Tangy IV Wind Farm Section 36C Variation

Technical Appendix 3.5: Tangy IV Cnoc Buidhe WF 132 kV OHL Shared Use Connection - EIA Scoping Report

Scottish & Southern Electricity Networks

TRANSMISSION

Tangy IV Wind Farm and Cnoc Buidhe Wind Farm 132 kV OHL Shared Use Connection.

Environmental Impact Assessment: Scoping Report

March 2025

CONTENTS

GLOSSARY

Term	Definition
Alignment	A centre line of an overhead line (OHL), along with location of key angle structures.
Alignment (preferred)	An alignment for the overhead line taken forward to stakeholder consultation following a comparative appraisal of alignment options.
Alignment (proposed)	An alignment taken forward to consent application. It comprises a defined centre line for the overhead line and includes an indicative support structure (tower) schedule, also specifying access arrangements and any associated construction facilities.
Amenity	The natural environment, cultural heritage, landscape, and visual quality. Also includes the impact of SSEN Transmission's works on communities, such as the effects of noise and disturbance from construction activities.
Annex I (as listed on the EC Habitats Directive)	Annex I to the EC Habitats Directive (Council Directive 92/43/EEC) lists the types of habitats and the animal and plant species whose conservation requires the designation of Special Areas of Conservation (SAC). Some are defined as 'priority' habitats or species in danger of disappearing and for which there are specific rules.
Ancient Woodland Inventory (AWI)	A database of land that is currently wooded and has been continually wooded, at least since 1750.
Conductor	A metallic wire strung from structure to structure, to carry electric current.
Construction Environnemental Management Plan (CEMP)	A site-specific environmental management plan setting out the environmental management procedures, legislation and requirements for a particular project and site.
Construction Traffic Management Plan (CTMP)	A site-specific traffic management plan setting out the traffic management procedures, access arrangements, legislation, and requirements for a particular site.
Consultation	The dynamic process of dialogue between individuals or groups, based on a genuine exchange of views, normally, with the objective of influencing decisions, policies, or programmes of action.
Corridor	A linear area which allows a continuous connection between defined connection points. The corridor may vary in width along its length; in unconstrained areas it may be many kilometres wide.
Design Solution	The design of the transmission infrastructure (location, structure type) between SSE Renewables Tangy IV Wind Farm and Belltown Power Cnoc Buidhe Wind Farm and the existing Carradale Grid Supply Point (GSP)
Environmental Impact Assessment (EIA)	Environmental Impact Assessment. A formal process codified by EU Directive 2011/92/EU and subsequently amended by Directive 2014/52/EU. The national regulations are set out in The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. The EIA process is set out in Regulation 4(1) of the regulations and includes the preparation of an EIA Report by the developer to systematically identify, predict, assess, and report on the likely significant environmental impacts of a proposed project or development.
European Designated Site	An area of land subject to protection through European legislation, including Special Areas of Conservation (SAC) and Special Protection Areas (SPA).
Forestry and Land Scotland (FLS)	Forestry and Land Scotland is the Scottish Government agency responsible for managing Scotland's national forests and land.
Gardens and Designed Landscapes (GDLs)	The Inventory of Gardens and Designed Landscapes lists those gardens or designed landscapes which are considered by a panel of experts to be of national importance.
Ground Water Dependent Terrestrial Ecosystem (GWDTE)	Wetlands which critically depend on groundwater flows. They are safeguarded by the Water Framework Directive (WFD) and are sensitive to hydrological and ecological changes.

Term	Definition
Habitat	Term most accurately meaning the place in which a species lives but also used to describe plant communities or agglomerations of plant communities.
Landscape Character Type (LCT)	A distinct, recognisable, and consistent pattern of elements in a landscape that differentiates the area from another.
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 A – C.
Limit of Deviation (LOD)	The area either side of the proposed alignment within which micro siting of structures may take place in accordance with the conditions of the Section 37 consent.
Local Landscape Areas (LLA)	Landscapes designated by Argyll and Bute Council which are considered to be of regional/local importance for their scenic qualities.
Marine Protected Areas (MPA)	Marine Protected Areas are used to ensure protection of some of the most vulnerable species and habitats within marine ecosystems.
Micro siting	The process of positioning individual structures to avoid localised environmental or technical constraints.
Mitigation	Term used to indicate avoidance, remediation, or alleviation of adverse impacts.
National Scenic Area (NSA)	A national level designation applied to those landscapes considered to be of exceptional scenic value.
Overhead line (OHL)	An electric line installed above ground, usually supported by lattice steel towers.
Plantation Woodland	Woodland of any age that obviously originated from planting.
Ramsar	A wetland site designated to be of international importance under the Ramsar Convention.
Route	A linear area of approximately 1 km width (although this may be narrower/wider in specific locations in response to identified pinch points / constraints), which provides a continuous connection between defined connection points.
Route (preferred)	A route for the overhead line taken forward to stakeholder consultation following a comparative appraisal of route options.
Route (proposed)	A route taken forward following stakeholder consultation to the alignment selection stage of the overhead line routeing process.
Routeing	The work undertaken which leads to the selection of a proposed alignment, capable of being taken forward into the consenting process under Section 37 of the Electricity Act 1989.
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'.
Semi-natural Woodland	Are composed of locally native trees and shrubs which derive from natural regeneration or coppicing rather than planting.
Sites of Special Scientific Interest (SSSI)	Areas of national importance. The aim of the SSSI network is to maintain an adequate representation of all natural and semi-natural habitats and native species across Britain.
Span	The section of overhead line between two supporting structures.
Special Area of Conservation (SAC)	An area designated under the 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.

Term	Definition
Special Protection Area (SPA)	An area designated under the Birds Directive (Directive74/409/EEC) to protect important bird habitats.
Species Protection Plan (SPP)	Developed by the Applicant to document general procedures, legislation, and requirements for ensuring protection to a variety of species.
Stakeholders	Organisations and individuals who can affect or are affected by SSEN Transmission works.
Tangy IV WF and Cnoc Buidhe WF Connection Project	The current project for which a Scoping Opinion is being sought.
Underground Cable (UGC)	An electric cable installed below ground, protected by insulating layers and marked closer to the surface to prevent accidental damage through later earthworks.
Volts	The international unit of electric potential and electromotive force.
Wayleave	A voluntary agreement entered into between SSEN Transmission and a landowner upon whose land an overhead line is to be constructed for the installation and retention of the transmission equipment.
Wild Land Area (WLA)	A series of 42 mapped areas which have been identified by NatureScot as the most extensive areas of high wildness within Scotland, following a process of interpretive mapping and site survey. WLA is not a statutory designation but are considered to be nationally important in Scottish Planning Policy (Policy 4 (g) in National Planning Framework 4).

EXECUTIVE SUMMARY

This EIA Scoping Report has been prepared by WSP UK Ltd. on behalf of Scottish Hydro Electric Transmission plc (the 'Applicant') who, operating and known as Scottish and Southern Electricity Networks Transmission ('SSEN Transmission'), owns, operates and maintains the electricity transmission network across the north of Scotland and remote islands. In this EIA Scoping Report, the Applicant and SSEN Transmission are used interchangeably unless the context requires otherwise.

The Applicant is proposing to submit an application under Section 37 of the Electricity Act 1989 for consent to construct and operate a new 132 kilovolt (kV) overhead line (OHL), to connect the consented Tangy IV Wind Farm and proposed Cnoc Buidhe Wind Farm to the existing Carradale Grid Supply Point (GSP) (hereafter referred to as 'Carradale substation').

This Scoping Report is provided to support a formal request under Regulation 12 of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 by the Applicant for a Scoping Opinion, to determine the information to be provided within the EIA Report.

The Applicant invites consultees to comment on the following:

1. What environmental information do you hold or are aware of that will assist in the EIA described here?
2. Do you agree with the proposed approach for baseline collection, and that the range of surveys across particular topics is sufficient and appropriate to inform the assessment of environmental effects?
3. Is there any other relevant existing baseline data that should be taken into account?
4. Are there any key issues or possible effects which have been omitted?
1. Do you agree with the list of issues to be scoped out, and the rationale behind the decision?

Responses to this EIA Scoping Report should be directed to the Energy Consents Unit (ECU) of the Scottish Government to ensure all responses are collated and included within the Scoping Opinion. Responses should be directed to:

Email: Econsents_Admin@gov.scot

OR

Energy Consents Unit

Scottish Government

5 Atlantic Quay

150 Broomielaw

Glasgow, G2 8LU

When submitting a response to the Scoping Report, the Applicant would be grateful if you could also send a copy of your response to the address below:

Email to: agnieszka.gallagher@sse.com

OR

For the Attention of Agnieszka Gallagher

Scottish and Southern Electricity Networks Transmission

1 Waterloo Street, Glasgow, G2 6AY

1. INTRODUCTION

1.1 The Proposals

1.1.1 Scottish Hydro Electric Transmission plc (herein referred to as 'the Applicant') operating under licence as Scottish and Southern Electricity Networks Transmission ('SSEN Transmission'), is a wholly owned subsidiary of the SSE plc group of companies. SSEN Transmission, owns and maintains the electricity transmission network across the north of Scotland and holds a license under the Electricity Act 1989 to develop and maintain an efficient, co-ordinated, and economical system of electricity transmission.

1.1.2 The Applicant is proposing to submit an application under Section 37 of the Electricity Act 1989 for consent to construct and operate a new 132 kilovolt (kV) overhead line (OHL) to connect the consented Tangy IV Wind Farm and proposed Cnoc Buidhe Wind Farm to the existing Carradale Grid Supply Point (GSP) (hereafter referred to as 'Carradale substation'). Both wind farms require a new 132 kV double circuit connection to facilitate a grid connection to the electricity transmission network at Carradale substation. It is proposed that this would be achieved via a combination of underground cable (UGC) and OHL, to account for environmental and technical constraints.

1.1.3 The Proposed Development comprises the construction and operation of a 132 kV OHL connection between terminal towers located at Collusca Water and land to the east of Rhonadale, approximately 10 km north-west of Campbeltown, Argyll and Bute. The approximately 13 km OHL will be constructed using steel lattice towers from the L7 tower suite.

1.1.4 Further details of the Proposed Development that form the basis of this EIA Scoping Report are described in **Chapter 2.** An overview of the Proposed Development is shown on **Figure 1.1**.

