



Thurrock Flexible Generation Plant

**Preliminary Environmental Information Report
Glossary, Acronyms and Units**

Date: September 2018

**Environmental Impact Assessment
Preliminary Environmental Information Report**

Glossary, Acronyms and Units

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Summary

This document provides a consolidated glossary and list of acronyms and units used in all volumes of the Preliminary Environmental Information Report.

Glossary

Term	Definition
Abnormal Indivisible Loads	Loads or vehicles that exceed maximum vehicle weight, axle weight or dimensions as set out in the Road Vehicles (Construction and Use) Regulations 1986 as amended.
Above ground installation (AGI)	The infrastructure visible above ground at the connection point between Thurrock Flexible Generation Plant gas pipeline and Feeder 18 of the high-pressure National Transmission System.
Access and construction haul road corridors (zones C, H, I and J)	Areas of land within which temporary construction access road(s) and laydown and/or permanent access for the development's operational lifetime may be constructed.
Access Land	Land where the public have access either by legal right or by informal agreement.
Accident and emergency management procedures	Procedures that will be developed by Thurrock Power Ltd to minimise accident risks and respond to accidents or emergencies to protect health, safety and the environment.
Agri-environment scheme	A government-funded scheme to encourage farmers to manage their land in an environmentally friendly way.
Alluvium	Unconsolidated (not cemented together into a solid rock) soil or sediment, which has been eroded, reshaped by water in some form, and redeposited in a non-marine setting.
Application site	All land within the proposed Development Consent Order boundary.
Aquifer	A subsurface layer or layers of rock or other geological strata of sufficient porosity and permeability to allow either a significant flow of groundwater or the abstraction of significant quantities of groundwater.
Auger boring	A core of soil taken for examination to a depth of 1 m with a Dutch Combination hand auger.
Baseline studies	Work done to determine and describe the environmental conditions against which any future changes can be measured or predicted and assessed.
"best and most versatile" land	The highest quality Grades 1, 2 and 3a agricultural land as determined by Defra.
Biodiversity Action Plan (BAP)	The UK Government's response to the Convention on Biological Diversity, which the UK signed in 1992 in Rio de Janeiro and ratified in 1994. The Convention on Biological Diversity requires signatory countries to identify, develop and enforce action plans to conserve, protect and enhance biological diversity. The UK BAP addresses this requirement. Local BAPs have been produced by many counties, to detail measures to conserve, protect and enhance local/county biological diversity.
Birds Directive	Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.
Bronze Age	The time period 2,000 - 700BC.
Calcareous	Containing lime or being chalky.

Term	Definition
Catchment Flood Management Plan	Catchment Flood Management Plans are documents produced by the Environment Agency to establish flood risk management policies which will deliver long term sustainable flood risk management across a catchment. They consider all types of inland flooding, from rivers, groundwater, surface water and tidal flooding within specific river basin district.
Catchments	An area that serves a watercourse with rainwater. Every part of land where the rainfall drains to a single watercourse is in the same catchment.
Characterisation	The process of identifying areas of similar landscape character, classifying and mapping them and describing their character.
Characteristics	Elements, or combinations of elements, which make a contribution to distinctive landscape character.
Climate change	A long term change in weather patterns, in the context of flood risk, climate change will produce more frequent severe rainfall.
Code of Construction Practice (CoCP)	A document detailing the overarching principles of construction, contractor protocols, construction-related environmental management measures, pollution prevention measures, the selection of appropriate construction techniques and monitoring processes.
Common Land exchange and habitat enhancement areas (zones F and I)	Areas of land within which exchange Common Land and further habitat creation or enhancement for biodiversity value may be provided.
Common Land replacement and habitat enhancement areas (Zones F, G and I)	Areas of land within which replacement for Walton Common and further habitat creation or enhancement for biodiversity value may be provided.
Compensation	Measures devised to offset or compensate for residual adverse effects which cannot be prevented/avoided or further reduced.
Competent authority	The authority which determines the application for consent, permission, licence or other authorisation to proceed with a proposal. It is the authority that must consider the environmental information before granting any kind of authorisation.
Construction Environmental Management Plan (CEMP)	A document providing further detail of management measures to be employed during construction to avoid or minimise environmental impacts, following the principles and meeting the requirements set out in the CoCP. This document will be prepared by the lead construction contractor once appointed and developed through method statements for particular construction activities.
Construction Traffic Management Plan (CTMP)	A plan managing all construction traffic, including protocols for delivery of Abnormal Indivisible Loads to site, personnel travel, measures for road cleaning and sustainable site travel measures.
Consultation bodies	Any body specified in the relevant EIA Regulations which the competent authority must consult in respect of an EIA, and which also has a duty to provide a scoping opinion and information.
Consultation Report	The Consultation Report records the consultation that has been undertaken, topics and issues raised by consultees, and how the applicant has responded.

