

The Sizewell C Project

6.1 Volume 1 Introduction to the Environmental Statement Chapter 1 Introduction Appendices 1A - 1B

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SIZEWELL C PROJECT - ENVIRONMENTAL STATEMENT

NOT PROTECTIVELY MARKED

VOLUME 1, CHAPTER 1, APPENDIX 1A: GLOSSARY AND ABBREVIATIONS



Appendix D: Glossary

Term	Definition
Abnormal Indivisible Loads (AILs)	Large loads to be delivered to the site which by their nature cannot be broken into smaller multiple deliveries. Wherever possible, AILs are to be brought in by sea, with any transport to the site by road delivered on a low loader with a police escort.
Acceptance period	The 28-day period in which the Secretary of State has to make a decision on whether to accept the Application, in accordance with section 55 of the Planning Act 2008, beginning with the day after the Application is received.
Accommodation Campus	Purpose-built accommodation campus on the main development site to house 2,400 Sizewell C workers.
Accommodation Management System	A system to signpost workers to appropriate accommodation and encourage integration through the provision of information on public services and useful local information.
Accommodation Strategy	Strategy to ensure an organised and robust approach to minimising any effects from the workforce on community cohesion, accommodation capacity and a range of socioeconomic concerns.
Additional Mitigation	This is often referred to as 'secondary mitigation' and includes actions that will require further activity in order to achieve the anticipated outcome. These may be imposed as part of the DCO.
Agricultural Land Classification (ALC)	A classification of agricultural land in England and Wales according to its quality and agricultural versatility. The classifications range from Grade 1 (the best and most versatile), through Grades 2, 3a, 3b, 4, down to Grade 5 (the least versatile).
Air Quality Objective	Defined levels of air quality and maximum pollution limits as specified in the Air Quality Strategy for England, Scotland, Wales and Northern Ireland, 2007.
Airborne Sound	Sound which is transmitted from the source via the surrounding air, as distinct from energy transmission through the ground.
Aldhurst Farm Habitat Creation Scheme	Land on which a habitat creation scheme has been created to help compensate for any future land-take from the Sizewell Marshes SSSI should Sizewell C be constructed.

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Term	Definition
	This land extends from the B1122 Abbey Road in Leiston to Lover's Lane. Permission was granted for the scheme in March 2015 and it has been completed.
Ambient Noise	Background noise level in a given situation at a given time usually composite of sounds from many sources near and far.
Anchorage	An area off the coast that is suitable for a vessel to anchor.
Ancient Woodland	Ancient Woodlands are those which have had continuous woodland cover since at least 1600 AD to the present day. Clearance at some time for underwood or timber production does not exclude a wood from this category.
Annex I habitats	Habitats listed in Annex I of the Directive 92/43/EEC ('Habitats Directive').
Annual Average Daily Traffic Flow (AADT)	24 hour traffic count data averaged for all the days in the year: i.e. the total traffic flow on a road for a year divided by 365.
Annual Average Weekday Traffic Flow (AAWT)	24 hour traffic count data averaged for just the weekdays (Monday to Friday).
Anthropogenic	Man-made.
Application	The application made by SZC Co to the Secretary of State for Business, Energy and Industrial Strategy under section 37 of the Planning Act 2008 for a DCO for the proposed Sizewell C nuclear power station.
Appraisal of Sustainability (AoS)	At the strategic level, NPS EN- 6 contains an 'Appraisal of Sustainability' for each of the nuclear power station sites identified in the UK.
Area of Outstanding Natural Beauty (AONB)	AONBs are designated under the Countryside and Rights of Way Act 2000 to protect areas of the countryside of high scenic quality that cannot be selected for National Park status due to their lack of opportunities for outdoor recreation (an essential objective of National Parks). Further information on AONBs can be found at www.aonb.org.uk .
As Low As Reasonably Achievable (ALARA)	As Low As Reasonably Achievable (social and economic factors being taken into account). This requires that all be reasonably done to lower radiation exposures below dose limits. It requires the employer to provide systems to reduce the radiation dose until or unless the cost of implementing

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Term	Definition
	those measures is considered to be greater than the risk averted.
As Low As Reasonably Practicable (ALARP)	The ALARP principle requires the employer to provide systems (engineered, management etc.) to reduce the radiation dose, until or unless the cost of implementing those measures is considered to be grossly disproportionate to the risk averted. In practice this requires the employer to go beyond the requirements of the ALARA principle in reducing dose.
Assessment of Roundabout Capacity and Delay (ARCADY)	Software tool for assessing the capacity, traffic movement, accident risk and delay around traffic roundabouts.
Associated Development	Development which is associated with a Nationally Significant Infrastructure Project (NSIP), as defined in the Planning Act 2008. It should be subordinate to, and necessary for, the construction or operation of the NSIP that is subject of the Application or to mitigate its impact.
Attentuation Pond	A pond that is used to store surface water run-off from specific rainfall events and discharge at a controlled rate during and after the specific event.
Attenuation (sound)	A reduction in the intensity of a sound signal.
Attenuation (water)	The process of water retention on-site and slow release in a controlled flow surface/ground water.
Baseline	The environmental conditions, resources and receptors that currently exist on the site and in the surrounding area.
Batching Plant	An arrangement of equipment which is used to mix the constituent materials of concrete and load batches for onward transport to specific locations on site.
Bathymetry	The 'topography' of the seabed.
Beach Landing Facility (BLF)	The proposed permanent facility to allow AILs to be brought to Sizewell C by sea during operation or construction.
Becquerel (Bq)	The standard international unit of radioactivity is equal to one atomic decay per second. Becquerels are abbreviated to Bq. Multiples of becquerels commonly used to define radioactive waste activity are: kilobecquerels (kBq) equal to 1 thousand Bq; megabecquerels (MBq) equal to 1 million Bq; gigabecquerels (GBq) equal to 1 thousand million Bq.

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Term	Definition
British Energy Estuarine and Marine Studies (BEEMS)	An integrated programme of marine environmental evidence-based scientific studies designed and maintained in order to support a consideration of new nuclear power stations at coastal sites in the UK, initiated by British Energy and continued by EDF Energy.
Benthic Invertebrates	Invertebrate animals (animals without backbones, e.g. marine worms and shrimps) that live in or attached to the seabed material.
Benthic Organisms	Organisms associated with the bottom or substratum of aquatic systems.
Berth	A designated location where a vessel may be moored.
Best and Most Versatile Land (BMVL)	Defined as Agricultural Land Classification (ALC) Grades 1, 2 and 3a.
Best Available Techniques	Best Available Techniques describe the most effective economically and technically viable technology and methods designed to prevent, and where this is not practicable to reduce, emissions and their impacts on the environment as a whole.
Beta activity	Beta activity takes the form of particles (electrons) emitted during radioactive decay from the nucleus of an atom. Beta particles cause ionisation in biological tissues which may lead to damage. Most beta particles can pass through the skin and penetrate the body, but a few millimetres of light materials, such as aluminium, would generally shield against them.
Biodiversity action plan (BAP)	An agreed plan for a habitat or species, which forms part of the UK's commitment to biodiversity under the Convention on Biological Diversity.
Biofouling	Growth of marine organisms on or within the cooling water system which, if established in large numbers, can affect the efficiency or safety of the power station.
Biotope	An area that is uniform in environmental conditions and in its distribution of animal and plant life.
Birds Directive	European Community Directive 2009/147/EC (which codified Directive 79/409/EEC) on the conservation of wild birds. In the UK the Birds Directive is implemented via the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2017 (SI 2017/1012) and

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Term	Definition
	the Conservation of Offshore Marine Habitats and Species Regulations 2017 (SI 2017/1013).
Bivalve	Marine or freshwater mollusc whose body is enclosed between two shells hinged together by a ligament on the dorsal side of the body.
Blackwater	Waste water from toilets.
British Standard	Technical industry standards that are produced by the British Standards Institution.
British Standards Institution	The national standards body of the UK which produces technical standards for various industries.
Brownfield Site	Land which has been previously developed and is potentially available for re-use.
Catchment	A surface water catchment is the total area that drains into a river. A groundwater catchment is the total area that contributes to the groundwater component of the river flow.
Centre for Environment, Fisheries and Aquaculture Science	An executive agency, sponsored by the Department for Environment, Food & Rural Affairs (Defra), which collects, manages and interprets data on the aquatic environment, biodiversity and fisheries.
Cetaceans	Marine mammals such as dolphins and porpoises.
Chartered Institute of Ecology and Environmental Management	A professional membership body representing and supporting ecologists and environmental managers in the UK, Ireland and abroad. Previously known as Institute of Ecology and Environmental Management (IEEM).
Commissioning	Commissioning of a reactor involves a series of tests to demonstrate, to the extent practicable, that the plant, as built and including all components and systems, is capable of safe and reliable operation in accordance with its design specification, performance objectives, and safety requirements.
Conservation areas	Designated areas of special architectural or historic interest, the character or appearance of which is desirable to preserve or enhance.
Construction phase	The period during which the main construction activity will take place prior to the Sizewell C power station becoming operational.
Contaminated Land	Land where there may be a presence on site of a hazardous substance, which may give rise to a hazard.

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Term	Definition
Contaminated Waste	Radioactive contamination is caused by radioactive material being deposited on the surface of, or within, objects. The radioactivity may be deposited from airborne sources, from waterborne sources, or from physical contact. Radioactive contamination is generally located on or near the surface of materials like metal or high-density concrete or painted walls. Radioactive contamination can usually be removed from surfaces by washing, scrubbing, spraying, or by removing the outer surface of the contaminated objects.
Controlled Waters	Waters defined and protected under the Water Resources Act 1991.
Conventional Island	Turbine halls and electrical buildings forming part of the UK EPR™.
Cooling Water Infrastructure	Infrastructure located offshore that will provide a cooling mechanism for the plant via the intake and outflow of sea water.
County Wildlife Site (CWS)	Areas identified and selected for their local nature conservation value.
Cross-shore	On or across the shore.
Culvert	A covered structure that conveys the flow of surface water below ground (e.g. a drainage channel or pipeline beneath a road).
Cumulative Impact	The additive and/or interactive impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.
Cut-off wall	In order to excavate to a sufficient depth for the foundations of the power station buildings, it will be necessary to construct a cut-off wall to isolate the excavation from the surrounding hydrological environment.
Decibel (dB)	A unit specifying the logarithm of the ratio between the value of a quantity and a reference value (usually used in the measurement of power and intensity).
Decommissioning	At the end of their operational life, the power station buildings would be removed. The process that is required to do this is known as decommissioning.