1.1.5 The following works are also required to complete the full connection of the OHL from Tangy IV Wind Farm and Cnoc Buidhe Wind Farm; however, they are being consented under different regimes and therefore do not form part of the Proposed Development for this EIA Scoping Report. They will however be considered in terms of cumulative development as discussed in **Section 3.6:**

- Construction and operation of an UGC connection between the Tangy IV Wind Farm and Cnoc Buidhe Wind Farm substations through the Cnoc Buidhe Wind Farm boundary, for approximately 5.6 km, to a connection point with the first terminal tower at Collusca Water.
- Construction and operation of an UGC connection from the last terminal tower (land east of Rhonadale), for approximately 0.6 km, to connect into the existing Carradale substation.
- Construction of an extension to the existing Carradale substation, involving the installation of transmission switchgear rated at a voltage of 132 kV, to provide control of the new overhead lines effecting the connection of the Tangy IV and Cnoc Buidhe Wind Farms.

1.2 The EIA Regulations

1.2.1 An application for consent for the OHL will be made to the Scottish Ministers under Section 37 of the Electricity Act 1989, along with a request for a direction that planning permission be deemed to be granted under Section 57 (2) of the Town and Country Planning (Scotland) Act 1997, as amended, for construction and operation of the OHL and carrying out of ancillary works.

1.2.2 Certain ancillary works would be associated with the Proposed Development such as the formation of bellmouths at public road access points, temporary and permanent construction access tracks and tower working areas, construction compounds, borrow pits to provide stone, vegetation clearance and management and other temporary measures required during construction.

1.2.3 The applicable EIA Regulations are the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, hereafter referred to as the "EIA Regulations". Schedule 1 of the EIA

Regulations lists projects where EIA is mandatory. Schedule 2 lists projects where EIA may be required 'where proposed development is considered likely to give rise to significant effects on the environment by virtue of factors such as its nature, size or location'. The Proposed Development is categorised as 'Schedule 2' development under the EIA Regulations. The Applicant has committed to preparing an EIA Report to accompany the application for consent, in accordance with the requirements of the EIA Regulations.

1.3 Purpose of the EIA Scoping Report

1.3.1 The purpose of this EIA Scoping Report is to ensure that the subsequent EIA is focused on the key impacts likely to give rise to significant adverse effects. As well as identifying aspects to be considered in the EIA this document also identifies those aspects that are not considered necessary to assess further.

1.3.2 In accordance with the EIA Regulations, this EIA Scoping Report contains:

- a plan sufficient to identify the location of the Proposed Development;
- a brief description of the nature and purpose of the Proposed Development and its possible effects on the environment; and
- information and representations from the Applicant on the aspects of the Proposed Development or environment that are not considered necessary to assess further in the EIA Report.

1.4 Scoping Report Methodology

1.4.1 This report provides information on the individual factors which require consideration under Regulation 4(3) of the EIA Regulations. This EIA Scoping Report presents the findings of an initial appraisal of the likely significant environmental effects of the Proposed Development on the receiving environment. It provides a basic overview of the baseline conditions as understood at the time of writing and the likely potential effects as a result of the Proposed Development. Where site survey and further assessment are deemed necessary, the approach and methodologies are outlined. Environmental topics included for initial assessment in this EIA Scoping Report are:

- Landscape and Visual Amenity;
- Ecology and Nature Conservation;
- Ornithology;
- Cultural Heritage;
- Hydrology, Hydrogeology, Geology and Soils;
- Forestry;
- Traffic and Transport;
- Noise and Vibration
- Recreation and Tourism;
- Land Use and Agriculture;
- Air Quality and Climate;
- Material Assets and Waste;
- Accidents and Disasters;
- Population and Human Health;
- Recreation and Tourism;
- Electric and Magnetic Fields; and
- Radio and TV Interference.

1.4.2 The proposed scope of the EIA Report is set out within this Scoping Report on a topic-by-topic basis. Where the scope of a topic differs according to the 'section' of the project, this is set out under each topic.

1.4.3 For each topic, an overall description of the baseline environment is provided relevant to that topic and broken down on a section-by-section basis where relevant. This is followed by a summary of the potential effects associated with each environmental topic listed above, and the proposed scope of survey and assessment work relevant to that Section to determine effects and identify appropriate mitigation measures. Issues to be scoped out of assessment are also provided.

1.5 Route and Alignment Selection

1.5.1 A detailed alignment selection process has been undertaken to identify the OHL alignment which best balances environmental, technical, and economic factors. Environmental designations and key sensitive receptors have been avoided where possible throughout the process.

1.5.2 At the routing and then alignment stages of the process, options are identified, appraised then consulted on before decisions are made and the design moves to the following stage. Each stage presents more detailed options than the previous, to ultimately arrive at the Proposed Alignment which is being taken into the EIA stage.

1.5.3 A route options appraisal for the Tangy IV Wind Farm connection was undertaken in July 2022 to select an environmentally preferred route. Workshops integrating engineering and environmental considerations were then held to select a Preferred Route as the starting point for developing an OHL alignment. SSEN Transmission consulted on the Preferred Route in August 2022[1]. Following this consultation, the Preferred Route was amended and confirmed as the basis for subsequent alignment selection.

1.5.4 A route options appraisal for the Cnoc Buidhe Wind Farm connection was undertaken in summer 2023. Observations and data collected during the site visits for the Tangy IV project helped inform and ground truth the key constraints which were identified by the various desk studies conducted. As a robust route selection exercise was completed previously as part of the Tangy IV project over the same area, the chosen Preferred Route for Cnoc Buidhe was decided to be the same.

1.5.5 Following identification of the Proposed Route, several site visits, surveys, and workshops were undertaken to inform the identification of alignment options. In September 2024, a Consultation Document[2] was prepared seeking comments from stakeholders and members of the public on alignment option studies undertaken, and the rationale for, and approach to, the selection of the Potential Alignment. Comments received will be documented in a Report on Consultation[3], which sets out the consultation process during the alignment option stage and how feedback was taken into account. This Proposed Alignment was confirmed for taking forward to the EIA stage as it was assessed as having the greatest potential to avoid or minimise interactions with the environment and people living and working on the Proposed Development.

1.5.6 The proposals for the Tangy IV WF and Cnoc Buidhe UGC connections and Carradale GSP extension into which the Proposed Development will connect have been informed by separate optioneering, site selection studies and included in routeing and alignment consultations with stakeholders and the public. These consultations are summarised in the Routing and Alignment Reports on Consultation[43]. The substation development is being progressed separately and does not form part of the Proposed Development.

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[1] SSEN (2022) Tangy Cnoc Buidhe Route Consultation Report

[2] SSEN (2024) Tangy Cnoc Buidhe Consultation Document

[3] The Tangy Cnoc Buidhe Alignment Report on Consultation will be made available online once the document is ready for publication.

[4] SSEN (2022) Tangy Cnoc Buidhe Routing Report on Consultation

2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Introduction

2.1.1 The Proposed Development would primarily comprise the construction of a new double circuit 132 kV OHL connection between terminal towers located at Collusca Water and land to the east of Rhonadale, approximately 13 km in length (also referred to as the 'OHL Alignment').

2.2 The Need for the Project

2.2.1 The consented Tangy IV Wind Farm and proposed Cnoc Buidhe Wind Farm in Argyll and Bute both require connection to the electricity transmission network at Carradale substation by April and May 2029, respectively. It is anticipated that this would be achieved via the construction and operation of a new 132 kV double circuit OHL and UGC, between the Tangy IV Wind Farm and Cnoc Buidhe Wind Farm substations and the existing Carradale Substation, a distance of approximately 21.5 km. Under the terms of their licence, SSEN Transmission is therefore obliged to connect both developers to the transmission network by the contracted connection dates.

2.2.2 Cnoc Buidhe Wind Farm anticipated applying to the Scottish Government under Section 36 for 30 turbines in Q4 2024. The project's connection to the grid network will be phased with 23 turbines planned to connect in May 2029 and the remaining seven turbines connecting in 2034. This is due to constraints on the wider transmission network which prevent the entire scheme connecting in one go.

2.3 Proposed Development Components

2.3.1 The Proposed Development will comprise steel lattice towers from the SSEN Transmission 132kV L7 tower suite. The size of towers and span lengths is generally dependent on three main factors: altitude; weather; and the topography of the route. Towers are typically closer together at high altitudes to withstand the effects of greater exposure to high winds, ice, and other weather events. Higher towers may be required in certain locations to maintain the required ground clearance heights, such as at road, river, and rail crossings.

2.3.2 Some permanent access tracks will also require construction.

2.3.3 Modification of the existing electricity distribution network in some areas is also likely to be required to accommodate the new OHL. These works do not form part of the Proposed Development but are included here as 'associated works for the purposes of the EIA.

2.4 Limit of Deviation

2.4.1 The Section 37 application will seek consent for the construction and operation of the OHL, specifying a centre line, terminal and angle supporting structures with a prescribed horizontal Limit of Deviation (LOD) to allow flexibility in the final siting of individual towers and construction access to reflect localised land, engineering and environmental constraints.

2.4.2 The horizontal LOD, for which consent will be sought, will be refined through the EIA process, and will ultimately seek to balance the need for flexibility in micro-siting with the desirability of avoiding, reducing, or controlling the potential for environmental impact. It is anticipated that the LOD would be 100 m either side of proposed infrastructure (i.e. 200 m in total).

2.4.3 A vertical LOD, i.e. the maximum height of a tower above ground level, would be confirmed through the EIA process as more detailed design information is obtained. Whilst indicative tower heights are known based on standard tower designs (see **section 2.6** below), some structure heights may vary depending on topography.

2.5 Decommissioning the Proposed Development

2.5.1 The Proposed Development would not have a fixed operational life. The effects associated with the construction phase are considered representative of worst-case decommissioning effects, and therefore no separate assessment is necessary.

2.6 OHL Design

Physical Characteristics of the OHL

2.6.1 Where steel structures are proposed, these will be of lattice design. Towers would be approximately 30.4 m in height on average, although tower heights may be increased where local topography dictates, in order to achieve sufficient clearance distances. The proposed steel lattice towers would support six conductor bundles (three wires per bundle) on six cross-arms (three on each side) and an earth wire between the peaks. The span lengths between towers would vary depending on topography and altitude but would be approximately 250 m to 350 m apart. Exact heights of and the distances between towers would be determined after a detailed line survey and confirmed prior to submission of an application for consent.