Term	Definition
Contaminant	Refers to the source of contamination (Hazard).
Cooling water pipe and construction haul road corridor (zone K)	The areas of land and estuary within which the buried cooling water pipeline route and intake/outfall would be located. A construction haul road from an existing third-party jetty would also be located within this corridor. The exact location of the pipe route, intake/outfall and construction haul road are flexible within this zone, subject to further constraints study and agreements with third parties prior to construction.
Cumulative effects	The combined effect of Thurrock Flexible Generation Plant in combination with the effects from one or more other development projects on the same receptor or resource.
Cumulative impact	Impacts that result from reasonably foreseeable actions of other development projects together with Thurrock Flexible Generation Plant.
de minimis	An amount or impact that is immaterial or small to be taken into consideration, often used in greenhouse gas accounting for very minor emission sources not appreciably affecting the total or within the bounds of other uncertainties.
Design envelope	A description of the range of possible elements that make up the Thurrock Flexible Generation Plant design options under consideration, as set out in detail in the project description. This envelope is used to define Thurrock Flexible Generation Plant for Environmental Impact Assessment (EIA) purposes when the exact engineering parameters are not yet known. This is also often referred to as the "Rochdale Envelope" approach.
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	Any proposal that results in a change to the landscape and/or visual environment.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Projects (NSIP).
Direct effect	An effect that is directly attributable to the proposed development.
Discharge consents	Consent granted by the Environment Agency to discharge into watercourses, subject to conditions.
"Do nothing" situation	Continued change or evolution in the landscape in the absence of the proposed development.
Drainage Board (DB)	Drainage Boards are an integral part of water level management in the UK. Each DB is a local public authority established in areas of special drainage need in England and Wales. They have permissive powers to manage water levels within their respective drainage districts. They undertake works to reduce flood risk to people and property and manage water levels to meet local needs.
Drainage Strategy	A document and drawings showing the outline ('concept') design for surface water drainage for Thurrock Flexible Generation Plant.
Driver Delay	Delays incurred to the driver of vehicles as they move along the highway network.
Droughtiness	The assessment of the degree to which the shortage of soil water influences the range of crops which may be grown and level of yield that may be achieved.

Term	Definition
Ecological Management Plan	A document detailing the management and protection of species and management or protection, enhancement or creation of habitats during the construction and operational phases of the proposed development.
Effect	Term used to express the consequence of an impact. The significance of an effect is determined by correlating the magnitude of the impact with the importance, or sensitivity, of the receptor or resource in accordance with defined significance criteria.
EIA Directive	European Union Directive 85/337/EEC, as amended by Directives 97/11/EC, 2003/35/EC and 2009/31/EC and then codified by Directive 2011/92/EU of 13 December 2011 (as amended in 2014 by Directive 2014/52/EU).
EIA Regulations	The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended).
Elements (<i>landscape</i>)	Individual parts which make up the landscape, such as, for example, trees, hedges and buildings.
English Heritage	The Historic Buildings and Monuments Commission for England. Now replaced by Historic England.
Enhancement (<i>ecology</i>)	An ecological enhancement is the modification of a site which increases the site's capacity to support target plants or animals.
Enhancement (<i>landscape</i>)	Proposals that seek to improve the landscape resource and the visual amenity of the proposed development site and its wider setting, over and above its baseline condition.
Environmental Impact Assessment (EIA)	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Directive and EIA Regulations, including the publication of an Environmental Impact Assessment (EIA) Report.
Environmental Impact Assessment (EIA) Report	A document reporting the findings of the EIA and produced in accordance with the EIA Directive as transposed into UK law by the EIA Regulations.
Environmental Statement (ES)	A document reporting the findings of the EIA and produced in accordance with the EIA Directive as transposed into UK law by the EIA Regulations. <i>see also Preliminary Environmental Information Report (PEIR)</i>
European conservation site	A Special Area of Conservation (SAC) or candidate SAC, a Special Protection Area (SPA) or potential SPA, a site listed as a site of community importance or a Ramsar site.
European Protected Species (EPS)	The animal species listed in Annex IV(a) to the Habitats Directive and the plant species listed in Annex IV(b) to the Habitats Directive.
Exceptions Test	The Exceptions Test ensures that development is permitted in flood risk areas only in exceptional circumstances and when strict qualifying conditions have been met. It is carried out if the Sequential Test demonstrates that a development cannot be located in areas of low flood risk.

