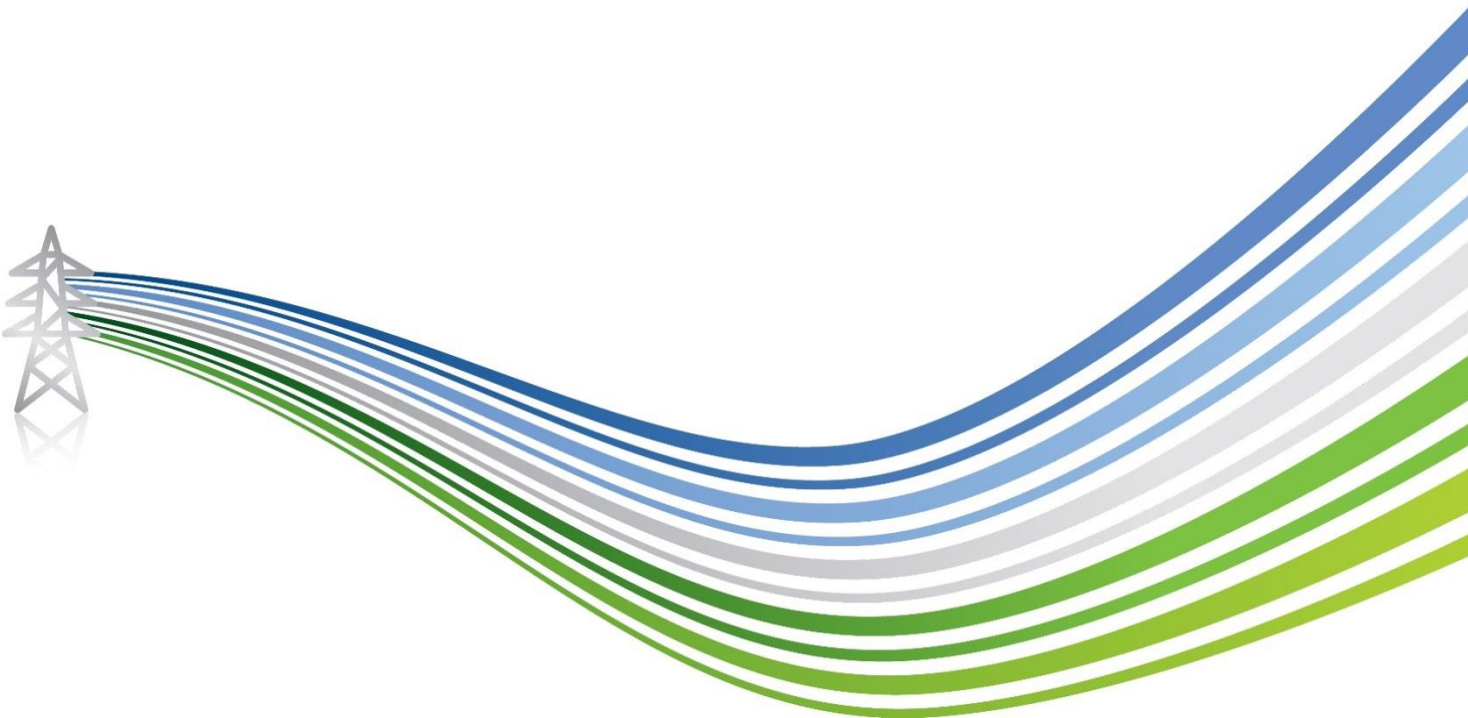


Greens Substation

Environmental Impact Assessment Report

Volume 2 | EIA Report

December 2024



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GLOSSARY AND ABBREVIATIONS

Term	Description
132 kV	132 kilovolt (132,000 volt) operating voltage electrical circuit.
AC	Aberdeenshire Council
AIL	Abnormal Indivisible Loads
AILV	AIL Vehicle
Annual Average Daily Traffic (AADT) flows	The average over a full year of the number of vehicles passing a point [in/on] the road network each day.
Air-Insulated Switchgear (AIS)	The apparatus used for controlling, regulating and switching on or off the electrical circuit in the electrical power system. Air Insulated Switchgear (AIS) adopts the air as the insulation media. An AIS substation is constructed with switchgear which relies on open air components, which can require large clearance areas for operation and safety, which takes up a larger area of land than Gas Insulated Switchgear (GIS).
ALRA	Abnormal Load Route Assessment
Ambient Sound	Totally encompassing sound in a given situation at a given time, usually composed of sound from many sources near and far.
Amenity	The natural environment, cultural heritage, landscape and visual quality. Also includes the impact of Scottish and Southern Electricity Networks Transmission (SSEN Transmission) works on communities, such as the effects of noise and disturbance from construction activities.
AOD	Above Ordnance Datum
Applicant	A person who makes a formal application for something, in this case, SSEN Transmission. SSEN Transmission own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands.
ATC	Automatic Traffic Counter
BAP	Biodiversity Action Plan
British Geological Survey (BGS)	UK's main provider of objective and authoritative scientific data, information and knowledge to help society understand the Earth.
Biodiversity Net Gain (BNG)	A way to contribute to the recovery of nature while developing land. It is a process which leaves nature in a better state than it was before development.
Birds of Conservation Concern (BoCC)	Birds of Conservation Concern (BoCC) provides the status of all regularly occurring birds in the UK, Channel Islands and Isle of Man. The current version is BoCC 5. Birds of highest conservation concern will appear on the Red List.
BSI	British Standards Institution
Biodiversity Units	A unit of account. Metrics assign all habitats a unit value according to their relative biodiversity value. The scores assigned to habitats vary between the different metrics.