2.6.2 The steel lattice towers to be used for the Proposed Development would be constructed from fabricated galvanised steel and would be grey in colour. The towers would likely comprise a 'L7' series of steel lattice tower (an example photograph of which is shown in **Plate 2-1).** A schematic of the proposed steel lattice towers is shown in **Plate 2-2** below.

2.6.3 Three types of towers are proposed to be used, as described below:

- suspension towers: these are used for straight sections of OHL where there is no need to terminate the conductor;
- angle / tension towers: these are typically used where there is a need to change the orientation of the OHL; and
- terminal towers; where the OHL transitions to UGC, via a Cable Sealing End Platform (CSEP).

2.6.4 Two CSEP towers would be required to facilitate the transitions from UGC to OHL and vice versa. Typical CSEP towers would accommodate the CSE equipment and downleads mounted on a specialised tower with a basket. Cables would emerge from below ground and would be affixed to the tower. The cables would be enclosed in a protective basket and anti-climb measures would be installed on the structure for safety reasons. The exact design of the CSE tower would be confirmed by the Contractor. A typical CSEP structure is shown on **Plate 2-3.**

Plate 2-1: Example Steel Lattice Tower from L7 Suite

Plate 2-2: Proposed Steel Lattice Tower Typical Schematic

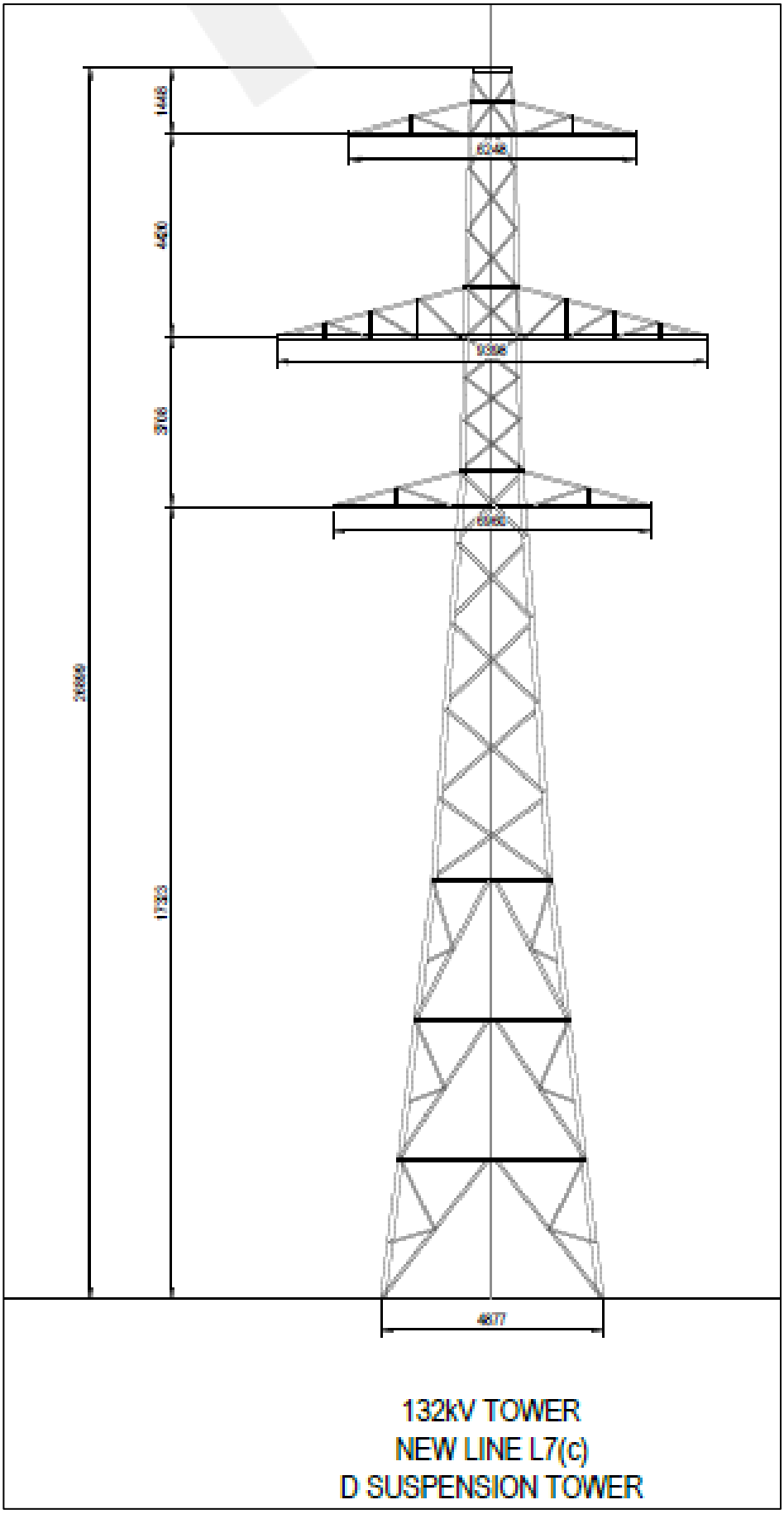

Plate 2-3: Example Terminal tower with Cable Sealing End Platform

2.7 OHL Construction

2.7.1 High voltage OHL construction typically follows a standard sequence of events as follows:

- Phase 1 – enabling works;
- Phase 2 – OHL construction;
- Phase 3 – OHL commissioning; and
- Phase 4 – re-instatement.

2.7.2 Further detail on typical construction activities and work methods would be set out in the EIA Report. An outline of the likely programme, phasing and working methods is provided here for the purpose of informing the initial scoping stage environmental assessment.

Construction Programme

2.7.3 It is anticipated that construction of the proposed OHL would take place over a two-year period, although the detailed programming of works would be the responsibility of the Principal Contractor in agreement with SSEN Transmission. Subject to gaining the necessary consents, it is anticipated that construction of the proposed OHL would commence in 2027, with an estimated completion date of April 2029. The detailed construction phasing and programme would be subject to change as the design progresses and also due to necessary consents and wayleaves being agreed. Further information will be provided in the EIA Report on the indicative construction programme.

Standard Mitigation and Working Methods

2.7.4 The initial scoping appraisal and the assessment in the EIA Report will be carried out on the basis that standard mitigation measures will be implemented during the construction work, including compliance with both project wide and site-specific environmental management procedures, with reference to SSEN Transmission General Environmental Management Plans (GEMPs) and Species Protection Plans (SPPs).

2.7.5 A Construction Environment Management Plan (CEMP) will be developed for the project and adopted by the successful contractor during the construction phase. The principal objective of this document is to provide information on the proposed infrastructure and to aid in avoiding, minimising, and controlling adverse environmental impacts associated with the Proposed Development. Furthermore, this document will aim to define good practice as well as specific actions required to implement mitigation identified in the EIA Report, the planning process and / or other licencing or consenting processes. Mitigation measures relevant to the OHL will be incorporated into the overall CEMP for the Proposed Development. The CEMP would be updated during the pre-construction phase and would form part of the contractor documents between the Applicant and the appointed construction contractor.

2.8 Construction Practices and Phasing

Phase 1 - Enabling Works

Distribution

2.8.1 Works would be required to the existing distribution network infrastructure within some areas to facilitate safe working and operating conditions given the proximity of the distribution network to the proposed OHL. It is anticipated that these distribution network assets would be realigned or undergrounded to make way for the Proposed Development. Specific details are not available at this stage, but it is anticipated that any works would be carried out under Permitted Development rights.

Access during Construction

2.8.2 In general, proposed construction site access would be taken via the existing road network as far as practicable, upgraded as required. Existing bellmouths would be utilised where possible, subject to improvements.

2.8.3 Where operational access is required, this would likely range from All Terrain Vehicle (ATV) routes with no formal track to a stone road suitable for 4x4 and wagon access. The selection of the type of track required will consider the proximity to a public road, structure type and potential maintenance activities / vehicles required in future to a given location (taking legal health & safety requirements into account). Access track details will be finalised through the EIA stage of the project and presented to illustrate where each access type will be deployed, and the rationale for that selection.

2.8.4 Materials required for the construction of any new stone access tracks are likely to be obtained from on-site borrow pits or imported from local quarries. The exact location of borrow pits would be dependent upon site surveys, availability of suitable material and proximity to the required location.

Steel Lattice OHL Construction Access

2.8.5 Typically, new stone tracks are likely to be required to access each steel tower location, as well as the requirement for inline access between towers. Stone tracks are designed to suit the heavy plant loads required for construction works for steel towers, and to suit the varied ground conditions along the route. It is anticipated that stone tracks would be approximately 4 m in width. On completion of construction, unless required for operational access, the stone tracks would be removed and the original material reinstated.

2.8.6 Where access to tower positions is difficult due to steep terrain, alternative methods would be proposed such as using smaller items of plant, specialist tracked plant, and in some cases using helicopters for moving materials.

2.8.7 Temporary trackways are an alternative method of providing access, dependent on ground conditions. Although there may be localised areas where trackway may be suitable, it is not considered an appropriate solution for the construction of steel lattice towers on this project in its entirety, due to the length of time they are required to be in place and the weight and size of construction plant that would be required to track over them. Stone tracks generally afford greater reliability and stability compared to trackway solutions. Similarly, the extensive use of wide tracked excavators and other plant without prior ground preparation are unlikely to be a viable solution for this project in its entirety, although they may be used for certain tasks during construction.

2.8.8 The use of helicopters for construction of steel lattice towers is feasible, however, the operational restrictions (e.g. weather, proximity to public roads and environmental factors), and the significant cost implications, for a project of this scale are key considerations. The use of helicopters is likely to be required in more remote sections of the project, and where particular environmental or geographical constraints necessitate their use. Where helicopters are used, construction plant would still require access to each tower location to facilitate construction and erection of towers. Helicopter landing zones would also require identification.

Access during Operation

2.8.9 Permanent access tracks would only be required in more remote areas where access during construction requires a higher specification track, and where long-term maintenance needs require permanent access. It is intended however to keep requirements for permanent access tracks to a minimum. Where required, permanent tracks would be reinstated to a width suitable for 4x4 vehicles.

Forestry Clearance

2.8.10 The Proposed Development would pass through or close to areas of woodland and commercial forestry. Where the Proposed Development passes through areas of woodland or forestry, a wayleave corridor would likely be required. The width of this corridor would be variable depending on the nature of the woodland or forestry.

Site Compounds

2.8.11 It is currently anticipated that a number of construction compounds and laydown areas would be required given the scale of the Proposed Development, the locations of which would be confirmed by the Principal Contractor.

