

Gate Burton Energy Park Environmental Statement

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APFP Regulation 5(2)(a)
Planning Act 2008
Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

EN010131/APP/3.1 Environmental Statement Glossary and Table of Contents



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Volume 1: Table of Contents

Chapter 1	Introduction
Chapter 2	The Scheme
Chapter 3	Alternative and Design Evolution
Chapter 4	Consultation
Chapter 5	EIA Methodology
Chapter 6	Climate Change
Chapter 7	Cultural Heritage
Chapter 8	Ecology and Nature Conservation
Chapter 9	Water Environment
Chapter 10	Landscape and Visual Amenity
Chapter 11	Noise and Vibration
Chapter 12	Socio-Economics and Land-Use
Chapter 13	Transport and Access
Chapter 14	Human Health and Wellbeing
Chapter 15	Other Environmental Topics
Chapter 16	Cumulative Effects and Interactions
Chapter 17	Summary of Significant Environmental Effects



Volume 2: Table of Contents

igure 1-1	Scheme Location
Figure 1-2	Scheme Boundary
Figure 2-1a	Environmental Constraints
Figure 2-1b	Environmental Constraints
Figure 2-2	Public Rights of Way (PRoW)
Figure 2-3	Substation Arrangement
Figure 2-4	Indicative Site Layout Plan
Figure 2-5	Grid Connection Access Locations and Construction Compounds
Figure 3-1	EIA Scoping Site Boundary
Figure 3-2	PEIR Boundary
Figure 3-3	Alternative Cable Route Corridors
igure 3-4	Agricultural Land Classifications - Overview
Figure 3-5	Landscape Designations, Ecological Designations and Heritage Designations
igure 3-6	Local Policy Designations
igure 3-7	Flood Zones
igure 3-8	Exclusion Zones
igure 5-1	Shared Grid Connection Corridor
igure 7-1	Designated Assets – Overview
Figure 7-2	Non-Designated Heritage Assets – Overview
Figure 7-3	Previous Archaeological Events Overview
Figure 7-4	Historic Landscape Character Areas
Figure 8-1	Sites Statutorily Designated for Nature Conservation Value
igure 8-2	Non Statutory Sites Designated for Nature Conservation Value
Figure 8-3	Phase 1 Habitat Survey
Figure 9-1	Water Resource Features and Attributes
Figure 9-2	Fluvial Flood Risk
igure 9-3	Surface Water Flood Risk
Figure 9-3a	Surface Water Flood Risk – High (3.3%)
igure 9-3b	Surface Water Flood Risk – Medium (1%)
igure 9-3c	Surface Water Flood Risk – Low (0.1%)
igure 9-4	Internal Drainage Board Watercourses and Pumping Station Locations
igure 9-5	Groundwater Flood Risk
Figure 9-6	Reservoir Flood Risk
Figure 10-1	Study Area
Figure 10-2	Topography



Figure 10-3	Public Rights of Way - Overview
Figure 10-4	National Character Areas
Figure 10-5	Regional Landscape Character Areas
Figure 10-6	County and District Landscape Character Areas
Figure 10-7	Areas of Great Landscape Value
Figure 10-8	Local Landscape Character Areas
Figure 10-9a	Zone of Theoretical Value (Bare Earth) – All Features
Figure 10-9b	Zone of Theoretical Value (Bare Earth) – Solar Panels
Figure 10-9c	Zone of Theoretical Value (Bare Earth) – Substation / Battery Storage
Figure 10-10a	Zone of Theoretical Visibility (with surface features) – All Features
Figure 10-10b	Zone of Theoretical Visibility (with surface features) – Solar Panels
Figure 10-10c	Zone of Theoretical Visibility (with surface features) – Substation / Battery Storage
Figure 10-11	Viewpoint Locations on OS Mapping
Figure 10-12	Viewpoint Locations on Aerial Photography
Figure 10-13	Cumulative Zone of Theoretical Visibility (with surface features) – Gate Burton with Cottam Solar Project
Figure 10-14	Cumulative Zone of Theoretical Visibility (with surface features) – Gate Burton with West Burton Solar Project
Figure 10-15	Cumulative Zone of Theoretical Visibility (with surface features) – Gate Burton with Tillbridge Solar
Figure 10-16	Photosheets Viewpoints 1-23
Figure 10-17	Photosheets Cumulative C1-C5
Figure 10-18	Photosheets Viewpoints LCC1-10
Figure 10-19	Residential Viewpoints Locations on Aerial Photography
Figure 10-20	Photosheets Residential Visual Amenity Survey
Figure 10-21	Vegetation Removal
Figure 10-22	Advanced Planting
Figure 10-23	Outline Landscape Masterplan
Figure 11-1	Receptor Locations and Noise Monitoring Positions
Figure 11-2	Noise Contours – Operational phase
Figure 11-3	Sensitivity Test using String Inverters as Noise Sources during the Operational Phase
Figure 12-1	Agriculture Land Classifications
Figure 13-1	Transport Study Area
Figure 13-2	Traffic Survey Locations
Figure 13-3	HGV Routing
Figure 13-4	Surrounding Highway Network

