

The Great Grid Upgrade

Chesterfield to Willington

Preliminary Environmental Information Report

Volume 3: Appendix 1B Abbreviations and Glossary

March 2026

nationalgrid

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1B. Abbreviations and Glossary

1B.1 Abbreviations

Abbreviations	Full Term
$\mu\text{g}/\text{m}^3$	Micrograms per cubic metre
AADT	Annual Average Daily Traffic
AAWT	Annual average weekday traffic flows
ACoW	Archaeological Clerk of Works
AD	Anno Domini
ADMS	Atmospheric Dispersion Modelling Software
AEP	Annual Exceedance Probability
AIA	Arboricultural Impact Assessment
AIL	Abnormal Indivisible Load
AIMS	Asset Information Management System
AIS	Air insulated switchgear
ALC	Agricultural Land Classification
AMEI	Associate Member of the Energy Institute
AMES	Area of Multiple Environmental Sensitivity
AOD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
APIS	Air Pollution Information System
AQAL	Air Quality Assessment Level
AQMA	Air Quality Management Area
AQO	Air Quality Objective
ArbCoW	Arboricultural Clerk of Works
ARN	Automated Road Network
ASSI	Area of Special Scientific Interest
ATC	Automatic Traffic Counter
AURN	Automatic Urban and Rural Network
AW	Ancient Woodland
B&B	Bed and Breakfast
BA	Bachelor of Arts
BAP	Biodiversity Action Plan

Abbreviations	Full Term
BB 93	Building Bulletin 93 (Acoustic Design of Schools)
BCE	Before Common Era
BGL	Below Ground Level
BGS	British Geological Survey
BMV	Best and Most Versatile (land)
BNG	Biodiversity Net Gain
BNL	Basic Noise Level
BOAT	Byways Open to All Traffic
BoCC	Birds of Conservation Concern
BOD	Biochemical Oxygen Demand
BP	Before Present
BPM	Best Practicable Means
BS	British Standard
BSc	Bachelor of Science
BTEC	Business and Technology Education Council
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
BTO	British Trust for Ornithology
C.Env	Chartered Environmentalist
CA	Conservation area
CAR	Control of Asbestos Regulations
CBC	Chesterfield Borough Council
CBS	Cement Bound Sand
CC	Climate Change
CE	Common Era
CEA	Cumulative Effects Assessment
CEH	Centre for Ecology and Hydrology
CEMP	Construction Environmental Management Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CIfA	Chartered Institute for Archaeologists
CIRIA	Construction Industry Research and Information Association
CIWEM	Chartered Institution of Water and Environmental Management
CL:AIRE	Contaminated Land: Applications in Real Environments

Abbreviations	Full Term
CLP13	Managing the Water Cycle (Chesterfield Borough Local Plan)
CMLI	Chartered Member of the Landscape Institute
CND	Customer and Network Development
CNP	Critical National Priority
CNVMP	Construction Noise and Vibration Management Plan
CoCP	Code of Construction Practice
COMAH	Control of Major Accident Hazards
CoPA	Control of Pollution Act
COSHH	Control of Substances Hazardous to Health
CPRSS	Corridor Preliminary Routeing and Siting Study
CR	Crossing Route
CREAM	Calculator for Road Emissions of Ammonia
CROW (Act)	Countryside and Rights of Way Act 2000
CRT	Canals and Rivers Trust
CRTN	Calculation of Road Traffic Noise
CSci	Chartered Scientist
CSE	Cable Sealing End (as in 'CSE Compound' or 'CSE Pylon')
CTMP	Construction Traffic Management Plan
CWTP	Construction Worker Travel Plan
dB	Decibel
dB(A)	A-weighted decibel
DBW	Daytime Bat Walkover
DCO	Development consent order
dDCO	Draft development consent order
DDR	Design Development Report
Defra	Department for Environment, Food and Rural Affairs
DESNZ	Department for Energy Security and Net Zero
DfT	Department for Transport
DHRA	Development High Risk Area
DLL	District Level Licensing
DM	Do-Minimum
DMP	Dust Management Plan
DMRB	Design Manual for Roads and Bridges

Abbreviations	Full Term
DNO	Distribution network operator
DoWCOP	Definition of Waste: Development Industry Code of Practice
DPZ	Draft Policy Zone
DQRA	Detailed Quantitative Risk Assessment
DS	Do-Something
DTM	Digital Terrain Model
DWPA	Drinking Water Protected Area
DWT	Derbyshire Wildlife Trust
EA	Environment Agency
EATM	Environmental Assessment of Traffic and Movement
EBC	Erewash Borough Council
EC	European Commission
EcIA	Ecological Impact Assessment
ECoW	Ecological Clerk of Works
ECP	Environmental Control Plan
EDR	Event Derbyshire Record
EEA	European Economic Area
EFT	Emissions Factor Toolkit
EIA	Environmental Impact Assessment
EMF	Electric and magnetic field
EN-1	Overarching National Policy Statement for Energy
EN-5	National Policy Statement for Electricity Networks Infrastructure
EnvCoW	Environmental Clerk of Works
EPA	Environmental Protection Act 1990
EPC	Emerging Preferred Corridor
EPS	European Protected Species
EPUK	Environmental Protection UK
EqIA	Equality Impact Assessment
EQS	Environmental Quality Standard
ES	Environmental Statement
EU	European Union
FEH	Flood Estimation Handbook
FFGWL	Future Flows and Groundwater Levels

Abbreviations	Full Term
FRA	Flood Risk Assessment
FRAP	Flood Risk Activity Permit
GCN	Great crested newt
GCR	Geological Conservation Review
GHG	Greenhouse gas
GI	Ground Investigation
GIS	Geographic Information System
GLTA	Ground Level Tree Assessment
GLVIA3	Guidelines for Landscape and Visual Impact Assessment Third Edition
GQRA	Generic Quantitative Risk Assessment
GW	Gigawatt. One billion (10 ⁹) watts
GWDTE	Groundwater Dependent Terrestrial Ecosystems
GWMMP	Groundwater Management and Monitoring Plan
ha	Hectare
HCA	Homes and Communities Agency
HD	Hydrology-specific Design Measure
HDD	Horizontal directional drilling
HDV	Heavy Duty Vehicle
HER	Historic Environment Record
HEWRAT	Highways England Water Risk Assessment Tool
HGBI	Herpetofauna Groups of Britain and Ireland
HGV	Heavy Goods Vehicle
HIA	Hydrogeological Impact Assessment
HLS	Higher Level Stewardship
HPI	Habitat of Principal Importance
HRA	Habitats Regulations Assessment
HSE	Health and Safety Executive
HSI	Habitat Suitability Index
HSQE	Health, Safety, Quality, and Environment
Hz	Hertz
IAQM	Institute of Air Quality Management
ICCI	In-Combination Climate Impact
ICNIRP	International Commission on Non-Ionizing Radiation Protection

Abbreviations	Full Term
ID	Identification (used in context of water body IDs)
IDB	Internal Drainage Board
IEF	Important Ecological Feature
IEMA	Institute of Environmental Management and Assessment
IMD	Index of Multiple Deprivation
INNS	Invasive Non-Native Species
IRZ	Impact Risk Zone
ISEP	Institute of Sustainability and Environmental Professionals
ISO	International Organization for Standardization
J	Joules (unit of energy)
ka	Kiloannum (thousand) years ago
kJ	Kilojoules (unit of energy)
km	Kilometres
kV	Kilovolt
kVA	Kilovolt-amperes (unit of apparent power)
LA	Local authority
LA10,18h	Sound level exceeded for 10% of the time over 18 hours
LAeq,16hr	Equivalent Continuous Sound Level over 16 hours
LAeq,18h	Equivalent Continuous Sound Level over 18 hours
LAeq,T dB	Equivalent Continuous Sound Level (A-weighted, over time period T, in decibels)
LAQM	Local Air Quality Management
LAQM.TG(22)	Local Air Quality Management Technical Guidance (2022)
LCA	Landscape Character Area
LCRM	Land Contamination Risk Management
LCT	Landscape Character Type
LCU	Landscape Character Unit
LDP	Long Distance Path
LDV	Light Duty Vehicle
LEMP	Landscape and Ecological Management Plan
LGM	Last Glacial Maximum
LHA	Local highway authority
LiDAR	Light Detection and Ranging
LLAU	Limit of Land to be Acquired or Used
LLFA	Lead Local Flood Authority