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Term	Definition
Degree of Saturation	An output from the LinSig modelling software. This is defined as the ratio of vehicular flow to the capacity available.
Delicensing	The ending of the period of responsibility under the Nuclear Installations Act, as defined in section 5 of the Nuclear Installations Act 1965. This can only happen when the Health and Safety Executive gives notice in writing to the licensee that in its opinion there has ceased to be any danger from ionising radiations from anything on the site or, as the case may be, on that part thereof.
Design Manual for Roads and Bridges (DMRB)	A comprehensive manual, prepared by the Highways Agency (now Highways England), that sets out all current standards, advice notes and other published documents relating to the design, assessment and operation road schemes. Volume 11 of the DMRB sets out the criteria for the environmental assessment of road schemes.
Development Consent Order (DCO)	A DCO is the form in which the Secretary of State grants consent for development applied for under the Planning Act 2008. A DCO removes the need to obtain a range of other separate consents, such as planning permission and listed building consent.
Disposal	In the context of solid waste, disposal is the emplacement of waste in a suitable facility without intent to retrieve it at a later date. Disposal may also refer to the release of airborne or liquid waste to the environment (i.e. emissions and discharges).
Dissolved Oxygen	Oxygen dissolved in the water column of a water body. Adequate dissolved oxygen concentrations are essential to most higher forms of marine and river life.
East Suffolk Council	Local authority for the district including Sizewell and the associated development sites. On 1 April 2019, Suffolk Coastal District Council merged with Waveney District Council to create East Suffolk Council. All pre-application consultation and engagement which took place prior to the merger was carried out with Suffolk Coastal District Council and therefore is referred to as such within the documentation submitted with the DCO Application.

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Term	Definition
East Suffolk Line	The railway line which runs from Ipswich to Lowestoft passing through Wickham Market, Saxmundham and Darsham.
Economically Inactive	People not in employment who have not been seeking work within the last 4 weeks and/or are unable to start work within the next 2 weeks.
EC ₅₀	The concentration of a contaminant predicted to cause a defined effect (e.g. reduced growth) to half of a particular species within a defined time period (e.g. 96 hours). Derived as a median value from laboratory experiments.
EDF Energy Estate	Land owned by the EDF Energy Group in the Sizewell area.
EDF Energy Group	EDF Energy Group is one of the world's largest energy companies and safely operates the world's largest fleet of nuclear power plants.
EDF Nuclear Generation Limited	The owner and operator of Sizewell B power station and part of the EDF Energy Group.
Embedded mitigation	This is often referred to as 'primary mitigation' and includes modifications to the location or design of the development made during the pre-application phase that are an inherent part of the Sizewell C Project, become a fundamental part of the design for which consent is sought, and do not require additional action to be taken (e.g. architectural treatment of proposed facilities to be in keeping with similar adjacent buildings in its external appearance; reduction in the height of a building to reduce visual impact; identifying a key habitat that should remain unaffected by the development's layout and operation e.g. retaining hedgerows as bat foraging routes; developing a transport strategy that reduces trips, avoiding the need for junction improvements).
Emergency Services Working Group	A sector-led and government-backed group which was formed in 2014, providing a legal framework to increase the scope of collaborative work across the emergency services.
Entrainment	Term used to describe the passage of marine organisms small enough to go through the cooling water filtration screens, through the power station cooling water circuit and then discharged to sea.
Entrapment	The inadvertent entry into the cooling water system of marine organisms caused by the ingress of water.

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Term	Definition
Environment Agency	A government agency responsible for matters relating to contaminated land, waste management, surface water drainage and discharges, flood risk management, and water quality and has responsibility for ensuring that new nuclear power station designs meet high environmental standards and use the Best Available Techniques (BAT) to achieve this.
Environmental Impact Assessment (EIA)	A process for predicting the effects of a proposed development on the environment that informs decision-makers in relation to planning permissions, consents, licences and other statutory approvals, as required by Directive 2014/52/EU (the EIA Directive).
Environmental Impact Assessment Scoping Report	A scoping report is usually produced at an early stage in the EIA process to request a regulator to provide a Scoping Opinion on the scope of the ES.
Environmental Statement (ES)	The document reporting the process and outcomes of the EIA. Book 6 of this Application.
Environmental Quality Standard (EQS)	Concentration of a specified contaminant considered to be none harmful to the environment, agreed at a European level under the Environmental Quality Standards Directive.
Fish Recovery and Return (FRR)	A system specifically designed to remove fish from the cooling water system and return them, in good condition, to the sea. Such systems have now been in use for many years – an early version is already in place at Sizewell B and was specifically designed to return juvenile sole quickly to the sea, although the measured survival of other species is also high. Given the risk of damage to turbulence, shear, pressure and physical impact this type of system only succeeds well for the most robust species such as flatfish and eel.
Fission Products	Radioactive materials formed in nuclear fuel as a result of fission in a nuclear reactor and the production of heat and useful energy.
Flood Tide	The tidal flow moving inland as the tide is 'coming in'. Also used to indicate the time at which the tide turns to start flowing inland.
Foreshore works	The works undertaken in the corridor to the east of main platform for the construction of the initial phase of sea defence, the BLF with the associated access road and the permanent sea defence.

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Term	Definition
Freight Management Facility	A proposed development along the A14 where heavy goods vehicles (HGVs) can be held while they wait to enter the Sizewell C main development site, or in the event of an accident on the local road network which prevents access to the Sizewell C main development site.
Future baseline	The situation that would occur in the absence of the proposed development. Predicted impacts are compared against this theoretical scenario, where appropriate. It is typically based upon extrapolating the current baseline forward using technical knowledge of changes that may occur.
Generic Design Assessment (GDA)	In this process, companies submit information on their reactor designs to the UK's Nuclear Regulators, who assess this information before a full application is made to build a nuclear power station at a particular site. The process involves a rigorous and structured examination of detailed design information by the regulators. At the end of their assessment (and at key stages during it), the regulators will issue reports on their findings, confirming whether they judge a design to be satisfactory.
Geological Disposal Facility	Disposal of radioactive waste underground at a depth of more than around 200 metres (also known as 'deep geological disposal'). The depth is chosen so as to provide a barrier against the escape of radioactivity and protect the waste from disturbance. This disposal method is appropriate for high and intermediate level wastes.
Geomorphology	The scientific study of landforms and the processes that shape them through an understanding of landform history and dynamics (in particular their nature, origin, processes of development and material composition).
Gravity Model	The Gravity Model used in the Transport Assessment (Doc Ref. 8.5) to calculate where both home-based and non-home-based workers would be likely to live across the region. It predicts the location of the permanent homes of home-based workers and temporary accommodation of non-home-based workers.
Gray (Gy)	The Gray is a unit used to measure a quantity called absorbed dose. This relates to the amount of energy actually absorbed in some material, and is used for any type of radiation and any material. One Gray is equal to one joule of energy deposited in one kg of a material. The unit

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Term	Definition
	Gray can be used for any type of radiation, but it does not describe the biological effects of the different radiations.
Green Rail Route	A proposed extension of the railway line of approximately 4.5km from the existing Saxmundham to Leiston branch line to a terminal within the main development site.
Greywater	Waste water from showers, sinks, domestic appliances etc.
Gross Value Added (GVA)	GVA measures the value of goods and services produced in a geographical area, industry or economic sector. It is a measure of economic productivity, calculated by valuing the amount of goods and services that have been produced, less the cost of all inputs and raw materials that are directly attributable to that production.
Ground Investigation	An intrusive investigation undertaken to collect information relating to the ground conditions, normally for geotechnical or contamination purposes.
Groundwater	Water occurring below ground in natural formations (typically rocks, gravels and sands).
Ground Source Protection Zones	Areas defined around groundwater sources used for public drinking water supply. The Source Protection Zone shows the risk of contamination from activities that might cause pollution in the area. The closer the activity, the greater the risk.
Habitat Regulations Assessment (HRA)	An assessment to determine compliance of a plan, project or programme with the Habitats Directive (92/43/EEC), as transposed into the UK legislation by the Conservation of Habitats and Species Regulations 2017 (SI 2017/1012) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (SI 2017/1013).
	The Application includes a shadow HRA. This is an assessment undertaken by a developer to demonstrate compliance, or otherwise, of a proposed development with the Habitats Directive. Only a specified competent authority (for example, the Environment Agency, Marine Management Organisation or Secretary of State) can undertake a formal HRA but a developer is required to provide the necessary evidence in a draft or 'shadow' HRA document.
Habitats Directive	The Habitats Directive (more formally known as Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora) is a European Union

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Term	Definition
	directive adopted in 1992 as a response to the Berne Convention. It is one of the EU's two directives in relation to wildlife and nature conservation (the other being the Birds Directive). It aims to protect over 200 habitats and approximately 1,000 animal and plant species listed in the Directive's Annexes. Annex I covers habitats; Annex II covers species requiring designation of special areas of conservation; Annex III covers the criteria for selecting sites eligible for identification as sites of community importance and designation as special areas of conservation; Annex IV covers species in need of strict protection; and Annex V covers species whose taking from the wild can be restricted by European law. These are species and habitats which are considered to be of European interest, following criteria given in the Directive. The Directive led to the setting up of a network of Special Areas of Conservation which, together with the existing Special Protection Areas, form a network of protected sites across the European Union called Natura 2000.
Half-Life	The radioactivity of all nuclear waste decays with time. Each radionuclide contained in the waste has a half-life (the time taken for half of its atoms to decay and thus for it to lose half of its radioactivity).
Health and Safety Executive (HSE)	A non-departmental public body, which is responsible for the encouragement, regulation and enforcement of workplace health, safety and welfare and for research into occupational risks in England, Wales, and Scotland.
Highway Authority	The responsibility for the maintenance and improvement of the highways within the district is split between the Department for Transport represented by Highways England, which is responsible for the strategic road network, and Suffolk County Council, which is the local highway authority.
Highways England	The government agency responsible for the Strategic Road Network.
Historic England	A government agency which promotes conservation and understanding of the historic environment and advises Government on the selection of listed buildings and scheduled monuments for protection and provides grant aid for the maintenance of historic buildings and monuments.