Term	Definition
Feature (<i>landscape</i>)	Particularly prominent or eye-catching elements in the landscape, such as tree clumps, church towers or wooded skylines, or a particular aspect of the project proposals.
Field drainage	Limiting the effect of flooding by maintaining surface water and land drainage systems.
Flood defences	A structure that is used to reduce the probability of floodwater affecting a particular area.
Flood Risk Assessment (FRA)	An evaluation of the baseline flood risk and effect as a result of Thurrock Flexible Generation Plant. The FRA sets out flood risk mitigation measures, as may be required.
Flood Zone 1	Low Probability Land having a less than 1 in 1,000 annual probability of river or sea flooding.
Flood Zone 2	Medium Probability Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding.
Flood Zone 3a	High Probability Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding.
Flood Zone 3b	The Functional Floodplain. This zone comprises land where water has to flow or be stored in times of flood. Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency.
Fluvial flooding	Fluvial flooding occurs when rivers burst their banks as a result of sustained or intense rainfall.
Gas connection corridor (zones C, D and E)	The areas of land within which the buried gas pipeline route and connection to the National Transmission System (see also above ground installation) would be located. The exact location of the pipe route and connection compound is flexible within these zones, subject to further constraints study and agreements with third parties prior to construction.
Geology	The scientific study of the origin, history and structure of the earth.
Geotextile	Textile matting laid under aggregate to provide coherence and stability to a temporary road surface.
Green Infrastructure	Networks of green spaces and watercourses and waterbodies that connect rural areas, villages, towns and cities.
Greenfield runoff rate	Rates of surface water runoff from a site that is undeveloped (greenfield).
Ground conditions	The chemical and physical characteristics of the soil at a particular location and how it has been affected by historical land uses.
Groundwater	All water which is below the surface of the ground in the saturated zone and in direct contact with the ground or subsoil.

Term	Definition
Groundwater Source Protection Zone 1 (Inner protection zone)	Any pollution that can travel to the borehole within 50 days from any point within the zone is classified as being inside zone 1. This zone also has a minimum 50m protection radius around the borehole and is designed to protect against the transmission of toxic chemicals and water-borne disease.
Groundwater Source Protection Zone 2 (Outer protection zone)	The outer zone covers pollution that takes up to 400 days to travel to the borehole, or 25% of the total catchment area, whichever area is the biggest. This travel time is the minimum amount of time that pollutants need to be diluted, reduced in strength or delayed by the time they reach the borehole.
Groundwater Source Protection Zone 3 (Total catchment)	The total catchment is the total area needed to support removal of water from the borehole, and to support any discharge from the borehole.
Growthed	The application of traffic growth rates to traffic flows.
Habitats Directive	Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.
Habitats Regulations Assessment (HRA)	A process which helps determine likely significant effects and (where appropriate) assesses adverse impacts on the integrity of European conservation sites and Ramsar sites. The process consists of up to four stages of assessment: screening, appropriate assessment, assessment of alternative solutions and assessment of imperative reasons of over-riding public interest (IROPI).
Health Determinant	The range of behavioural, biological, socio-economic and environmental factors that influence the health status of individuals or populations.
Heritage	The historic environment and especially valued assets and qualities, such as historic buildings and cultural traditions.
Highway Link	Length of highway.
Historic England	The Historic Buildings and Monuments Commission for England.
Historic Landscape Characterisation	Historic characterisation is the identification and interpretation of the historic dimension of the present-day landscape or townscape within a given area.
Impact	Change that is caused by an action; for example, land clearing (action) during construction which results in habitat loss (impact).
Indirect effects	Effects that result indirectly from the proposed project as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects.
Inter-related effects	Multiple effects on the same receptor arising from Thurrock Flexible Generation Plant. These occur either where a series of the same effect acts on a receptor over time to produce a potential additive effect or where a number of separate effects, such as noise and habitat loss, affect a single receptor.
Intertidal area	The area between mean low water and mean high water.
Iterative design process	The process by which project design is amended and improved by successive stages of refinement which respond to a growing understanding of environmental issues.

Term	Definition
Key characteristics	Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.
L_{A90}	Background noise level. The A-weighted sound level exceeded for 90% of the measurement duration.
L_{Aeq}	Noise parameter describing a sound level with the same energy content as the varying acoustic signal measured.
$L_{Aeq,T}$	L_{Aeq} is defined as the notional steady sound level which, over a stated period of time (T), would contain the same amount of acoustical energy as the A – weighted fluctuating sound measured over that period.
L_{AT} (DW)	Average 'A'-weighted downwind sound pressure level at receptor.
L_S	Specific sound level.
L_W	Overall sound power level.
Land cover	The surface cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use.
Land use	What land is used for, based on broad categories of functional land cover, such as urban and industrial use and the different types of agriculture and forestry.
Landform	The shape and form of the land surface which has resulted from combinations of geology, geomorphology, slope, elevation and physical processes.
Landscape and Visual Impact Assessment	A tool used to identify and assess the likely significance of the effects of change resulting from the 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 Areas	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 combinations of elements and features that make landscape distinctive. The process results in the production of a Landscape Character Assessment.
Landscape Character 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 classification	A process of sorting the landscape into different types using selected criteria but without attaching relative values to different sorts of landscape.
Landscape effects	Effects on the landscape as a resource in its own right.