EN010131/APP/3.1 **Environmental Statement** Glossary and Table of Contents



Figure 13-5	Walking and Cycling Network
Figure 13-6	Abnormal Load Routing
Figure 13-7	Public Right of Way (PRoW) Management (Construction Phase)
Figure 15-1	Dust Risk Assessment Zones
Figure 16-1	Maximum Zone of Influence for Cumulative Assessment



Volume 3: Table of Contents

Appendix 1-A	EIA Scoping Report
Appendix 1-B	EIA Scoping Opinion
Appendix 1-C	EIA Scoping Opinion Responses
Appendix 1-D	Statement of Competence
Appendix 2-A	BESS and Substation Description
Appendix 2-B	Grid Connection Construction Method Statement
Appendix 3-A	Grid Connection Options Appraisal
Appendix 6-A	Climate Change Summary of Non-Significant and Residual Effects
Appendix 7-A	Cultural Heritage Desk-Based Assessment
Appendix 7-B	Gazetteer of Known Heritage Assets
Appendix 7-C	Aerial Photograph and LiDAR Analysis Report
Appendix 7-D	Geophysical Survey Fieldwork Reports
Appendix 7-E	Trial Trench Evaluation Fieldwork Report
Appendix 7-F	Geoarchaeological Assessment Report
Appendix 8-A	Ecology Legislation and Policy
Appendix 8-B	Preliminary Ecological Appraisal
Appendix 8-C	Flora Report (including hedgerows)
Appendix 8-D	Terrestrial Invertebrates
Appendix 8-E	Aquatic Baseline Report
Appendix 8-F	Great Crested Newt Survey Report
Appendix 8-G	Report on survey for reptiles and other amphibians
Appendix 8-H	Report on survey for breeding birds
Appendix 8-I	Wintering Bird Survey Report
Appendix 8-J	Bat Survey Report
Appendix 8-K	Riparian Mammal Survey Report
Appendix 8-L	Badger Survey Report
Appendix 9-A	Water Framework Directive Assessment
Appendix 9-B	Water Legislation and Policy
Appendix 9-C	Outline Drainage Strategy
Appendix 9-D	Flood Risk Assessment
Appendix 9-E	Water Summary of Non-Significant Effects
Appendix 10-A	LVIA Legislation and Policy
Appendix 10-B	LVIA Methodology
Appendix 10-C	Landscape Baseline
Appendix 10-D	Landscape Assessment
Appendix 10-E	Visual Baseline



Appendix 10-F	Visual Assessment
Appendix 10-G	Residential Visual Amenity Survey
Appendix 10-H	Landscape and Visual Cumulative Effects
Appendix 10-I	Arboricultural Impact Assessment
Appendix 10-J	Lincolnshire County Council Consultation Meeting Notes
Appendix 11-A	Noise and Vibration Legislation and Policy
Appendix 11-B	Acoustic Terminology
Appendix 11-C	Baseline Noise Survey
Appendix 11-D	Noise Modelling
Appendix 11-E	Noise and Vibration Summary of Non-Significant Effects
Appendix 12-A	Socio-Economics and Land Use Legislation and Planning Policy
Appendix 12-B	Socio-Economics and Land Use Summary of Non-Significant Effects
Appendix 12-C	Agricultural Land Classification Report
Appendix 13-A	Transport Scoping Note
Appendix 13-B	Transport Key Policies and Guidance
Appendix 13-C	Transport Summary of Non-Significant Effects
Appendix 13-D	Transport Assessment
Appendix 13-E	Framework Construction Traffic Management Plan
Appendix 14-A	Health and Wellbeing Legislation and Policy
Appendix 15-A	Dust Risk Assessment
Appendix 15-B	Air Quality Table of Non-Significant Effects
Appendix 15-C	Unplanned Atmospheric Emissions Report
Appendix 15-D	Glint and Glare Assessment
Appendix 15-E	Phase 1 Desk Study & Preliminary Risk Assessment
Appendix 15-F	Desk Study – Grid Connection Corridor
Appendix 16-A	Short List of Cumulative Schemes
Appendix 16-B	Effects Interaction Matrix