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Term	Definition
Historic Environment Record (HER)	Formerly the Sites and Monuments Record, the HER is a register of known archaeological sites, monuments and finds.
Hold the Line	One of the several policy options that may be identified for separate lengths of coastline under the Shoreline Management Plan (SMP) (q.v.). A 'hold the line' policy chooses to provide some level of coastal defence, keeping the position of the defence approximately where it is now. This does not automatically mean that defences will be improved to counteract climate change as this will be considered in more detail by flood risk management strategies and individual defence schemes. Other such policies include 'no active intervention' and 'managed realignment'.
Impact Magnitude	This is the scale of change which the impact may cause compared to the baseline and how this change relates to accepted thresholds and standards.
Impact Significance	The level of significance is usually defined by the magnitude of impact in relation to the sensitivity/value of the environmental receptor.
Impingement	Term used to refer to the fish and other marine species becoming trapped on cooling water filtrations screens.
Interim Storage	Storage of radioactive waste, or spent fuel, within a robust engineered facility pending the availability of a geological disposal facility or alternative management route. An interim store would provide protection for waste packages, or spent fuel assemblies, and would maintain containment of radioactivity and prevention of releases which could impact upon the outside environment.
Intermediate Level Waste (ILW)	Radioactive waste containing higher concentrations of beta/gamma contamination and sometimes alpha emitters. Such waste comes from routine power station maintenance operations, for example used ion exchange resin and filter cartridges. In the UK, ILW is defined as waste with a radioactive content exceeding that of LLW but which does not require heat dissipation to be taken into account in the design of storage or disposal facilities.
Intertidal	The area of shore between the highest and lowest tides.

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Term	Definition
Ionising Radiation	Radiation, such as alpha, beta, gamma, and x-rays, capable of inducing certain changes and effects in materials of living tissues.
Isotope	One of two or more atoms having the same atomic number but different mass numbers.
Journey Time	The length of time it takes to undertake a certain route or part of a route.
Junctions 9	A software package incorporating the ARCADY and PICADY modules which model traffic capacity, queues and delays at roundabouts and priority junctions respectively.
L _{A10}	The level exceeded for 10% of the measurement time. This has been shown to correlate well with human responses to road traffic noise.
L _{A10} т	For example, L_{A10} 18 hr is the L_{A10} level determined over a period of 18 hours.
L _{A90}	Represents the noise level exceeded for 90% of the measurement period and is used to indicate quieter times during the measurement period. It is usually referred to as the background noise level.
L _{А90} т	Represents the noise level exceeded for 90% of the measurement period and is used to indicate quieter times during the measurement period. It is usually referred to as the background noise level. The 'T' denotes the time period over which the sound levels were averaged.
LAE SEL	Sound Exposure Level. A parameter closely related to L_{Aeq} for assessment of events that have similar characteristics but are of different duration. The L_{AE} value contains the same amount of acoustic energy over a 'normalised' one second period as the actual noise event under consideration.
L _{Aeq}	As almost all sounds vary or fluctuate with time it is helpful, instead of having an instantaneous value to describe the noise event, to have an average of the total acoustic energy experienced over its duration. The L _{Aeq} , 07:00-19:00 for example, describes the equivalent continuous noise level over the 12 hour period between 07:00 and 19:00. In the assessment of proposed industrial equipment or machinery noise, this is referred to as 'specific noise level'.

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Term	Definition
L _{Aeq} T	The equivalent continuous (time-averaged) A-weighted sound level. This is commonly referred to as the average noise level. The 'T' denotes the time period over which the sound levels were averaged. For example, LAeq 1 hr is the LAeq level determined over a period of one hour.
L _{Amax}	The L _{Amax} is the loudest instantaneous noise level. This is usually the loudest 125 milliseconds measured during any given period of time.
L _{An}	The method of describing with a single value a noise level which varies over a given time period is to consider the average amount of acoustic energy and the length of time for which a particular noise level is exceeded. If a level of x dB L_A is exceeded for 6 minutes within one hour, that level can be described as being exceeded for 10% of the measurement period. This is denoted as the L_{A10} (1-hour) = x dB. The L_{A10} index is often used to describe road traffic noise whilst the L_{A90} , the noise level exceeded for 90% of the time, is the usual descriptor of the underlying background noise. L_{A1} in addition to L_{Amax} are common descriptors of construction noise.
Land east of Eastlands Industrial Estate (LEEIE)	Land to the east of the Eastlands Industrial Estate, which is directly north of Sizewell Halt, would be used to support construction on the power station platform and temporary construction area.
L _{Ar,T}	The rating level, L _{Ar,T} , is the specific noise level from proposed industrial plant or machinery plus any adjustment for the characteristic features of the noise.
LC ₅₀	The concentration of a contaminant predicted to kill half of a particular species within a defined time period (e.g. 96 hours). Derived as a median value from laboratory experiments.
Light Detection and Ranging (LiDAR)	Use of reflected light to make accurate measurements of distance making use of the known wavelength of the light beam, used in aerial surveys to map visible ground levels.
LinSig	A software tool which allows traffic engineers to model signalised junctions and traffic signals, and their effect on traffic capacities and queuing.
Listed Buildings	Buildings and structures which have been identified as being of special architectural or historic interest and whose

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Term	Definition
	protection and maintenance are the subject of special legislation. Their curtilage and setting is also protected. Listed building consent is required before any works can be carried out on a listed building.
Local Biodiversity Action Plan (LBAP)	A local agenda (produced by the local authority) with plans and targets to protect and enhance biodiversity and achieve sustainable development. Statutory Consultees and Local Authorities are committed to Biodiversity Action Plans and work with central government (Rio Earth Summit, 1992) to realise LBAP objectives.
Local Transport Plan (LTP)	A Local Transport Plan is a plan produced by strategic transport authorities (county councils, unitary authorities, passenger transport authorities and local councils) that should provide advice to the local planning authority on highway and transport matters. An LTP should outline the current baseline with regard to transport, accessibility and pollution, before setting out objectives that should be reached, along with a programme for achieving these objectives. It is expected to be a forward-looking plan covering a number of years (typically five years), which is then presented to the Department for Transport. It can then be used as a 'material consideration' when a local planning authority or the Secretary of State determines a planning application.
Low Level Radioactive Waste (LLW)	Materials with primarily low concentrations of beta/gamma contamination, but may include small amounts of alpha contaminated material. In the UK LLW may be treated and disposed of through a variety of routes including the national LLW Repository (the LLWR), via commercial incinerators, other treatment facilities, or in certain cases to specific approved landfill.
Main development site	The site of the proposed Sizewell C nuclear power station and construction areas consisting of: the main platform, the temporary construction area, LEEIE, offshore works, Sizewell B relocated facilities and National Grid works and several off-site development areas including sports facilities at Leiston, marsh harrier habitat and fen meadow compensation land.
Managed realignment	One of several policy options that may be identified for separate lengths of coastline under the Shoreline Management Plan (SMP) (q.v.). A 'managed realignment' policy allows managed landward movement of defences,

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Term	Definition
	giving up some land to the sea to form a more sustainable defence line in the future. This option may create additional habitat such as mud flats or saltmarsh which provide a natural flood risk defence.
Mean high water mark	The average water level reached by the sea for all high tides. Anything below this level is considered to be the marine environment.
Mean high water spring mark	The average high water level reached by the sea for spring tides only. Anything below this level is considered to be the marine environment.
Mean low water spring mark	The average low water level reached by the sea for spring tides only.
Megawatt (MW)	A unit of electrical power, equal to a million watts or thousand kilowatts.
Microsimulation	Microsimulation software can provide a virtual model of transportation infrastructure in order to simulate the interactions of road traffic and other forms of transportation. The software treats each vehicle, bus, train, tram, cyclist, pedestrian etc. in the model as a unique entity with its own goals and behavioural characteristics, each possessing the ability to interact with other entities in the model and can be used to predict the impact of a development on an existing highway and test proposed improvements.
Mitigation	Measures proposed through the EIA process and applied through the regulatory approvals process to avoid, reduce or offset adverse effects on the environment.
National Grid	The organisation that operates the high voltage electric power transmission network in Great Britain, connecting power stations and major sub-stations and ensuring that electricity generated anywhere in Great Britain can be used to satisfy demand elsewhere.
National Policy Statement (NPS)	Policy statements that set out the government's objectives for the development of nationally significant infrastructure. They undergo a democratic process of public consultation and parliamentary scrutiny before being designated (i.e. published). They provide the primary basis for deciding NSIPs.
National Trust	An independent charity promoting the permanent preservation of land with outstanding natural features, and buildings of beauty and historic interest.

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Term	Definition
Nationally Significant Infrastructure Project (NSIP)	Term within the Planning Act 2008 for a specified type of major infrastructure project.
Natura 2000 Sites	Sites designated under the Birds Directive (Special Protection Areas (SPAs)) for birds and under the Habitats Directive (Special Areas of Conservation (SACs)) for other species and for habitats which together make up the Natura 2000 network.
Natural England	A government agency promoting the conservation of England's wildlife and natural features and is responsible for designating National Nature Reserves, identifying Sites of Special Scientific Interest, and for advising a wide range of bodies and individuals including the government on matters affecting nature conservation.
Neap tide	Neap tides occur when the moon is in the first or third quarter – when the sun, earth and moon form a right angle. The lunar high tide coincides with the solar low tide and they partly cancel out, giving a small total tide.
No Active Intervention	One of several policy options that may be identified for separate lengths of coastline under the Shoreline Management Plan (SMP) (q.v.). A 'no active intervention' strategy assumes that no investment in the maintenance, repair or replacement of existing defence structures takes place. It is a 'do nothing' scenario against which different policies can be tested but it is also a viable policy for some stretches of shoreline e.g. where there is a low risk of flooding or erosion now or in the future.
Northern Park and Ride	The proposed park and ride facility at Darsham. Associated development aiming to alleviate traffic going to and from the main development site by providing car parking for construction workers and a bus directly to the main development site.
Nuclear Island	Reactor buildings and associated buildings forming part of the UK EPR™.
Office for Nuclear Regulation (ONR)	The body responsible for regulating nuclear industry. It is an independent statutory corporation.
On-site associated development	Development which is required for the construction or operation of Sizewell C or to mitigate its impacts, and located within the main development site boundary.