Phase 2 – Construction Works

Foundations

2.8.12 Different approaches to forming foundations may be used for steel lattice towers, subject to ground conditions at each location. These are likely to comprise:

- spread type e.g. concrete pad and chimney; or
- piled type e.g. driven concrete, tube, and micro pile; or
- augered.

2.8.13 Foundation types and designs for each tower will be confirmed following detailed geotechnical investigation at each position.

Steel Lattice Tower Construction

2.8.14 Tower construction can typically commence two weeks after the foundations have been cast, subject to weather conditions and concrete curing rates. Tower steelwork would be delivered to each tower construction site either as individual steel members or as prefabricated panels, depending on the method of installation and the available access. A working area, up to approximately 50 m x 50 m, is required at each tower location to facilitate access, laydown, and assembly.

Conductor Stringing

2.8.15 The conductor would be delivered to site on wooden drums in pre-determined pulling section lengths. Prior to stringing the conductors, temporary protection measures (e.g. netted scaffolds), would be required across public roads and existing access tracks.

2.8.16 Conductor stringing equipment (i.e. winches, tensioners and ancillary equipment) are set out at either end of pre-selected sections of the OHL.

2.8.17 Pilot wires would be pulled through the section to be strung. These would be hung on blocks (wheels) at each suspension tower and connected to a winch and tensioner at the respective end of the section. The winch, in conjunction with the tensioner, is used to pull the pilot wires between the

structures. The conductor is pulled via the pilot wires through the section under tension to avoid contact with the ground and any underrunning obstacles. Once the conductor has been strung between the ends of the section it is then tensioned and permanently clamped at each tower.

Phase 3 - Commissioning

2.8.18 The OHL and support towers would then be subject to an inspection and snagging process. This allows the Contractor and SSEN Transmission to check that the works have been built to specification and are fit to energise. The circuits would then be energised from the substations in a phased sequence.

Phase 4 - Reinstatement

2.8.19 Following commissioning of the Proposed Development, it is anticipated that all construction sites would be reinstated. Reinstatement would form part of the contractual obligations for the Principal Contractor and would include the removal of all temporary access tracks, all work sites around the tower locations and the re-vegetation of all construction compounds.

2.9 Construction Employment and Hours of Work

2.9.1 SSEN Transmission takes community responsibilities seriously. The delivery of a major programme of capital investment provides the opportunity to maximise support of local communities.

2.9.2 Employment of construction staff will be the responsibility of the Principal Contractor, but SSEN Transmission encourages the Principal Contractor to make use of suitable labour and resources from areas local to the location of the works.

2.9.3 It is envisaged that there will be a number of separate teams working at the same time at different locations along the Proposed Development route. The resource levels will be dependent on the final construction sequence and will be determined by the Principal Contractor.

2.9.4 Construction working is likely to be during daytime periods only. Working hours are currently anticipated between approximately 07.00 to 19.00 March to September and 07.30 to 17.30 (or within daylight hours) October to February, Monday to Friday. Weekend working would also be proposed with slightly reduced working hours (i.e. works to cease at 16.00). Working hour assumptions would be set out within the EIA Report and confirmed with Argyll and Bute Council as local authority.

2.10 Construction Traffic

2.10.1 The construction will give rise to regular numbers of staff transport movements, with small work crews travelling to work site areas. It is anticipated that the Principal Contractor will identify main compound areas, each with a safe area for parking away from the public highway.

- Vehicle movements will be required as follows:
- to construct new or upgraded access roads;
- to deliver foundation and tower components and conductor materials to site; and
- to deliver and collect materials and construction plant from site compounds and to individual tower locations.

2.10.2 Where practicable, helicopters will be utilised for delivery of construction materials, so as to minimise potential impacts upon soils and the landscape from conventional traffic. The sourcing and implementation of helicopters for this purpose would be defined by the Principal Contractor.

2.10.3 The EIA Report would provide a summary of the total anticipated traffic movements associated with construction of the Proposed Development, broken down by phases.

2.11 Operation and Management of the OHL

2.11.1 OHLs require very little maintenance. Regular inspections are undertaken to identify any unacceptable deterioration of components, so that they can be replaced. From time to time, inclement weather, storms, or lightning can cause damage to either the insulators or the conductors. If conductors are damaged, short sections may require replacement.

2.11.2 In addition to the removal of vegetation to facilitate construction, it may be necessary to manage all vegetation within the vicinity of the OHL throughout operation, to maintain required safety clearance distances. Vegetation clearance required will be dependent on the height of the vegetation adjacent to the OHL and the surrounding topography.

3. EIA APPROACH AND METHODOLOGY

3.1 Introduction

3.1.1 The EIA Report will be prepared in accordance with the EIA Regulations, and the Good Practice Guidance published by the Scottish Government's Energy Consents & Deployment Unit in July 2012[5]. Consideration will also be given to advice contained in Planning Circular 1/2013 strategic development plan areas and 1/2017 Environmental Impact Assessment[6], and other good practice guidance documents where relevant.

3.1.2 The EIA work will comprise a series of specialist environmental studies targeted to assess the potential significant effects which the Proposed Development is likely to have on the environment. Each topic included within the EIA Report will be incorporated as a separate chapter in the main body of the EIA Report; or included as an appendix if the assessment of the subject matter requires to be more detailed.

3.1.3 On receipt and consideration of this Scoping Report, the Energy Consents Unit (ECU) of the Scottish Government, following input by statutory and non-statutory consultees, will issue their Scoping Opinion confirming the scope of the EIA Report. Throughout the EIA Report, where an issue raised in the Scoping Opinion is addressed, this will be clearly referenced in the relevant chapter. A scoping matrix will also be included in the EIA Report which will detail all consultation responses received during the scoping and EIA process, with a reference to where these responses have been addressed in the EIA Report. A schedule of mitigation measures will also be included as an appendix and cross-referenced in the relevant assessment work.

3.2 Identification of Baseline

3.2.1 To identify the scale of likely significant effects as a result of the Proposed Development, it is necessary to establish the existing baseline environmental conditions and their sensitivities.

3.2.2 The baseline scenario will be established through the following methods, where relevant:

- site visits and surveys;
- desk-based studies;
- review of existing information; and,
- consultation with the relevant consultees.

3.3 Assessment of Likely Significant Environmental Effects

3.3.1 The terms used in the assessment of effects are generally defined as follows:

- 'Impact' is specific and defined as the action being taken, for example, cutting down trees.
- 'Effect' is defined as the change resulting from that action, for example, loss of habitat.

3.3.2 The assessment of significance will consider the magnitude of change (from the baseline conditions), the sensitivity of the affected environment / receptors and (in terms of determining residual effects), the extent to which mitigation and enhancement will reduce or reverse adverse effects. In addition, further influences such as those listed below have been factored into the assessment using professional judgement:

- likelihood of occurrence;
- geographical extent;

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[5] Energy Consents Unit (2022) Good Practice Guidance for Applications under Section 36 and 37 of the Electricity Act 1989. Available at: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2022/02/good-practice-guidance-applications-under-sections-36-37-electricity-act-1989/documents/energy-consents-unit-good-practice-guidance-applications-under-section-36-37-electricity-act-1989-february-2022/energy-consents-unit-good-practice-guidance-applications-under-section-36-37-electricity-act-1989-february-2022/govscot%3Adocument/energy-consents-unit-good-practice-guidance-applications-under-section-36-37-electricity-act-1989-february-2022.pdf

[6] Scottish Government (2017) Planning Circular 1/2017: Environmental Impact Assessment regulations. Available online at: Planning Circular 1/2017: Environmental Impact Assessment regulations - gov.scot

- value of the affected resource;
- adherence of the proposals to legislation and planning policy; and
- reversibility and duration of the effect.

3.3.3 Identification of impacts will consider the magnitude (scale) of change from the established baseline conditions, for the construction stage and operational period of the Proposed Development. As the project concerns construction of permanent infrastructure required for the continuing safe supply of electricity to the wider community, with a view to maintain, repair for perpetuity, or upgrade if required, decommissioning of the Proposed Development is not considered applicable and is scoped out of the EIA.

3.3.4 The sensitivity of the receptor / receiving environment to change will be determined using professional judgement, consideration of existing designations (such as Sites of Special Scientific Interest (SSSIs)) and quantifiable data, where possible.

3.3.5 Where no published standards exist, the assessments presented in the technical chapters will describe the professional judgements (assumptions and value systems) that underpin the attribution of significance. For certain technical topics, such as ecology, widely recognised published significance criteria and associated terminology have been applied and these will be presented in the technical chapters and associated appendices where relevant.

3.3.6 The result of the assessment is the determination of whether the likely effect would be significant or not significant, direct, or indirect, adverse, or beneficial and temporary or permanent. Several criteria will be used to determine whether or not the likely environmental effects of the Proposed Development will be deemed 'significant', including:

- international, national, and local standards;
- sensitivity of receiving environment;
- extent and magnitude of the effect; and
- reversibility and duration of the effect.

3.3.7 Each effect will be assessed taking account of the predicted magnitude of change and the sensitivity of the receptor as shown in **Table 3-1** below to determine an overall significance.

Table 3-1: Matrix for Determining the Significance of Effects

		Sensitivity of Receptor / Receiving Environment to Change / Effect			
		High	Medium	Low	Negligible
Magnitude of Change/Effect	High	Major	Major	Moderate	Negligible
	Medium	Major	Moderate	Minor	Negligible
	Low	Moderate	Minor	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

3.3.8 Major and moderate effects are considered to be significant in the context of the EIA Regulations. Minor and negligible effects are not considered significant.

3.3.9 Specific criteria have been adopted for certain technical assessments in accordance with widely recognised EIA guidelines published by professional bodies. Where applicable, these will be referenced in the respective technical chapters.

3.4 Identification of Mitigation Measures

3.4.1 The routeing and alignment selection process described in **Section 1.5** has sought to avoid or minimise likely significant environmental effects of the Proposed Development through careful routeing.

Environmental Impact Assessment

3.4.2 Following the initial assessment, mitigation measures will be recommended to prevent, reduce, or remedy any significant adverse environmental effects identified. Such measures would be implemented during design, construction and / or operation of the Proposed Development. Each technical chapter will detail the measures recommended to mitigate any identified significant adverse effects, and a summary of the recommended mitigation measures will be provided.

3.4.3 Following the implementation of mitigation measures, an assessment of the significance of any residual effects will be undertaken. The findings will be presented in each technical chapter of the EIA Report.

