 6 – Chapter 17** **Part 3, Chapter 22 – Chapter 31** **Part 4, Chapter 33 – Chapter 35**
	(d) such other information or representations as the person making the request may wish to provide or make	Where relevant, this is presented within each of the technical aspect chapters: **Part 2, Chapter 6 – Chapter 17** **Part 3, Chapter 22 – Chapter 31** **Part 4, Chapter 33 – Chapter 35**

Planning Inspectorate Advice Note Seven	***The Proposed Development***	
	An explanation of the approach to addressing uncertainty where it remains in relation to elements of the Proposed Development e.g. design parameters;	**Part 2, Chapter 5 EIA Approach and Methodology** **Part 2, Chapter 4 English Onshore Scheme** **Part 3, Chapter 20 English Offshore Scheme**
	Referenced plans presented at an appropriate scale to convey clearly the information and all known features associated with the Proposed Development;	The Projects Scoping Boundary is shown on **Figure 1-6 The Projects Scoping Boundary.** The English Onshore Scheme Scoping Boundary is shown on **Figure 1-7 English Onshore Scheme Scoping Boundary** The key elements of the English Onshore Scheme are shown in **Figure 1-8 Key Elements of the English Onshore Scheme** The English Offshore Scheme Scoping Boundary is shown on **Figure 1-9 English Offshore Scheme Scoping Boundary**
	EIA Approach and Topic Areas	
	An outline of the reasonable alternatives considered and the reasons for selecting the preferred option;	**Part 2, Chapter 3 Consideration of Alternatives** **Part 3, Chapter 19 Consideration of Alternatives**
	A summary table depicting each of the aspects and matters that are requested to be scoped out allowing for quick identification of issues;	Each of the technical aspect chapters considered in **Part 2, English Onshore Scheme** (**Chapter 6** to **Chapter 17**) include a summary table identifying those sources, impacts and receptors proposed to be scoped in and out of the ES. **Part 3 English Offshore Scheme, Chapters 24** to **31** also include a summary table setting out the effects to be scoped in or out of the ES.

A detailed description of the aspects and matters proposed to be scoped out of further assessment with justification provided;	The technical aspects proposed to be scoped out of the ES are detailed within: **Part 2, Chapter 17 Scoped Out Aspects.** **Part 3, Chapter 32 English Offshore Scheme Scoping Conclusions** **Part 4, Chapter 34 Scoped Out Aspects**
Results of desktop and baseline studies where available and where relevant to the decision to scope in or out aspects or matters;	These are set out within the 'Baseline Conditions' section of each of the technical aspect chapters considered in **Part 2, English Onshore Scheme (Chapter 6** to **Chapter 16)** and in the 'Baseline Characterisation' section in **Part 3 English Offshore Scheme (Chapter 23** to **31)**.
Aspects and matters to be scoped in, the report should include details of the methods to be used to assess impacts and to determine significance of effect e.g. criteria for determining sensitivity and magnitude;	Impacts and receptors proposed to be 'scoped in' for the English Onshore Scheme for the purpose of the ES are identified within the 'Likely Significant Effects' section of each of the technical aspect chapters considered in **Part 2, English Onshore Scheme (Chapter 6** to **Chapter 16**). Impacts and receptors proposed to be 'scoped in' for the English Offshore Scheme for the purpose of the ES are identified within each of the technical aspect chapters considered in **Part 3, English Offshore Scheme** (**Chapter 22** to **Chapter 31**). The proposed EIA approach and methods are described in **Part 2, Chapter 5 EIA Approach and Methodology** and **Part 3, Chapter 21 EIA Approach and Methodology**. The 'Assessment Methodology' section of each of the technical aspect chapters considered in **Part 2, English Onshore Scheme (Chapter 6** to **Chapter 16)** and 'Proposed Assessment Methodology' section in **Part 3, English Offshore Scheme (Chapter 23** to **31)** also describe how they will apply that methodology to their assessments or

	where it differs due to specific topic guidance, set out their proposed methodologies.
Any avoidance or mitigation measures proposed, how they may be secured and the anticipated residual effects;	These are set out within the 'Design and Control Measures' section of each of the technical aspect chapters considered in **Part 2, English Onshore Scheme (Chapter 6** to **Chapter 16)** and in **Part 3. English Offshore Scheme (Chapter 22** to **Chapter 31)** where identified at this stage
Information Sources	
References to any guidance and best practice to be relied upon;	This is presented within section 2 of each of the technical aspect chapters considered in **Part 2, English Onshore Scheme (Chapter 6** to **Chapter 16)** and in the 'Data Sources' section in **Part 3, English Offshore Scheme (Chapter 23** to **31)**
Evidence of agreements reached with consultation bodies (for example the statutory nature conservation bodies or local authorities);	Where it has been received, feedback from stakeholders is described as appropriate throughout the technical aspect chapters considered in **Part 2, English Onshore Scheme (Chapter 6** to **Chapter 16)** and **Part 3, English Offshore Scheme (Chapter 20** and **Chapters 22** to **Chapter 31).**
An outline of the structure of the proposed ES.	The outline structure of the ES is provided in **Part 1, Chapter 1: Introduction.**
Transboundary Effects	
The Applicant may also wish to provide a completed transboundary screening matrix dealing with the potential effects of the Proposed Development on other European Economic Area (EEA) States.	As outlined in the Planning Inspectorate's Advice Note Twelve (Ref 1.10) the screening process for transboundary effects will be carried out by the Planning Inspectorate. The transboundary screening matrix will be provided at a future stage of the process and is not included at this time. However, an initial view on the likelihood of transboundary effects is provided in **Section 5.10, Chapter 5, Part 2,**

English Onshore Scheme and **Section 21.9, Chapter 21, Part 3 English Offshore Scheme**.