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Term	Definition
Order Limits	The Order Limits define the area within which the development authorised by the DCO may be constructed, operated and maintained.
Ordinary Watercourse	Comprise all watercourses that are not Main Rivers. These include all tributaries, streams, rhynes, ditches, and those watercourses that have been culverted or piped.
Ordnance Datum (OD)	A vertical datum point used by the Ordnance Survey as a reference point for the level or altitude of any point. Ordnance Datum is based on the mean sea level at Newlyn in Cornwall between 1915 and 1921 but measurements are today made using satellite systems.
Ordnance Survey (OS)	Great Britain's national mapping agency.
Oslo-Paris Commission (OSPAR)	OSPAR is the mechanism by which 15 governments and the EU cooperate to protect the marine environment of the North-East Atlantic. Based on outputs from the Oslo convention (1972) and Paris convention (1974)
Pascal (Pa)	Unit of pressure equal to one Newton per square metre (1N/m²).
Passenger Car Unit	A standardised unit of measurement that allows mixed vehicular flows to be defined in terms of the equivalent number of cars. For example, a bus is considered to be equivalent to 2.5 cars.
Piling	The installation of bored and driven piles by vibratory dynamic and other methods of ground stabilisation.
Plankton	Organisms suspended in the water column and incapable of moving against water currents.
Planning Performance Agreement (PPA)	Framework agreed between a local planning authority and a planning applicant for the management of complex development proposals.
Planning Practice Guidance (PPG)	The Planning Practice Guidance (PPG) is a web-based resource which brings together planning guidance on various topics into one place. It was launched in March 2014 and coincided with the cancelling of the majority of Government Circulars which had previously given guidance on many aspects of planning.
Potable water	Drinking water.

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Term	Definition
Primary Mitigation	This is often referred to as 'embedded mitigation' and includes modifications to the location or design of the development made during the pre-application phase that are an inherent part of the Sizewell C Project, become a fundamental part of the design for which consent is sought, and do not require additional action to be taken.
Principal Aquifer	Principal Aquifers 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.
Proposed Development	Proposals for which SZC Co. is seeking consent for as part of the Sizewell C DCO Application. The context of the term is defined in each ES volume separately.
Public Access	Permitted use of land by members of the public. Access can be allowed by a variety of means including: public rights of way (e.g. footpath, bridleway, byway); Acts of Parliament; the granting of conditional access by landowners (e.g. National Trust); custom or tradition.
Public Rights of Way (PRoW)	These are designated 'highways' under the Countryside and Rights of Way Act 2000, which the public can use at any time.
Radioactive Waste	Any material contaminated by or incorporating radioactivity above certain thresholds defined in legislation, and for which no further use is envisaged, is known as radioactive waste.
Radionuclide	Any man-made or natural element which emits radiation in the form of alpha or beta particles, or as gamma rays.
Ramsar Convention	The Convention on Wetlands (Ramsar, Iran, 1971) - called the "Ramsar Convention" - is an intergovernmental treaty that embodies the commitments of its member countries to maintain the ecological character of their wetlands of international importance and to plan for the "wise use", or sustainable use, of all of the wetlands in their territories.
Ramsar site	The Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat (1971) imposes a requirement on the UK Government to promote the wise use of wetlands and to protect wetlands of international importance. This includes the designation of certain areas as Ramsar sites, where their importance for nature

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Term	Definition
	conservation (especially with respect to waterfowl) and environmental sustainability meet certain criteria. Further information can be found on the Ramsar convention on wetlands website: www.ramsar.org
Ratio of Flow to Capacity	An output from the Junctions 9 modelling software, which shows the ratio of vehicular flow to the capacity available.
Receptor	Used to refer to human beings or aspects of the environment that may be affected by changes arising due to the development and the socio-economic systems on which they depend. These can be reflected individually or collectively. For example, resident, employees, communities.
Registered Parks and Gardens	Parks and gardens identified by Historic England as being of particular interest and quality by reasons of their historic layout, features and architectural ornaments. Like listed buildings they are graded I, II* and II.
Remediation	The removal of pollution or contaminants from land (including sediments in waterways) for the general protection of the environment.
Rochdale Envelope	Rochdale Envelope defines the maximum parameters of a proposed development. The 'Rochdale Envelope' approach is employed where the nature of a proposed development means that some details of a project have not been confirmed (for instance, the precise dimensions of structures) when an application is submitted, and flexibility is therefore sought to address uncertainty.
Run-off	Rainfall that is not absorbed by soil and flows into a drainage system.
Saltmarsh	An environment in the upper intertidal zone which is inundated periodically by saline or brackish water and is dominated by salt-tolerant plants, including herbaceous plants, grasses and small shrubs.
Saxmundham to Leiston branch line	The railway line branching east from the East Suffolk line at Saxmundham and terminating at Sizewell Halt north of Leiston.
Scheduled Monument	A feature of national, historical or archaeological importance, either above or below the ground, which is included in the schedule of monuments as identified by the Secretary of State. Not all nationally important

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Term	Definition
	archaeological remains are scheduled and sites of lesser importance may still merit protection.
Secondary Aquifer	Layers of rock or deposits providing lower levels of groundwater storage than a Principal Aquifer.
Secondary Aquifer (Undifferentiated) -	A Secondary Aquifer (Undifferentiated) is designated in cases where it has not been possible to attribute either category Secondary A or Secondary B to a rock type.
Secondary Mitigation	This is often referred to as 'additional mitigation' and includes actions that will require further activity in order to achieve the anticipated outcome.
Section 106 Agreement	Section 106 of the Town and Country Planning Act 1990 allows a local authority to enter into a legally-binding agreement or planning obligation with a land developer over a related issue. The obligation is often termed as a 'Section 106 Agreement'.
Shoreline Management Plan (SMP)	A non-statutory plan produced to provide sustainable coastal defence policies (to prevent erosion by the sea and flooding of low-lying coastal land) and to set objectives for the future management of the shoreline. SMPs are prepared by the Environment Agency and maritime local authorities, acting individually or as part of coastal defence groups.
Short-term dose	Dose incurred due to short-term releases of a significant proportion of the 12-month discharge limit, which can occur as a result of variations in site operations. For assessment purposes the duration of a release is typically assumed to be 30 minutes or 24 hours.
Sievert (Sv)	The Sievert is a unit used to derive equivalent dose. This relates the absorbed dose in human tissue to the effective biological damage of the radiation. To determine equivalent dose (Sv), you multiply absorbed dose (Gy) by a quality factor (Q) that is unique to the type of incident radiation. Doses to humans are usually expressed in Sieverts.
Significant effect	The assessment of whether an effect is considered significant or not significant is set out within the ES . The assessment criteria applied within each topic assessment is described within the relevant methodology chapter in Volume 1 of the ES (Doc Ref. 6.2).

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Term	Definition
Site of Special Scientific Interest (SSSI)	An area designated as being of special interest by reason of any of its flora, fauna or geological or physiographical features. SSSIs are designated by Natural England under the Wildlife and Countryside Act 1981and the Countryside and Rights of Way Act 2000.
Sizewell A / Sizewell A power station	The existing Sizewell A power station and associated infrastructure, located to the south of the existing Sizewell B power station and the location of the proposed Sizewell C power station platform.
Sizewell B / Sizewell B power station	The existing Sizewell B power station and associated infrastructure, located to the south of the location of the proposed Sizewell C power station platform.
Sizewell B relocated facilities	Relocation of several Sizewell B facilities including the outage laydown area, operational car parking and access roads and outage car parking and access roads.
Sizewell C / Sizewell C power station	The proposed new nuclear power station to be located to the north of the existing Sizewell A and Sizewell B power stations.
Sizewell C Project	The works that SZC Co. is proposing to undertake as part of the Sizewell C DCO Application. This includes all components of the nuclear power station itself, as well as associated developments, which are the works required to facilitate construction or operation of the power station or to mitigate its impacts.
Sizewell Drain	The Sizewell Drain rises from the south of Sizewell B power station and joins with the Leiston Drain at the north of Sizewell B power station before flowing north to the coast at Minsmere Sluice, where they discharge to the sea.
Sizewell Halt	The nearest railhead to Sizewell nuclear power station, about one mile inland.
Sizewell link road	The proposed road to bypass the B1122 through Middleton Moor and Theberton.
Sound Level	Sound level, in decibels, is the weighted sound pressure level obtained by use of a sound-level meter. The reference pressure is 20 µPa, unless otherwise stated.
Sound power level (Lw)	The sound power level is the fundamental measure of the total sound energy radiated by a source per unit time.
Sound pressure level (Lp)	The level of the pressure of the sound above the internationally accepted reference value of 20 µPa (2x10-

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Term	Definition
	5N/m2), which corresponds to the pressure of the quietest sound an average person can hear at the frequency of 1000 Hz. It is a quantity that can be measured, thus the intensity of a sound can be derived from it.
Source Protection Zones (SPZ)	Defined by the Environment Agency, these zones show the risk of contamination from any activities that might cause pollution in the area.
Southern Park and Ride	The proposed park and ride facility at Wickham Market. Associated development aiming to alleviate traffic going to and from the main development site by providing car parking for construction workers and a bus directly to the main development site.
Special Area of Conservation (SAC)	A site designated via the European Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC) (i.e. the Habitats Directive) to protect rare and endangered, habitats and species at a European level. Together with SPAs they form a network of European sites known as Natura 2000.
Special Protection Area (SPA)	Designated under Article 4 of the European Directive on the Conservation of Wild Birds (2009/147/EC) (i.e. the Birds Directive) to protect the habitats of threatened and migratory birds.
Spent Fuel	Spent fuel is nuclear fuel that has been irradiated in and permanently removed from a reactor core. Due to the long half-life of a proportion of the radionuclides contained within spent fuel, its level of activity (and the fact this means it produces heat for long periods) and its fissile content (meaning it has the potential to be recycled and also raises security issues) means that the management of spent fuel is an important issue for the design of any new nuclear power station.
Spring tide	Tides occurring approximately once a fortnight when the range of the tide is greatest.
Statutory Organisations	Government bodies and other organisations which have a legislative duty in dealing with specific matters, e.g. Environment Agency, Natural England, English Heritage, etc.
Subsoil	Soil lying immediately beneath topsoil lacking topsoil's organic matter.
Subtidal	Areas below water at all states of tide.