Term	Definition
Landscape Management Plan	A document detailing the proposed landscape planting and landscape enhancement measures.
Landscape quality (condition)	A measure of the physical state of the landscape. It may include the extent to which a typical character is represented in individual areas, the intactness of the landscape and the condition of the individual elements.
Landscape receptors	Defined aspects of the landscape resource that have the potential to be affected by a proposal.
Landscape strategy	The overall vision and objectives for what the landscape should be like in the future.
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.
Laydown areas	Areas within the application boundary which may be used temporarily during the construction period for offloading and laydown or storage of construction materials, pre-manufactured components, or construction plant.
Lead Local Flood Authority	Lead Local Flood Authorities have responsibility for developing a Local Flood Risk Management Strategy for their area identifying local sources of flooding. The local strategy produced must be consistent with the national strategy. It will set out the local organisations with responsibility for flood risk in the area, partnership arrangements to ensure co-ordination between these organisations, an assessment of the flood risk, and plans and actions for managing the risk.
List Entry Number	Reference number for entry in National Heritage List.
Loam	Soil composed of sand, silt, and clay in relatively even concentration.
Local authority	A local authority is a body empowered by law to exercise various statutory functions for a particular area of the United Kingdom. These include unitary authorities and county, district or borough councils.
Local Biodiversity Action Plan (LBAP)	Local BAPs have been produced by many counties, to detail measures to conserve, protect and enhance local/county biological diversity.
Local highway authority	The public organisation responsible for the maintenance of local roads and consideration of the effects of proposed development projects on the road network.
Local Nature Reserve	A local authority designation under the National Parks and Access to the Countryside Act 1949 (as amended), and in consultation with relevant statutory nature conservation agencies.
Local Wildlife Site	Defined in local and structure plans under the Town and Country Planning system. The designation is a material consideration when planning applications are being determined.
Lower Super Output Area	Is a geographic area within a geographic hierarchy designed to improve the reporting of small area statistics in England and Wales.
Lower Thames Crossing	The proposed development by Highways England of a new road crossing of the Thames to the east of the application site with possible link road to Tilbury Port passing to the north of the main development site.
Magnitude	A combination of the extent, duration, frequency and reversibility of an impact/effect.

Term	Definition
Main development site (zone A)	The area of land within which the principal built elements of the proposed development will be constructed, i.e. gas engines, batteries and substations.
Main rivers	The term used to describe a water course in respect of which the Environment Agency has permissive powers in relation to its management.
Main rivers	The term used to describe a water course in respect of which the Environment Agency has permissive powers in relation to its management.
Major HDDs	Over 200 m in length.
Measures adopted as part of the project	Enhancement, mitigation or monitoring commitment (which may include process or design measures) intended to avoid, reduce and where possible, remedy significant adverse impacts of a development.
Medieval	The time period AD410 - AD1540.
Mesolithic	The time period 10,000 - 3,500BC.
Minor watercourses	The term used to describe a water course owned and operated by a local Drainage Board, a Lead Local Flood Authority or a private land owner.
Modern	The time period 1901 onwards.
NATA/WebTAG Methodology	A standard national approach to undertaking assessments of major transport infrastructure projects.
National Nature Reserve	Designated under the National Parks and Access to the Countryside Act 1949 (as amended) and Wildlife and Countryside Act 1981 (as amended). Support examples of some of the most important natural and semi-natural ecosystems in Great Britain. Managed to conserve habitats and species within them, and to provide scientific study opportunities.
National Policy Statement (NPS)	A document setting out national policy against which proposals for NSIPs will be assessed and decided upon.
National Transmission System (NTS) and Feeder 18	The network of high-pressure gas transmission pipes operated by National Grid Gas. Feeder 18 is the closest such pipe to the application site.
Nationally Significant Infrastructure Project (NSIP)	Large scale development including power generating stations which requires development consent under the Planning Act 2008. An offshore wind farm project with a capacity of more than 100 MW constitutes an NSIP.
Natura 2000	A coherent European ecological network of Special Areas of Conservation and Special Protection Areas.
Noise sensitive receptor	A component of the natural or man-made environment that is affected by a perceived change in noise level.
Non-statutory consultee	Organisations that a local planning authority and/or PINS may choose to engage with (if, for example, there are planning policy reasons to do so) who are not designated in law but are likely to have an interest in a proposed development.
Non-statutory designated sites	Non-statutory designated sites are sites which have been designated due to their nature conservation interest, typically through the local planning process, which are usually protected by planning policies but not legally protected.

Term	Definition
Operational assessment	The assessment of the degree to which a junction is operating within its theoretical capacity.
Order limits	The boundary of the DCO application within which all temporary and permanent works for the proposed development would be undertaken.
Ordinary watercourses	A river, stream, ditch, cut, sluice, dyke or non-public sewer that is not a designated Main river, and for which the local authority has flood risk management responsibilities and powers.
Parameters	A limit or boundary which defines the scope of a particular process or activity.
Pathway	Route for the contaminant to move/migrate to receptor(s).
Pedestrian Amenity	The convenience or comfort of movement on foot.
Pedestrian Delay	Delay incurred to pedestrians moving from one side of a road to another.
Perception	Combines the sensory (that we receive through our senses) with the cognitive (our knowledge and understanding gained from many sources and experiences).
Phase 1 Preliminary Risk Assessment	A document which assesses the potential for contamination to be present which could significantly constrain the use of the site.
Photomontage	A visualisation which superimposes an image of a proposed development upon a photograph or series of photographs.
Planning Inspectorate (PINS)	The executive agency of the Ministry of Housing, Communities and Local Government responsible for operating the planning process for NSIPs.
Post Medieval	The time period AD1540 to 1901.
Preliminary Environmental Information Report (PEIR)	The Preliminary Environmental Information Report (PEIR) presents the findings of Environmental Impact Assessment work undertaken to date concerning potential impacts of Thurrock Flexible Generation Plant. The PEIR is being published to inform pre-application consultation.
Principal Aquifer	These formations provide a high level of water storage and may support water supply and / or river base flow on a strategic scale.
Priority Habitats	UK Biodiversity Action Plan priority habitats are those identified as being the most threatened and requiring conservation action under the UK BAP.
Priority Species	UK Biodiversity Action Plan priority species were those that were identified as being the most threatened and requiring conservation action under the UK BAP.
Project Description	A description of the design envelope, construction process, activity in operation and future decommissioning options for Thurrock Flexible Generation Plant.
Ramsar Convention	The Convention on Wetlands of International Importance especially as Waterfowl Habitat of 2 February 1971 (as amended) which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.
Ramsar site	Wetlands of international importance, designated under the Ramsar Convention.