Glossary of Abbreviations

AADT Annual Average Daily Traffic

AC Alternating current

AEP Annual Exceedance Probability

agl Above ground level

AlL Abnormal Indivisible Load

ALC Agricultural Land Classification

AOD Above Ordnance Datum

AONB Areas of Outstanding Natural Beauty

AQMA Air Quality Management Area

AQS Air Quality Strategy

ATC Automatic Traffic Count

AW Ancient Woodland

BAP Biodiversity Action Plan
BCT Bat Conservation Trust
BDC Bassetlaw District Council

BDLDF Bassetlaw District Local Development Framework

BESS Battery Energy Storage System

BGS British Geological Survey
BMV Best and Most Versatile
BNG Biodiversity Net Gain

BOAT Byways Open to All Traffic

BOD Biochemical Oxygen Demand

BPM Best Practicable Means

BRE Building Research Establishment

BRES Business Register and Employment Survey

BS British Standard

CAFE Clean Air for Europe

CAMS Catchment Abstraction Management Strategy

CCC Climate Change Committee
CCGs Clinical Commissioning Groups

CCR Climate change resilience
CCTV Closed circuit television

CCW Countryside Council for Wales
CDM Construction Design Management

CEMP Construction Environmental Management Plan

CIEEM Chartered Institute of Ecology and Environmental Management

CifA Chartered Institute for Archaeologists

CIPD Chartered Institute of Personnel and Development



CJEU Court of Justice of the European Union

CM Conceptual Model

COPA Control of Pollution Act 1974

COSHH Control of Substances Hazardous to Health

CSM Conceptual site model

CTMP Construction Traffic Management Plan

CWS County Wildlife Sites
DBA Desk-Based Assessment

DBEIS Department for Business, Energy & Industrial Strategy

DC Direct Current

DCO Development Consent Order

DECC Department of Energy and Climate Change

DEFRA Department for Environment, Food and Rural Affrairs
DEMP Decommissioning Environmental Management Plan

DfT Department for Transport
DMP Dust Management Plan

DMRB Design Manual for Roads and Bridges

DoS Degree of Saturation
DRA Dust Risk Assessment
EA Environment Agency
EC European Commission

EcIA Ecological Impact Assessment

EIA Environmental Impact Assessment

EMI Electromagnetic Interference

EN Energy

EPA Environmental Protection Act

EPD Environmental Product Declaration
EQS Environmental Quality Standards

ERP Emergency Response Plan
ES Environmental Statement
FRA Flood Risk Assessment
FTE Full Time Employment

FZ Flood Zone

GCR Ground Coverage Ratio

GHG Greenhouse Gas

GLVIA3 Guidelines for Landscape and Visual Impact Assessment, 3rd Edition

GPP Guidance for Pollution Prevention

GRP Glass reinforced plastic
GVA Gross Value Added

GWDTE Groundwater Dependent Terrestrial Ecosystem

Ha Hectare



HaPI Habitats of Principal Importance
HCA Homes and Communities Agency
HDD Horizontal Directional Drilling

HDV Heavy Duty Vehicle
HE Historic England

HER Historic Environment Record

HGV Heavy Goods Vehicle

HIA Heritage Impact Assessment

HIS Habitat Suitability Index

HLC Historic Landscape Character
HRA Habitats Regulation Assessment

HSI Habitat Suitability Index

HVAC Heating, Ventilation and Cooling
IAQM Institute of Air Quality Management
ICCI In-combination climate change impact

IDB Internal Drainage Board

IEF Important Ecological Features

IEMA Institute of Environmental Management and Assessment

IMD Index of Multiple DeprivationINNS Invasive Non-Native Species

IPCC Intergovernmental Panel on Climate Change

JNCC Joint Nature Conservation Committee

JSNAs Joint Strategic Needs Assessment

kg CO2e/kWh Kilograms carbon dioxide equivalent per kilowatt hour

Km Kilometre

LBAP Local Biodiversity Action Plan

LBMP Landscape and Biodiversity Management Plan

LCA Landscape Character Area
LCC Lincolnshire County Council
LCP Landscape Character Parcel
LCT Landscape character Type
LDU Landscape Description Unit