Abbreviations	Full Term
LNR	Local Nature Reserve
LNRS	Local Nature Reserve Strategy
LOAEL	Lowest Observed Adverse Effect Level
LoD	Limit of Deviation
LPA	Local planning authority
LRN	Local Road Network
LSE	Likely Significant Effect
LSOA	Lower-Layer Super Output Area
LTP	Local Transport Plan
LV	Limit Value
LVAC	Low Voltage Alternating Current
LVIA	Landscape and Visual Impact Assessment
LwA	Sound Power Level (A-weighted)
LWS	Local Wildlife Site
m	metre
m ³ /s	cubic metres per second (unit of flow)
MAGIC	Multi-Agency Geographic Information for the Countryside
MCIEEM	Member of the Chartered Institute of Ecology and Environmental Management
MDR	Monument Data Record
MEWP	Mobile Elevating Work Platform
MIAQM	Member of the Institute of Air Quality Management
MIEnvSc	Member of the Institution of Environmental Sciences
MIOA	Member of the Institute of Acoustics
ML	Monitoring Location
mm/s	Millimetres per second (unit of velocity)
MMP	Materials Management Plan
MOD	Ministry of Defence
MoRPh	Modular River Physical survey
MOT	Ministry of Transport
MP	Member of Parliament
MPA	Mineral Planning Authority
MSA	Mineral Safeguarding Area
MSc	Master of Science
Mya	Million years ago

Abbreviations	Full Term
NAC	Noise Advisory Council
NCA	National Character Area
NCN	National Cycle Network
NCR	National Cycle Route
ND	No Data
ND†	Data Rejected (tube found on floor, containing spider web, etc.)
NERC	Natural Environment and Rural Communities Act 2006 (as amended)
NESO	National Energy System Operator
NETS	National Electricity Transmission System
NGED	National Grid Electricity Distribution Plc
NGET	National Grid Electricity Transmission Plc
NGR	National Grid Reference
NH3	Ammonia
NHLE	National Heritage List for England
NIA	Noise Important Area
NMP	National Mapping Programme
NNR	National Nature Reserve
NO	Nitrogen monoxide
NO2	Nitrogen dioxide
NOA	Network Options Assessment
NOEL	No Observed Effect Level
NOx	Nitrogen oxides
NP	National Park
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NPS	National Policy Statement
NPSE	Noise Policy Statement for England
NRMM	Non-Road Mobile Machinery
NRW	Natural Resources Wales
NSIP	Nationally Significant Infrastructure Project
NSL	National Speed Limit
NSR	Noise Sensitive Receptor
NTS	Non-Technical Summary

Abbreviations	Full Term
NVC	National Vegetation Classification
NVZ	Nitrate Vulnerable Zone
OCCS	Opencast Coal Site
OCoCP	Outline Code of Construction Practice
OCOR	Our City Our River
Ofgem	Office of Gas and Electricity Markets
OHID	Office for Health Improvement and Disparities
OLEMP	Outline Landscape and Ecological Management Plan
ONS	Office of National Statistics
ORPA	Other Routes with Public Access
OS	Ordnance Survey
OWC	Ordinary Watercourse Consent
OWSI	Outline Written Scheme of Investigation
PA 2008	Planning Act 2008
PAH	Polycyclic Aromatic Hydrocarbons
PaMELA	Palaeolithic and Mesolithic Lithic Artefact database
PAR	Primary Access Route
PAS	Portable Antiquities Scheme
PAS 2080	Publicly Available Specification 2080
PBDE	Polybrominated Diphenyl Ethers
PCB	Polychlorinated Biphenyl
PCM	Pollution Climate Model
PD	Permitted Development
PEI	Preliminary Environmental Information
PEIR	Preliminary Environmental Information Report
PFAS	Polyfluoroalkyl Substances
PFOS	Perfluorooctane sulphonate
pFRA	Preliminary Flood Risk Assessment
PGDip	Postgraduate Diploma
PHE	Public Health England
PIEMA	Practitioner Member of the Institute of Environmental Management and Assessment
PINS	Planning Inspectorate
plc	Public Limited Company
pLWS	potential Local Wildlife Site

Abbreviations	Full Term
PM	Particulate Matter
PM10	Particulate Matter less than 10 microns in diameter
PM2.5	Particulate Matter less than 2.5 microns in diameter
PMQ	Project Management Qualification (Association for Project Management)
PPE	Personal Protective Equipment
PPG	Planning Practice Guidance
PPGN	Planning Practice Guidance for Noise
PPV	Peak Particle Velocity
PRA	Preliminary Risk Assessment
PRF	Potential Roost Feature
Project	Chesterfield to Willington Project
PRoW	Public Right of Way
PRoWMP	Public Rights of Way Management Plan
PRR	Portable Relay Room
PWMS	Precautionary Working Method Statement
Q95	Flow exceeded 95% of the time
QA/QC	Quality Assurance/Quality Control
QMED	Median Annual Flood (with a return period of two years)
RBD	River Basin District
RBMP	River Basin Management Plan
RCA	River Condition Assessment
RCP	Representative Concentration Pathway
ReCA	Regional Character Area
Ref	Reference
REFH2	Revitalised Flood Hydrograph 2
RIGS	Regionally Important Geological Site
RoFSW	Risk of Flooding from Surface Water
RPG	Registered Park and Garden
RSA	Road Safety Audit
RSA1	Road Safety Audit Stage 1
SAC	Special Area of Conservation
SAR	Secondary Access Route
SDDC	South Derbyshire District Council
SF6	Sulphur hexafluoride

Abbreviations	Full Term
SFRA	Strategic Flood Risk Assessment
SK	Ordnance Survey Grid Reference (prefix for locations)
SLA	Special Landscape Area
SLM	Sound Level Meter
SM	Scheduled monument
SMP	Soil Management Plan
SOAEL	Significant Observed Adverse Effect Level
SoC	Statement of Competence
SOR	Strategic Options Report
SoS	Secretary of State
SPA	Special Protection Area
SPI	Species of Principal Importance
SPZ	Source Protection Zone
SQSS	Security and Quality of Supply Standard
SRN	Strategic Road Network
SSSI	Site of Special Scientific Interest
STATS19	Department for Transport's Road Accident Database
SuDS	Sustainable Drainage System
SWMP	Site Waste Management Plan
SWSGZ	Surface Water Safeguard Zone
T&T	Traffic and Transport
TAG	Transport Analysis Guidance
TCPA 1990	Town and Country Planning Act 1990
TEA	Triethanolamine
TEMPro	Trip End Model Presentation Program
TGN	Technical Guidance Note
TIN	Technical Information Note
TPH	Total Petroleum Hydrocarbons
TPO	Tree Preservation Order
TS	Transport Statement
UK	United Kingdom
UKAS	United Kingdom Accreditation Service
UKBAP	United Kingdom Biodiversity Action Plan
UKCP18	United Kingdom Climate Projections 2018