CAR	Controlled Activity Regulations
CDM	Construction Design and Management
Construction Environmental	A document to address how potentially adverse impacts associated with the Proposed Development will be managed during construction.

Term	Description
Management Plan (CEMP)	
Construction Traffic Management Plan (CTMP)	A document that sets out the agreed mitigation measures which would be implemented during construction.
CIEEM	Chartered Institute of Ecology and Environmental Management
CIRIA	Construction Industry Research and Information Association
Conductor	A metallic wire strung from structure to structure, to carry electric current.
Consultation	The dynamic process of dialogue between individuals or groups, based on a genuine exchange of views and, normally, with the objective of influencing decisions, policies or programmes of action.
CoWRP	Control of Woodland Removal Policy
CTMP	Construction Traffic Management Plan
Decibel (dB)	A measure of sound level.
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DIA	Drainage Impact Assessment
DMRB	Design Manual for Roads and Bridges
DTM	Digital Terrain Model
Drinking Water Protected Area (DWPA)	Drinking Water Protected Areas (DWPAs) are those areas where water is abstracted to provide water for human consumption and includes surface water (from rivers or reservoirs) and groundwater.
EC	European Commission
EclA	Ecological Impact Assessment
Ecological Clerk of Works (ECoW)	Personnel assigned to advise on / undertake work in a specialist area of ecology (e.g. applying for a protected species licence for bats).
ECU	Energy Consents Unit
Effect	The direct or indirect physical consequence(s) of the Proposed Development on receptors, under each of the various topic headings.
EHO	Environmental Health Officer
ELC	European Landscape Convention
EMF	Electromagnetic Field
EMP	Environmental Management Plan
Environmental Clerk of Works (EnvCoW)	Personnel assigned to ensure compliance with environmental legislation (e.g. coordinating pre-site checks and monitoring via specialist consultants) and provide advice on environmental constraints and controls.
Engagement	The establishment of effective relationships with individuals or groups.
Environmental Impact Assessment (EIA)	A formal process set down in Town & Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 used to systematically identify, predict and assess the likely significant environmental impacts of a proposed project or development.