3.5 Consideration of Alternatives

3.5.1 The Proposed Development has been subject to a route selection process, informed by SSEN Transmission's guidance[7] which provides a framework to ensure environmental, technical, and economic considerations are identified and appraised at each stage of the routeing process. This has also included the consideration of alternative technology solutions.

3.5.2 The guidance splits the routeing stage of a project into four principal stages, as follows:

- Stage 0: Routeing Strategy Development;
- Stage 1: Corridor Selection;
- Stage 2: Route Selection; and
- Stage 3: Alignment Selection.

3.5.3 Each stage is an iterative process and involves an increasing level of detail and resolution, bringing cost, technical and environmental considerations together in a way which seeks to achieve the best balance at each stage. The stages that are carried out can vary depending on the type, nature of and size of a project and consultation is carried out at each stage of the process. The approach to routeing and alignment is set out in **Section 1.5.**

3.5.4 A summary of the alternatives considered will be set out within the EIA Report, including the alternative technologies considered during the route and alignment selection process.

3.6 Cumulative Effects

3.6.1 There are two aspects to Cumulative Effects, defined as follows:

- In-combination effects: the combined effect of the Proposed Development together with other reasonably foreseeable developments (taking into consideration effects at the construction and operational phases).
- Effects interactions: the combined or synergistic effects caused by the combination of several effects on a particular receptor (taking into consideration effects at the construction and operational phases), which may collectively cause a more significant effect than individually. A theoretical example is the culmination of disturbance from dust, noise, vibration, artificial light, human presence, and visual intrusion on sensitive fauna (e.g. certain bat species) adjacent to a construction site.

3.6.2 The potential for cumulative effects will be considered in relation to other EIA developments for which an application has been submitted or approved within the study area relevant to each particular issue, or as otherwise confirmed through the Scoping Opinion. The basis for this is that

[7] SSEN Transmission (March 2018), Procedures for Routeing Overhead Lines of 132kV and above (updated in September 2020)

only these developments have the potential to result in significant cumulative effects in combination with those arising from the Proposed Development. The final list of developments to be considered in the cumulative effects assessment will be frozen one month prior to publication and agreed with the local planning authority to allow sufficient time to compile the EIA Report.

3.6.3 Other elements of the wider Tangy IV and Cnoc Buidhe Wind Farm connection which are under different consenting regimes, as discussed in **Section 1.1** will be included in the cumulative assessment.

3.7 Assumptions and Limitations

3.7.1 The key assumptions and limitations applied to the preparation of this EIA Scoping Report are set out below. Assumptions and limitations specific to certain topics are identified in the appropriate technical chapter.

- Baseline conditions have been established from a variety of sources, including historical data, but due to the dynamic nature of certain aspects of the environment, conditions may change during the construction and operation of the Proposed Development. Site surveys and desk-based data collection will be undertaken during the EIA to ensure a comprehensive and timely baseline for assessment;
- Information received by third parties is complete and up to date. Further consultation will be undertaken during the EIA where relevant and appropriate, to verify existing data and ensure collection of relevant additional information;
- The design, construction and completed stages of the Proposed Development will satisfy minimum environmental standards, consistent with contemporary legislation, practice, and knowledge; and
- The existing tower access routes are not fully defined at this stage; therefore, the constraints and study areas presented in this Scoping Report are based upon the OHL Alignment. The confirmed access routes will be included in the EIA and the baseline information updated accordingly to reflect this.

4. PLANNING POLICY

4.1 Introduction

4.1.1 This Chapter provides an overview of the planning policy context for the Proposed Development. A more detailed discussion and evaluation of relevant policies will be included within the Planning Statement that will be provided as a supporting document with the application for consent. An up-to-date list of relevant planning policies will be contained within the EIA Report.

4.2 National Planning Policy

National Planning Framework 4

4.3.1 National Planning Framework (NPF) provides a framework for long-term spatial development in Scotland. The fourth National Policy Framework (NPF4)[8] was adopted by the Scottish Ministers on 13 February 2023, following approval by the Scottish Parliament in January[9]. It sets out how planning and development will help Scotland to achieve a 'net zero, sustainable Scotland by 2045.' It confirms the necessary shift required to achieve net zero-emissions by 2045. It will also 'play a critical role in supporting nature restoration and recovery' and will be followed by a Scottish biodiversity strategy which will set targets for 2030.

4.3.2 The NPF4 confirms that a concerted effort to work together with communities will be required so that the transition to net zero and nature recovery is fair to all. One of the four key actions identified for Scotland's north and west islands and coastal communities is to *Strengthen Resilience and Decarbonise Connectivity* by improving grid connections. This will actively facilitate decarbonised heating and electricity generation and distribution.

4.3.3 Moreover, the NPF4 identifies the need for a significant increase in electricity generation from renewable sources to meet the net zero emissions targets and that the electricity transmission grid will need substantial reinforcement and additional infrastructure to achieve this. Developments that fall within one or more of the following categories will be designated as national development:

- '*Electricity generation, including electricity storage, from renewables of or exceeding 50 megawatts capacity;*
- *New and/or replacement high voltage electricity lines and interconnectors of 132 kv or more;* and
- *New and/or upgraded infrastructure directly supporting high voltage electricity lines and interconnectors including converter stations, switching stations and substations*.'

4.3.4 The Proposed Development therefore continues to be classed as national development under NPF4.

Local Planning Policy

4.3.5 Local Development Plans (LDPs) cover all planning authority areas and provide detailed and site-specific planning policy for an area. The Proposed Development would be considered against the Argyll and Bute Local Development Plan 2 (LDP2) (2024)[10].

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[8] Scottish Government (2023) National Planning Framework 4. Available at: https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf

[9] Scottish Government (2023) National Planning Framework 4 Transforming Planning. Available at: https://www.gov.scot/publications/national-planning-framework-4/

[10] Argyll and Bute Council (2024) Argyll and Bute Local Development Plan 2. Available at: https://www.argyll-bute.gov.uk/sites/default/files/2024-03/Argyll%20and%20Bute%20LDP%202%20February%202024.pdf

4.3.6 The plan provides policies and proposals for delivering high quality, connected places including low carbon environments; a diverse and sustainable economy; high quality environment, including outstanding landscapes, strong cultural heritage, and rich biodiversity; homes for people and sustainable communities.

4.3.7 There are numerous policies within the LDP2 on the protection of the natural and built environments that are relevant in the consideration of the development of electricity infrastructure.

4.3.8 These include:

- Policy 04 Sustainable Development – developers should seek to demonstrate a series of sustainable development principles. These include, avoiding the use of local important good quality agricultural land, conserving the natural and built environment, respecting the landscape character of an area, and avoiding significant adverse impacts on land, air and water environment.
- Policy 05 Design and Placemaking – proposals should endeavour to comply with a series of placemaking criteria which include compatibility with surrounding land uses, respect of site topography and surrounding important landmarks or views, and resource efficiency.
- Policy 09 Sustainable Design – development proposals should demonstrate consideration and where possible, utilisation of renewable sources of energy and sustainable design and construction methods in terms of embodied carbon; conversion, re-use and adaptability.
- Policy 10 Design: All Development – the design of any development must demonstrate an understanding of the proposed site and wider context, incorporate existing and enhancing features, avoid falsification of period details, use appropriate proportions, use materials that are harmonious, consider the embodied energy and durability of proposed materials and incorporate the use of flood resistant and resilient materials and construction methods.
- Policy 15 Supporting the Protection, Conservation and enhancement of our Historic Built Environment – proposals will not be acceptable where they fail to protect, preserve, conserve or enhance the special characteristics and/or cultural significance of the historic built environment and where they fail to avoid any cumulative effect upon the special characteristics and/or cultural significance of designated built environment sites.
- Policy 30 The Sustainable Growth of Renewables – the Council will support renewable energy developments where they are consistent with the principles of sustainable development, and it can be adequately demonstrated there would be no unacceptable environmental effects.
- Policy 77 Forestry, Woodland, and Trees – care should be taken to ensure that ancient semi-natural woodland, native/long established woods, hedgerows, and individual trees of high nature conservation value are safeguarded, conserved and, where possible, enhanced.
- Policy 79 Protection of Soil and Peat Resources – the Council will only support development where appropriate measures are taken to maintain soil resources and functions to an extent that is considered relevant and proportionate to the scale of the development. Development that would potentially have significant adverse effect on soil or peat will not be supported unless it is demonstrated that adverse effects are outweighed by social, environmental, or economic benefits and a soil or peatland management plan is submitted.

5. LANDSCAPE AND VISUAL AMENITY

5.1 Introduction

5.1.1 The landscape and visual impact assessment (LVIA) will identify, predict, and assess the likely landscape and visual amenity effects of the Proposed Development. Landscape and visual assessments are separate although linked processes, describing closely related but distinct sets of effects:

- landscape assessment considers the effects of change and development on landscape, considered as a resource; and
- visual assessment is concerned with the views that are available to people who may be affected by the Proposed Development, and their perception and responses to changes in these views.

5.1.2 The assessment will establish the extent of the area that may be affected, the sensitivity of the affected landscape elements and visual receptors to the Proposed Development and then will quantify the magnitude of change that they would experience. The outcome is a professional judgement of the significance of the effect that may be caused by the development to each relevant resource or receptor.

5.2 Baseline Conditions

Study Area

5.2.1 Perceptibility studies[11] have shown that steel lattice tower overhead lines can be noticeably visible from up to 10 km away. The starting point for the study area will therefore be the OHL Alignment buffered by 10 km in all directions.

5.2.2 The Study Area will be based on the zone of theoretical visibility (ZTV). A preliminary ZTV is provided in **Figure 5.1**. As visual effects can, by definition, only occur where the Proposed Development may be visible, the Study Area for the visual assessment will be the area covered by the ZTV, which extends to 10 km from each indicative tower position.

5.2.3 The Study Area for the landscape assessment will similarly be based on the ZTV coverage. It will include all areas of distinct landscape character as defined by the Nature Scot national landscape character assessment[12] with more than a marginal proportion covered by the ZTV. The assessment will consider the effects on the defined areas of character type as a whole, but also the effects more locally – the area within approximately 1 km of the OHL.

Context

5.2.4 The area traversed by, and potentially affected by, the Proposed Development is the centre and eastern edge of the Kintyre Peninsula, for the most part rolling moorland plateau with extensive areas of conifer plantation and large windfarms, cut into by deep settled and actively farmed valleys leading to a settled coastal fringe.