Abbreviations	Full Term
UKHab	UK Habitat Classification
UKHSA	United Kingdom Health Security Agency
UWWTD	Urban Wastewater Treatment Directive
UXO	Unexploded Ordnance
VOC	Volatile Organic Compound
VP	Vantage Point/View Point
VSR	Vibration Sensitive Receptor
WCH	Walkers, Cyclists, Horses
WeBS	Wetland Birds Survey
WFD	Water Framework Directive
WG	Woodland Grant
WHS	World Heritage Site
ZOI	Zone of Influence
ZTV	Zone of Theoretical Visibility

1B.2 Glossary

Term	Definition
Abnormal Indivisible Loads	Oversized or overweight loads exceeding standard vehicle limits (e.g. >44 tonnes, >2.9 m wide) delivered to the construction site which by their nature cannot be broken down into smaller multiple deliveries and requiring special permits, route planning, and often police/escort coordination.
Above Ordnance Datum	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.
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.
Acute health effect	An adverse health effect that manifests itself immediately or shortly after exposure to a causative factor (e.g. soil contamination). Associated with short-term exposures.
Additional mitigation measures	Additional mitigation measures comprise measures over and above any embedded and good practice mitigation measures, for which the Environmental Impact Assessment has identified a requirement to further

Term	Definition
	reduce significant environmental effects, such as landscape planting.
Advice Note	The Planning Inspectorate has published a series of advice notes that are intended to inform applicants, consultees, the public and others about a range of process matters in relation to the Planning Act 2008.
Agricultural Land Classification	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 1) to very poor (Grade 5). Agricultural Land Classification is determined using the Ministry of Agriculture, Fisheries and Food's Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land, 1988.
Air Quality Assessment Level	An Air Quality Assessment Level is the value which the percentage change in concentration due to a proposed development is compared against. It may be an air quality objective, EU limit or target value, or an Environment Agency 'Environment Assessment Level'.
Air Quality Management Areas	If a local authority finds any places where the Air Quality Objectives are not likely to be achieved, it must declare an Air Quality Management Area 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.
Air Quality Objective	The Air Quality 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	The Air Quality Standards Regulations report limit values at differing averaging periods for certain pollutants. There are limits provided for the protection of human health for sulphur dioxide (SO ₂), nitrogen dioxide (NO ₂), benzene, carbon monoxide (CO) and lead (Pb). Target values have been set for the concentration of PM _{2.5} .
Air Quality Strategy	The Air Quality Strategy for England, Scotland, Wales and Northern Ireland describes the plans drawn up by the government and the devolved administrations to improve and protect ambient air quality in the UK in the medium-term. The Strategy sets objectives for the main air pollutants to protect health. Performance against these objectives is monitored where people regularly spend time and might be exposed to air pollution.

Term	Definition
Alluvium	Comprises any waterborne sediment, but commonly refers to fine-grained floodplain deposits of clay, silt, sand, gravel, and peat (see Peat). It is typically deposited in river valleys, estuaries, deltas and on floodplains. Alluvium is of Holocene age and can contain or mask archaeological features such as weirs and other irrigation infrastructure, jetties, boats, and fish traps. It can also obscure underlying deposits and topographic features. Waterlogged conditions can mean preservation is good for wooden structures and artefacts as well as organic palaeoenvironmental remains such as pollen and plant macrofossils.
Ambient sound	The totally encompassing sound in a given situation at a given time, usually composed of sound from all sources near and far and expressed in the LA _{eq} statistical parameter.
Anglian	The largest onshore UK glaciation, approximately 480 to 423 ka BP (thousand years, before present) in the Middle Pleistocene. The ice mass reached as far south as Finchley Road in London, shaped the landscape and rerouted major river systems. It deposited extensive Till formations (see Till) such as the Lowestoft Till in East Anglia, up to 69 m thick at, e.g. Wickhambrook, Suffolk. Anglian glacial Till often overlies earlier Pleistocene fluvial systems such as the Bytham River, that can contain evidence of early human activity.
Annex 1 habitat	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	An underground layer of rock with water storage capability.
Archaeological Interest	A heritage asset with value from the potential to hold evidence about the past that can be retrieved through specialist investigation.
Architectural/Artistic Interest	A heritage asset with value from contemporary appreciation of a heritage asset's aesthetics.
Area of Outstanding Natural Beauty	An Area of Outstanding Natural Beauty is land protected by the Countryside and Rights of Way Act 2000. It protects the land to conserve and enhance its natural beauty.
Areas of Multiple Environmental Sensitivity	Broad areas of landscape that have been identified as being sensitive with respect to a range of environmental datasets. The areas have been defined using the Derbyshire landscape character assessment as a spatial framework for reviewing data relating to biodiversity, the historic environment and visual unity.

Term	Definition
Artificial ground	Artificial ground also commonly referred to as 'Made Ground' are deposits that have accumulated or been placed through human activity.
Associated development	Development which is associated with a Nationally Significant Infrastructure Project (NSIP), as allowed by the Planning Act 2008. It is for the Secretary of State to decide on a case-by-case basis whether development should be treated as associated development. As a general principle, it should be subordinate to, and necessary for, the construction and/or the effective operation (or to address the impacts) of the NSIP that is the subject of the development consent order application. The Planning Act 2008: associated development applications for major infrastructure projects guidance provides advice on what constitutes associated development under the Planning Act 2008.
Atmospheric Dispersion Modelling Software	Software that uses mathematical formulations to simulate atmospheric processes and predicts the dispersion and concentrations of pollutants at discrete receptor locations.
A-weighted dB(A) decibels	The ear is not as effective in hearing low frequency sounds as it is hearing high frequency sounds. That is, low frequency sounds of the same dB level are not perceived to be as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the 'A' weighting filter. A sound level measured with this filter switched on is denoted as dB(A). Practically all noise for the assessment and consideration of impacts upon humans is measured using the 'A' weighted filter. The sound pressure level in dB(A) gives a close indication of the subjective loudness of the noise.
Background sound/noise level	<p>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 LA90, T.</p> <p>Background noise is defined by the L90 statistical parameter. This is representative of the quieter portions of the noise climate and is usually included in the A-weighted noise weighting descriptor.</p>
Baseline	The prevailing situation or characteristics of the receiving environment against which the project is assessed.

Term	Definition
Bellmouth	An access point from the public highway for construction purposes.
Best and Most Versatile agricultural land	Defined as land of excellent (ALC Grade 1), very good (Grade 2) and good (Subgrade 3a) agricultural quality. Best and Most Versatile agricultural land is afforded a degree of protection within planning policy.
Biodiversity Net Gain	Biodiversity Net Gain is an approach to development that ensures habitats for wildlife are left in a measurably better state than they were before the development.
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. Those on the red list are at most risk.
Blue-collar Employment	Employment in non-office settings and involves manual labour.
British Geological Survey	The world's oldest national geological survey, founded in 1835.
Bronze Age	2,600 to 700 BCE.
Cable Sealing End Compound	Electrical infrastructure used as the transition point between overhead lines and underground cables. A compound on the ground usually acts as the principal transition point.
Chartered Institute for Archaeologists	The leading professional body representing archaeologists working in the UK and overseas.
Chartered Institute of Ecology and Environmental Management	The leading professional membership body representing and supporting ecologists and environmental managers in the UK, Ireland and abroad.
Chesterfield to High Marnham Uprating	A proposed uprating of the existing 275 kV overhead lines between Chesterfield and High Marnham to facilitate a transmission load of 400 kV and the development of two new substations to help carry more secure, cleaner, home-grown energy from more affordable sources from the North of England to homes and businesses in the Midlands and beyond.
Chesterfield to Willington (the Project)	Located in the East Midlands region of England, the Project comprises major reinforcement of the electricity transmission system. This would transport clean energy from the North of England to homes and businesses in the Midlands and play an important role in building a more secure and resilient future energy system. These proposals form part of The Great Grid Upgrade, which is the largest overhaul of the grid in generations. The Project will support the UK's Net Zero target by adding capacity to accommodate increasing power flows from offshore wind and interconnections from Scotland and