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Term	Definition
Suffolk Heritage Coast	Areas of coast that are managed to conserve their natural beauty and, where appropriate, to improve accessibility for visitors.
Supply Chain Portal	SZC Co. has partnered with the Suffolk Chamber of Commerce to identify and support local businesses that want to become part of the supply chain. The Chamber is the first point of contact for business and agencies wishing to engage in the construction of this proposed nuclear new build project.
Surface Water	Terrestrial water bodies that are found above ground level, such as lakes, rivers and ditches, and including fresh and inland brackish water.
Sustainable Drainage Systems (SuDS)	A sequence of management practices and control structures designed to drain surface water in a more sustainable fashion than some conventional techniques (may also be referred to as sustainable drainage techniques).
SZC Co.	This application for development consent is made by NNB Generation Company (SZC) Limited who is referred to as "SZC Co." throughout this Application.
Temporary Construction Area	The area located primarily to the north and west of the proposed SSSI crossing, which would be used to support construction activity on the main development site.
Tertiary mitigation	Mitigation required regardless of any EIA assessment, as it is imposed as a result of legislative requirements and/or standard sectoral practices.
Tidal range	The difference in water surface levels between high tide and low tide.
Topography	The configuration of a land surface, including its relief and the position of its natural and manmade features.
Topsoil	The upper layer of soil usually 5-20cm deep with a high concentration of organic matter in which plants grow.
Total residual oxidants	The sum of breakdown products (residual oxidants) from the reaction of chlorine with sea water, used to assess the discharge concentration from chlorination of the cooling water system to prevent biological fouling.
Trammel Net	Fishing net with three layers of netting that is used to entangle fish or crustaceans.

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Term	Definition
Turbidity	The cloudiness in water caused by scattering of light by suspended particles, which may include both non-biological components (e.g. sand and silt) and biological components (e.g. algae and bacteria).
Two village bypass	The proposed road which would bypass the A12 through Farnham and Stratford St Andrew.
UK Biodiversity Action Plan	UK list of priority species and habitats compiled in response to Article 6 of the Biodiversity Convention.
UK European Pressurised Water Reactor (EPR™)	The UK EPR™ design is derived from the latest generations of reactors built in France and Germany, combining the safety experience and knowledge acquired from operating reactors. The proposed safety options also benefit from the results of research and development, in particular in the area of severe accidents.
UK Technical Advisory Group (UKTAG)	UKTAG is a partnership of the UK environment and conservation agencies which was created to provide coordinated advice on the science and technical aspects of the WFD.
Uranium	A heavy, naturally occurring and weakly radioactive element, commercially extracted from uranium ores. By nuclear fission (the nucleus splitting into two or more nuclei and releasing energy) it is used as a fuel in nuclear reactors to generate heat.
Viewed rhyne	Viewed Rhynes are Ordinary Watercourses (open or culverted) that undertake a significant function in the drainage or irrigation of an area. The term also includes any structures in the bed or banks for controlling or regulating the flow of these watercourses.
Visibility Splay	A Visibility Splay is a diagram indicating the area adjacent to a road junction or access which should be free from obstruction to motorists and pedestrians. There are varying standards for visibility splays depending on the speed of traffic on the roads.
VISSIM	VISSIM is a microscopic, multi-modal traffic flow simulation software package.
VISUM	VISUM is a traffic analysis and forecasting software package.
Water Framework Directive (WFD)	European Community Directive (2000/60/EC) on integrated river basin management. The WFD sets out environmental

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Term	Definition
	objectives for water status based on: ecological and chemical parameters; common monitoring and assessment strategies; arrangements for river basin administration and planning; and a programme of measures in order to meet the objectives. For further detail consult the European Commission website: http://europa.eu.int.
Water Management Zone (WMZ)	Zone in which surface water run-off would be attenuated, treated if required and monitored before being infiltrated back into the groundwater system or discharged to local watercourses under a relevant water discharge permit.
Windrow	A long low ridge or line of soil, designed to achieve the best conditions for drying, in order to maintain the soil integrity.
Written Scheme of Investigation	A specification and/or project design for a specific piece of archaeological work. Specifies how investigations are to be undertaken, including a definition of roles and responsibilities, aims and objectives, staffing programme, methods, reporting, archiving and monitoring requirements.
Zone of Influence	The maximum geographical area around the main development site and off-site associated development where there is a potential for impacts to occur.
Zone of Theoretical Visibility	The likely (or theoretical) extent of visibility of a development, usually shown on a map.



Abbreviations

Abbreviation	Term
AA	Appropriate Assessment
AADT	Annual Average Daily Traffic
AAWT	Annual Average Weekday Traffic
ABCL	Automatic Barrier Crossing Locally Monitored
ABI	Annual Business Inquiry
ADMS	Atmospheric Dispersion Modelling System
AES	Annual Employment Survey
AHB	Automatic Half Barrier
AIL	Abnormal Indivisible Load
AIS	Automated Identification System
ALARP	As Low as Reasonably Practicable
ALC	Agricultural Land Classification
ANPR	Automatic Number Plate Recognition
AOCL+B	Automatic Open Crossing locally monitored with barriers
AOD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
AoS	Appraisal of Sustainability
APIS	Air Pollution Information Website
AQMA	Air Quality Management Area
AST	Assured Shorthold Tenancy
ATA	Apprenticeship Training Agency
ATC	Automatic Traffic Counts
B&B	Bed and Breakfast
BAP	Biodiversity Action Plan
BAT	Best Available Techniques / Broad Assemblage Types (as appropriate in context)
BEEMS	British Energy Estuarine and Marine Studies
BEIS	Department for Business, Energy and Industrial Strategy

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Abbreviation	Term
bgl	Below Ground Level
BGS	British Geological Survey
BLF	Beach Landing Facility
BMV	Best and Most Versatile
Bn	Billion
BOCC	Birds of Conservation Concern
BOD	Biological Oxygen Demand
BP	Before Present
BRES	Business Register and Employment Survey
CA	Combustion Activities
CABE	Commission for Architecture and the Built Environment at the Design Council
CCA	Construction Contractor Area / Civils Contingencies Act (as appropriate in context)
CCTV	Closed Circuit Television
CDCZ	Construction Daily Commuting Zone
CDM	Construction Design and Management
CDO	Combined Drainage Outfall
CEA	Cumulative effects assessment
CEEQUAL	Civil Engineering Environmental Quality Award
Cefas	Centre for Environment, Fisheries and Aquaculture Science
CEMP	Construction Environmental Management Plan
CES	Census of Employment
CGS	County Geodiversity Sites
CHP	Combined Heat and Power
CIEEM	Chartered Institute of Ecology and Environmental Management
CIRIA	Construction Industry Research and Information Association
CITB	Construction Industry Training Board
CLG	Community Liaison Group
CLO	Community Liaison Officer
CLR	Contaminated Land Report

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Abbreviation	Term
CMS	Central Management System
CO2e	Carbon Dioxide Equivalent
CoCP	Code of Construction Practice
СОМАН	Control of Major Accidents and Hazards
COSHH	Control of Substances Hazardous to Human Health
СРМ	Combined Phytoplankton and Macroalgae
CSM	Conceptual Site Model
CSMP	Community Safety Management Plan
CSN	Construction Skills Network
CSZ	Core Sustenance Zone
CTD	Conductivity, Temperature and Depth Sensor
СТМР	Construction Traffic Management Plan
CWDA	Construction Water Discharge Activity (permit)
CWS	County Wildlife Site
CWTP	Construction Workforce Travel Plan
DAC	Design Acceptance Confirmation
dB	Decibel
DBA	Desk Based Assessment
DCLG	Department for Communities and Local Government
DCO	Development Consent Order
DEFRA	Department for Environment, Food and Rural Affairs
DEHP	Bis(2-ethylhexyl) phthalate
DfT	Department for Transport
DG	Diesel Generator
DIN	Dissolved Inorganic Nitrogen
DMRB	Design Manual for Roads and Bridges
DMS	Delivery Management System
DO	Dissolved Oxygen
DoS	Degree of Saturation
DoWCoP	Definition of Waste: Development Industry Code of Practice

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Abbreviation	Term
DWMP	Decommissioning Waste Management Plan
DWP	Department for Work and Pensions
DWT	Deadweight Tonnage
EAL	Environmental Assessment Level
EcIA	Ecological Impact Assessment
ECoW	Ecological Clerk of Works
EDF	Electricité de France
EDG	Emergency Diesel Generator
EEA	European Economic Area
EEEGR	East of England Energy Group
EEFM	East of England Forecasting Model
EERM	East of England Regional Model
EIA	Environmental Impact Assessment
EIOT	Eastern Institute of Technology
EMF	Electromagnetic Fields
EMS	Environmental Management System
EMU	Entrainment Mimic Unit
EPR	European Pressurised Reactor
EPS	European Protected Species
EQS	Environmental Quality Standard
ES	Environmental Statement
ESC	East Suffolk Council
ESG	Environmental Social and Governance
ESL	English as a Second Language
ESW	East Suffolk Water
ERCA	Eels Regulations Compliance Assessment
EU	European Union
FCT	Favourable Condition Target
FDP	Funded Decommissioning Programme
FLO	Fisheries Liaison Officer

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Abbreviation	Term
FMF	Freight Management Facility
FRA	Flood Risk Assessment
FRR	Fish Recovery and Return
GCSE	General Certificate of Secondary Education
GDA	Generic Design Assessment
GDP	Gross Domestic Product
GEP	Good Ecological Potential
GES	Good Ecological Status
GHG	Greenhouse Gas
GI	Ground Investigation
GIS	Geographical Information Systems
GLVIA	Guidelines for Visual Impact Assessment
GP	General Practitioner
GPLC	Guiding Principles for Land Contamination
GQRA	Generic Quantitative Risk Assessment
GRIP	Governance for Railway Investment Projects
GSB	Greater Sizewell Bay
GVA	Gross Value Added
GW	Gigawatt
GWDTE	Groundwater Dependent Terrestrial ecosystems
ha	Hectare
HAP	Health Action Plan
HAZID	Hazard Identification
НВ	Home Based
HCDF	Hard Coastal Defence Feature
HDV	Heavy Duty Vehicle
HE	Historic England
HER	Historic Environment Record
HGV	Heavy Goods Vehicle
HIA	Health Impact Assessment

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Abbreviation	Term
HLC	Historic Land Characterisation
НМО	House in Multiple Occupation
HMWB	Heavily Modified Water Body
HRA	Habitats Regulations Assessment
HSC	Hazardous Substances Consent
HSE	Health and Safety Executive
HTL	Hold The Line
IAEA	International Atomic Energy Agency
IAQM	Institute of Air Quality Management
ICAG	Information, Career Advice and Guidance
ICCI	In-combination climate impacts
ICES	International Council for the Exploration of the Seas
ICT	Information and Communications Technology
IDB	Internal Drainage Board
IEF	Important Ecological Feature
IEMA	Institute of Environmental Management and Assessment
IFCA	Inshore Fisheries and Conservation Authority
ILO	International Labour Organisation
ILW	Intermediate Level Waste
ILWSF	Intermediate Level Waste Storage Facility
IMA	Incident Management Area
IMO	International Maritime Organisation
INNS	Invasive Non-Native Species
IPC	Infrastructure Planning Commission
IROPI	Imperative Reason of Overriding Public Interest
ISFS	Interim Spent Fuel Store
ITIS	Integrated Transport Information System
IUCN	International Union for Conservation of Nature
JCP	Jobcentre Plus
JLAG	Joint Local Authority Group