LERC Lincolnshire Environmental Records Centre

LGV Light Goods Vehicle

LHA Local Highway Authority

LLCA Local Landscape Character Area

LLFA Lead Local Flood Authority
LNR Local Nature Reserves

LOAEL Lowest Observable Adverse Effect Level

LSEs Likely Significant Effects
LSOA Lower Super Output Area



LVIA Landscape and Visual Impact Assessment

LWS Local Wildlife Sites

M³ Meters cubed

MAGIC Multi-Agency Geographic Information Centre

MCC Manually Classified Count

MRN Major Road Network

MSOA Middle Super Output Area

MW Megawatts

MWh Megawatt hours

NBGRC Nottinghamshire Biological and Geological Records Centre

NBN National Biodiversity Network
NCC Nottinghamshire County Council

NE Natural England

NERC Natural Environment Research Council

NGR National Grid Reference
NNR National Nature Reserves

NO₂ Nitrogen Dioxide

NOEL No Observed Effect Level

NPPF National Planning Policy Framework
NPPG National Planning Practice Guidance

NPS National Policy Statement

NPSE National Policy Statement for England

NRMM Non-Road Mobile Machinery
NRTF National Road Traffic Forecast

NSIP Nationally Significant Infrastructure Project

NTEM National Trip Ends Model

NTL National Tidal Limit

NTM National Transport Model

NVQ National Vocational Qualification

NVZ Nitrate Vulnerable Zone

ODEMP Outline Decommissioning Environmental Management Plan

OEMP Operational Environmental Management Plan

ONS Office for National Statistics

OOEMP Outline Operational Environmental Management Plan

OS Ordnance Survey

PEA Preliminary Ecological Appraisal

PEI Preliminary Environmental Information

PIC Personal Injury Collision

PM₁₀ Particulate Matter

PPE Personal protective equipment



PPG Pollution Prevention Guidance
PPG Planning Practice Guidance
PRA Preliminary Risk Assessment

PRoW Public Rights of Way

PSYM Predictive System for Multimetrics

PV Photovoltaic PV Photovoltaic

PWS Private Water Supply
RBD River Basin District

RBMPs River Basin Management Plans

RCPs Representative Concentration Pathways

RFC Ratio of Flow to Capacity

RLB Red Line Boundary

RVAA Residential Visual Impact Assessment

SAC Special Areas of Conservation

SF6 Sulphur hexafluoride

SFRA Strategic Flood Risk Assessment

SM Scheduled Monument

SOAEL Significant Observed Adverse Effect Level
SOCC Statement of Community Consultation

SoS Secretary of State

SPA Special Protection Areas

SPI Species of Principal Importance

SPZ Source Protection Zone

SSSI Site of Special Scientific Interest
SuDS Sustainable Drainage Systems
SWMP Site Waste Management Plan

TA Transport Assessment

tCO₂e tonnes CO₂ equivalent

TEMPRO Trip Ends Model Program

TTM Temporary Traffic Management

TVL Trent Valley Landscape

TW Trent Washlands

UKBAP UK Biodiversity Action Plan

W Watts

WCA Wildlife and Countryside Act
WFD Water Framework Directive
WHO World Health Organisation
WLDC West Lindsey District Council
WMP Water Management Plan

EN010131/APP/3.1 Environmental Statement Glossary and Table of Contents



WRMP Water Resources Management Plan

WSI Written Scheme of Investigation

WTN Waste Transfer Note

WTT Well-to-tank

Zol Zone of Influence

ZTV Zone of Theoretical Visibility



Definitions of Frequently Used Terms

"A" Weighting (dB(A))

The human ear does not respond uniformly across the audible frequency range. The 'A' weighting is commonly used to simulate the frequency response of the ear.

Abnormal Indivisible Load

An abnormal load that cannot be broken down into smaller loads for transport.

Abnormal Load

A vehicle that has a weight of more than 44,000kg, an axle load of more than 10,000kg for a single non-driving axle and 11,500kg for a single driving axle, a width of more than 2.9 metres or a rigid length of more than 18.65 metres.

Agricultural Land Classification (ALC)

A means of assessing the quality of farmland. Its assessment is based on physical limitations of the land, such as climate, site characteristics (for example gradient) and soil. The assessment gives an indication of the versatility and expected yield of the land. The system classifies agricultural land in 5 grades. The best and most versatile land is classified as 1, 2 and 3a. The Agricultural Land Classification was developed by the former Ministry of Agriculture, Fisheries and Food (MAFF) in 1998 and revised in 1996.

Air Quality Management Area (AQMA)

Places where air quality objectives are not likely to be achieved. Where an AQMA is declared, the local authority is obliged to produce an action plan in pursuit of the achievement of the air quality objectives.

Ambient noise Level, $L_{Aeq, T}$

The total sound in a certain situation at a given time usually composed of sound from many sources, near and far.

Amenity

The ability of human receptors to achieve enjoyment and/or quality of life.

Annual Average Weekly Traffic (AAWT)

Traffic data obtained by calculating daily traffic flows and then calculating the annual average. Often used in predicting noise levels and air quality, usually in conjunction with other parameters such as average vehicle speed and percentage heavy vehicles.

Annual Exceedance Probability (AEP)

The probability of a certain accumulation being exceeded in a particular year.

Applicant

Gate Burton Energy Park Limited which is a subsidiary of Low Carbon Ltd.