Term	Description
EPS	European Protected Species
ESDAL	Electronic Service Delivery for ALLs
ESO	Electricity Systems Operator
EU	European Union
FM	Frequency Modulated
Flood Risk Assessment (FRA)	Document that reviews the risk of flooding from a development.
GCR	Geological Conservation Review
Gardens and Designed Landscapes (GDLs)	The Inventory of Gardens and Designed Landscapes held by Historic Environment Scotland (HES) lists those gardens or designed landscapes which are considered by a panel of experts to be of national importance.
General Environmental Management Plan (GEMP)	A series of documents to address how potentially adverse impacts associated with the Proposed Development will be managed to mitigate negative environmental effects and ensure compliance with relevant regulations.
GQRA	Generic Quantitative Risk Assessment
Gigawatt (GW)	A measure of power, one billion watts. 1 GW = 1,000,000,000 W.
GI	Ground Investigation
GIS	Geographic Information System
GIS	Gas Insulated Switchgear
GPP	Guidance for Pollution Prevention
GLVIA3	Guidelines for Landscape and Visual Impact Assessment 3 rd Edition
GW	Gigawatt
Groundwater Dependant Terrestrial Ecosystem (GWDTE)	Groundwater Dependent Terrestrial Ecosystems (GWDTE) are wetlands which critically depend on groundwater flows or chemistries. They are safeguarded by the Water Framework Directive (WFD) and are sensitive to hydrological and ecological changes caused by developments.
Habitat	Term most accurately meaning the place in which a species lives, but also used to describe plant communities or agglomerations of plant communities.
Hectare (Ha)	An area measuring 10,000 square metres.
Heritage Assets	Heritage assets are a building, monument, site, place, area or landscape identified as having a cultural, environmental, historical, natural, scientific, technological or artistic significance and are held indefinitely for the benefit of present and future generations.
Hertz (Hz)	A unit of frequency.
Historic Environment Record (HER)	Sources of, and signposts to, information relating to landscapes, buildings, monuments, sites, places, areas and archaeological finds spanning more than 700,000 years. Based in mainly local authorities, they are used for planning and development control but also fulfil an educational role.
Historic Environment Scotland (HES)	Organisation responsible for investigating, caring for and promoting Scotland's historic environment.
HEPS	Historic Environment Policy for Scotland

Term	Description
HGV	Heavy Goods Vehicle
LHMP	Landscape and Habitat Management Plan
HRA	Habitats Regulations Assessment
IEF	Important Ecological Feature
IEMA	Institute of Environmental Management and Assessment
IUCN	International Union for Nature Conservation
Kilovolt (kV)	A measure of power. one thousand volts. 1kV = 1,000 W.
Listed Building	Building included on the list of buildings of special architectural or historic interest and afforded statutory protection under the 'Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997' and other planning legislation. Classified categories are A – C.
Landscape Character Type (LCT)	A landscape type that is characterised by its distinct, recognisable and consistent pattern of elements that makes one landscape different from another.
LiDAR	Light Detection and Ranging
LGS	Local Geodiversity Site
LGV	Light Goods Vehicle
LMP	Land Management Plan
Limit of Deviation (LoD)	The area either side of the proposed alignment and ancillary works within which micro-siting may take place in accordance with the conditions of the Section 37 consent.
LTFP	Long-Term Forest Plan
LVIA	Landscape and Visual Impact Assessment
MMP	Materials Management Plan
Mitigation	Term used to identify measures that are identified to prevent, reduce or remedy any potentially significant adverse environmental effects, beyond that already taken into account as normal good practice.
NBN	National Biodiversity Network
NCN	National Cycle Network
NeSTS	New Suite of Transmission Structures
NGR	National Grid Reference
NHZ	National Heritage Zone
NLS	National Library of Scotland
National Planning Framework 4 (NPF4)	The national spatial strategy for Scotland. It sets out the spatial principles, regional priorities, national developments and national planning policy. It replaces National Planning Framework 3 (NPF3) and Scottish Planning Policy.
Noise Rating (NR)	Graphical method for assigning a single-number rating to a noise spectrum.
NRTF97	National Road Traffic Forecast 1997
National Scenic Area (NSA)	A national level designation applied to those landscapes considered to be of exceptional scenic value.