Term	Definition
	north east England, which is expected to double within the next ten years, to areas of demand south to the Midlands and beyond.
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	A written code of standards and procedures developed for the Project that it is proposed developers and contractors must adhere to. It would be secured as part of the development consent order.
Committed Development	Committed Developments are existing, approved, or planned projects that are considered as part of the cumulative effects assessment to determine the combined environmental impacts of multiple activities within the Zone of Influence.
Conductors	The bare ‘live’ wire that carries electrical power over distances, supported by pylons on insulators, using materials like aluminium and often reinforced with steel for strength. Conductors come in several different designs with specific features for electrical conductivity, mechanical strength, and environmental resilience to transmit electricity efficiently.
Conservation area	A conservation area is an area of special architectural or historic interest, the character, appearance or setting of which it is desirable to preserve or enhance, designated by the local planning authority.
Construction Environmental Management Plan	The purpose of the Construction Environmental Management Plan (CEMP) is to outline how construction of the Project 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 Environmental Statement. It is a ‘live’ document which is to be reviewed and updated at regular intervals throughout the Project life cycle. This would be secured by the development consent order.
Construction phase	Activity on- and/or off-site required to implement the Project. The construction phase is considered to commence with the first activity on-site (e.g. creation of site access) and ends with demobilisation.
Corridor	A broad area, within which a new overhead line could be routed.
Corridor Preliminary Routeing and Siting Study	The Corridor Preliminary Routeing and Siting Study reports the process undertaken as part of the Options

Term	Definition
	<p>Identification and Selection stage to identify an Emerging Preferred Corridor, siting zones and siting areas within which the required infrastructure for the Project may be located.</p>
Cumulative effects	<p>There are two types of effect, intra-project effects (also known as combined effects) and inter-project (also known as cumulative) effects. The former occurs as a result of two or more impacts associated with a project 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 Project in combination with other large-scale developments or projects.</p>
Decibel	<p>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 140 dB corresponding to the intensity of the sound pressure level.</p> <p>The level of noise is measured objectively using a Sound Level Meter. This instrument has been specifically developed such that it can be set to mimic the operation of the human ear ('A' Weighted filter band). The human ear responds to minute pressure variations in the air. These pressure variations can be likened to the ripples on the surface of water but of course cannot be seen. The pressure variations in the air cause the eardrum to vibrate and this is heard as sound in the brain. The stronger the pressure variations, the louder the sounds are heard. The range of pressure variations associated with everyday living may span over a range of a million to one. On the top range may be the sound of a jet engine and on the bottom of the range may be the sound of a pin dropping. For example:</p> <ul style="list-style-type: none"> • four engine jet aircraft at 100 m: 120 dB; • riveting of steel plate at 10 m: 105 dB; • pneumatic drill at 10 m: 90 dB; • circular wood saw at 10 m: 80 dB; • heavy road traffic at 10 m: 75 dB; • telephone bell at 10 m: 65 dB; • male speech, average at 10 m: 50 dB; • whisper at 10 m: 25 dB; and • threshold of hearing, 1,000 Hz: 0 dB.
Design Development Report	<p>A report that describes the evolution of the design of a project between project stages. For example, between non-statutory (Stage 1) consultation and statutory (Stage</p>

Term	Definition
	2) consultation, or between statutory consultation and development consent order submission.
Design Manual for Roads and Bridges	A set of technical standards and guidance used in the UK for designing, building, and maintaining roads and bridges. This is managed by National Highways and ensures consistency, safety, and quality across highway projects.
Development consent order	Where the Secretary of State proposes to grant consent for a Nationally Significant Infrastructure Project (NSIP), this will be through a development consent order (DCO) which is normally made as a statutory instrument – a form of secondary legislation. The DCO not only provides planning consent for the project but may also incorporate other consents and include authorisation for the compulsory acquisition of land.
Devensian	The name for the last cold stage (glaciation) in the UK 116 ka to 11.8 ka BP, in the Late Pleistocene. The maximum expansion of the ice sheet and the peak of cold climate conditions occurred towards the end of the Devensian at around 23 to 18 ka BP, the Last Glacial Maximum. After the Last Glacial Maximum, deglaciation and ice readvance took place before the final transition to the Holocene interglacial.
Direct effects	Direct effects are those that result directly from the Project.
Distribution network operator	The company that owns and operates the overhead power lines and infrastructure that connects the National Electricity Transmission System (NETS) to properties and businesses. The distribution network operator in proximity to the Project is National Grid Electricity Distribution Plc.
Double tee	A connection from both circuits on either side of the same structure, creating a third and fourth circuit on another structure.
Driver delay	Traffic delays to non-development traffic.
Dust	Generic term used to describe larger non-respirable airborne particulates (typically those which are deposited rapidly and normally associated with soiling/markings of property, cars, vegetation, etc.).
Early medieval	410 to 1066 CE.
Earthwire	Wire strung between the tops of pylons used for shielding against lightning strikes and system protection. May also be used to carry telecommunication signals.
Effects	For the purposes of the Environmental Impact Assessment, the term ‘effects’ are the consequences of changes (e.g. habitat becomes degraded by changes in drainage pattern).

Term	Definition
Electricity Ten Year Statement	<p>The Electricity Ten Year Statement is the National Energy System Operator’s view of future transmission requirements and the capability of Great Britain’s National Electricity Transmission System over the next 10 years. Using the data from the Future Energy Scenarios, points on the transmission network are identified where more transfer capacity is needed to continue to deliver electricity reliably from where it is generated to where it is needed.</p>
Electricity Transmission System	<p>The electricity transmission system is made up largely of 400 kV, 275 kV and 132 kV 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 132 kV or above in Scotland or offshore. In England and Wales, it relates to assets at 275 kV and above.</p> <p>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 National Energy System Operator, 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 which ensures that the network is developed and operated securely and is resilient to any foreseeable network faults and disruption.</p>
Electromagnetic fields	<p>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.</p>
Embedded mitigation measures	<p>Modifications to the location, design or operation of the development identified during the iterative design process in order to prevent or reduce likely adverse effects, and that are an inherent part of the Project. These are referred to as ‘primary measures’ in accordance with ISEP guidelines and will be embedded within the design of the Project. In addition, best practice/industry standard measures also form embedded mitigation.</p>
Emerging Preferred Corridor	<p>An area within which the transmission infrastructure for the Project may be located, based on the findings of the Options Identification and Selection stage.</p>

Term	Definition
Environmental Gain	National Grid has defined 'Environmental Gain' with Ofgem as being an amalgam of Biodiversity Net Gain and the status of Natural Capital This sees a simple formula being used to calculate overall Environmental Gain.
Environmental Impact Assessment	An Environmental Impact Assessment (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 the Project and identify measures to prevent, reduce or offset any adverse effects. EIA is an exercise performed by the decision-maker at the moment of decision, informed by the environmental information contained in the Environmental Statement and elsewhere.
Environmental Statement	The outcome of the studies contributing to the Environmental Impact Assessment process, reported within a document called an Environmental Statement.
Exception Test	When a development cannot be located in areas with a lower risk of flooding, the Exception Test is used to ensure the benefits of the site outweigh the risk.
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.
Flood plain	The flood plain is located adjacent to a watercourse that is susceptible to flooding during out of bank peak river flow events.
Flood Risk Assessment	The Flood Risk Assessment will assess the flood risk both to and from the Project and demonstrate how that flood risk will be managed over the Project's lifetime.
Flood Zone	These denote areas designated as a certain level of risk of fluvial or tidal flooding.
Free-Field	A situation in which the radiation from a sound source is completely unaffected by the presence of any reflecting surfaces.
Future baseline	This is the theoretical situation that would exist in a given location and at a stated future time in the absence of the Project. 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	Published annually by the National Electricity System Operator (NESO), the Future Energy Scenarios set out credible ways that the UK can achieve Net Zero by 2050,