Array cables

The low or medium voltage cables within the Solar and Energy Storage Park which transform electricity between solar PV modules to inverters and transformers.

Area of Outstanding Natural Beauty (AONB) Land protected by the Countryside and Rights of Way Act (2000) (CROW Act). It protects the land to conserve and enhance its natural beauty. Under the CROW Act, Natural England can make orders to designate an AONB or vary the boundaries of existing ones.

Automatic Traffic Count

A traffic count which is undertaken automatically such as through the installation of a temporary or permanent electronic traffic recording device.



L_{A90, T}

Background Noise Level The A-weighted sound pressure level of the residual noise at the assessment position that is exceeded for 90% of a given time interval, T, measured using the fast time weighting, F, and guoted to the nearest

whole number.

Baseline Conditions The conditions against which potential effects rising from the Scheme are

identified and evaluated.

A container to house the battery energy storage cells and associated **Battery Container**

equipment within the BESS.

Battery Energy Storage

System (BESS)

Proposed development of a battery storage installation and associated development to allow for the storage, importation and exportation of

energy to the National Grid.

Birds Directive EU Council Directive 2009/147/EC on the conservation of wild birds.

Biodiversity The biological diversity of the earth's living resources. The total range of

> variability among systems and organisms at the following levels of organisation: bioregional, landscape, ecosystem, habitat, communities, species, populations, individuals, genes and the structural and functional

relationships within and between these different levels.

Biodiversity Net Gain

(BNG)

Development that improves the biodiversity value of a site and can involve developers working with local governments, wildlife groups, land owners and other stakeholders to support priorities for nature conservation.

Byways Open to All

Traffic

A highway over which the public have a right of way for vehicular and all other kinds of traffic, but which is primarily used by the public for walking,

cycling or horse riding.

Cable Circuit An electrical conductor necessary to transmit electricity between two

> points within the Scheme and may include one or more auxiliary cables for the purpose of gathering monitoring data, earthing cables, cables for auxiliary supply, optical fibre, and other types of communication cables,

cables connecting to direct current boxes.

Export Cables The cables, which transmit electricity from the transformers to the project

substation via Cable Circuits.

Carbon dioxide (CO2) equivalent is a measure of how much a gas CO₂ equivalent (CO₂e)

> contributes to global warming, relative to carbon dioxide, by multiplying the mass of the gas (in tonnes), by the gas' global warming potential

(GWP).

Conservation Area An area of special environmental or historic interest or importance, of

which the character or appearance is protected (Section 69 of the Planning (Listed Buildings and Conservation Areas) Act 1990).

Construction Environmental Management Plan A site-specific plan developed to ensure that appropriate environmental management practices are followed during the construction phase of a

project.

Cottam National Grid

Substation

(CEMP)

The point of electricity connection for the Scheme. It is located at Cottam Power Station and is owned and operated by National Grid.

Cumulative Effects Effects upon the environment that result from the incremental impact of an

action when added to other past, present or reasonably foreseeable

actions.

Each impact by itself may not be significant but can become a significant

effect when combined with other impacts.

The land shown on the Works Plans within which the Scheme can be Order limits

carried out.



Decibel (dB) A logarithmic ratio of two values of a variable. The range of audible sound

pressures is approximately 2 x 10-5 Pascals (Pa) to 200 Pa. Using decibel notation presents this range in a more manageable form, 0dB to 140dB.

Decommissioning Environmental Management Plan (DEMP) A specific plan developed to ensure that appropriate environmental management practices are followed during the decommissioning phase of a project.

Degree of Saturation/ Ratio of Flow to Capacity A ratio of demand to capacity on each approach to the junction, with a value of 100% meaning the demand and capacity are equal and no further traffic is able to progress through the junction.

Design Manual for Roads and Bridges (DMRB)

A series of 15 volumes authored by National Highways that provide standards, advice notes and other published documents relating to the design, assessment and operation of trunk roads, including motorways in the United Kingdom.

Designated Landscape

Areas of landscape identified as being of importance at international, national or local levels, either defined by statute or identified in development plans or other documents.

Development Consent Order (DCO)

An order made by the Secretary of State which grants development consent for Nationally Significant Infrastructure Projects pursuant to the Planning Act 2008.

Direct employment

Employment generated by direct activity on site.

Drinking Water Protected Area Drinking Water Protected Areas (Surface Water) are, within the WFD, where raw water is abstracted from rivers and reservoirs. Raw water needs to be protected to ensure that it is not polluted which could lead to additional purification treatment. To do this water companies and the Environment Agency identify raw water sources that are 'at risk' of deterioration which would result in the need for additional treatment. These zones are areas where the land use is causing pollution of the raw water. Action is targeted in these zones to address pollution so that extra treatment of raw water can be avoided.