1.7.4 The Scoping Report is structured as follows:

- **Part 1 - Introduction:**
  - **Chapter 1 Introduction** sets out an overview of the Projects, the background to the need for an EIA in relation to the Projects, the structure of this Scoping Report, and other assessments to be undertaken.
  - **Chapter 2 Planning Act 2008 and Policy Overview** provides an overview of the legislation and policies that are relevant to the Projects.
- **Part 2 – English Onshore Scheme:**
  - **Chapter 3 Consideration of Alternatives** provides a background to and the need for the Projects, and the main alternatives considered.
  - **Chapter 4 English Onshore Scheme** provides a description of the surrounding land and its land uses alongside a description of the elements of the English Onshore Scheme.
  - **Chapter 5 EIA Approach and Methodology** summarises the approach that has been taken to identify the scope of the EIA, including an introduction to the methods used.
  - **Chapter 6 Biodiversity** to **Chapter 16 Health & Wellbeing** outline the proposed scope of the assessment for each technical topic, the baseline data collected, the approach to setting the study area and the proposed methodology for assessment.
  - **Chapter 17 Scoped Out Aspects** identifies those aspects that are scoped out of the EIA.
  - **Chapter 18 Summary** provides a summary of the scope of the assessment.
- **Part 3 – English Offshore Scheme.**
  - **Chapter 19 Consideration of Alternatives** provides a background to and the need for the Projects, and the main alternatives considered.
  - **Chapter 20 English Offshore Scheme** provides a description of the surrounding land and its land uses alongside a description of the elements of the English Offshore Scheme**.**
  - **Chapter 21 EIA Approach and Methodology** summarises the approach that has been taken to identify the scope of the EIA, including an introduction to the methods used.
  - **Chapter 22 Designated Sites** explains the different assessment processes required for designated sites and how these will be undertaken by NGET.
  - **Chapter 23 Marine Physical Processes** provides a description of the potential impacts arising from the construction, operation and maintenance and decommissioning of the Projects on marine physical processes
  - **Chapter 24 Intertidal and Subtidal Benthic Ecology** provides a description of the potential impacts arising from the construction, operation and maintenance

and decommissioning of the Projects on intertidal and subtidal benthic ecology receptors

- **Chapter 25 Fish and Shellfish** provides a description of the potential impacts arising from the construction, operation and maintenance, and decommissioning of the Projects on fish and shellfish
- **Chapter 26 Intertidal and Offshore Ornithology** provides a description of the potential impacts arising from the construction, operation and maintenance, and decommissioning of the Projects on Intertidal and Offshore Ornithology
- **Chapter 27 Marine Mammals and Marine Reptiles** provides a description of the potential impacts arising from the construction, operation and maintenance, and decommissioning of the Projects on marine megafauna receptors including marine mammals
- **Chapter 28 Shipping and Navigation** provides a description of the potential impacts arising from the construction, operation (including maintenance and repair) and decommissioning of the Projects on shipping activity and key navigation features
- **Chapter 29 Commercial Fisheries** provides a description of the potential impacts arising from the construction, operation and maintenance, and decommissioning of the Projects on commercial fisheries
- **Chapter 30 Other Marine Users** provides a description of the potential impacts arising from the construction, operation and maintenance, and decommissioning of the Projects on other marine users
- **Chapter 31 Marine Archaeology** provides a description of the potential impacts arising from the construction, operation (including maintenance and repair) and decommissioning of the Projects on offshore archaeology and cultural heritage receptors
- **Chapter 32 English Offshore Scheme Scoping Conclusions** provides a summary of the impacts of the English Offshore Scheme that have been scoped 'in' to the EIA and those impacts it is proposed to scope out of the assessment, for physical and biological receptors and socio-economic receptors respectively

- **Part 4 – Project Wide.**
  - **Chapter 33 Greenhouse Gases** identifies the proposed methodology for assessment of the greenhouse gases.
  - **Chapter 34 Scoped Out Aspects** identifies those aspects that are proposed to be scoped out of the EIA and sets out the proposed content of the ES.
  - **Chapter 35 Cumulative Effects** identifies the proposed methodology for assessment for the cumulative effects assessment.

1.8 Competence

1.8.1 Regulation 14(4) of the EIA Regulations requires that an ES is prepared by 'competent experts' and that the ES is accompanied by a statement outlining the relevant expertise or qualifications of such experts.

1.8.2 Competent experts have prepared this EIA Scoping Report and will undertake the EIA and prepare the ES. All experts are accredited at a Company level by the Institute of Environmental Management and Assessment (IEMA) EIA Quality Mark Scheme. The scheme allows organisations that lead the co-ordination of EIAs in the UK to make a commitment to excellence in their EIA activities and have this commitment independently reviewed.

1.8.3 Details of the expertise and qualifications of the competent experts who have been responsible for preparing the topic specific chapters will be provided in the ES.

1.9 Other assessments

1.9.1 In addition to the EIA, the preparation of the application for the Projects requires other standalone assessments to be carried out to meet the requirements of other policy and legislation. Whilst the outcomes of these assessments may be drawn upon when carrying out the EIA (and vice versa), the scope of these other assessments will be discussed and agreed with appropriate regulatory authorities in line with the requirements of the relevant policy and legislation, rather than within this Scoping Report.

1.9.2 Where appropriate, however, the individual topic chapters in this Scoping Report outline where the findings of one of the additional assessments are to be drawn upon when carrying out the EIA, and any proposed scope of the relevant additional assessment is set out to facilitate consultation with relevant consultees in relation to this Scoping Report. The other assessments that are required to meet the requirements of other legislation and policy are outlined below.