Term	Definition
Ratio of flow to capacity (RFC)	A measure of the operational performance of one arm of a junction calculated as the number of vehicles using an arm of a junction divided by the theoretical maximum number of vehicles that are able to use the arm during a specified period.
Receptor	The target that could be affected by the contaminant(s).
Relevant planning authority	A relevant planning authority is the local authority in respect of an area within which a project is situated, as set out in Section 173 of the Planning Act 2008. relevant planning authorities may have responsibility for discharging requirements and some functions pursuant to the Development Consent Order, once made. The relevant planning authority in this case is Thurrock Borough Council.
River Basin Management Plan	River Basin Management Plans describe the current state of the water environment in the river basin district. It sets out what improvements are possible by 2015 and how the actions will make a difference to the local environment - the catchments, estuaries, the coast and groundwater.
Roman	The time period AD43 - AD410.
Scope 1	Scope 1 emissions are those released directly by the entity being assessed, e.g. from combustion of fuel at an installation.
Scope 2	Scope 2 emissions are those caused indirectly by consumption of imported energy.
Scope 3	Scope 3 emissions are those caused indirectly, not defined in scopes 1 or 2.
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 important issues and avoids those that are considered to be less significant.
Secondary A Aquifer	These formations are formed of permeable layers capable of supporting water supplies at a local scale, in some cases forming an important source of base flow to rivers.
Secondary B Aquifer	These formations are generally formed of lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering.
Secondary Undifferentiated Aquifer	These formations have varying characteristics in different locations.
Section 47 consultee	Consultees identified in the Thurrock Flexible Generation Plant Statement of Community Consultation (SoCC), including the local community. Once the SoCC is finalised, the applicant has a duty under Section 47 of the Planning Act 2008 to carry out the consultation in accordance with that document.
Sensitivity	The extent to which a receptor can accept a change, of a particular type and scale.
Sequential Test	A Sequential Test aims to steer new development to areas with the lowest probability of flooding by recommending that development is not allocated if there are reasonably available sites appropriate to the proposed development in areas with a lower probability of flooding.
Serious personal injury accident	An accident leading to serious injuries requiring hospital treatment.
Severance	Real or perceived difficulties moving between one part of a community to another.

Term	Definition
Shoreline Management Plan	A Shoreline Management Plan is a large-scale assessment of the risks associated with coastal processes and sets out a policy framework to address these risks to people and the developed, historic and natural environments. Coastal processes include tidal patterns, wave height, wave direction and the movement of beach and seabed materials.
Shuttle working	The use of either manual control or traffic signals to allow alternate traffic streams to pass through a length of highway where the width is reduced and insufficient to allow two vehicles to pass each other.
Significance	The significance of an effect combines the evaluation of the magnitude of an impact and the sensitivity of the receptor.
Site of Importance for Nature Conservation	Alternative title to Wildlife Site, as defined below. Defined in local and structure plans under the Town and Country Planning system. The designation is a material consideration when planning applications are being determined.
Site of Nature Conservation Importance	Alternative title to Wildlife Site, as defined below. Defined in local and structure plans under the Town and Country Planning system. The designation is a material consideration when planning applications are being determined.
Sites of Special Scientific Interest (SSSI)	Sites designated by Natural England under the Wildlife and Countryside Act 1981 (as amended) as areas of land of special interest by reason of any of their flora, fauna, or geological or physiographical features.
Slight accident	An accident leading to slight injuries which are defined as cuts, bruises or sprains requiring roadside attention but not normally requiring admission to hospital.
Soundplan	Acoustic modelling and prediction software.
Special Areas of Conservation	A site of Community importance designated under Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora through a statutory, administrative and/or contractual act where the necessary conservation measures are applied for the maintenance or restoration, at a favourable conservation status, of the natural habitats and/or the populations of the species for which the site is designated.
Special Protection Area (SPA)	An area which has been identified as being of international importance and designated under Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds for the breeding, feeding, wintering or the migration of rare and vulnerable bird species found within European Union countries.
Statement of Community Consultation (SoCC)	This details the approach to consultation proposed by the applicant and agreed with Thurrock Borough Council.
Statutory consultee	Organisations that are required to be consulted by a local planning authority and/or PINs, and who also have with a duty to respond to that consultation within a set deadline. This includes consultees that the applicant is required to consult with, under Section 42 of the Planning Act 2008. Not all consultees will be statutory consultees (see non-statutory consultee definition).
Statutory designated sites	Sites which have been designated under UK and in some cases European or international legislation which protects areas identified as being of special nature conservation importance.