Term	Definition
	as well as the UK government’s commitment to a decarbonised electricity system by 2035. Based on extensive stakeholder engagement, research and modelling, each scenario considers how much energy might be needed; where it could come from; and how NESO maintain a system that is reliable.
Gas insulated switchgear	Gas insulated switchgear technology seals electrical equipment in pressured chambers filled with insulating gas (traditionally sulphur hexafluoride (SF6)). Due to SF6 being a potent greenhouse gas National Grid has made a commitment to using non-SF6 alternatives for all new switchgear installations where practicable.
Glaciofluvial	Refers to well-sorted, stratified coarse to fine sands and gravels deposited by meltwater streams flowing from melting glaciers, ice sheets and ice caps. These mostly form outwash deposits, terraces, channel fills, and eskers at decaying ice margins. Glaciofluvial deposits are associated with the Pleistocene and can bury and preserve archaeological materials.
Glaciolacustrine	Refers to laminated silts and clays deposited in glacial lakes: ice marginal lakes or lakes formed due to glacial erosion or deposition. Lakes are low-energy depositional environments, characterised by fine-grained and often anoxic conditions. Former glaciolacustrine systems can serve as important archives of Pleistocene palaeoglaciological, palaeoenvironmental and palaeoclimatic information.
Good practice measures/Good practice mitigation measures	Actions that would occur with or without input from the Environmental Impact Assessment 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 ISEP guidelines and would also be embedded within the design of the Project.
Graduated Swathes	Indicate the broad areas where the components of the new electricity infrastructure forming part of the Project are likely to be located.
Greenhouse gas	Gases able to absorb infrared radiation emitted from Earth's surface and reradiate it back to Earth's surface, thus contributing to the greenhouse effect. Carbon dioxide, methane, and water vapour are the most important greenhouse gases.

Term	Definition
Ground dissolution (of limestone)	A reduction in the solid mass of rock as a result of groundwater dissolving it. This loss of mass can cause ground instability at the surface.
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 hazardous ground gases, such as radon, carbon dioxide, methane, hydrogen sulphide and carbon monoxide.
Habitat of Principal Importance	Habitats of Principal Importance are covered under section 41 of the Natural Environment and Rural Communities Act 2006. The term is interchangeable with 'UK Priority BAP Habitat', 'Section 41 habitat' and 'NERCs41 habitat'.
Habitats Regulations Assessment	A Habitats Regulations Assessment is carried out by a decision maker before authorising or deciding to undertake a plan or project. The assessment comprises several elements that must be considered in series and is informed by information compiled by an applicant for a consent or other authorisation. The assessment looks at effects upon internationally important nature conservation sites, the presence or absence of alternatives and whether there are imperative reasons of overriding public interest in favour of the project. If a consent or authorisation is given, then environmental compensation must be secured. A Habitats Regulations Assessment 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) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) to determine if a plan or project may affect the protected features of a habitats site before deciding whether to undertake, permit or authorise it.
Head	Comprises unconsolidated, loose sediment that can be a patchy mixture of soil, broken rock fragments, and sometimes organic material. It forms when material is transported downslope under gravity (creep) and is exacerbated in cold climates where freeze-thaw cycles dominate (solifluction, the downslope movement of saturated soil). While often associated with the Devensian, Head may originate from multiple periglacial stages. Head can incorporate archaeological material and ecofacts, often in secondary contexts, but occasionally in primary contexts when stratified layers are preserved. It can also mask former land surfaces.
Heavily Modified Water Body	Significant water bodies that have changed water category due to modifications.

Term	Definition
Heavy Duty Vehicle	Vehicles greater than 3.5 tonnes unladen weight, including lorries, buses, coaches, and specialised service vehicles like fire engines, gritters, and refuse trucks.
Heavy Goods Vehicle	Vehicles greater than 3.5 tonnes gross vehicle weight used for transporting significant volumes or weights of goods, raw materials, fuel, and large equipment.
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.
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 guidelines/rules for the routing and design of new overhead lines or overhead line modifications. 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 routing. The guidelines now form an important part of national planning policy relating to the development of electricity networks, as set out in the National Policy Statement for Electricity Networks Infrastructure (NPS EN-5).
Horizontal directional drilling	A method of cable installation where the cable is drilled beneath a feature without the need for trenching.
Horlock Rules	A series of guidelines/rules for the siting and design of new substations, or substation extensions, including consideration of overhead line entries and Cable 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, as set out in the National Policy Statement for Electricity Networks Infrastructure (NPS EN-5).
Impacts	For the purposes of the Environmental Impact Assessment, the term 'impacts' is used to describe the changes that arise as a result of the Project (e.g. changes in drainage pattern).
Important Ecological Features	Ecological features requiring specific assessment within Ecological Impact Assessment. Ecological features can be important for a variety of reasons (e.g. quality and extent of designated sites or habitats, habitat/species rarity).

Term	Definition
Index of Multiple Deprivation	The Index of Multiple Deprivation (IMD) is the official measure of relative deprivation for small areas (neighbourhoods) in England. The IMD is 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.
Indirect and secondary effects	Indirect and secondary effects are those which are not caused immediately by the Project 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 Project, and the consequences of that damage are fire or flood risk to other receptors.
Infrastructure Planning (Environmental Impact Assessment) Regulations 2017	The Environmental Impact Assessment (EIA) Regulations transpose amendments to Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment which were made by Directive 2014/52/EU. They implement the requirements for EIA procedures in the context of the nationally significant infrastructure regime in England and Wales.
Institute of Air Quality Management	The professional body for air quality practitioners. It occasionally produces guidance that is widely used and accepted by consultants and councils (dependent on the nature of the project).
Institute of Sustainability and Environmental Professionals (formerly Institute of Environmental Management and Assessment)	A professional body for practitioners working in the fields of sustainability, environmental management, and assessment.
Insulator	Insulator sets are crucial components on overhead lines that support the live electrical conductors while preventing electrical current from flowing to the grounded pylon structure. Insulators can be made of porcelain, toughened glass or polymeric materials..
Internal Drainage Board	A public body that manages water levels in an area, known as an internal drainage district, where there is a special need for drainage. Internal Drainage Boards undertake works to reduce flood risk to people and property, and manage water levels for agricultural and environmental needs within their district.
Inter-project effects	Arise as a result of the Project in combination with other large-scale developments or projects.