Term	Description
NatureScot (NS)	The public body responsible for Scotland's natural heritage and advisor to the Scottish Government.
Noise Sensitive Receptors (NSR)	Noise sensitive receptors are defined as receptors which are potentially sensitive to noise and vibration. Examples include dwellings, hospitals, schools, community facilities.
NTS	Non-Technical Summary
NVC	National Vegetation Classification
Overhead Line (OHL)	An electric line installed above ground, usually supported by lattice steel towers or wooden poles.
Ordnance Survey (OS)	Great Britain's national mapping agency.
PAN	Planning Advice Note
PPE	Personal Protective Equipment
PPV	Peak Particle Velocity
PIA	Personal Injury Accidents
PIDS	Perimeter Intruder Detection System – a fence-mounted sensor that monitors and detects any form of intrusion
Prime agricultural land	Agricultural land identified as being Class 1, 2 or 3.1 in the land capability classification for agriculture developed by Macaulay Land Use Research Institute (now the James Hutton Institute).
Planning Application	An application for planning permission under the Town and Country Planning (Scotland) Act 1997, as amended by the Planning etc. (Scotland) Act 2006 and by the Planning (Scotland) Act 2019.
Proposed Development	The Proposed Development is taken to be the description of the substation components, access arrangements and any associated construction activities and ancillary works. Refers collectively to all elements required to construct and operate the proposed 400 kV substation.
Public Road Improvement (PRI)	Works required to improve public roads to enable appropriate access.
Preferred Site Option	The Site Option that is the preferred choice during Stage 2 – Detailed Site Selection based on environmental, engineering and cost perspectives.
PWS	Private Water Supplies
Ramsar	A wetland site designated to be of international importance under the Ramsar Convention.
Special Area of Conservation (SAC)	An area designated under the European Commission (EC) Habitats Directive to ensure that rare, endangered or vulnerable habitats or species of community interest are either maintained at or restored to a favourable conservation status.
SBL	Scottish Biodiversity List
Synchronous Condenser	A component used to improve voltage regulation and stability by continuously generating / absorbing adjustable reactive power and to provide improved short-circuit strength and frequency stability by providing synchronous inertia to the grid.
Section 37	An application for development consent under Section 37 of the Electricity Act 1989.

Term	Description
Scottish Environment Protection Agency (SEPA)	Scotland's principal environmental regulator, protecting and improving Scotland's environment.
Super Grid Transformer (SGT)	A transformer which steps the voltage between different levels on the transmission network.
Scottish Landscape Area (SLA)	Regionally valuable landscapes identified to protect and enhance landscape qualities and promote their enjoyment.
Scheduled Monument	A monument which has been scheduled by the Scottish Ministers as being of national importance under the terms of the 'Ancient Monuments and Archaeological Areas Act 1979'.
Scottish Natural Heritage (SNH)	The former name of the public body NatureScot which changed in August 2020.
SNRHE	Scottish National Record of the Historic Environment
Site Options	Collective term for sites identified for consideration in the site selection process.
Special Protection Area (SPA)	An area designated under the Wild Birds Directive (Directive 79/409/EEC) to protect important bird habitats. Implemented under the Wildlife and Countryside Act 1981.
SPP	Species Protection Plan
Scottish and Southern Electricity Networks Transmission	SSEN Transmission own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands.
Site of Special Scientific Interest (SSSI)	A statutory designation made by NatureScot under the Nature Conservation (Scotland) Act 2004. Areas of land and water that are considered to best represent natural heritage in terms of their flora (i.e. plants), fauna (i.e. animals), and geology (i.e. rocks) and geomorphology (i.e. landform).
Stakeholders	Organisations and individuals who can affect or are affected by Scottish and Southern Electricity Networks (SSEN) Transmission proposals and works.
Substation	A node on the network to allow safe control of the electricity network. This could include convergence of multiple circuits, transformation of voltage or other functions to maintain and operate the electricity network.
SuDS	Sustainable Drainage System
SW	Scottish Water
TPO	Tree Protection Order
UK Habitat Classification (UKHab)	Unified and comprehensive approach to classifying habitats.
Underground Cable (UGC)	An electric wire installed underground.
UK	United Kingdom
UKFS	UK Forestry Standard
Volts	The international unit of electric potential and electromotive force.
VP	Viewpoint
Water Framework Directive (WFD)	The main aims of the Water Framework Directive (WFD) are to: prevent deterioration and enhance status of aquatic ecosystems, including groundwater,



Term	Description
	promote sustainable water use, reduce pollution, and contribute to the mitigation of floods and droughts.
Works	Constructing new transmission infrastructure such as substations, overhead lines, underground cables; major refurbishment of these; the dismantling and removal of any parts of the system; and ancillary works, which may include formation of access tracks, bridge and road improvements, tree cutting, drainage etc.
Zone of Influence (Zol)	The maximum area in which disturbance from the Proposed Development can be expected.
Zone of Theoretical Visibility (ZTV)	The area from which the Proposed Development is anticipated to be visible, in the absence of mitigation.