Term	Definition
Strategic Flood Risk Assessment	A Strategic Flood Risk Assessment provides information on areas at risk from all sources of flooding.
Surface water resources	Water on the surface of the land such as in a river, lake, wetland, or ocean.
Surface water runoff	Surface water runoff is flow of water that occurs when excess storm water, meltwater, or other sources of water flows over a surface.
Susceptibility	The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences.
Sustainable urban Drainage Systems	A sequence of management practices and control measures designed to mimic natural drainage processes by allowing rainfall to infiltrate, and by attenuating and conveying surface water runoff slowly at peak times.
The Secretary of State for Business, Energy and Industrial Strategy	The ultimate decision maker with regard to Thurrock Power Ltd's application for Development Consent.
Thurrock Power Ltd or the applicant	The company developing Thurrock Flexible Generation Plant. Thurrock Power Ltd is a subsidiary of Statera Energy Ltd, which has developed a number of flexible generation plants around the UK.
Tidal (Coastal) flooding	Tidal flooding is caused by extreme tidal conditions including high tides and storm surges, overtopping local flood defences or coastal features.
Tilbury Energy Centre	The proposed development by RWE of a new power station on part of the Tilbury Power Station site with 2.5 GW combined cycle gas turbine and 300 MW open cycle gas turbine generating capacity plus battery storage.
Tilbury National Grid Substation	The existing National Grid Tilbury 275 / 400 kV substation to which Thurrock Flexible Generation Plant will connect via underground cables.
Tilbury Power Station	Decommissioned coal-fired power station to the south of Thurrock Flexible Generation Plant.
Tilbury2	The proposed development of an extension to Tilbury Port, on land immediately west of Tilbury Power Station.
Time depth	Historical layering – the idea of landscape as a palimpsest, a much written over manuscript.
Townscape	The character and composition of the built environment including the buildings and the relationship between them, the different types of urban open space, including green spaces, and the relationship between buildings and open spaces.
TRACK Analysis	Computer modelling of area taken up by a moving vehicle.
Traffic growth rate	An estimate of the rate of change in traffic flows from one year to another year.
Tranquillity	A state of calm and quietude associated with peace, considered to be a significant asset of landscape (as defined in GLVIA3).
Transboundary	Crossing into other European Economic Association (EEA) States.

Term	Definition
Transport Assessment	A transport assessment is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport impacts of the scheme and to improve accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling and public transport.
Treated Effluent	Water that has received primary, secondary or advanced treatment to reduce its pollution or health hazards and is subsequently released from a wastewater facility after treatment.
Trip Assignment	The routes that vehicles take between a site and other areas.
Trip Distribution	The proportion of vehicle trips between a site and other areas.
Trip Generation	The number of vehicle movements into and out of a development.
Trunk Road	A trunk road is a road maintained by a national government body, as distinct from the great majority of roads, which are maintained by local Highway Authorities.
UK Climate Projections 2009	Climate projections expressed in terms of absolute values. A projection of the response of the climate system to emission scenarios of greenhouse gases and aerosols, or radiative forcing scenarios based upon climate model simulations and past observations.
Undefended Flood Zone	Environment Agency mapped river.
Unproductive Strata	These formations have a low permeability and have negligible significance for water supply or base flow.
Upper Palaeolithic	The time period 30,000 - 10,000BC.
Vibration	Vibration is an oscillatory motion. The magnitude of vibration can be defined in terms of displacement how far from the equilibrium something moves, velocity (how fast something moves), or acceleration (the rate of change of velocity).
Visual amenity	The overall pleasantness of the views people enjoy in their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.
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.
Visualisation	A computer simulation, photomontage or other technique illustrating the predicted appearance of a development.
Water Quality	The physical, chemical and biological characteristics of water.
Wildlife Site	Local authority designation for sites of local conservation interest. Designation criteria can vary between areas, as can titles which include Local Wildlife Site, Local Nature Conservation Site, Site of Importance for Nature Conservation or Site of Nature Conservation Importance. They are defined in local and structure plans under the Town and Country Planning system and are a material consideration when planning applications are being determined.