Term	Definition
Intra-project effects	Effects that occur as a result of two or more impacts arising from the Project acting together (i.e. combined), to result in a new or changed effects on a single receptor.
Iron Age	800 BCE to 43 CE.
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.
Joint Nature Conservation Committee	The Joint Nature Conservation Committee is the public body that advises the UK government and devolved administrations on UK-wide and international nature conservation.
Kilometre	A unit of measurement. A metric unit of length, equal to 1,000 metres.
Kilovolts	A unit of electromotive force, equal to 1,000 volts.
Landscape and Ecology Management Plan	A Landscape and Ecology Management Plan details the immediate long-term commitments to manage the planting, protection and enhancement of biodiversity in and around a new development site.
Landscape Character Area	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	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.
Lead Local Flood Authority	County or unitary councils in England responsible for investigating local flood events, identifying relevant risk management authorities and publishing findings. They manage flood risks from surface water, groundwater, and ordinary watercourses, and coordinate with agencies.
Light Duty Vehicle	Cars and small vans <3.5 tonnes gross vehicle weight.
Limits 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).
Listed building	A building or structure of special historical or architectural/artistic interest. Designated by the Secretary of State for Culture, Media and Sport. All buildings built before 1700 which survive in anything like their original condition are likely to be listed, as are many buildings

Term	Definition
	<p>built between 1700 and 1850. There are three grades of listed building, which are Grades II, II* and I.</p> <ul style="list-style-type: none"> • Grade II buildings are of special interest; • Grade II* buildings are particularly important buildings of more than special interest; and • Grade I buildings are of exceptional interest.
Ln Noise Descriptors	<p>Because noise varies with time, a single noise value cannot adequately define the noise climate. For this reason, the acoustic environment is described using a number of noise level descriptors, statistical parameters, as follows:</p> <ul style="list-style-type: none"> • L10: The sound pressure level that is exceeded for 10% of the time for which the given sound is measured. • L90: The level of noise exceeded for 90% of the time. The bottom 10% of the sample is the L90 noise level expressed in units of dB(A). • Leq: The equivalent sound pressure level – the steady sound level that, over a specified period of time, would produce the same energy equivalence as the fluctuating sound level actually occurring.
Local Air Quality Management	<p>The Local Air Quality Management process requires local authorities to periodically review and assess the current and future quality of air in their areas.</p>
Local Geological Sites	<p>A non-statutory designation for regionally important geological and geomorphological sites that have been identified as being of importance locally.</p>
Local Wildlife Site	<p>Non-statutory nature conservation sites of local value.</p>
Long List	<p>Initial and comprehensive set of Committed Developments identified as potentially relevant for the cumulative impact assessment. It is compiled using a set of criteria, such as geographic proximity, and temporal overlap.</p>
Lower-Layer Super Output Area	<p>Lower-Layer Super Output Areas are a geographic hierarchy designed to improve the reporting of small area statistics in England and Wales.</p>
Lowest Observed Adverse Effect Level	<p>This is the level above which adverse effects on health and quality of life can be detected.</p>
Magnitude of impact	<p>The scale of the change caused to the baseline conditions.</p>
Main River	<p>Main Rivers are statutory watercourses designated by the Environment Agency due to the significant importance for flood management.</p>

Term	Definition
Major Event	Events that threaten immediate or delayed serious environmental effects on human health, welfare and/or the environment, and require the use of resources beyond those of the client or its appointed representatives to manage. The events could occur due to malicious intent or be accidental, but the outcome (e.g. train derailment) may be the same. Therefore, many mitigation measures will apply to both deliberate and accidental events.
Medieval	1066 to 1540 CE.
Mesolithic	10,000 to 4,000 BCE.
Microphone	An electro acoustic transducer which receives an acoustic signal and delivers a corresponding electric signal.
Mineral Safeguarding Areas	An area designated by the Minerals Planning Authorities which covers known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development.
Modern	1901 CE to present.
National Cycle Network	The National Cycle Network is a UK-wide network of signed paths and routes for walking, cycling, wheeling and exploring outdoors.
National Electricity System Operator	The National Energy System Operator (NESO) is a government-owned energy system operator for Great Britain, designated as the Independent System Operator and Planner under the Energy Act 2023. NESO is the licensed electricity system operator and balances supply and demand in real time. It has strategic planning roles for electricity networks, and planning and forecasting roles for gas transmission systems.
National Grid	Throughout this report, the term National Grid is used to refer to National Grid Electricity Transmission Plc (see below). The wider National Grid Group comprises several businesses, including National Grid Ventures and National Grid Electricity Distribution. These businesses are not licensed Transmission Owners and do not develop the national transmission system.
National Grid Electricity Distribution Plc	In June 2021, Western Power Distribution was acquired by National Grid Group. It remains a separate company from National Grid Electricity Transmission Plc, operating within the wider National Grid Group and recently rebranded as National Grid Electricity Distribution (NGED). NGED is a distribution network operator operating in proximity to the Project.
National Grid Electricity Transmission Plc ('National Grid')	National Grid operates the national electricity transmission network across Great Britain and owns and

Term	Definition
	<p>maintains the network in England and Wales, providing electricity supplies from generating stations to local distribution companies. National Grid 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.</p> <p>In England and Wales, the electricity transmission system is made up largely of 400 kV and 275 kV assets connecting separately owned generators, interconnectors, large demands fed directly from the transmission system, and distribution systems. The electricity transmission system is designed to make sure there is sufficient transmission capacity so that the system can be operated in an economic and efficient way by the National Energy System Operator, ensuring that power can be moved from where it is generated to demand centres across Britain. The planning and development of the electricity transmission system is governed by the Security and Quality of Supply Standard which ensures that the network is developed and operated securely and is resilient to any foreseeable network faults and disruption.</p>
National Planning Policy Framework	The National Planning Policy Framework was published in March 2012 by the UK's Department of Communities and Local Government, consolidating over two dozen previously issued documents called Planning Policy Statements and Planning Practice Guidance Notes for use in England. The National Planning Policy Framework was updated in December 2024 by the Ministry of Housing, Communities and Local Government.
National Policy Statement	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 developed in accordance with the relevant NPS. In the case of new electricity transmission infrastructure the relevant energy-related NPS are NPS EN-1: Overarching NPS for Energy and NPS EN-5: NPS for Electricity Networks Infrastructure.
Nationally Significant Infrastructure Project	Nationally Significant Infrastructure Projects are developments (relating to energy, transport, water, or waste) which are identified in the Planning Act 2008 and require a type of consent known as 'development consent'.
Neolithic	4,000 to 2,200 BCE.
Net Zero	The balance between the amount of greenhouse gas that is produced and the amount that is removed from the atmosphere. It can be achieved through a combination of emission reduction and emission removal.

Term	Definition
Nitrate Vulnerable Zones	Areas covering 62% of England designated as a result of the EU's Nitrates Directive in order to reduce the level of nitrates in surface and groundwater. Farmers with land in Nitrate Vulnerable Zones have to follow mandatory rules to tackle nitrate loss from agriculture.
Nitrogen dioxide	Reddish brown gas (in high concentrations), respiratory irritant and precursor to photochemical processes which produce other pollutants, photochemical smog and contribute to global warming.
Nitrogen oxides (NOx)	Nitrogen monoxide and nitrogen dioxide.
Nitrous oxide (N ₂ O)	Inert product of combustion, which does not contribute to local air pollution.
Noise	Any sound that is undesired by the receptor.
Non-Road Mobile Machinery	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	<p>An engagement process undertaken to capture public, stakeholder and landowner feedback on the Emerging Preferred Corridor, siting zones, siting areas (where relevant) and the graduated swathe. The feedback informs the onward development of the Project.</p> <p>Non-statutory consultations are consultations that are not held pursuant to sections 42 and 47 of the Planning Act 2008.</p>
Non-Technical Summary	A summary, usually of technical reports, which presents the content of the main report in a simplified form, limiting the use of technical terms, to make the content accessible to a wide audience.
Operational phase	Describes the operational phase of a completed development and is considered to commence at the end of the construction phase.
Options appraisal	A 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 Project.
Options Identification and Selection	Work undertaken to determine the preferred corridor and preliminary routeing and siting options for the Project. It is intended to demonstrate how National Grid's 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.