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Abbreviation	Term
JSA	Jobseekers Allowance
KPI	Key Performance Indicator
kV	Kilovolt
kW	Kilowatt
LCA	Landscape Character Area
LCT	Landscape Character Type
LEEIE	Land east of Eastlands Industrial Estate
LEP	Local Enterprise Partnership
LGS	Local Geological Site
LGS	Local Geological Site
LGV	Light Goods Vehicle
LiDAR	Light Detection and Ranging
LLW	Low Level Waste
LMP	Lighting Management Plan
LOAEL	Lowest Observed Adverse Effect Level
Lo-Lo	Lift-On Lift-Off
LOOP	Loss of Operational Power
LVIA	Landscape and Visual Impact Assessment
LVSE	Low Velocity Side Entry
M&E	Mechanical and Engineering
MAD	Major Accidents and Disasters
MAFF	Ministry of Agriculture, Food and Fisheries
MAGIC	Defra's Multi-Agency Geographic Information for the Countryside website
MAID	Marine Accident Investigation Branch
MarESA	Marine Evidenced-Based Sensitivity Assessment
MAS	Manufacturing Advisory Service
mbgl	Metres Below Ground Level
МСВ	Manually Controlled Barrier
MCB-CCTV	Manually Controlled Barriers with CCTV

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Abbreviation	Term				
MCB-OD	Manually Controlled Barrier with Obstacle Detection				
MCC	Manual Classified Counts				
MCZ	Marine Conservation Zone				
MHWM	Mean High Water Mark				
MHWS	Mean High Water Spring				
MLWS	Mean Low Water Spring				
MMO	Marine Management Organisation				
MMP	Materials Management Plan				
MMMP	Marine Mammals Mitigation Plan				
MOD	Ministry of Defence				
mph	Miles per Hour				
MR	Managed Realignment				
MSL	Miniature Stop Light				
MUGA	Multi-Use Games Area				
MW	Megawatt				
NALEP	New Anglia Local Enterprise Partnership				
NAMRAC	Nuclear Advanced Manufacturing Research Centre				
NAMTEC	National Metals Technology Centre				
NCA	National Character Area				
NCA82	National Character Area 82				
NCA83	National Character Area 83				
NCR	National Cycle Route				
NDA	Nuclear Decommissioning Authority				
NEET	Not in Education, Employment and Training				
NERC Act	Natural Environment and Rural Communities Act 2006				
ng	Nanogram				
NGR	National Grid Reference				
NHB	Non-Home-Based				
NHBC	National House Building Council				
NHLE	National Heritage List for England				

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Abbreviation	Term				
nm	Nautical Miles				
NMP	National Mapping Programme				
NMR	National Monuments Record				
NNB	New Nuclear Build				
NNR	National Nature Reserve				
NO ₂	Nitrogen Dioxide				
NOEC	No Observed Effect Concentration				
NOEL	No Observed Effect Level				
NPPF	National Planning Policy Framework				
NPS	National Policy Statement				
NPS EN-1	Overarching National Policy Statement for Energy (EN-1)				
NPS EN-6	National Policy Statement for Nuclear Power Generation (EN-6)				
NPSE	Noise Policy Statement for England				
NRA	Navigation Risk Assessment				
NRMM	Non-Road Mobile Machinery				
NSAN	National Skills Academy for Nuclear				
NSIP	Nationally Significant Infrastructure Project				
NSL	Nuclear Site Licence				
NtM	Notice to Mariners				
NTS	National Transmission System				
NVC	National Vegetation Classification				
NVZ	Nitrate Vulnerable Zone				
O-D	Origin-Destination				
ODN	Ordnance Datum (Newlyn)				
oLEMP	Outline Landscape and Ecology Management Plan				
ONR	Office for Nuclear Regulation				
ONS	Office for National Statistics				
ORR	Office of Road and Rail				
OS	Ordnance Survey				
OSC	Operational Service Centre				

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Abbreviation	Term			
OSPAR	Oslo Paris Commission			
PAH	Polycyclic Aromatic Hydrocarbons			
PAS	Portable Antiquities Scheme			
РСВ	Polychlorinated Biphenyls			
PCL	Potential Contaminant Linkages			
PCSM	Preliminary Conceptual Site Model			
PCU	Passenger Car Unit			
PDZ	Policy Development Zone			
PEI	Preliminary Environmental Information			
PHA	Preliminary Hazard Assessment			
PINS	Planning Inspectorate			
PM _{2.5} or PM ₁₀	Particulate matter			
PNEC	Predicted No Effect Concentration			
POGO	Power operated gate opener			
PPE	Personal Protective Equipment			
PPG	Planning Practice Guidance			
PRoW	Public Right of Way			
PRS	Private Rented Sector			
PV	Photovoltaic			
PWR	Pressurised Water Reactor			
PWS	Private Water Supplies			
RBD	River Basin District			
RBMP	River Basin Management Plan			
RDB	Red Data Book			
REPPIR	Radiation (Emergency Preparedness and Public Information) Regulations 2019			
RFC	Ratio of Flow to Capacity			
RFID	Radio Frequency Identification			
RHP	Registered Housing Provider			
RIGS	Regionally Important Geodiversity Sites / Regionally Important Geographical Sites (as appropriate in context)			

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Abbreviation	Term				
RNLI	Royal National Lifeboat Institution				
RNR	Roadside Nature Reserve				
RSPB	Royal Society for the Protection of Birds				
RSR	Radioactive Substances Regulations				
RYA	Royal Yachting Association				
SAC	Special Area of Conservation				
SAL	Site Action Level				
SAT	Specific Assemblage Types				
SBIS	Suffolk Biodiversity Information Service				
SCC	Suffolk County Council				
SCCAS	Suffolk County Council Archaeological Service				
SCDC	Suffolk Coastal District Council (now part of ESC)				
SCDF	Soft Coastal Defence Feature				
SCLP	Suffolk Coastal Local Plan				
SCT	Seascape Character Type				
SDG	Sustainable Development Goals				
SECDB	Suffolk Energy Coast Delivery Board				
SEGway	Suffolk Energy Gateway Scheme				
SFRA	Strategic Flood Risk Assessment				
SHWG	Sizewell C Health Working Group				
SIC	Standard Industrial Classification				
SLA	Special Landscape Area				
SLAF	Suffolk Local Access Forum				
SMP	Shoreline Management Plan / Soil Management Plan (as appropriate in context)				
SO ₂	Sulphur Dioxide				
SOAEL	Significant Observed Adverse Effect Level				
SoCC	Statement of Community Consultation				
SoDA	Statement of Design Acceptability				
SPA	Special Protection Area (as appropriate in context)				

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Abbreviation	Term				
SPZ	Source Protection Zones				
SRF	Suffolk Resilience Forum				
SRP	Soil Resources Plan				
SSA	Strategic Siting Assessment				
SSA	Spoil Storage Area				
SSC	Suspended Sediment Concentration				
SSSI	Site of Special Scientific Interest				
STEM	Science, Technology, Engineering, and Maths				
STEMC	Science, Technology, Engineering, Maths, and Construction				
STW	Sewage Treatment Works				
SuDS	Sustainable Drainage System				
SWMP	Site Waste Management Plan				
SWT	Suffolk Wildlife Trust				
SZB RF	Sizewell B Relocated Facilities				
SZC Co.	NNB Generation Company (SZC) Limited				
TA	Transport Assessment				
TAG	Transport Analysis Guidance				
ТВМ	Tunnel Boring Machine				
TifALARP	Tolerable if As Low as Reasonably Practicable				
TIMA	Traffic Incident Management Area				
TIMP	Traffic Incident Management Plan				
ТОВ	Train crew operated barrier with assistance				
TOG	Train crew operated crossing				
tpa	Tonnes per annum				
TRG	Transport Review Group				
TRO	Total Residual Oxidants				
TSS	Traffic Separation Scheme				
UDG	Ultimate Diesel Generator				
UK	United Kingdom				
UK EPR™	United Kingdom European Pressurised Reactor				

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Abbreviation	Term			
UKCIP	United Kingdom Climate Impacts Programme			
UKCP18	United Kingdom Climate Projections 2018			
UKHO	United Kingdom Hydrographic Office			
UN SDGs	United Nations Sustainable Development Goals			
UWC	User Worked Crossing			
UWC+T	User Worked Crossing with Telephone			
UXO	Unexploded Ordnance			
VAS	Vehicle Activated Signs			
VDV	Vibration Dose Value			
VISSIM/VISUM	A microscopic multi-modal traffic flow simulation software package			
WDA	Water Discharge Activities			
WDC	Waveney District Council			
WFD	Water Framework Directive/ Waste Framework Directive (depending on context)			
WLMP	Water Level Management Plan			
WMZ	Water Management Zones			
WSI	Written Scheme of archaeological Investigation			
WWI	First World War			
WWII	Second World War			
ZOI	Zone of Influence			
ZTV	Zone of Theoretical Visibility			
ZVI	Zone of Visual Influence			
μg	Microgram			
μΙ	Microlitre			



SIZEWELL C PROJECT – ENVIRONMENTAL STATEMENT

NOT PROTECTIVELY MARKED

VOLUME 1, CHAPTER 1, APPENDIX 1B: STATEMENT OF COMPETENCE



SIZEWELL C PROJECT – ENVIRONMENTAL STATEMENT

NOT PROTECTIVELY MARKED

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Plates

None provided.

Figures

None provided.



1 Statement of Competence

1.1 Introduction

1.1.1 European Union Directive 2014/52/EU requires that developers ensure that the Environmental Impact Assessment (EIA) report (Environmental Statement (ES) (Doc Ref. Book 6)) is prepared by 'competent experts'. In addition, the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (Ref. 1.1) and the Marine Works (Environmental Impact Assessment) Regulations 2007 (Ref. 1.2) state that an ES must be accompanied by a statement from the Applicant outlining the relevant expertise or qualifications of experts. As such, this Statement of Competence has been prepared to outline the competency of the individuals involved in undertaking the EIA.