Drinking Water Safeguard Zones Catchment areas that influence the water quality for their respective Drinking Water Protected Area (Surface Water), which are at risk of failing the drinking water protection objectives. These non-statutory Safeguard Zones are where action to address water contamination will be targeted, so that extra treatment by water companies can be avoided.

EN 15804

European Standard for the generation of EPD for construction products.

Environmental effect

The consequence of an action (impact) upon the environment such as the decline of a breeding bird population as a result of the removal of hedgerows and trees.

Environmental impact

The change in the environment from a development such as the removal of a hedgerow.

Environmental Impact Assessment (EIA) A process by which information about environmental effects of a proposed development is collected, assessed and used to inform decision making. For certain projects, EIA is a statutory requirement.

Environmental Impact Assessment (EIA) Regulations Regulations that give planning authorities a means of ensuring that they can take account of the environmental, economic and social implications of individual developments in their decisions on planning applications. For the Scheme, the relevant regulations are the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.



Environmental Product Declaration (EPD)

An EPD is a document that quantifiably demonstrates the environmental

impacts of a product.

Environmental Statement (ES)

A document produced in accordance with the EIA Regulations to report

the results of an EIA.

Flood Zone Flood Zone definitions are set out in the National Planning Policy

Guidance. There are three flood zones which refer to the probability of river and sea flooding, not taking into account the presence of flood

defences.

Flood Zone 1 Land assessed as having a less than 1 in 1,000 annual probability of river

flooding (<0.1% Annual Exceedance Probability (AEP).

Flood Zone 2 Land assessed as having between 1 in 100 and 1 in 1,000 annual

probability of river flooding (>0.1% AEP to <1% AEP).

Flood Zone 3 Land assessed as having 1 in 100 or greater annual probability of river

flooding (>1% AEP)).

Frequency (Hz) The number of cycles per second (i.e. the number of vibrations that occur

in one second); subjectively this is perceived as pitch.

Grid Connection

Gross impact

Corridor

Land required for the laying of Cables between the Solar and Energy Storage Park and the Cottam National Grid Substation (at Cottam Power Station), for export of electricity from the Scheme to the National Grid.

Overall impact before taking into account the impact of deadweight,

displacement, leakage and substitution.

Ground mounted solar

PV panel arrays

Solar photovoltaic (PV) modules attached to structures that are fixed to

the ground.

Habitats Directive EU Council Directive 92/43/EEC on the conservation of natural habitats

and of wild fauna and flora.

Habitats Regulations The Conservation of Habitats and Species Regulations 2017.

Habitats Regulations

Assessment (HRA)

The assessment process required where a project is likely to have significant effects on a designated European site. Its purpose is to assess the implications of the proposal in respect of the site's conservation

objectives'.

Heavy Goods Vehicle

(HGV)

Vehicles with 3 axles (articulated) or 4 or more axles (rigid and

articulated).

Employment growth arising through spending in the supply chain by Indirect employment

activity on site (i.e. contracted out manufacturing and services).

Induced employment Employment generated through spending by workforce (direct

employment) in the economy.

Inverter Inverters convert the direct current (DC) electricity collected by the PV

modules into alternating current (AC), which allows the electricity

generated to be exported to the National Grid. BESS also use inverters to convert between DC and AC. The batteries function in DC and electricity

must be converted to AC to pass into or from the grid.

ISO 14025 ISO 14025:2006 establishes the principles and specifies the procedures

for developing Type III environmental declaration programmes and Type

III environmental declarations.



Jointing pit Underground structures constructed at regular intervals along the cable

route to join sections of cable and facilitate installation of the cables into

the buried ducts.

Landscape An area, as perceived by people, the character of which is the result

of the action and interaction of natural and/or human factors.

Landscape and Visual

Impact Assessment

A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and

visual amenity.

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

These are single unique areas which are the discrete geographical

areas of a particular landscape type.

Landscape Character

Assessment

The process of identifying and describing variation in the character of the landscape and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscapes

combination of elements and features that make landscapes distinctive. The process results in the production of a Landscape

Character Assessment.

Landscape Character

Landscape Receptors

Types

These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they

occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement

pattern, and perceptual and aesthetic attributes.

Landscape Effects Effects on the landscape as a resource in its own right.

Defined aspects of the landscape resource that have the potential to

be affected by a proposal.

Landscape Sensitivity A term applied to specific receptors, combining judgements of the

susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor.

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.

Level L_{A10, T} The A-weighted sound pressure level exceeded for 10% of a give time

interval, T, measured using the fast time weighting, F.

Light Goods Vehicle A commercial motor vehicle with a total gross weight of 3,500kg or less.

Lowest Observed

Adverse Effect Level

This is the level of noise above which adverse effects on health and

quality of life can be detected.