Term	Definition
Woodland	As described under the Phase 1 habitat survey guidelines (JNCC, 2010); vegetation dominated by trees more than 5 m high when mature, forming a distinct, although sometimes open, canopy. In accordance with Natural England's guidelines for Environmental Stewardship (Natural England, 2013, native woodland is defined as a group of trees with overlapping canopies covering at least 0.1 ha, at least half of which are native species.
Works areas	The areas within which all works associated with the construction, operation and decommissioning of the proposed Flexible Generation Plant are undertaken, including access, drainage and landscaping.
Written Scheme of Investigation (WSI)	A plan detailing the protocol for any archaeological investigation to be carried out prior to the construction of Thurrock Flexible Generation Plant, including procedures for field survey and watching briefs, as may be required.
Zone A	The 'main development site' immediately north of Tilbury Substation, within which the principal buildings or structures of the proposed development would be constructed. The gas engines, batteries, electrical switchgear (customer substations), runoff attenuation, control room and staff parking would be within zone A.
Zone B	This is the existing National Grid Tilbury Substation. The proposed development would connect to the 275 kV circuit at this substation via underground cables crossing from zone A into zone B.
Zone C	Zone C is a corridor of land south of the railway line in which the permanent access road and underground gas pipeline would be constructed, between Station Road and the main development in zone A. The route of the access road and gas pipeline within this corridor would be defined following detailed design.
Zone D	Zone D comprises a section of Station Road and two agricultural fields within which the gas pipeline would be constructed. This zone allows flexibility in the routing of the gas pipeline between zone C and zone E. The final route would be defined following detailed design.
Zone E	The AGI for the connection of the gas pipeline to the NTS would be constructed within zone E. The NTS 'Feeder 18' high pressure pipeline runs through this zone. The final location of the AGI within zone E would be defined following detailed design.
Zone F	This zone north of the railway, currently agricultural land, is the primary area in which exchange Common Land would be provided. Habitat creation / enhancement, compatible with Common Land rights, would also be provided in this zone.
(Zone G)	This zone letter is not used.
Zone H	This zone comprises sections of public highway that would need to be widened and sections of an existing private road with temporary planning permission that would be retained for the proposed development's construction period in order to provide a possible access route from Orsett Cock junction (in the north) to zone I and/or zone C that could accommodate heavy goods vehicle (HGV) traffic and abnormal loads, as an alternative to routing via zone J (see below).

Term	Definition
Zone I	Up to one acre of this zone adjacent to the railway line could be used for temporary laydown during the construction period and a temporary tower crane for moving items across the railway. A temporary haul road south from Cooper's Shaw Road may also be constructed. Undisturbed areas of zone I may be used for protected species translocation and habitat creation / enhancement, compatible with existing Common Land rights.
Zone J	A construction haul road would be created in this zone from St Chad's Road to Gun Hill. The haul road would remain in situ for up to 15 years following the end of the construction programme in order to provide a continued access option for abnormal loads should a major component (such as transformer) of the proposed development fail in operation and require replacement.
Zone of Theoretical Visibility	A map, usually digitally produced, showing areas of land within which a development is theoretically visible.

Acronyms

Unit	Description
AA	Appropriate Assessment
AADT	Annual Average Daily Traffic
AC	Ambient Concentration
AGI	Above ground installation
AGL	Above Ground Level
ALC	Agricultural Land Classification
AONB	Area of Outstanding Natural Beauty
AoS	Appraisal of Sustainability (undertaken on all of the NPSs)
AQAL	Air Quality Assessment level
AQMA	Air Quality Management Area
AQS	Air Quality Strategy
ATC	Automatic Traffic Counter
BAP	Biodiversity Action Plan
BC	Borough Council
BEIS	Department for Business, Energy and Industrial Strategy
bgl	Below ground level
BGS	British Geological Survey
BS	British Standard
BSP	Bulk Supply Point substation
CC	County Council
CCGT	Combined cycle gas turbine
CCR	Carbon capture readiness
CCS	Carbon capture and storage
CEA	Cumulative Effect Assessment
CEMP	Construction Environmental Management Plan
CFMP	Catchment Flood Management Plan
CoCP	Code of Construction Practice

Unit	Description
COMAH	Control of Major Accident Hazards
COPD	Chronic Obstructive Pulmonary Disorder
CRTN	Calculation of Road Traffic Noise
CSM	Conceptual Site Model
CSSP	Core Strategic Spatial Policy
CSTP	Core Strategic Thematic Policy
CTMP	Construction Traffic Management Plan
CWS	County Wildlife Site
DB	Drainage Board
DCLG	Department for Communities and Local Government
DCMS	Department of Digital, Culture, Media and Sport
DCO	Development Consent Order
DECC	(former) Department of Energy and Climate Change
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
DNO	Distribution network operator
EA	Environment Agency
ECow	Ecological Clerk of Works
EEA	European Economic Association
EIA	Environmental impact assessment
EMP	Ecological Management Plan
END	Environmental Noise Directive
EPS	European Protected Species
EPUK	Environmental Protection UK
ES	Environmental Statement
ETS	Emission Trading Scheme
EWG	Expert Working Group