5.2.5 The core of the area is large-scale mosaic of open moorland and forestry, rolling terrain mostly between 200 and 400 m AOD, with summits, occasionally craggy, to 450 m. To the west and south, the central plateau is cut into by fluvial valleys, generally broad and shallow angled in their lower reaches, becoming steeper, narrower and more vee-shaped in their upper reaches. To the east, it is cut into by distinctively u-shaped glacial valleys.

5.2.6 Extensive conifer plantations dominate large parts of the area, with remnants of native woodland mainly on areas of steeper ground, whilst wind farms are becoming a defining characteristic of the centre of the peninsula.

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[11] Mark Turnbull Landscape Architects (2015) Perceptibility of Overhead Steel Lattice Transmission Towers

[12] NatureScot (2023) Scottish Landscape Character Types Map and Descriptions. Available at: https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions

5.2.7 Settlement is confined to narrow strips along the valley bottoms and along the coasts.

Landscape Baseline - Designated and Protected Landscapes

National Parks

5.2.8 There are no National Parks within 10 km of the Study Area.

National Scenic Areas

5.2.9 National Scenic Areas (NSA) are defined as areas of outstanding scenic value in a national context. The nearest NSA is the North Arran NSA. The Isle of Arran lies approximately 7.5 km east of the Proposed Development at its closest point, and the NSA also encompasses the coastal waters (**Figure 5.2**).

Wild Land

5.2.10 Wild Land Areas (WLAs) are the most extensive areas of high wildness, defined and mapped by NatureScot. The nearest Wild Land Area (WLA) is the North Arran WLA, which lies just under 10 km east of the Proposed Development at its closest point.

Inventory of Gardens and Designed Landscapes

5.2.11 The Inventory of Gardens and Designed Landscapes (GDLs) is maintained by Historic Environment Scotland, so GDLs are considered cultural heritage assets and are appraised as such. However, there are no Inventory GDLs within the Study Area.

Argyll and Bute Local Landscape Areas

5.2.12 Local Authorities may designate landscapes considered to be of regional importance for their scenic qualities through a Local Development Plan. Argyll and Bute Council have designated regionally important landscapes as Local Landscape Areas (LLA)[13]

5.2.13 Both the East Kintyre (Coast) and West Kintyre (Coast) LLAs fall within the Study Area on the east and west coast, respectively. The area of the East Kintyre (Coast) LLA covered by the ZTV is approximately 1.5 km from the Proposed Development at its closest point. There is a very small area of the West Kintyre (Coast) LLA overlapped at some 8 km from the part of the Proposed Development that would be visible.

Landscape Character

5.2.14 The entire Study Area falls within the broad area of landscape defined by Scottish Natural Heritage (now NatureScot) in their Landscapes of Scotland map[14] as Kintyre landscape. This is described as *"A long central moorland spine is flanked by a mix of forestry plantations and small areas of open moorland, that fall gently toward the coast, with intimate glens cutting into the spine. Rocky stretches and sandy beaches provide a varied coastline, hugged by the main roads and giving dramatic views across the sounds to the islands of Arran, Gigha and Islay*."

5.2.15 The Proposed Development would traverse two Landscape Character Types (LCTs) as defined by NatureScot:

- LCT 39 – Plateau Moor and Forest; and
- LCT 36 – Coastal Glens.

5.2.16 There would also be some visibility of parts of the Proposed Development from a small area of a third:

- LCT 53 – Rocky Coastland.

[13] Nature Scot (2023) Local Landscape Areas. Available at: https://www.nature.scot/professional-advice/protected-areas-and-species/protected-areas/local-designations/local-landscape-areas

[14] Scottish Natural Heritage (2012) Landscapes of Scotland Map. available at: https://www.nature.scot/landscapes-scotland-map

LCT 39 – Plateau Moor and Forest

5.2.17 This unit of this LCT traversed by the Proposed Development covers most of the area between Kennacraig and Campbelltown, close to the coast on the west and in parts all the way to the coast on the east, an area in the order of 400 km. Key characteristics of this LCT as described by NatureScot and relevant to the Study Area are:

- Upland plateau with rounded ridges, craggy outcrops, and an irregular slope profile;
- Upland lochs;
- Winding narrow glens and wider glens with rivers;
- Extensive, large-scale mosaic of open moorland and forestry;
- No field boundaries;
- Very few buildings; occasional isolated dwellings on edges of moor;
- Small enclosed pastures and occasional farms and houses on lower hill slopes at the transition with adjacent character types and within the narrow glens which dissect these uplands; and
- Little access: roads follow shorelines.

LCT 36 – Coastal Glens

5.2.18 This unit of this LCT traversed by the Proposed Development covers the valley of the Carradale Water, from Auchenbreck to the coast. Key characteristics of this LCT as described by NatureScot and relevant to the Study Area are:

- Narrow glens, with a small, domestic scale, steeply enclosed by forested ridges;
- Meandering rivers are a focus on the floor of the glen;
- Diverse woodland including ornamental species; and
- Sand dunes and sheltered sandy bays at the coast.

LCT 53 – Rocky Coastland

5.2.19 The unit of this LCT is not traversed but potentially affected by the Proposed Development and covers a narrow band along the west coast and lower reaches of the Barr Glen. Key characteristics of this LCT as described by NatureScot and relevant to the Study Area are:

- Uneven, hummocky landform with rocky outcrops and narrow glens;
- Raised beaches, cliffs, and distinctive rounded knolls;
- Rocky, indented coastline with small sandy bays;
- Relatively small-scale landscape with a diverse mix of colours and textures;
- Steep wooded cliffs and hummocky, gorse-covered slopes;
- Relatively well-settled, with scattered isolated farm buildings and small villages in sheltered sites; and
- Complex transitional landscape.

Visual Baseline

5.2.20 The ZTV coverage, and thus the visual Study Area mainly comprises areas of the forested moorland plateau which forms the spine of the Kintyre peninsula. To the west, it extends to include the lower reaches of the Barr Glen, including the settlement at Glenbarr. To the east, it includes most of the valley of Carradale as well as Bridgend and Waterfoot, and the hill between Carradale and Kilbrannan Sound. It also includes a small area of Arran between Pirnmill and Dougarie Point.

5.2.21 The main road through the area is the A83 up the west coast. The B842 connects the settlements along the east coast and is a recognised cycle touring route (originally National Cycle Network although now declassified).

5.2.22 The visual receptors to be included in the EIAR are provisionally proposed to be:

Residential receptors

- Villages and hamlets:

- Glenbarr; and
- Bridgend.

- Scattered residential properties:
  - in Carradale;
  - in Barr Glen; and
  - north of Grogport.

Recreational and tourist receptors

- The Kintyre Way;
- Glenbarr Abbey;
- Campbelltown to Tarbert cycle route (recently delisted National Cycle Network Route 78);
- Locally promoted trails around Carradale;
- Lussa Loch; and
- Core paths.

Transport Receptors

- Users of the B842 in Carradale;
- Users of the Barr Glen road; and
- Users of the A83 near Glenbarr.

5.2.23 The ZTV coverage includes part of Arran, approximately 5 km of the coast path and coast road and a number of scattered residential properties between Dougarie Point and Pirnmill, at a distance of approximately 7.5 to 10 km from the Proposed Development. Significant effects on receptors in this area are considered unlikely. However, this will be investigated in detail in the early stages of the assessment process.

Cumulative Assessment

5.2.24 The cumulative visual assessment will chiefly consider schemes within the 10 km study radius but will also identify any schemes within a 15 km radius that could have a significant cumulative effect when combined with the Proposed Development. Given the more local nature of the potential landscape character effects, the cumulative landscape assessment will consider any such schemes within a 2 km radius of the Proposed Development.

5.3 Issues Scoped Out

Landscape

5.3.1 The effect on the National Scenic Areas and Wild Land Areas on Arran will not be considered. Whilst the Proposed Development may be perceptible from parts of these areas, distance, and the separation of the Isle from the Kintyre peninsula combine to mean that the risk of the Proposed Development affecting their special qualities is very low. The effects on the landscape character of Arran are scoped out for the same reasons: distance and separation.

5.3.2 The ZTV overlaps with a very small area of the West Kintyre (Coast) LLA, from where towers may be visible at a distance of approximately 8 km. The risk of the Proposed Development affecting its special qualities is extremely low and this designation will therefore not be considered.

5.3.3 The parts of the Proposed Development that may be perceived from the Rocky Coastland LCT are between 4 and 7 km at the nearest point, and the ZTV coverage of this LCT is limited. The potential for a significant landscape effect on this LCT is considered sufficiently low that it can be scoped out from further consideration.

Visual

As for landscape effects, the potential for significant visual effects on receptors on Arran (8 km from the nearest part of the proposed development) is considered to be sufficiently low that they can be scoped out from further consideration.

5.4 Potential Significant Effects

5.4.1 The Proposed Development would introduce a steel lattice tower overhead line - a man-made development of an industrial character - into a landscape currently little affected by transmission development, although parts are substantially affected by wind farm developments.

5.4.2 Forestry clearance (where needed) for the operational corridor could change the pattern of the landscape in ways that may be significant.

5.4.3 Construction works would introduce new tracks, some of which may become permanent, which may be intrusive or change the character of the landscape.

Landscape

5.4.4 The Proposed Development would introduce a noticeable man-made element in the landscape. Where the Proposed Development passes through forestry, a new operational corridor swathe would be created, which may affect the pattern of the landscape. Alternatively, the forestry block may be clear-felled and replanted to accommodate the proposed OHL and operational corridor.

5.4.5 The effect of any development on the landscape depends on the scale at which the landscape character is considered. The Proposed Development is unlikely to significantly affect the character of the landscape when considered at the scale of the NatureScot landscape character types (although this will be tested by the assessment). It is likely, however, to affect the character of the landscape when considered locally – in the order of a kilometre from the new line, where the changes would be most clearly perceived. The assessment will therefore focus on the more local landscape effects.

5.4.6 In the vicinity of the windfarms, the landscape may be perceived as partly industrialised such that the Proposed Development has a limited effect. On the higher ground away from the windfarms, the Proposed Development may be perceived as reducing the naturalness of the landscape. In Carradale and Rhonadale, the Proposed Development may be perceived as intrusive and out of character, despite the presence of an existing OHL.

5.4.7 During construction, construction activities would have the potential to be intrusive in the landscape locally, giving rise to temporary significant landscape effects.