Magnitude (of effect) A term that combines judgements about the size and scale of the effect,

the extent of the area over which it occurs, whether it is reversible or

irreversible and whether it is short or long term in duration.

Major Road Network The middle tier of England's busiest and most economically important

local authority 'A' roads.

Manually Classified

Count

A traffic count which is undertaken manually such as by an observer visually counting and recording the volume of vehicles on a tally sheet.

Middle Super Output

Area

A geographic hierarchy designed to improve the reporting of small area statistics in England and Wales, built from groups of contiguous Lower Layer Super Output Areas.

Mitigation Measures including any process, activity, or design to avoid, prevent,

reduce, or, if possible, offset any identified significant adverse effects on

the environment.

National Road Traffic

Forecast

A forecast for traffic demand, congestion and emissions in England and

Wales.

National Transport

Model

A multi-modal model of land-based transport in Great Britain, used to inform transport policy and roads strategy and produce road traffic

forecasts.

National Trip Ends

Model

A model which forecasts the growth in trip origin-destinations (or

production-attractions) for use in transport.

Nationally Significant Infrastructure Projects

(NSIP)

NSIPs are large scale developments such as certain new harbours, power generating stations (including wind farms), highways developments and electricity transmission lines, which require a type of consent known as 'development consent' under procedures governed by the Planning Act

2008 (and amended by the Localism Act 2011).

Net impact Impact discounting deadweight (impact that would have happened without

the intervention), displacement (proportion of intervention

outputs/outcomes accounted for by reduced outputs/outcomes elsewhere in the target area), leakage (proportion of outputs that benefit those outside of the intervention's target area or group) and substitution (effect

arises where a firm substitutes one activity for a similar one).

Nitrate Vulnerable Zone NVZs are statutory designated areas as being at risk from agricultural

nitrate pollution and includes about 55% of land in England. The

designations are made in accordance with the Nitrate Pollution Prevention

Regulations 2015.

Noise Unwanted or unexpected sound.

NPS National Policy Statement. National Policy Statements are produced by

government. They comprise the government's central policy documents

for the development of nationally significant infrastructure.

Outline Battery Fire Safety Management

Plan

This document identifies the measures required to avoid and reduce the risk of fire from the BESS, as well as how to effectively manage a fire

should the event occur.



Outline Landscape and **Ecology Management** Plan (OLEMP)

The OLEMP sets out the landscape and ecological management actions for the Scheme, outlining how mitigation measures, identified within the Environmental Statement, will be delivered through future landscape works and management.

Permissive Paths

A new recreational informal path signed as permissive that the landowner allows the public to use for the life of the Scheme.

Personal Injury Collision

A collision involving a mechanically-propelled vehicle on a road or other public area which causes injury or damage to a person.

Photomontage

A visualisation which superimposes an image of a proposed development upon a photograph or series of photographs.

Photovoltaic (PV)

The process of converting sunlight to electrical energy.

Power Conversion Unit

A Power Conversion Unit will comprise an inverter, a transformer, and switchgear, which can be grouped together or distributed throughout the Site. The Power Conversion Unit can sometimes be enclosed in a single container.

Preliminary Environmental Information (PEI)

PEI is defined in the EIA Regulations as: "information referred to in

Regulation 14(2) which -

(a) has been compiled by the applicant; and

(b) is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development (and of any associated development)."

Preliminary Risk Assessment

Report that presents a summary of readily-available information on the geotechnical and/or geo-environmental characteristics of the site and provides a qualitative assessment of geo-environmental and/or geotechnical risks in relation to the proposed development.

Principal Aquifer

These are layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.

Public Rights of Way

Rights across land exercisable by the public at all times.

PV Modules

Solar photovoltaic panel designed to convert solar irradiance to electrical energy fitted to mounting structures.

Q95 Flow

River flow rate that is exceeded 95% of the time.

Rating level, LAR, TR

The specific noise level plus any adjustment for any characteristic features of the noise.

Receptor

A component of the natural or man-made environment that is affected by an impact, including people.

Reference Time Interval, The specified interval over which an equivalent continuous A-weighted sound pressure level is determined.

Representative (RCPs)

Representative Concentration Pathways (RCPs) capture, within a set of Concentration Pathways scenarios, assumptions about the economic, social and physical changes to our environment that will influence climate change. The conditions of each scenario are used in the process of modelling possible future climate

evolution.



RCPs specify concentrations of greenhouse gases that will result in total radiative forcing increasing by a target amount by 2100, relative to pre-industrial levels. Total radiative forcing is the difference between the incoming and outgoing radiation at the top of the atmosphere. Radiative forcing targets for 2100 have been set at 2.6, 4.5, 6.0 and 8.5 watts per square metre (W m-2) to span a wide range of plausible future emissions scenarios and these targets are incorporated into the names of the RCPs; RCP2.6, RCP4.5, RCP6.0 and RCP8.5. Each pathway results in a different range of global mean temperature increases over the 21st century.