Term	Definition
Order Limits	The Order Limits are the outermost extent of the Project indicated on the plans supporting the application for development consent. This is the Limit of Land to be Acquired or Used by the Project and represents the area in which the development consent order would apply.
Overhead line	An above-ground electricity line that safely and securely transmits electricity through a series of conductors (wires). An overhead line comprises a series of components including: supporting structures, such as pylons; line fittings, such as electrical insulators and conductor spacers; an earth wire (to protect the line from electrical faults and carry control data); and the conductors themselves.
Palaeolithic	1,000 000 to 10,000 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 1/1000 th of a metre). 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.
Peat	Organic sediment formed of decaying plant material accumulating in waterlogged, anaerobic (oxygen-poor) environments where decomposition is inhibited. Peat can form beneath the water table (limnic peats, composed partly of transported plant debris and partly of decayed vegetation formerly growing <i>in situ</i>); in the swamp zone between high and low water levels (telmatic peats); and at or above the high water mark (terrestrial peat). Peat forms in bogs, fens, marshes, lakes, mires and swamps and can preserve organic artefacts (e.g. wood, leather, textile), and even human remains (bog bodies). Paleoenvironmental remains such as pollen, microfossils and charcoal may also be preserved in these deposits.
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 cross roads 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 Project is complete, although these effects may be caused by environmental changes that are permanent or temporary.

Term	Definition
Phytotoxic	Poisonous to plants.
Planning Act 2008	The Planning Act 2008 provides the statutory framework for deciding applications for a development consent order (DCO) for Nationally Significant Infrastructure Projects (NSIPs). It also defines the application process under which a DCO is sought. The Planning Act 2008 sets out that the projects meeting certain defined criteria, are classified as NSIPs. It requires that developers wishing to construct, operate and maintain NSIPs must obtain a DCO from the relevant Secretary of State to authorise the project.
Planning Practice Guidance	Planning Practice Guidance supports the National Planning Policy Framework and sets out government policies for England.
Pollution Climate Model	A collection of models produced by the Department for Environment, Food and Rural Affairs designed to fulfil part of the UK's EU Directive (2008/50/EC) requirements to report on the concentrations of particular pollutants in the atmosphere.
Polybrominated diphenyl ethers	Polybrominated diphenyl ethers are a group of human-made organobromine compounds.
Post medieval	1540 to 1901 CE
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.
Prehistoric	1,000,000 BC to AD 43
Preliminary Environmental Information Report	A report that compiles and presents the Preliminary Environmental Information gathered for a project. An early output of the Environmental Impact Assessment process, and part of the development consent order application process, the Preliminary Environmental Information Report is presented as part of the section 42 statutory consultation under the Planning Act 2008.
Principal Aquifer	Aquifer designation defined by the Environment Agency (2017) as rock layers that <i>'provide significant quantities of drinking water, and water for business needs. They may also support rivers, lakes and wetlands'</i> .
Project Need Case	Sets out the reasons why the Project is required.
PRoWMP	Public Rights of Way Management Plan.
Public Rights of Way	These are designated routes under the Countryside and Rights of Way Act 2000, which the public can use at any time.

Term	Definition
Pulling positions	Pulling positions are sites established at tension pylons either end of the section(s) of overhead line being strung for running out the conductors. These are typically, set back a distance of twice the pylon height from the pylon centre (1:2 ratio) and established on an area of, typically, temporary matting for storage of plant, equipment, materials and welfare cabins. One end would be comprised of a winch site for pulling the conductors through. The opposing site at the other end would comprise a tensioning machine to keep the wires off the ground, and for storage of full conductor drums.
Pylon	Overhead line structure used to carry overhead electrical conductors, insulators and fittings.
Q95	Q95 refers to the flow in a river which is equalled to or exceeded to 95% of the time.
Radon	A naturally occurring radioactive chemical element, which occurs as a gas.
Ramsar sites	Wetlands of international importance designated under the Ramsar Convention. An area of land designated to conserve wetlands, especially those providing waterfowl habitat.
Rating level	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.
Reasonably Practicable	A balance between risk and benefit which considers factors such as the likelihood and severity of harm and the availability and suitability of control measures and the cost of implementation.
Receptor	A component of the natural or man-made environment such as water or a building that is affected by an impact.
Regionally Important Geological Site	These are the most important designated sites for geology and geomorphology, representing educational, historical and recreational resources.
Registered Battlefield	A battlefield listed on the register of nationally significant military engagements maintained and designated by Historic England.
Registered Park and Garden	An area listed on the register of historic parks, gardens, grounds, and planned open spaces maintained and designated by Historic England. There are three grades of Registered Park and Garden, which are Grades II, II* and I.
Residual effects	Those effects that remain following the implementation of the mitigation measures proposed.

Term	Definition
River Basin Management Plan	A regional plan that sets out how organisations, stakeholders and communities would work together to improve the water environment and fulfil the requirements of the Water Framework Directive.
River Terrace Deposits	Consist of sand and gravel, with local lenses of silt, clay and occasionally organic material. Terraces are created by river incision into a valley floor leading to the abandonment of floodplain levels, or to renewed gravel aggradation. This can result from a number of factors including excessive runoff; higher sediment loads and erosion (from e.g. over-grazing, over-cultivation or industry). The Thames River Terrace Deposits are the most intensively studied river terrace sequences and contain a long record of river activity. RTDs can preserve stratified sediment sequences, palaeo-land surfaces and Palaeolithic remains.
Road links	A linear spatial object that describes the geometry and connectivity of a highway between two points in the highway.
Rochdale Envelope	The ‘Rochdale Envelope’ or ‘Design Envelope’ approach is employed where the nature of a proposed development means that some details of a project have not been confirmed (for instance, the precise dimensions of structures) when an application is submitted, and flexibility within clearly defined parameters is therefore sought to address uncertainty. This is achieved through the assessment of the worst case scenario(s).
Romano-British	43 to 410 CE.
Root Protection Area	A notional area of tree root spread (as calculated per BS 5837) considered as the minimum volume necessary to ensure tree health and function.
Section 41 of the Natural Environment and Rural Communities Act 2006 (S41 of NERC Act)	Section 41 of the Natural Environment and Rural Communities Act 2006 lists species of principal importance in England for the purpose of conserving biodiversity
Schedule 1 Species	Bird species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), 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 site. 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	The process of identifying the issues to be addressed by the Environmental Impact Assessment process. It is a method of ensuring that an assessment focuses on the

Term	Definition
	important issues and avoids those that are considered unlikely to be significant.
Scoping Boundary	A Scoping Boundary has been defined to represent the likely maximum extent of development at the time of production of the Scoping Report. Following the receipt of a Scoping Opinion and further design development, the Scoping Boundary will be refined and replaced by the Order Limits.
Scoping Opinion	A Scoping Opinion is requested from the Planning Inspectorate on behalf of the Secretary of State, to inform the requirements of the Environmental Impact Assessment (EIA) process and ultimately the Environmental Statement 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.
Scoping Report	A report produced before the Environmental Statement to outline the key issues associated with a project and assist the relevant regulator in providing a Scoping Opinion.
Secondary A Aquifer	Aquifer designation defined by the Environment Agency (2017) as <i>'permeable layers that can support local water supplies, and may form an important source of base flow to rivers'</i> .
Secondary B Aquifer	Aquifer designation defined by the Environment Agency (2017) as <i>'mainly lower permeability layers that may store and yield limited amounts of groundwater through characteristics like thin cracks (called fissures) and openings or eroded layers'</i> .
Secondary Undifferentiated Aquifer	Aquifer designation defined by the Environment Agency (2017) as <i>'where it is not possible to apply either a Secondary A or B definition because of the variable characteristics of the rock type. These have only a minor value'</i> .
Security and Quality of Supply Standard	The Security and Quality of Supply Standard 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 and value of receptor	Term applied to specific receptors, combining judgements of the susceptibility of the receptor to a specific type of change proposed and the value related to that receptor.
Sequential Test	The aim of the Sequential Test is to steer new developments to areas with the lowest risk of flooding from any source.