Habitats Regulations Assessment

1.9.3 In accordance with Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive') and Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (the 'Birds Directive'), a network of protected areas has been designated by EU member states for the protection of Europe's most valuable and threatened habitats and species. These areas are known as European sites. The Conservation of Habitats and Species Regulations 2017 (SI 2017 No. 1012) (the 'Habitats Regulations') transpose the EU Directives into UK law. Following Brexit, a number of changes were made to the Conservation of Habitats and Species Regulations 2017 (Ref 1.11). The changes are made by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

1.9.4 When considering the merits of the application, the SoS must consider potential effects on European sites. In instances where a proposal has the potential to affect a European site, a Habitats Regulations Assessment (HRA) will need to be conducted. HRA is a process that determines if a plan or project proposal could significantly harm the designated features of a European site.

1.9.5 It should be noted that, post Brexit, European sites in the UK (as defined by the Conservation (Natural Habitats, &c.) Regulations 1994, and the Conservation of Offshore Marine Habitats and Species Regulations 2017) are no longer part of the European Union's Natura 2000 network. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 have created a national site network on land

and at sea, including both the inshore and offshore marine areas in the UK (Ref 1.10). The UK national site network (hereafter referred to as 'NSN') includes existing Special Areas of Conservation (SACs), existing Special Protection Areas (SPAs), and new SACs and SPAs designated under these Regulations.

1.9.6 UK policy extends the requirements pertaining to NSN sites to include Ramsar sites, proposed / candidate SACs, potential SPAs and areas secured as sites compensating for damage to a NSN site. Any proposals which have the potential to affect these sites would also require a HRA because they are protected by government policy.

Marine Conservation Zone Assessment

1.9.7 A Marine Conservation Zone (MCZ) Assessment, under the Marine and Coastal Access Act (MCAA) 2009, will be undertaken for the English Offshore Scheme and will be submitted as part of the application.

1.9.8 When considering the merits of the application, the SoS must satisfy themselves under Section 126 (6) of the MCAA, that there is no significant risk of the proposed activity hindering the achievement of the conservation objectives stated for a MCZ.

1.9.9 There are three stages to the assessment process including Screening (the process of identifying whether S.126 should apply to the English Offshore Scheme and whether the activity is capable of affecting (other than insignificantly) either the protected features of the MCZ or the ecological or geomorphological processes on which the protected features are dependent); Stage 1 assessment (which considers whether there is a significant risk of the activity hindering the achievement of the conservation objectives stated for the MCZ); and Stage 2 assessment (which considers whether there are benefits to the public of proceeding with the project that clearly outweigh the damage to the environment and what measures NGET will take to provide equivalent environmental benefit to compensate for the damage which the project will have on the MCZ).

Flood Risk Assessment

1.9.10 A Flood Risk Assessment (FRA) will be submitted and form part of the application. The FRA will assess the flood risk both to and from the Projects and demonstrate how that flood risk will be managed over the Projects lifetime. The FRA will give due regard to climate change.

Water Framework Directive Assessment

1.9.11 Effects on hydrology, water quality and morphology combine with any direct effects on aquatic biology to potentially affect the overall Water Framework Directive (WFD) status of surface waterbodies. The EIA will be supported by a standalone WFD Assessment in relation to hydrological receptors. It is noted that there is an overlap between the onshore and offshore elements of the Projects in the inter-tidal area. The WFD Assessment will cover waterbodies within the inter-tidal area as well as the land based WFD waterbodies. WFD compliance for surface waterbodies will be assessed, based on the results of assessments for hydromorphology and water quality, plus the results of the assessment of effects on aquatic biology from the biodiversity chapter. Assessment of WFD compliance for groundwater bodies will be reported within the Geology and Hydrogeology chapter of the ES.

1.10 Net Gain Commitments

1.10.1 NGET has committed to 10% Net Gain in Environmental value including as a minimum 10% Biodiversity Net Gain (BNG) across all its construction projects.

1.10.2 This commitment is underpinned by the delivery of quantifiable enhancements for biodiversity measures from a baseline using the Department for Environment, Food and Rural Affairs Biodiversity Calculator (Ref 1.12) with actions formalised and secured by long term management arrangements with external organisations and partners.

1.10.3 Wider environmental benefits such as carbon capture and storage, air quality and recreation and associated financial values are also considered and quantified using variation tools and emerging methodologies.

1.10.4 These commitments ensure that NGET can deliver long term environmental improvements as part of our works. The commitments will align and make a positive contribution to regional and national strategies and facilitate collaboration and partnerships with our communities and stakeholders.

1.11 Stakeholder Engagement

1.11.1 This section sets out the NGETs approach to stakeholder engagement and consultation. It provides an overview of the general approach, the engagement and consultation that has taken place to date, and that is proposed in the future. Engagement and consultation with technical stakeholders and the local community is a key element of the EIA process and will inform the design and assessment of the Projects.

General approach

1.11.2 NGET will continue to ensure stakeholders are engaged and consulted in a useful and inclusive manner. The general approach to engagement and consultation includes:

- Engagement and consultation activities scheduled at key points of the design and assessment process;
- Proactive and effective engagement with statutory and non-statutory stakeholders, including local residents who are most likely to be impacted by the Projects;
- A focus on the matters of greatest importance and relevance to stakeholders to ensure efficient use of their time;
- Use of varied and accessible engagement techniques – including a mix of online and in person channels. One-way and two-way communications will be utilised;
- Opportunities for stakeholders to share their experience and knowledge to help identify potential effects, mitigations and enhancements at an early stage of the design process;
- Addressing stakeholder queries and concerns in an efficient and effective manner; and
- Feedback which will be recorded, analysed and used to inform the EIA, optioneering and design of the Projects.