Scheduled Monument

A 'nationally important' archaeological site or historic building, given protection against unauthorised change and included in the Schedule of Monuments kept by the Secretary of State for Culture, Media and Sport. The protection given to scheduled monuments is given under the Ancient Monuments and Archaeological Areas Act 1979.

Scheme

The Gate Burton Energy Park, comprising solar PV and battery storage and associated development for connection to the national transmission system.

Scoping

The process of identifying the issues to be addressed by an EIA. It is a method of ensuring that an EIA focuses on the likely significant effects and avoids those that are considered to be unlikely to be significant.

Secondary (undifferentiated) aquifer

Assigned in cases where it has not been possible to attribute either category A or B to a rock type. In most cases, this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type.

Secondary A Aquifer

Secondary A aquifers comprise permeable layers that can support local water supplies and may form an important source of base flow to rivers.

Secondary B Aquifer

Predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the waterbearing parts of the former non-aquifers.

Setting

The surroundings within which a heritage asset is experienced and any element, which contributes to the understanding of its significance.

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 This is the level of noise above which significant adverse effects on health and quality of life occur.

Site

Comprises the Solar and Energy Storage Park and the Grid Connection Corridor.

Solar and Energy Storage Park The approximately 824 hectare site comprising the majority of the infrastructure (e.g. BESS) required as part of the Scheme. This does not include land as part of the Order limits for the Grid Connection Corridor.

Source Protection Zone

Zones which show the level of risk to a groundwater source from contamination. This could be from any activity that might cause pollution in the area. For example, storing pollutants like petrol underground, soakaways from septic tanks to the ground. The closer the activity, the greater the risk.



Specific Noise Level,

LAEQ. Tr

The equivalent continuous A-weighted sound pressure level at the assessment position produced by the specific noise source over a given

reference time interval.

Study Area The area in which a particular assessment or survey targets. The study

area will vary depending on the nature of the technical assessment. Where relevant, these are defined within the relevant technical chapter of

the ES.

Susceptibility The ability of a defined landscape or visual receptor to

accommodate the specific proposed development without undue

negative consequences.

Switchgear A combination of electrical disconnect switches, fuses, or circuit

breakers used to control, protect and isolate electrical equipment.

Temporary Traffic Management

A system of controlling traffic movement (such as through or past a works site) to maximise safety for and minimise inconvenience to road workers

and road users.

Tranquillity A state of calm and quietude associated with peace, considered to

be a significant asset of landscape.

Transformers Transformers control the voltage of the electricity generated across the

site before it reaches the electrical infrastructure.

Trip Ends Model

Program

Software which allows users to view the National Trip Ends Model

dataset and provides forecasts of trip ends and associated

documentation.

Visual Effects Effects on specific views and on the general visual amenity

experienced by people.

Visual Receptors Individuals and/or defined groups of people who have the potential

to be affected by a proposal.

Water Framework

Directive

The Water Framework Directive ("WFD") introduced a new system for monitoring and classifying the quality of surface and ground waters. The Directive requires that Environmental Objectives be set for all surface

waters and groundwater to enable them to achieve Good Ecological Potential/Status by a defined date.

Water Framework
Directive Assessment

As part of its role, the Environment Agency must consider whether proposals for new developments have the potential to a) Cause a

deterioration of a water body from its current status or potential; and/or b) Prevent future attainment of Good Ecological Status (or potential where not already achieved). A WFD Assessment determines whether a scheme

is compliant with these criteria.

Well-to-tank (WTT)

emissions

A Well-to-Tank emissions factor, also known as upstream or indirect emissions, is an average of all the GHG emissions released into the

atmosphere from the production, processing and delivery of a fuel or

energy vector.

World Heritage Site A site inscribed by United Nations Educational, Scientific, and Cultural

Organisation (UNESCO) because of its Outstanding Universal Value

under the terms of the UNESCO World Heritage Convention.

EN010131/APP/3.1 Environmental Statement Glossary and Table of Contents



Written Scheme of A Written Scheme of Investigation outlines known and potential

Investigation archaeological features and deposits or built heritage elements on a site

and suggests a structure for exploring them using the latest, most

appropriate and cost-effective archaeological techniques.

Zone of Influence The area for the assessment of combined effects. Zones of Influence

(ZoIs) are variable depending on the environmental factor being

discussed.

Zone of Theoretical

Visibility

A map, usually digitally produced, showing areas of land within which the

Scheme is theoretically visible.