1.2 Institute of Environmental Management and Assessment EIA Quality Mark

1.2.1 This **ES** has been led and coordinated by AECOM alongside SZC Co. AECOM is a registrant to the Institute of Environmental Management and Assessment (IEMA) EIA Quality Mark and undertakes all EIA work in line with the EIA Quality Mark Commitments. The EIA Quality Mark is a voluntary scheme through which EIA activity is independently reviewed, on

an annual basis, to ensure it delivers excellence in: EIA management, EIA team capabilities, EIA regulatory compliance, EIA context and influence, EIA content, EIA presentation and improving EIA practice. Many of AECOM's EIA Coordinators hold Practitioner or Full (Chartered) Membership status with IEMA, or are chartered members of other appropriate professional institutions.



1.3 Competent experts

1.3.1 This **ES** has been prepared by competent experts, who hold professional memberships and are committed to undertaking continued professional development within their respective fields. Details of the EIA coordination team and EIA technical leads, including their role, company, qualifications and relevant experience, are listed in table below.



Table 1.1: Table of competent experts

Name	Role	Company	Relevant Academic Qualifications.	Relevant Professional Qualifications.	Other Relevant Experience.
EIA coordinat	tion team.				<u> </u>
	EIA Project Director.	AECOM	PhD MSc BSc (Hons).		20 years in environment consultancy focused on power sector including new build development projects and associated EIA, permitting, Best Available Techniques and air quality issues.
					Environmental Project Director on 11 Development Consent Order (DCO) applications in the power sector to date including gas-fired, energy from waste, solar and carbon capture utilisation and storage projects.
					Led environmental inputs in 4 DCO examinations and associated hearings to date (6 projects ongoing). Expert witness in 4 planning inquiries / mediation meetings / enforcement hearings.
	FIA Constitution for social	450014	DO (11) NA 1 ''	05	
	EIA Coordinator for main development site.	AECOM	BSc (Hons) Mphil.	CEnv MIEnvSc	8 years of experience in EIA coordination and environmental management. Relevant professional experience includes environmental management support for Hinkley
	Major Accidents and Disasters assessment.			PIEMA.	Point C and EIA coordination for other DCO applications, such as Luton Airport Expansion.
	EIA Coordinator for associated development sites.	AECOM	MEarth Sci (hons). PhD Environmental Geochemistry	PIEMA	Over 3 years experience in EIA coordination and environmental management, and environmental research alongside PhD.
			and Geomicrobiology.		Relevant professional experience includes EIA coordination for a Hybrid Bill application for High Speed 2, Phase 2a West Midlands to Crewe, and environmental management support for Thames Tideway and road projects.
	EIA Coordinator for associated	AECOM	BA (Hons) Geography.	PIEMA	Over 4 years of experience in EIA coordination, environmental management.
	development sites. Major Accidents and Disasters assessment.		MSc Integrated Environmental Studies.		Relevant professional experience includes EIA coordination for the Transport and Works Act Order application for Croydon Area Remodelling Scheme, project management of the DCO application for M42 Junction 6 improvements and environmental management support for other highway and railway maintenance projects.
	EIA Coordinator for the cumulative	AECOM	BSc (Hons) MSc.	PIEMA	Over 3 years of experience in EIA coordination and environmental management.
	effects assessment.				Assisted with the management of the cumulative effects assessments for several infrastructure projects, including for EIA to support DCO application for the A303 Stonehenge tunnel scheme.
	EIA Marine Technical Specialist.	AECOM	MA (Hons).	PIEMA CEnv	Over 6 years of experience in the development and assessment of marine-based power projects and c4 years of experience working with marine stakeholders and regulators on multiple NNB programmes around England including for Bradwell B and Hinkley Point C.
				MEI MIEMA	Led the assessment of marine impacts for 8 Coastal Energy DCOs (spanning Combined Cycle Gas Turbine, Biomass, Flexible Plant/Battery and Energy from Waste).
				MIMarEST CMarTech C.WEM	Managed marine environmental input for 4 Offshore Wind DCOs (including the UK's first Underwater Noise Habitats Regulations Assessment (HRA) at the Southern North Sea Special Area of Conservation following the 2017 regulatory position change on sound propagation).
				MCIWEM	Wider EIA, HRA, Water Framework Directive, Waste Framework Directive and Marine Conservation Zones consenting experience across Coastal and Flood Defence, Road & Rail, Dredging and Cables.
EIA technical	leads.				
	Decommissioning Lead	EDF Energy.	MChem, PhD.	MRSC	Over 10 years in the nuclear industry working across both national and international decommissioning projects.

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Name	Role	Company	Relevant Academic Qualifications.	Relevant Professional Qualifications.	Other Relevant Experience.
					Experience in the development of optimised decommissioning and waste management plans for Hitachi, Magnox, EDF, Vattenfall.
					Delivery of decommissioning safety case for Hitachi's UK Advanced Boiling Water Reactor Generic Design Assessment submission.
					Development of decommissioning cost estimates for a number of reactor variants including Pressurised Water Reactors.
					Safety case author for a number of nuclear facilities including Evaporator D, High Active Storage Tanks at Sellafield and retrieval of plutonium contaminated wastes from Magazine 3 at Low Level Radioactive Waste.
	Radiological Waste Lead.	EDF Energy.	BSc (Hons) Chemistry.		Over 10 years experience in the UK nuclear industry. 2 years graduate training scheme, 5 years working as an environmental specialist in the central technical organisation supporting EDF Energy's nuclear fleet, 4 years as an environmental technical specialist on the Hinkley Point C project more recently also supporting SZC development and HPR1000 GDA.
	Conventional Waste Technical	Mott	BSc (Hons), LLMI.	MCIWM	17 years practical and technical experience in the waste management sector.
	Lead.	MacDonald.			Relevant professional experience includes writing operational waste management strategies for large multi-use developments including Waterbeach New Town, Cambridge, Cambridge North, Bell Foundry, Woburn Court, Northcote.
					Writing and reviewing Waste and Materials Chapters for ES including Highways England Major Roads Projects (A27, A303, A358, A417, A20, A47,M6 J10, M20 J10a, M25, Operation Stack) plus A494 River Dee, Waterbeach, Calstock FAS, Houghton Regis FAS, Beckton WWTW, Rotherhithe and Warrington Western Link. Some of which have been submitted as part of a DCO application.
	Socio-economics Lead.	Quod	BSc; MA.		12 years experience in socio-economic assessments across several DCO applications and examinations including Energy (Hinkley Point C, Navitus Bay) and Transport (Heathrow, Crossrail) projects.
	Transport Lead.	WSP	BSc (Hons). DIC MSc.	MCIWEM C.WEM MCIWM FRGS Lead ISO14001 auditor. CEEQUAL Assessor.	15 years in industry. Technical experience in EIA, Transport, Environmental Management and Compliance on UK and overseas projects across a range of sectors including: highways, rail, and construction. Relevant professional experience includes technical support to Crossrail, HS2, Olympic Park and EIA coordination for projects such as Ipswich Northern routes, Winnersh Relief road, Victoria station upgrade.
	Noise and vibration Lead.	Sharps Redmore.	BSc (Hons) Combined Studies in Science. BSc (Hons) Environmental Health.	CEnv CSci MIEnvSc MCIEH MIOA.	14 years experience as a noise and environmental protection specialist in a local authority. Worked as an acoustic consultant for 15 years. Appeared as an expert witness in dozens of public inquiries, informal planning hearings and in court.
	Air Quality Lead.	AECOM	BSc (Hons). PhD	MIEnvSc MIAQM	28 years of experience in the assessment of air quality impacts. Relevant technical experience includes support to EIA or management plans for Wylfa Newydd, Hinkley Point C, Dounraey decommissioning, M1-A5 Link, Glyn Rhonwy Pumped Storage DCO, Swansea Tidal Barrage. Garry has successfully fulfilled the role of expert witness at public inquires and public hearings.
	Technical Lead - Ecology and Landscape.	AECOM	BSc (Hons) MSc.	CEnv MIEMA MIEEM.	20 years of experience in EIA coordination and environmental management (26 years of experience in ecological survey and assessment). Relevant professional experience includes EIA and environmental management support for

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Name	Role	Company	Relevant Academic Qualifications.	Relevant Professional Qualifications.	Other Relevant Experience.
					Thames Tideway Tunnel, and for other DCO applications, such as A303 (Stonehenge).
	Landscape and Visual Impact Assessment Lead.	LDA Design.	BSc (Hons), Dip LA.	CMLI MCIfA.	20 years experience as a Landscape Architect with specialist expertise in landscape, seascape and townscape character assessment, and landscape and visual impact assessment. Led the landscape and visual work on Sizewell C since 2014. Experience on DCO projects including Sizewell C, and Rookery Pit Resource Recovery
					Facility.
	Terrestrial Ecology and Ornithology Lead.	Arcadis (now Biocensus).	BSc (Hons).	MCIEEM CEcol	25 years experince in professional ecological consultancy. Has overseen the ecological deliverables of SZC since 2012.
				Cenv.	Acted as ecology expert witness for Canal and River Trust over proposals to install 4 fish passess on historic weirs on the River Severn.
	Amenity and Recreation Lead.	LDA Design.	BSc (Hons), BLD.	CMLI	31 years experience as a Landscape Architect with specialist expertise in amenity and recreation and EIA. Led the amenity and recreation work on Sizewell C since 2015. Experience on DCO projects including Sizewell C, and Hornsea 3 and Greater Gabbard offshore wind farms. Represented Orsted on landscape matters at the examination for Hornsea 3 offshore wind farm. Presented evidence at seven public inquiries and six hearings.
	Terrestrial Historic Environment Lead.	Wood E&IS UK Ltd.	BA (Hons) MA PhD.	MCIfA	24 years of experience in professional archaeological and historic environment practice, 12 years of experience in EIA and historic environment consultancy. Relevant professional experience includes providing Historic Environment technical lead roles and presentation of written and oral evidence to DCO examinations on Richborough Connection Project DCO and Manston Airport DCO applications. Has also provided EIA review support and presented written and oral evidence to the Wylfa Newydd DCO application for Isle of Anglesey County Council.
	Soils and Agriculture Lead.	Arcadis	BSc (Joint Hons), PhD.	CEnv FISoilSci MCIEEM.	28 years experience in soils research and consultancy, undertaking soil and Agricultural Land Classification (ALC) surveys, producing ES chapters and developing soil handling strategies. Relevant experience includes other major infrastructure projects such as Lower Thames Crossing (surveys and impact assessment) and Hinkley Point C (implementation of the Soil Management Plan). Incoming President (2021-2022) of the British Society of Soil Science.
	Geology and Land Quality Lead.	Atkins	BEng, MSc, PhD.	CEng CEnv	24 years combined experience in geo-environmental engineering, contaminated land investigations and assessments and civil and structural engineering.
				MCIWEM C.WEM.	Relevant professional EIA experience includes the completion of geology and soils/land quality ES chapters/Environmental Assessment Reports, Preliminary Environmental Information Reports, Technology Assessment Reports for various schemes including new infrastructure (A45, A50, Gun Lane rail improvements), the redevelopment of a former power station (Poole) and greenfield sites.
					Geo-environmental experience includes the production and technical review of site audits, desk studies, ground investigations, interpretive report writing, risk assessments, remedial options appraisals, remediation designs, validation and completion reporting for a variety of schemes ranging from small developments to large infrastructure schemes, and including demolition projects.
					Provided support to Renfrewshire Council for the examination in public of the redevelopment of the former Ministry Of Defence site in Bishopton. Also independently audit the geology and soils chapters for Transport Scotland road schemes.
	Groundwater Lead.	Atkins	BSc (Hons), MSc.	CGeol	15 years of experience in the environmental sector including assessment of groundwater for nationally significant infrastructure projects.
					Relevant professional experience includes provision of support to Wylfa Newydd as subject matter expert for groundwater, technical support to other DCO applications and support during