Future engagement and consultation

1.11.3 In line with the requirements of the PA 2008, NGET will undertake further consultation and engagement with communities and stakeholders as the Projects continue to develop.

1.11.4 The programme of ongoing stakeholder engagement and consultation will be structured around key milestones in the design development and assessment process. This will provide the opportunity to update and consult stakeholders on the evolving design and decision-making process.

1.11.5 Engagement and consultation will continue throughout the stages of the Projects, with the following stakeholders:

- Statutory bodies;
- Non-statutory bodies;
- Local authorities;
- Directly affected individuals and asset owners; and
- Local communities.

1.11.6 In addition to statutory consultation with prescribed consultees, as best practice, applicants are also encouraged to engage in non-statutory consultation with all potentially affected parties from the earliest stages of design. This allows stakeholders and local communities to gain a better understanding of the Projects and any potential effects identified whilst also giving the opportunity to influence the design and help identify appropriate mitigation. Local knowledge and understanding is important, and the applicant will seek to engage with consultees through both formal and informal consultation prior to submission of the DCO application.

1.11.7 NGET has undertaken an initial, non-statutory consultation on the English Onshore Scheme between 23 April and 15 July 2024. Responses received from the non-statutory consultation will inform how potential effects may be mitigated and if required, the design may be updated as a result.

1.11.8 Statutory Consultation will be held in 2025, and the Preliminary Environmental Information Report (PEIR) will be issued as part of this. The PEIR will enable consultees to understand the likely environmental effects of the Projects and help to inform their responses to the Statutory Consultation.

1.11.9 NGET will set up Technical Working Groups which will be themed to allow collaborative engagement across core environmental issues. The aim is to encourage attendees representing different environmental organisations to assist in reaching resolution with all parties, to inform the EIA.

1.11.10 Through the process of engagement and consultation the aim is to reach agreement, as far as possible, with stakeholders prior to the submission of the DCO. Statements of Common Ground will be developed between NGET and relevant stakeholders to document any remaining areas of disagreement which will be shared with the Planning Inspectorate at the point of submitting the DCO application.

1.11.11 A summary of the engagement and consultation activities undertaken, and how feedback has been taken into account will be documented in the Consultation Report which will accompany the DCO application.

1.12 Structure of the ES

1.12.1 The Planning Inspectorate's Advice Note Seven (The Planning Inspectorate, 2020a) requires that applicants provide an outline structure of what the ES will contain. The structure of the ES will broadly follow the same order of chapters that are presented in this Scoping Report, acknowledging that changes may need to be made to address the requirements of the Scoping Opinion, both in terms of presentation of the Projects to aid understanding, or as the design requirements evolve.

1.12.2 An indicative outline structure for the ES is set out in **Table 1-2 Outline structure of the ES.**

Table 1-2 Outline structure of the ES

ES content	Likely content
Non-Technical Summary (NTS)	A concise and standalone document that provides a description of the EIA process and its findings in a manner that is both appealing to read and easily understood by the general public.
Part 1: ES Introductory chapters	
Introduction	Overview of the Projects. The applicant and EIA project team and competency details. Purpose of the ES. Structure of the ES. A brief summary of other relevant assessments and documents (for example, Habitats Regulations Assessment).
The Projects	Description of the Projects and their surroundings. Development proposals (location and development description, development timescales and programme etc.). Design and Control measures.
Need and alternatives	The need for the Projects. Alternatives considered and environmental reasons for the choice of preferred options.
Legislation and policy	Legislative context. National and local policy context. Other relevant guidance and policies. Applicable consents and permits.
Approach to preparing the ES	The EIA process. EIA terminology.

ES content	Likely content
	EIA scoping. Stakeholder engagement. Identification of baseline conditions. Overview of assessment methodology. Approach to significance evaluation. Development of design and control measures Approach to CEA.
Part 2: English Onshore Scheme	
Environmental aspect chapters	Introduction. Relevant aspect specific guidance. Consultation and engagement. Data gathering methodology. Baseline description. Scope of the assessment. Design and control measures. Assessment methodology. Assessment of effects. Cumulative effects (inter-project effects) assessment. Limitations and assumptions.
Part 3: English Offshore Scheme	
Environmental aspect chapters	Introduction. Relevant aspect specific guidance. Consultation and engagement. Data gathering methodology. Baseline description. Scope of the assessment. Design and control measures. Assessment methodology. Assessment of effects. Cumulative effects (inter-project effects) assessment. Limitations and assumptions.
Part 4: Project wide chapters	
Greenhouse Gases	Environmental aspect chapter as structure outlined above
Cumulative effects (intra-project effects) assessment	Intra-project effects that occur as a result of two or more environmental aspect effects acting together (i.e. combined), to result in a new or changed effects on a single receptor.

ES content	Likely content
Assessment summary	Summary of the outcome of the environmental aspect assessments and how mitigation will be implemented through for example, a Construction Environmental Management Plan and Development Consent Order Requirements.

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2. Planning Act 2008 and Policy Overview

nationalgrid

2. Planning Act 2008 and Policy Overview

2.1 Introduction

2.1.1 This chapter provides an overview of the key legislation and policy against which the DCO application will be prepared and assessed. A full explanation of the relevant legislation and policy will be provided in the Planning Statement included within the suite of documents which will accompany the DCO application. The environmental aspect chapters (**Part 2, Chapter 6 to Chapter 16**) of this Scoping Report provide a summary of the key legislation and policies relevant to the specific receptor assessment.