Term	Definition
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 or the impedance of pedestrian access to essential facilities.
Short List	Refined subset of the Long List, created after applying a screening criterion to Committed Developments to determine which developments are most likely to contribute significant cumulative effects. Factors include temporal scope, scale and nature, sensitivity of the receiving environment, and consultation.
Significance of effects	The level or importance of effects, generally determined by considering together the sensitivity of the receptor with the magnitude of impact.
Significant Observed Adverse Effect Level	This is the level above which significant adverse effects on health and quality of life occur.
Site of Ecological Importance	An old system of designated sites designated by the local authority (on the basis of their wildlife and amenity value) which are gradually being reviewed and reassessed against new Local Wildlife Site (LWS) selection criteria and where they qualify will be replaced by a LWS.
Site of Importance for Nature Conservation	Non-statutory nature conservation sites; these are equivalent to Local Wildlife Sites.
Site of Special Scientific Interest	An area of land designated by Natural England as of special interest by reason of its flora, fauna or geological or physiographical features.
Site Waste Management Plan	A document which sets out how resources will be managed, and waste controlled during the Project. Plans usually involve recording the amount of waste that will be produced and detailing the proposed methods of waste disposal.
Siting Area	An area of land within which a new Cable Sealing End Compound or substation could be sited.
Siting Zone	An area of land within a Study Area, within which multiple Siting Areas could be located.
Solifluction	A mass movement deposit derived from the downslope travel of saturated soil, particularly active in periglacial environments. Abundant moisture is made available by seasonal thawing of soil above a frozen subsurface, and this form of solifluction is termed gelifluction.

Term	Definition
Sound	A fluctuation of air pressure which is propagated as a wave through air.
Sound Level Meter	An instrument consisting of a microphone, amplifier and indicating device, having a declared performance and designed to measure sound pressure levels.
Sound Pressure Level	The fluctuations in air pressure, from the steady atmospheric pressure, created by sound, when measured on the decibel scale.
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	Zones defined by the Environment Agency to protect groundwater sources such as wells, boreholes and springs from potential contamination.
Spatial Scope	The geographical area over which environmental effects are predicted to occur as a consequence of the Project, and therefore will be assessed within the Environmental Impact Assessment.
Special Areas of Conservation	Protected areas in the UK designated under the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales. An area of land designated under the Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora to protect one or more special habitats and/or species.
Special Protection Areas	Protected areas for birds in the UK classified under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales. An area of land designated under the Directive 79/409 on the Conservation of Wild Birds to protect the habitats of migratory birds and certain particularly threatened birds.
Species of Principal Importance	Covered under section 41 of the Natural Environment and Rural Communities Act 2006. The term is interchangeable with 'UK Priority BAP Species', 'Section 41 species' and 'NERCs41 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.
Stand-off distance	Stand-off distances refer to a buffer between the proposed infrastructure and associated construction works and a receptor such as a watercourse.

Term	Definition
Strategic Flood Risk Assessment	Strategic Flood Risk Assessments are strategic level studies conducted by the local planning authority to evaluate flood risk from all sources within the district boundary.
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	The Strategic Road Network is made up of motorways and trunk roads (the most significant 'A' roads).
Statutory Consultation	Consultation required by law with defined stakeholders, as required under Section 42 to Section 44 of the Planning Act 2008.
Study Area	The spatial area within which environmental effects are assessed (i.e. extending a distance from the development footprint). This area varies between different environmental topic areas.
Substation	<p>Electrical equipment in an electric power system through which electrical energy is passed for transmission, transformation, distribution or switching.</p> <p>A secure node on the electricity system where: switching may be undertaken to direct power flows; operating voltages may be altered through the use of electricity transformers; and sources of electricity import, generation and/or demand can be connected.</p> <p>Substations may be located either outdoors or within a building but will always be enclosed by a secure perimeter fence.</p>
SuDS Manual	The SuDS Manual provides guidance on planning, design, construction and maintenance of Sustainable Drainage Systems measures to manage flood risk and improve water quality.
Sulphur hexafluoride	Sulphur hexafluoride (SF6) is a highly effective electrical insulator used in high voltage electrical applications. It is a greenhouse gas that has a global warming impact of 22,800 times that of carbon dioxide. National Grid has made a commitment to using non-SF6 alternatives for all new switchgear installations.
Superficial Deposits	Geologically recent deposits that consist of various sediments (clay, sand, gravel, etc.) and sit on top of the bedrock.
Surface water flooding	Surface water flooding is the result of heavy rainfall unable to infiltrate into the ground or overwhelming drainage systems, travelling across overland flow paths.
Surface Water Management Plan	Surface Water Management Plans are developed by local authorities and outline the strategy for managing

Term	Definition
	surface water in a given location, in order to reduce flood risk.
Sustainable Drainage Systems/SuDS	Measures designed to control surface runoff close to its source, including management practices and control measures such as storage tanks, basins, swales, ponds and lakes. Sustainable drainage systems allow a gradual release of water and thereby reduce the potential for downstream flooding.
Temporal Scope	The Environmental Impact Assessment will predict the changes (effects) to the current and future baseline during the construction and operational phases of the Project.
Temporary effects	These are effects that are related to environmental changes associated with a particular activity and that will cease when that activity finishes.
Till	Formerly 'Boulder Clay', Till comprises of an unsorted mixture of clay, sand, gravel, and boulders (diamicton) and was deposited directly by glacier ice. Till occurs extensively across the midland. It often mantles uplands and lies beneath other deposits in valleys and may form part of moraines, drumlins, or ground moraines (a blanket of unsorted glacial debris). Till is a Pleistocene sediment generally with low potential to preserve archaeological materials such as lithic tools (mostly <i>ex situ</i>) and low potential for palaeoenvironmental deposits but may seal sites and deposits.
Transboundary effects	Transboundary effects are those effects that would affect the environment in another state within the European Economic Area.
Transformer	Equipment used at electricity substations to increase or reduce voltage.
Tree Preservation Order	A statutory designation protecting trees, administered by the relevant local planning authority.
Underground cable	An insulated conductor carrying electric current designed for underground installation.
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).
Water Framework Directive	Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy. The Directive establishes a framework for the protection of inland surface waters, estuaries, coastal waters and groundwater. The framework for delivering the WFD is

Term	Definition
	through river basin management planning. The UK has been split into several river basin districts. Each river basin district has been characterised into smaller management units known as water bodies. The surface water bodies may be rivers, lakes, estuary or coastal.
White-collar Employment	Employment in office settings.
Wirescape	Caused by multiple overhead lines running in different angles or the proximity of multiple overhead lines.
Wolstonian	A Middle Pleistocene glacial complex (with at least three significant glacial advances) dated between approximately 362 and 126 ka BP that deposited glacial sediment across Britain, especially in central and lowland areas such as the West Midlands.
Woodland Grant	Schemes which offer financial support for creating, managing, and protecting woodlands, with incentives tailored to climate, biodiversity, carbon, and community benefits.
World Heritage Site	A natural or human-made site, area, or structure recognised as being of outstanding international importance and therefore as deserving special protection. Sites are nominated to and designated by the World Heritage Convention.
Zone of Influence	An identified geographical area around the Project where there is a potential for impacts to occur.
Zone of Theoretical Visibility	The likely (or theoretical) extent of visibility of a development, usually shown on a map.
μT	Microteslas.

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