Visual

5.4.8 The core of the area affected by the Proposed Development is an unpopulated rolling plateau with limited recreational use. Where the line crosses high ground there are open areas with long views, whilst in Carradale views of the line are likely to be constrained or focussed. There is potential for visual effects up to 10 km from the Proposed Development, although significant effects are more likely within two to three kilometres.

5.4.9 The Proposed Development passes close to a small number of residential receptors in Carradale with the potential for significant effects. It will be more distantly visible from residential receptors in the Barr Glen where significant effects are possible although less likely.

5.4.10 The Proposed Development will be clearly visible to cycle tourists on the B842 (declassified Sustrans National Cycle Route 78) in Carradale, and from users of the waymarked circular walk from Carradale village, from the top of Cnoc nan Gabhar (Deer Hill). There is anticipated to be visibility from short sections of the Kintyre Way and from parts of Lussa Loch. There are no ‘destination summits’ in the Study Area.

5.4.11 There is potential for significant effects on users of the small section of the road network: users (including tourists) on the B842 in Carradale.

5.4.12 During construction, the active change and movement of construction vehicles may be more noticeable in some situations than the finished development, giving rise to temporary significant visual effects.

Viewpoints and visualisations

5.4.13 The visual assessment will be illustrated with photographs from a selection of key and representative viewpoints, to be agreed with the ECU and Argyll and Bute Council. The preliminary viewpoints are listed below and shown on **Figure 5.1.** Photomontages will be produced from a proportion of these (noted with [PM] in the list below).

5.4.14 The assessment, however, will consider the effects on visual amenity across the whole of the area affected, in addition to the effects on the agreed viewpoints.

5.4.15 The viewpoints to be included will provide a balance of views from different directions and different distances as well as to pick out key viewpoints. The full list of viewpoints will be agreed early in the LVIA process but is anticipated to comprise:

- VP-A The B842 in the vicinity of Moineruadh (view up the glen towards Rhonadale) [PM];
- VP-B Cnoc nan Gabhar Carradale Circular Walk [PM];
- VP-C The B842 in the vicinity of Auchnasavil (view down the glen) [PM];
- VP-D Brackley (upper Carradale);
- VP-E Sunadale;
- VP-F Barr Glen, approaching Arnicle;
- VP-G Glenbarr; and
- VP-H Lussa Loch.

Suggestions are invited for additional viewpoints, or for changes to the viewpoints proposed.

5.5 Mitigation

5.5.1 The key method of landscape and visual mitigation for an OHL is to avoid adverse effects arising in the first place. Potential landscape and visual amenity impact therefore formed a key input into the routeing and alignment selection decision-making processes, including consideration of Rules 2 to 5 of the Holford Rules[15] (Rules 1, 6 & 7 not being relevant to the area of the Proposed Development).

5.5.2 Through the detailed assessment, the LVIA will consider any further refinements to the alignment and micro-siting of the Proposed Development to limit potentially significant adverse effects. This may include restricting the Limits of Deviation at the eastern end of the OHL close to Rhonadale.

5.5.3 Where significant adverse effects are identified on individual receptors, local mitigation measures may be proposed if both feasible and appropriate.

5.5.4 Vegetation clearance will be kept to that essential for the placement of the towers and OHL, which require a swathe of permanent clearance (width dependent on tower size and OHL voltage). Given that most vegetation clearance will be of areas of commercial forestry, the LVIA does not include a landscape restoration plan.

5.6 Proposed Scope and Assessment Methodology

5.6.1 The landscape and visual assessment will be undertaken in accordance with the Guidelines for Landscape and Visual Impact Assessment (3rd edition, 2013) (GLVIA3)[16]. **Appendix 5.1** gives details of the LVIA assessment methodology.

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[15] Scottish & Southern Electricity Networks. The Scottish Hydro-Electric Transmission Limited (SHETL) (2004), The Holford Rules: Guidelines for the Routeing of New High Voltage Overhead Transmission Lines with NGC 1992 And SHETL 2003 Notes.

[16] Landscape Institute and Institute of Environmental Management and Assessment, Guidelines for Landscape and Visual Impact Assessment (3rd edition, 2013).

5.6.2 Photographs (and photomontages) will be presented in accordance with Landscape Institute guidance[17]. Subject to consultation and agreement, this would comprise a panoramic view made up of one or more panoramas, together with a single frame 'standard lens' image focussed on either the nearest part of the line or the most sensitive part of the view.

Assessment Approach and Process

5.6.3 In accordance with GLVIA3, the level of effect and whether it is significant or not will be assessed based on the sensitivity of the affected receptor and the magnitude of change caused by the Proposed Development. The sensitivity and magnitude are then considered together in accordance with **Appendix 5.1 LVIA methodology**[16] to determine the level of effect and whether or not it is significant. Effects can be either beneficial or adverse and, in some cases, neutral (neither beneficial nor adverse), although the introduction of a new OHL is normally considered an adverse effect.

5.6.4 In all cases the criteria set out in the methodology are used as guidelines, not hard and fast rules. The gradations in significance levels are shown as discrete steps but in reality, represent a continuum, and conclusions about the sensitivity of receptors, the magnitude of impacts and the significance of effects are always based on professional judgement.

5.7 Summary

5.7.1 The Proposed Development is considered to have the potential for effects on visual amenity up to 10 km from the OHL, although significant effects are more likely no more than two to three kilometres from the OHL.

5.7.2 It is considered to have the potential for locally significant effects on the landscape, but unlikely to have a significant effect on any unit of LCT as defined by the NatureScot landscape character assessment. This will be tested through the assessment.

5.7.3 An initial study area limit of 10 km from the OHL Alignment is proposed for the visual assessment, based on perceptibility studies for overhead lines. The landscape assessment will consider the entirety of the units of NatureScot LCT traversed by the Proposed Development and will also consider the effects on a more local scale (in the order of a kilometre from the final alignment). Study area limits will be tested in the early stages of the LVIA and may be amended for the EIA Report to ensure a focus on potentially significant effects.

[17] Landscape Institute Technical guidance note TGN 06/19 Visual Representation of development proposals.

6. ECOLOGY AND NATURE CONSERVATION

6.1 Introduction

6.1.1 This Chapter of the Scoping Report provides a brief overview of the terrestrial ecological baseline conditions, the potential effects associated with the Proposed Development, and the proposed scope and assessment methodology to be considered in the EIA Report.

6.2 Baseline Conditions

6.2.1 Information on baseline ecological conditions and sites of importance for nature conservation has been gathered from the following sources:

- Identification of designated sites and other constraints from GIS datasets available from the NatureScot SiteLink[18];
- UK Habitat Classification (UKHab) surveys undertaken as part of the alignment walkover in September 2022[19]; and
- Protected species suitability surveys undertaken concurrently with the above UKHab surveys.

Designated Sites

6.2.2 No non-avian statutory International or European designated sites of nature conservation importance (i.e. Special Areas of Conservation (SACs)) are located within 10 km of the Proposed Development.

6.2.3 No non-avian statutory (biological) nationally designated sites of nature conservation importance (i.e. SSSIs) are located within 2 km of the Proposed Development.

6.2.4 The following non-statutory designated sites were identified within 1 km of the Proposed Development (shown in **Figure 6.1**):

- Carradale (inland) Local Nature Conservation Site (LNCS) – limited publicly available information is available on the location's qualifying features. This LNCS overlaps with the most northern section of the Proposed Development;
- Woodland listed on the Ancient Woodland Inventory (AWI)[20] – three parcels of category 2a ancient woodland of semi-natural origin. The closest parcel is approximately 50 m north of the Proposed Development; and
- Class 1, 2 and 3 peatlands listed on the Carbon and Peatland 2016 map[21]. Class 1 and 2 peatlands are within the Proposed Development; Class 3 peatlands are located approximately 265 m east of the Proposed Development.

Habitats

6.2.5 The UKHab survey (covering the OHL Alignment, along with a 50 m buffer either side) recorded large areas of coniferous plantation woodland (w2c) within the southern region.

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[18] NatureScot (nd). SiteLink. Available at: https://sitelink.nature.scot/home

[19] SSEN (2024) LT337 Tangy IV Wind Farm and LT404 Cnoc Buidhe Wind Farm OHL Connection, Environmental Alignment Selection Study. SSEN Transmission.

[20] The Ancient Woodland Inventory (AWI) in Scotland lists areas which are currently wooded and have been continuously wooded since at least 1750.

[21] Carbon and peatland 2016 map | Scotland's soils (environment.gov.scot). The Carbon and Peatland 2016 map is a guide to screen where areas of peatland are likely to occur but is not regarded as definitive. Class 1 and 2 are solely, or are dominated by, land with peat soil and peatland priority habitats. Class 3 is peaty soil with some/mostly peat forming vegetation. Class 4 is unlikely to be associated with peatland. Class 5 is peat soil >50cm but currently without peatland habitats.

6.2.6 The central region of the UKHab survey area is comprised largely of bog (f1), including stretches of degraded blanket bog (f1a6) and many areas of purple moor grass with rush pastures (H6410), a UKBAP Priority Habitat.

6.2.7 The northern region is a mosaic habitat largely consisting of coniferous woodland (w2c) plantation, dense scrub (h3), temporary grass and clover leys (c1b), modified grassland (g4), suburban/ mosaic of development/ natural surface (u1), and artificial unvegetated unsealed surface (u1c). There are two large areas of blanket bog (H7130), an Annex 1 habitat[22].

6.2.8 There is also potential that habitats crossed by the Proposed Development, particularly wetland habitats, may support Ground Water Dependant Terrestrial Ecosystems (GWDTE)[23].

6.2.9 There is no habitat survey data available for one area within the central region of the Proposed Development due to a change in design meaning it was out with the survey area in 2022 (see **Figure 6.2**). This will not cause limitations to the scope, as the area will be surveyed during the proposed UKHab survey.

Protected Species

6.2.10 Based on the available protected species data and the baseline habitats recorded along the OHL Alignment, the following legally protected or notable (e.g. Scottish Biodiversity List or local biodiversity priority) species of conservation concern are considered:

- amphibians (including great crested newts (GCN) *Triturus cristatus*);
- reptiles;
- otter *Lutra lutra*;
- water vole *Arvicola amphibius*;
- pine marten *Martes martes*;
- red squirrel *Sciurus vulgaris*;
- badger *Meles meles*;
- bats;
- fish (salmonids);
- freshwater pearl mussel (FWPM) *Margaritifera margaritifera*;

6.2.11 Additionally, **Table 6.1** describes the protected species data recorded during field surveys up to 250 m of the Proposed Development in 2022. The data is also shown in **Figure 6.2**.