2.2 Key Legislation

Planning Act 2008

2.2.1 The *Planning Act 2008 (SI 2008 c. 29)* (as amended) (PA 2008) is the primary legislation that establishes the legal framework for submitting, examining and determining applications for development consent. The PA 2008 sets out that developments meeting certain defined criteria, are classified as Nationally Significant Infrastructure Projects (NSIPs). It requires that developers wishing to construct, operate and maintain NSIPs must obtain a DCO from the relevant Secretary of State (SoS) to authorise their project.

2.2.2 Section 14 of the PA 2008 defines types of developments which are classified as NSIPs, subject to the criteria and thresholds set out in Sections 15 to 30A for different types of infrastructure. Section 16 of the PA 2008 sets this out for developments comprising ‘Electricity lines’.

2.2.3 The Projects do not fall under the definition of a NSIP under Part 3 of the PA 2008. Only electricity lines that are above ground, 132kV or greater and 2km or more in length are defined as NSIPs in their own right under Section 16 of the PA 2008. The Projects are therefore not an NSIP under the definitions set out in the PA 2008. However, under Section 35(1) of the PA 2008, “the Secretary of State may give a direction for development to be treated as development for which development consent is required” if certain criteria (including the type and location of the development) are met.

2.2.4 On 2 February 2024 NGET issued two letters to the Secretary of State for Energy Security and Net Zero (the SoS), requesting directions under section 35 of the PA 2008 related to development forming part of the Projects.

2.2.5 In the first letter NGET requested that the proposed converter station in the Walpole area of Norfolk required for the EGL3 Project should be treated as development for which development consent is required. In the letter, the converter station was described as the ‘Proposed Development’ which would constitute the ‘authorised development’ in a development consent order (DCO).

2.2.6 In the second letter NGET requested that the proposed converter station in the Walpole area of Norfolk alone or together with a switching station and a converter station in the

East Lindsey area of Lincolnshire required for the EGL4 Project should be treated as development for which development consent is required. In the letter, the converter station in the Walpole area alone or together with the switching station and the converter station in the East Lindsey area were described as comprising the 'Proposed Development' which would constitute the 'authorised development' in a DCO.

2.2.7 On 29 February 2024, the SoS gave the requested directions under sections 35(1) and 35ZA of the PA 2008, noting in both that the Projects could be consented by way of one joint DCO application. Therefore, the PA 2008 provides the primary legislative framework for the consenting of the Projects.

The EIA Regulations

2.2.8 An EIA is required because the Projects meet the criteria for EIA development under the EIA Regulations.

2.2.9 The EIA Regulations set out a procedure for assessing, consulting and informing decision-making for projects which are likely to have significant environmental effects. The EIA Regulations require the provision of an ES, which will be submitted alongside the DCO application for the Projects.

2.2.10 Paragraph 5 of Schedule 4 of the EIA Regulations specifically outlines that the EIA must identify, describe and assess, the direct and any indirect, secondary, cumulative, transboundary, short–term, medium-term and long-term, positive and negative significant effects of the Projects upon specific environmental factors. The requirement of Schedule 4 of the EIA Regulations will be met through the assessment of effects for each environmental aspect assessed as part of the EIA. Further details on the approach to the EIA are outlined in **Part 2, Chapter 5: EIA Approach and Methodology** and in the scope of environmental aspects outlined in the environmental aspect chapters (**Part 2, Chapter 6 to Chapter 16**).

2.2.11 The EIA will be undertaken in line with legislation and policy and specifically in accordance with the requirements of the EIA Regulations. In addition, the EIA will take into consideration key guidance documents (Ref 2.1) from the Planning Inspectorate which include:

- Advice Note Three: EIA Notification and Consultation (Version 7, 2017)
- Advice Note Six: Preparation and submission of application documents (Version 11, 2012)
- Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements (Version 7, 2020).
- Advice Note Nine: Rochdale Envelope (Version 3, 2018).
- Advice Note Ten: Habitats Regulations Assessment relevant to Nationally Significant Infrastructure Projects (Version 9, 2022)
- Advice Note Eleven: Working with public bodies in the infrastructure planning process (Version 4, 2017).
- Advice Note Twelve: Transboundary Impacts and Process (Version 6, 2020).
- Advice Note Seventeen: Cumulative effects assessment to nationally significant infrastructure projects (Version 2, 2019) (Ref 2.2).

- Advice Note Eighteen: The Water Framework Directive (Version 1, 2017) (Ref 2.3).

2.2.12 The IEMA also provides guidance on EIA, and the EIA for the Projects will take into consideration the following guidance documents from IEMA:

- Environmental Impact Assessment Guide to: Delivering Quality Development (Ref 2.4) (IEMA, 2016).
- Delivering Proportionate EIA. A Collaborative Strategy for Enhancing UK Environmental Impact Assessment Practice (Ref 2.5).

2.2.13 These lists of guidance documents are not exhaustive and provide a general overview of the important guidance that will help to inform the EIA process for the Projects. The lists will be continually reviewed and updated throughout the EIA process up to submission of the DCO application. Each individual environmental aspect will also refer to relevant aspect-specific guidance in the environmental aspect chapters (**Part 2, Chapter 6 to Chapter 16**) of the Scoping Report, where appropriate. A full list of the relevant legislation and guidance considered as part of the EIA process will be provided within the PEIR and ES.

Marine and Coastal Access Act 2009

2.2.14 A spatial planning system for the management of the marine environment was introduced by the Marine and Coastal Access Act 2009 (MCCA 2009). This introduced a requirement to obtain Marine Licences for works at sea.