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Name	Role	Company	Relevant Academic Qualifications.	Relevant Professional Qualifications.	Other Relevant Experience.
					construction phase on DCO projects such as the Feeder 9 Replacement Project.
	Surface Water Lead.	Atkins	BSc (Hons), MSc.	CEnv CSci	18 years of experience in environmental assessment with a focus on surface water and water based development (e.g. flood alleviation schemes).
				CWEM.	Relevant professional experience includes technical oversight of the Water Framework Directive Compliance Assessment for Wylfa Newydd, including expert witness at the DCO issue specific hearings.
					Extensive experience in wetland protection, enhancement and creation in East Anglia.
	Marine Assessments Technical Lead.	Cefas	BSc (Hons).		40 years experience in applied marine science and consultancy.12 years experience of leading marine studies programme for EDF Energy at Hinkley Point C and Sizewell C and 1 year leading DCO marine assessments for Bradwell B. Attended Hinkley Point C public inquiry as nominated marine expert.
	Coastal Geomorphology and Hydrodynamics Lead.	Cefas	Bsc, MSc (Hons), PhD.		Over 25 years experience in coastal hydrodynamics and geomorphology (academia, government and consulting). Working on the Sizewell C Project for 7 years. Developed monitoring plans for Hinkley Point C and Cefas lead of coastal geomorphology subgroup for Hinkley Point C and Sizewell C Marine Technical Fora.
	Marine Water Quality and Sediments Lead.	Cefas	BSc, MSc.		Over 30 years of experience as Ecotoxicologist and chemical risk assessor and Government Advisor. Relevant professional experience includes development of EIA for Hinkley Point C.
	Marine Ecology Lead.	Cefas	BSc, MRes, PhD.	MCIEEM	PhD in Marine Biology. 9 years of postdoctoral experience in research and environmental consultancy roles. Research areas include plankton ecology and water quality issues. Consultancy experience includes project management for environmental and marine wildlife mitigation and monitoring surveys worldwide with a focus on projects in the offshore renewables sector.
					Marine Ecology Lead for Cefas' nuclear programme, relevant professional experience includes managing monitoring programmes, technical reports and a shadow-Habitats Regulations Assessment for Hinkley Point C, as well as baseline surveys and technical reports for Sizewell C.
	Marine Historic Environment Lead.	COARS, University of Southampton.	BSc (Hons), MSc, PhD.		11 years of relevant experience in commercial archaeology including retained archaeological services on Hinkley Point C, London Array OWF and Hornsea OWF developments and ES support on projects such IFA2, Greenlink, Havingsten and Celtic Interconnectors.
	Marine Navigation Risk Assessment Lead.	Anatec	BSc (Hons), MSc.		Over 27 years working in risk assessment in offshore renewable, oil and gas and marine sectors.
					Project manager for a large number of marine navigation chapters for EIA and navigational risk assessments for offshore developments.
					Risk assessment support for Hinkley Point C.
					Provided expert witness advice at a number of public enquiries for navigational risk assessment for offshore wind farm projects.
	Radiological Lead.	EDF Energy.	BSc (Hons) Rural Resource Management.	MSRP	Over 20 years experience in the Nuclear Industry and Radiation Protection Profession. Industry lecturer on University of Surrey MSc on Radiation and Environmental Protection on topic of radiological assessment.
					Environment correspondent responsible for closing out the Generic Design Assessment for the UK EPR reactor design.
					Lead technical author for HPC RSR Permit application and lead reviewer for acceptance of HPC radiological dose assessments for environmental permit application and ES.
					Undertook the long-range gaseous radiological impact assessment for routine and accidental

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Name	Role	Company	Relevant Academic Qualifications.	Relevant Professional Qualifications.	Other Relevant Experience.
					releases to support the UK EPR Article 37 submission from UK Government to the European Union which were required to demonstrate the operations at HPC will not impact other Member States.
					Previous experience through consultancy work for various clients on dose assessments including:
					• shadow assessment of British Energy RSA review for Sizewell B and Heysham 1 and 2 on behalf of the Environment Agency;
					Sellafield Authorisation Reviews (1996 and 2000);
					• other nuclear sites: Capenhurst, Chapelcross, Devonport, Oldbury, Springfields and Wylfa;
					short term assessment for abnormal releases from Sellafield;
					emergency dose assessments to support nuclear emergency exercises;
					sewage worker dose assessments resulting from hospital discharges;
					Contaminated Land Assessments on Dalgety Bay and other confidential clients; and
					lecturing on RADSAFE and NAIR transport accidents and scenarios.
	Climate Change Lead.	AECOM	BA (Hons).		15 years experience on greenhouse gas and climate change assessment.
	Omnate Change Load.	/ (200 M	27. (116116).		AECOM's technical lead for climate assessment. Has delivered greenhouse gas assessment
					for a range of projects and provided climate assessment inputs for a range of EIA and Environmental and Social Impact Assessments.
					Recent project experience includes:
					London Luton Airport Preliminary Environmental Information Report/ES;
					A303 Amesbury to Berwick Down ES;
					High Speed 2 Phase 2b;
					International Quarter London (IQL) ES;
					• 1 Leadenhall ES;
					Stratford Waterfront; and
					Burgess Hill Northern Arc.
	Health and Wellbeing Lead.	RPS Group.	PhD, MSc, BSc (Hons).	Fellow of the Royal Society of Medicine (FRSM). Fellow of the Royal Society of Public Health (FRSPH).	20 years of planning focussed health assessment experience, including the development of national and sector specific guidance and best practice, with an unmatched catalogue of project examples ranging from local planning, regional and national policy through to DCO and Hybrid Bill.
				,	Pertinent projects examples include:
					Moorside, Hinkley Point C and Oldbury New Nuclear Power Stations; Sellafield Transformation Plan and UK Geological Nuclear Waste Repository;
					HS2 (Phase 2b Lot 3), Midlands Mainline Electrification and Northern Powerhouse Rail, and Crossrail Hybrid Bill HIA;
					• London City, Dublin, Belfast City, Birmingham, Melbourne, Stansted, Manston, Western Sydney and Gatwick Airports;
					• Runcorn; Rufford; Lostock; Suffolk; Exeter; Norfolk; Belfast; Cheshire; Brig y Cwm; Tipperary; and PHE Science Hub Energy from Waste Facilities;
					Hornsea (One, Two and Three), the Atlantic Array, Burbo Bank, Moray Firth, Inch Cape, Kildare and Tyrone windfarms;
					• Environmental Social and Health Impact Assessments in Algeria; Albania; Ethiopia; Kurdistan; Sakhalin; Salym; and the Arctic Circle.Hornsea (One, Two and Three), the

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Name	Role	Company	Relevant Academic Qualifications.	Relevant Professional Qualifications.	Other Relevant Experience.
					Atlantic Array, Burbo Bank, Moray Firth, Inch Cape, Kildare and Tyrone windfarms; and
					• Enviornmental Social and Health Impact Assessments in Algeria; Albania; Ethiopia; Kurdistan; Sakhalin; Salym; and the Arctic Circle
	Technical Lead - Radiological, Decommissioning and Major Accidents and Disasters.	EDF Energy.	BSc Physics (1st Class Honours).	MSRP	Over 10 years experience in the Nuclear Industry and Radiation Protection Profession.
			MSc Radiation and Environmental Protection (Distinction).	CRadP MPhys	Experienced Safety Case Author, Manager and Verifier for a range of Commercial Nuclear and Defence Nuclear Facilities.
				CPhys.	Experienced Radiological Dose Assessor for Routine and Accidents.
					Development of the Emergency Preparedness Arrangements for Hinkley Point C.
					President of the UK Chartered Society for Radiological Protection. This has included actively supporting UK Government and Regulators in the development of the Radiation Protection Framework, Legislation and Guidance.
					Supported development of the Radiation (Emergency Preparedness and Public Information) Regulations 2019 ACoP and chaired the Consultation Workshop.
					Supported the developments of EIA's and Environmental Impact Assessment for Decommissioning Regulations for nuclear facilities across the UK and abroad.
	Planning (strategic).	Quod	BA (Hons) Town Planning DipTP.	MRTPI	13 years experience in planning consultancy.
					Recent DCO application experience includes the Wylfa Newydd Nuclear Power Station project and the AQUIND Interconnecor project.
	Planning (main development site).	Quod	BA Hons. MSc	MRTPI	Over 12 years experience in planning consultancy working on complex and strategic projects across the UK and abroad.
					Recent DCO application experience includes the Wylfa Newydd Nuclear Power Station project.
	Planning (associated development).	Quod	BSc (Hons) Geography / MPhil (Cantab) Planning, Growth and Regeneration.	MRTPI	Over 7 years experience in planning consultancy working on projects ranging from urban regeneration schemes to major infrastructure developments.
					Recent DCO application experience includes the Wylfa Newydd Nuclear Power Station project.
	Planning (associated development).	Quod	MA Planning and Sustainability.	MRTPI	Chartered Town Planner with over 10 years' Local Planning Authority and private sector consultancy experience.





References

- 1.1 Parliament of the United Kingdom, 2017. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. London
- 1.2 Parliament of the United Kingdom, 2007. Marine Works (Environmental Impact Assessment) Regulations 2007. London