Unit	Description
FGD	Flue Gas Desulphurisation
FRA	Flood Risk Assessment
GCN	Great crested newt (<i>in Chapter 9: Ecology</i>)
GCN	Guidelines for Community Noise (<i>in Chapter 11: Noise and Vibration</i>)
GLVIA3	Guidelines for Landscape and Visual Impact Assessment; Third Edition (2013)
GSP	Grid supply point substation
HDD	Horizontal Directional Drilling
HDV	Heavy Duty Vehicle
HE	Highways England (<i>in Chapter 10: Transport</i>)
HE	Historic England (<i>in Chapter 7: Heritage</i>)
HGV	Heavy Goods Vehicle
HHRA	Human Health Risk Assessment
HIA	Health Impact Assessment
HLC	Historic Landscape Character/Characterisation
HRA	Habitats Regulations Assessment
HRAR	Habitats Regulations Assessment Report
HSI	Habitat Suitability Index
ICNIRP	International Commission on Non-Ionising Radiation Protection
IED	Industrial Emissions Directive
IPC	Infrastructure Planning Commission
ISO	International Organisation for Standardisation
JNCC	Joint Nature Conservation Committee
LA	Local Authority
LAQM	Local Air Quality Management
LBAP	Local Biodiversity Action Plan
LCA	Landscape Character Assessment
LCAs	Landscape Character Areas
LCTs	Landscape Character Types
LDA 1991	Land Drainage Act 1991

Unit	Description
LLFA	Lead Local Flood Authority
LNR	Local Nature Reserve
LOAEL	Lowest Observed Adverse Effect Level
LoWS or LWS	Local Wildlife Site
LPA	Local Planning Authority
LTC	Lower Thames Crossing
LTC	Lower Thames Crossing
LTP	Local Transport Plan
LVIA	Landscape and Visual Impact Assessment
MAFF	Ministry of Agriculture, Fisheries and Food
MCZ	Marine Conservation Zone
MHWS	Mean High Water Springs
NE	Natural England
NERC	Natural Environment and Rural Communities
NIC	National Infrastructure Commission
NISM	Notification of Inadequate System Margin
NISM	Notification of Inadequate System Margin
NNG	Night Noise Guidelines
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
NSR	Noise Sensitive Receptor
NTS	National Transmission System
NVC	National Vegetation Classification
OCGT	Open cycle gas turbine
OHL	Overhead (power) line
ORC	Organic Rankine cycle
OS	Ordnance Survey

Unit	Description
PAH	Polycyclic Aromatic Hydrocarbons
PC	Process Contributions
PEA	Preliminary Ecological Appraisal
PEC	Predicted Environmental Concentrations
PEIR	Preliminary Environmental Information Report
PHE	Public Health England
PIA	Personal Injury Accident
PINS	Planning Inspectorate
PMD	Policy for Management and Development
PPG	Planning Practice Guidance
PRoW	Public Right of Way
PSCA	Population Size Class Assessment
rMCZ	recommended Marine Conservation Zone
SAC	Special Area of Conservation
SCR	Selective Catalytic Reduction
SM	Scheduled Monument
SMC	Scheduled Monument Consent
SOAEL	Significant Observed Adverse Effect Level
SoCC	Statement of Community Consultation
SoP	Standard of Protection
SoS	Secretary of State
SPA	Special Protection Area
SPD/SPG	Supplementary Planning Document/Supplementary Planning Guidance
SPZ	Source Protection Zone
SSSI	Site of Special Scientific Interest
TEC	Tilbury Energy Centre
TEMPRO	Trip End Model Presentation Programme
TLDF	Thurrock Local Development Framework
TTD	Thames Tidal Defences

Unit	Description
UKBAP	UK Biodiversity Action Plan
UKCP09	UK Climate Projections 2009
VER	Valued Ecological Receptor
VOC	Volatile Organic Compounds
WCA 1981	The Wildlife and Countryside Act 1981 (as amended)
WebTAG	Web Transport Analysis Guidance
WFD	Water Framework Directive
WHO	World Health Organisation
WRA 1991	Water Resources Act 1991
WRMP	Water Resource Management Plan
WSI	Written Scheme of Investigation
Zol	Zone of Influence
ZTV	Zone of Theoretical Visibility

Units

Unit	Description
° C	Degrees Celsius (temperature)
dB	Decibel (acoustic)
ft	Feet (distance)
g.s ⁻¹	Mass emission rate
ha	Hectare (10,000 m ²)
Hz	Hertz, cycles per second (frequency)
Km	Kilometre (distance)
kV	Kilovolt (electrical potential)
kW, MW, GW	Kilowatt, megawatt, gigawatt (power)
kWh, MWh, GWh	Kilowatt-hours, megawatt-hours, gigawatt-hours (total power during a period of time)
MW _e	Megawatt electrical (thermal power generator electrical output)
MW _{th}	Megawatt thermal (thermal power generator fuel input)
m	Metre (distance)
m ²	Metres squared (area)
mph	Miles per hour (speed)
m.s ⁻¹	Metres per second (velocity)
m ³ .s ⁻¹	Volumetric flow per second
t	Tonne (weight)
tCO ₂ e	Tonnes of carbon dioxide equivalent, i.e. greenhouses gases expressed as carbon dioxide based on their global warming potential
µg.m ⁻³	Micrograms per cubic metre (concentration)
x, y	Grid coordinates
"	Inches (distance)