2.2.15 The Marine Management Organisation (MMO) is responsible, under Part 4 of the MCAA 2009, for administering marine licensing of activities related to construction or removal of any substance or object in UK territorial waters and also for regulating activities where they are undertaken outside of the UK territorial waters e.g. within the UK Exclusive Economic Zone (EEZ). They do so by issuing a Marine Licence.

2.2.16 The PA 2008 enables an applicant for a DCO to apply for 'Deemed Marine Licence' (DML) as part of the DCO process by virtue of Section 149A of the PA 2008 which was inserted by the MCAA 2009. It is intended that the DCO will contain two separate DMLs, for the offshore works for each of the Projects.

2.2.17 In addition, Section 126 of the MCAA 2009 sets out that where a public authority has the function of determining an application that is capable of effecting (other than insignificantly) the protected features of a Marine Conservation Zone (MCZ), or the processes on which those features depend, then they have a duty to consider MCZs during their decision making.

Electricity Act 1989

2.2.18 Section 9(2) of the Electricity Act 1989 places general duties on NGET as a license holder:

"to develop and maintain an efficient, co-ordinated and economical system of electricity transmission…"

2.2.19 In addition, Section 38 and Schedule 9 of the Electricity Act 1989 requires an electricity licence holder such as NGET, when formulating proposals for new lines and other works, 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 shall do what it 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."

2.2.20 NGET's Stakeholder, Community and Amenity Policy (Ref 2.6), published December 2016, sets out how the company will meet the Schedule 9 duty placed upon it by the legislation.

Countryside and Rights of Way Act 2000

2.2.21 A National Landscape is, from November 2023 the rebranded name of Areas of Outstanding Natural Beauty (AONB). They are designated under the provisions of Part IV of the Countryside and Rights of Way (CRoW) Act 2000 for the purpose of conserving and enhancing the natural beauty of an area and securing its permanent protection against development that would damage its special qualities. NGET as a statutory undertaker, has a duty under Section 85 of the Act (as amended in s245 of the Levelling up and Regeneration Act 2023) which states:

"In exercising or performing any functions in relation to, or so as to affect, land in an AONB in England, a relevant authority must seek to further the purpose of conserving and enhancing the natural beauty of the AONB".

2.3 National Planning and Marine Policy

National Policy Statements (NPSs)

2.3.1 As detailed in Section 1.5 of this Scoping Report, two separate directions (under s35 of the PA 2008) were sought from the SoS. The directions for both EGL 3 and EGL 4 were made on 29 February 2024. Therefore, in accordance with Paragraph 1.3.10 of NPS EN1 (Ref 2.7) "*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."*

2.3.2 Where relevant to the EIA, further details pertaining to NPSs are provided in the appendices to the environmental aspect chapters (**Part 2, Chapter 6** to **Chapter 16**) of this Scoping Report and will be included in the Planning Statement, included within the suite of documents which will accompany the DCO application.

2.3.3 A summary of the relevant National Policy Statements is included in **Table 2-1 Relevant National Policy Statements**.

Table 2-1 Relevant National Policy Statements

Plan	Summary
Overarching National Policy Statement for Energy (EN-1) (Ref 2.7)	
Paragraph 1.3.10	This paragraph states, that EN-1 in conjunction with any relevant technology specific NPS - will be the primary policy for Secretary of State

Plan	Summary
	decision making on projects in the field of energy for which a direction has been given under section 35 of the PA 2008.
National Policy Statement for Electricity Networks Infrastructure (EN-5) (Ref 2.8)	
Paragraph 1.6.4	This section confirms in that it also applies to developments that require development consent pursuant to section 35 of the PA 2008
Paragraph 2.9.19	A summary of the Horlock Rules to provide guidelines for the design and siting of substations (in addition to cable sealing end compounds and line entries). These rules, the basis of which was established in 2003 When considering new electricity infrastructure, National Grid has regard to the degree to which options comply or deviate from these rules.
National Policy Statement for Renewable Energy Infrastructure (EN-3) (Ref 2.9)	
	This NPS may also have relevance to the Projects, in the view of the need for the Projects to reinforce boundary flows and facilitate future connections from offshore wind.

Marine Policy Statement (MPS)

2.3.4 The framework for preparing Marine Plans and decisions affecting the marine environment is contained within the MPS, which was adopted in 2011. The MPS has been considered in the development of this EIA Scoping Report, particularly, within the chapters relating to the English Offshore Scheme.

2.3.5 Guidance to the UK Marine Policy Statement from 1 January 2021 provides statutory guidance which explains how references to EU law in the UK MPS should be interpreted following the UK's withdrawal from the EU.

Marine Plans

2.3.6 The East Inshore and East Offshore Marine Plan, April 2014 (Ref 2.10) has been considered in the development of this scoping report.

2.3.7 The *Guidance to the UK Marine Policy Statement from 1 January 2021*[14] provides statutory guidance which explains how references to EU law in the UK MPS should be interpreted following the UK's withdrawal for the EU. Marine Plans. This Marine Plan has been considered in the development of this EIA Scoping Report.

British Energy Security Strategy

2.3.8 The British Energy Security Strategy (Ref 2.11) was published by the UK Government in April 2022. It sets out the Government's ambition to improve energy efficiency, transition away from oil and gas, and build a self-sufficient and secure energy system

2.3.9 The Strategy sets out the UK's ambition to deliver up to 50GW of offshore wind by 2030 and outlines a number of ways in which the time taken for development and deployment

[14] Guidance to the UK Marine Policy Statement from 1 January 2021 - GOV.UK (www.gov.uk)

of offshore wind farms will be reduced. This includes through streamlining the consenting process and strengthening the Renewable NPSs.

2.3.10 The Strategy also prioritises the need for flexibility in matching supply and demand, so that minimal energy is wasted, thus creating a more efficient and locally-responsive energy system.

Accelerating Electricity Transmission Network Deployment: Electricity Networks Commissioner's recommendations (August 2023)

2.3.11 In August 2023 independent recommendations were provided by the UK's Electricity Networks Commissioner, Nick Winser, on how to accelerate the deployment of electricity transmission infrastructure. The key recommendations that are considered relevant to the proposed Scheme are:

- The production of a Strategic Spatial Energy Plan (SSEP), which would forecast supply and demand characteristics and their likely whereabouts. This Plan would bridge the gap between government policy and infrastructure delivery plans.
- A new document to be created, the Electricity Transmission Design Principles, which will provide a clear basis for communities and stakeholders to understand proposals and a clear foundation for the Planning Inspectorate's consideration.
- Implementation of reforms to the DCO process. In particular, having an updated suite of NPS which reference and are supported by a SSEP, associated network plans and Design Principles, will reduce the pre-application period and assist the Planning Inspectorate

2.3.12 While these recommendations by the Electricity Networks Commissioner have been acknowledged in the preparation of this EIA Scoping Report, it is important to note that at the time of writing, they have not yet been implemented. Their status will monitored, and should they be implemented during the EIA process, they will be duly considered.

Transmission Acceleration Action Plan (November 2023)

2.3.13 The Action Plan sets out the Government's response to the above recommendations from the Electricity Networks Commissioner and was published in November 2023. In summary, the Government accepts the Commissioner's recommendations in all areas, and in some cases seeks to go further. The Action Plan also seeks to halve the end-to end build time of electricity transmission network infrastructure, from 14 to 7 years.

National Planning Policy Framework

2.3.14 The revised National Planning Policy Framework (NPPF) was most recently updated in December 2023 (Ref 2.12). Paragraph 5 of the NPPF sets out that it does not contain specific policies for NSIPs and states that:

"These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the National Planning Policy Framework)".

2.3.15 Notwithstanding the above, paragraph 157 of the NPPF confirms the Framework's support for the transition to a low carbon future in a changing climate. It states that:

"the planning system should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience...and support renewable and low carbon energy and associated infrastructure."

2.3.16 While EN-1 and EN-5 remain the prime decision-making policy, where they do not provide guidance, each technical chapter will consider whether there is important and relevant policy in the NPPF that may require consideration by the decision-making authority.

2.3.17 At this stage, it is not possible to confirm if such secondary guidance will be considered important or relevant by the SoS, and it is therefore included for completeness to allow the SoS to make such a determination.

2.3.18 Paragraph 159 of the NPPF states that:

"New Development should be planned for in ways that:

avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; and

can help to reduce greenhouse gas emissions, such as through its location, orientation, and design. Any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards."

2.3.19 The NPPF is also supported by the National Planning Practice Guidance (NPPG).

2.4 Local Planning Policy

2.4.1 The NPPF states that the planning system should be genuinely plan-led. As such, local plans are prepared by the Local Planning Authority (LPA), usually the Council or the national park authority for the area. Succinct and up-to-date local plans should provide a positive vision for the future of each area and a framework for addressing housing needs and other economic, social and environmental priorities.

2.4.2 Local plans must be positively prepared, justified, effective and consistent with national policy in accordance with section 20 of the Planning and Compulsory Purchase Act 2004 (as amended) and the National Planning Policy Framework (NPPF). Once adopted, local plans provide the framework for development across England, including in the boroughs that EGL 3 & 4 would be developed in.

2.4.3 A summary of the relevant, adopted local planning policies for the seven boroughs relevant to the Projects are included in **Table 2-2 Relevant local planning policy.**

Table 2-2 Relevant local planning policy

Plan	Summary
South East Lincolnshire Joint Strategic Planning Committee (Boston Borough, South Holland District and Lincolnshire County Council)	

Plan	Summary
South East Lincolnshire Local Plan 2011-2036 (Adopted March 2019)	The South East Lincolnshire Local Plan 2011-2036 was produced by the South East Lincolnshire Joint Strategic Planning Committee (the Joint Committee) and adopted in March 2019. The Joint Committee is a partnership of Boston Borough, South Holland District and Lincolnshire County Councils. The Local Plan will guide development and the use of land in South East Lincolnshire from 1 April 2011 to 31 March 2036, and will help to shape how the area will change over this period.
East Lindsey District Council	
East Lindsey Local Plan Core Strategy (Adopted July 2018)	The East Lindsey Local Plan Core Strategy was adopted in July 2018 and sets out the vision and strategic policies for the growth and development of the District up to 2031.
East Lindsey Local Plan Review: Issues & Options	East Lindsey District Council is undertaking a partial review of the East Lindsey Local Plan 2018. The Issues and Options Paper sets out certain issues within the adopted local plan which are being considered in the partial review and suggests potential options in relation to these – in particular relating to whether or not the Plan continues with its current strategy of separate policies for the coastal are or brings the policies together with one strategy for the District. The Council also undertook a call for land. Those with an interest in developing land within East Lindsey were asked to submit sites to the Council for consideration. Sites were being sought for both housing and employment land. Both the Issues and Options Paper consultation and the Call for Land consultations ran for an 8 week period between 15 February 2021 and 12 April 2021.
Fenland District Council	
Fenland Local Plan (Adopted May 2014)	The Fenland Local Plan was adopted in May 2014 and contains the policies and broad locations for the growth and regeneration of Fenland up to 2031.
Draft Local Plan	Fenland District Council consulted on the Draft version of the Local Plan between 25 August 2022 and 19 October 2022. The Draft Plan sets out the emerging policies and proposals for growth and regeneration, and the proposed sites to deliver the growth.
King’s Lynn and West Norfolk Council	
Local Development Framework – Core Strategy (Adopted July 2011)	The Local Development Framework was adopted in July 2011 and sets out the spatial planning framework for the development of the borough up to 2026.
Local Plan review (2016-2036)	The Local Plan Review was submitted to the Secretary of State for Levelling Up, Housing and Communities on 29 March 2022. The first round of Local Plan examination hearings was held during December 2022/ January 2023. In January the Inspectors adjourned the hearings to

Plan	Summary
	allow the Council to undertake further work to justify the spatial strategy and distribution of housing in the Local Plan Review. The Examination hearings were held during March 2024 and April 2024 and the remaining hearing is scheduled for September 2024.
Norfolk County Council	
Core Strategy and Minerals and Waste Development Management Policies Development Plan Document 2010-2026 (Adopted September 2011)	The Core Strategy and Minerals and Waste Development Management Policies Development Plan Document 2010-2026 was adopted in September 2011 and sets out the spatial vision for future mineral extraction and associated development and waste management facilities in Norfolk. The Core Strategy plans for facilities to manage the waste that is expected to arise and also where to extract the minerals that are needed over the Plan period to the end of 2026
Mineral Site Specific Allocations Development Plan Document (Adopted October 2013)	The Minerals Site Specific Allocations Development Plan Document (DPD) was adopted in October 2013. Its purpose is to set out specific, allocated sites where mineral extraction sites are considered acceptable in principle.
Waste Site Specific Allocations Development Plan Document (Adopted October 2013)	The Waste Site Specific Allocations Development Plan Document (DPD) was adopted in October 2013. Its purpose is to set out specific, allocated sites where waste management facilities are considered acceptable in principle.
Norfolk Minerals and Waste Local Plan	Norfolk County Council is preparing a Norfolk Minerals and Waste Local Plan, to consolidate the three adopted DPDs into one Local Plan, ensure that the policies within them remain up-to-date and to extend the plan period to the end of 2038. The Norfolk Minerals and Waste Local Plan was submitted to the Planning Inspectorate for independent examination on 20 December 2023.
Cambridgeshire County Council	
The Cambridgeshire and Peterborough Minerals and Waste Local Plan (Adopted July 2021)	The Cambridgeshire and Peterborough Minerals and Waste Local Plan was adopted in July 2021 and guides minerals and waste development over the plan period to 2036.
Lincolnshire County Council	
Lincolnshire Minerals and Waste Local Plan Core	The Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies was adopted in June 2016. The Core Strategy and Development Management Policies document sets out the

Plan	Summary
Strategy and Development Management Policies (Adopted June 2016)	key principles to guide the future winning and working of minerals and the form of waste management development in the County up to 2031.
Lincolnshire Minerals and Waste Local Plan Site Locations (Adopted December 2017)	The Site Locations document was adopted in December 2017 and includes specific proposals and policies for the provision of land for mineral and waste development.
Lincolnshire Minerals and Waste Local Plan	Lincolnshire County Council is reviewing the Lincolnshire Minerals and Waste Local Plan. The Development Scheme timetable indicates that the draft Local Plan will be submitted to the Secretary of State in Summer 2024.

2.4.4 Further aspect specific details on local planning policy, including specific policies of relevance to the Projects, are provided in the appendices to the environmental aspect chapters (**Part 2, Chapter 6 to Chapter 16)** of this Scoping Report and will be included in the Planning Statement.

2.5 National Grid Policy and Guidance

2.5.1 National Grid has its own policies and processes that are followed when developing projects. The key policies that are applicable to the Project include:

- Holford Rules (Ref 2.13): A series of guidelines/rules for the routeing and design of new overhead lines or overhead line extensions. The guidelines were initially developed in 1959 and have been reviewed on a number of occasions by National Grid and by the other UK transmission licence holders. The guidelines provide a set of design criteria that have stood the test of time and became accepted industry best practice in overhead line routeing. The guidelines now form an important part of national planning policy relating to the development of electricity networks, as set out in National Policy Statement EN-5.The general principles underlying the Holford Rules – the avoidance of adverse impacts by careful routeing – are to a degree also relevant to the routeing of underground cables, although the balance of impacts and constraints will often be different;
- Horlock Rules (Ref 2.14): A series of guidelines/rules for the siting and design of new converter stations, substations, or substation extensions, including consideration of line entries and sealing end compounds. The guidelines were initially developed in 2003 and have been reviewed on a number of occasions by National Grid, with a revised version issued in 2009. The Horlock Rules provide a set of principles which avoid, or reduce the environmental impacts associated with the development of new substation infrastructure.
- National Grid's Stakeholder, Community, and Amenity Policy (Ref 2.6): This document describes the ten commitments that National Grid has made to the way that electricity and gas works are carried out in the UK. This includes setting out how

National Grid will meet its amenity responsibilities and how stakeholders and communities are involved on projects; and

- National Grid's Approach to Consenting (Ref 2.15): This document outlines the project development process for major infrastructure projects, from initial inception to consent and construction. National Grid's Approach to Consenting is divided into six stages, as detailed within **Part 2, Chapter 3: Consideration of Alternatives**.
- National Grid also has an extensive range of process and guidance documents that govern how projects are designed and implemented. Specific documents are referenced later in the Scoping Report chapters where relevant.

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National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com