Table 6.1 – Protected Species Data Recorded in 2022.

Target Note (TN)	Species	Description
TN1	Water vole	Slow moving burn with dense vegetation providing suitable water vole habitat. No water vole field signs recorded.
TN2	Bat	Stone building with no roof or intact chimney. Classified as providing low suitability to support roosting bats following Bat Conservation Trust (BCT) guidance[24].

[22] The Habitats Directive (2013). Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A01992L0043-20130701

[23] Scottish Environment Protection Agency (2024). Guidance on Assessing the Impacts of Developments on Groundwater Dependant Terrestrial Ecosystems.

[24] Collins, J. (ed) (2023). Bat Surveys for Professional Ecologist: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.

Sensitive Receptors

6.2.12 Based on the available baseline data, important ecological features within the Proposed Development's potential ecological Zone of Influence (ZoI)[25] are anticipated to be as follows:

- Carradale (inland) LNCS;
- Protected and notable species – amphibians, reptiles, otter, water vole, badger, pine marten, red squirrel, bats, fish, FWPM, aquatic and terrestrial invertebrates and notable plant species;
- Habitats – wetland (including bog), heathland, running and standing water; and
- GWDTEs.

6.3 Issues to be Scoped Out

6.3.1 No statutory designated sites of conservation importance (non-avian) have been identified within the ZoI of the Proposed Development and therefore have been scoped out.

6.3.2 Temporary or permanent direct or indirect loss of, or damage woodland listed on the AWI has been scoped out, due to being located 50 m north the Proposed Development. Therefore, no direct or indirect negative impacts to the AWI woodland parcels, or their soils, is anticipated.

6.3.3 The remaining UKHab habitat types recorded during the 2022 survey that have not been identified as sensitive receptors (including, but not limited to; modified grassland, coniferous plantations and dense scrub) have been scoped out due to their lower ecological value and predominance in the local region.

6.3.4 European beaver *Fibre Castor* has been scoped out as the Proposed Development is located out with their current range[26] and there is an absence of known nearby records[27].

6.3.5 All operational activities, e.g. maintenance/repair activities, have been scoped out of further assessment. Maintenance/repair activities are likely to be infrequent, localised and unplanned (e.g. to repair defects) and therefore unlikely to result in beyond baseline levels of disturbance on habitats and protected species.

6.3.6 At present ecological surveys described in this EIA Scoping Chapter are provisional. As surveys and consultation progress, the scope of survey and assessment will be reviewed to ensure a proportionate assessment.

6.4 Potential Significant Effects

6.4.1 Potential significant effects of the Proposed Development on important ecological features during construction are anticipated to be as follows:

- temporary or permanent direct or indirect loss of, or damage to Carradale (inland) LNCS;
- killing, injury and disturbance of protected and notable species during construction and advance site clearance activities;
- disturbance or destruction of protected species resting sites and places of shelter;
- loss or degradation of priority habitats, including GWTDEs, peatland and Annex I habitats (due to the limited ability to micro-site the OHL Alignment around these habitats);
- loss, degradation or disturbance of habitats of importance to protected and notable species, including foraging and commuting areas; and

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[25] The range over which effects could be realised on ecological interests, depending on factors such as effect pathways (e.g. hydrological connectivity), the sensitivity of species/habitats (e.g. typical disturbance distances), and their ecology (e.g. territory size, supporting habitat). The EZoI would be specific to each species/habitat.

[26] Mammal Society (nd) Eurasian beaver. Available at: https://mammal.org.uk/british-mammals/eurasian-beaver

[27] NatureScot (2024). Beaver Management Report - January 2023 to April 2024. Available at: https://www.nature.scot/doc/beaver-management-report-january-2023-april-2024

- temporary pollution incidents indirectly affecting habitats with potential for effect on protected and notable species.

6.5 Mitigation

6.5.1 The routeing and alignment selection process for the Proposed Development has enabled consideration of potentially significant impacts and their effects on habitats and species, and for such effects to be minimised where practicable through this process. This will continue through the EIA process; whereby further survey data will help inform the siting of infrastructure and construction access, to further minimise effects on habitats and species where practicable.

6.5.2 In addition, the Applicant has established best practice construction techniques and procedures that have been agreed with statutory consultees, including Scottish Environment Protection Agency (SEPA) and NatureScot. These are set out within the Applicant's GEMPs and SPPs. The Proposed Development will be constructed in accordance with these plans.

6.5.3 A contractual management requirement of the successful Principal Contractor would be the development and implementation of a comprehensive and site-specific, robust CEMP. This document will detail how the successful Principal Contractor would manage the works in accordance with all commitments and mitigation detailed in the EIA Report, the Applicant's GEMPs, SPPs, statutory consents and authorisations, and industry best practise and guidance, including Scottish Environment Protection Agency's (SEPA) Pollution Prevention Advice and Guidance[28] and those outlined by the Construction Industry Research and Information Association guidance[29].

6.6 Proposed Scope and Assessment Methodology

6.6.1 A detailed desk study and consultation exercise will be undertaken to gather existing publicly available information on protected and notable species within 2 km of the Proposed Development. This information, together with the specific surveys described below, will inform the ecological baseline conditions associated with the Proposed Development. NatureScot, SEPA and Argyll and Bute Council will be consulted with as part of this exercise.

6.6.2 Additionally, records will be obtained from a search of the National Biodiversity Gateway Atlas[30] and a review of ecological information contained in planning applications of relevance to the Proposed Development.

6.6.3 The following surveys are scheduled to commence in early 2025:

- Update and extension of the previous UKHab survey[31], in line with the relevant Chartered Institute of Ecology and Environmental Management (CIEEM) guidance[32]; also including habitat condition assessment[33] to inform the BNG assessment. A peatland condition assessment will also be carried out following advice from NatureScot[34]. Survey coverage will comprise the OHL operational corridor, LOD, access tracks and a surrounding 250 m survey area (see **Figure 6.2**).

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[28] NetRegs (nd). Guidance for Pollution Prevention (GPP) Documents. Available: https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/

[29] CIRIA (2015) Environmental good practice on site (Fourth edition) (C741) Charles, P., Edwards, P (eds). CIRIA, London.

[30] NBN Atlas (nd). NBN Atlas SiteLink. Available at: https://nbnatlas.org/

[31] UKHab Ltd (2023). UK Habitat Classification Version 2.0. Available at https://www.ukhab.org

[32] Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. Second Edition.

[33] Natural England (2022). Biodiversity Metric 3.1, Auditing and accounting for biodiversity, User Guide. Available at: https://publications.naturalengland.org.uk/file/4711800952848384

[34] NatureScot (2023). Advising on peatland, carbon-rich soils and priority peatland habitats in development management. Available at: https://www.nature.scot/doc/advising-peatland-carbon-rich-soils-and-priority-peatland-habitats-development-management

- National Vegetation Classification surveys following standard guidance[35]. Survey coverage will comprise the OHL operational corridor, LOD, access tracks and a surrounding buffer of 250 m. The survey will focus on sensitive/protected habitats (e.g. Annex 1 and Scottish Biodiversity List habitats) and those indicative of potential GWDTE[36].
- Protected species surveys will follow best practice guidance and cover the OHL operational corridor, LOD, access tracks and surrounding species specific buffers as set out in Error! Reference source not found. below.

Table 6.2 - Targeted Protected Species Surveys

Species and Guidance	Survey Buffer	Guidance
Bats	30 m	In accordance with prevailing best practice[37] and NatureScot[38] guidance.
Red Squirrel	50 m	Following survey guidance for initial non-intrusive visual surveys[39] and NatureScot standing advice[40]
Pine Marten	250 m	Following survey guidance[41,42]
Otter	200 m up and downstream	Following standard methodology described in Monitoring the Otter[43,44]
Water vole	50 m up-and downstream	Following the methodology described in Dean et al.,[45] and NatureScot guidance[46].

[35] Rodwell, J.S. (2006) NVC Users' Handbook, JNCC, Peterborough.

[36] Scottish environment Protection Agency (SEPA) (2017). Land Use Planning System SEPA Guidance Note 31. Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems. Available at: https://www.sepa.org.uk/media/144266/lups-gu31-guidance-on-assessing-the-impacts-of-development-proposals-on-groundwater-abstractions.pdf

[37] Collins, J. (ed) (2023). Bat Surveys for Professional Ecologist: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.

[38] NatureScot (online). Standing advice for planning consultations – bats. Available at: https://www.nature.scot/doc/standing-advice-planning-consultations-bats

[39] Cresswell, W.J., Birks, J.D.S., Dean, M., Pacheco, M., Trewhella, W.J., Wells, D. & Wray, S. (2012). UK BAP Mammals: Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation. Southampton, UK: The Mammal Society

[40] NatureScot (nd). Standing advice for planning consultations – Red squirrels. Available at: https://www.nature.scot/doc/standing-advice-planning-consultations-red-squirrels

[41] Cresswell, W.J., Birks, J.D.S., Dean, M., Pacheco, M., Trewhella, W.J., Wells, D. and Wray, S. (2012). UK BAP Mammals: Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation. The Mammal Society, Southampton.

[42] NatureScot (nd). Standing advice for planning consultations – Pine martens. Available at: https://www.nature.scot/doc/standing-advice-planning-consultations-pine martens

[43] Chanin, P. (2003). Monitoring the Otter *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No. 10, English Nature, Peterborough.

[44] NatureScot (2020) Standing advice for planning consultation – Otters. Available at: https://www.nature.scot/doc/standing-advice-planning-consultations-otters

[45] Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016). The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. The Mammal Society, London.

[46] NatureScot (2022) Standing advice for planning consultations – Water Voles. Available at: https://www.nature.scot/doc/standing-advice-planning-consultations-water-voles

Species and Guidance	Survey Buffer	Guidance
Badger	100 m	Following the standard methodology outlined by Scottish Badgers[47] and with reference to NatureScot standing advice[48].
Amphibians (GCN)	500 m	Undertaken following Amphibian and Reptile Groups current best practice methods[49]
Fish and FWPM	200 m up and downstream	Following Scottish Fisheries Coordination Centre (SFCC) habitat survey methodology[50].

6.6.4 The ecological impact assessment (EcIA) will be completed in accordance with the CIEEM EcIA Guidance[51]. The assessment would use the ecological baseline information collected during the above surveys to identify the important ecological features (IEF) that could be affected by the construction and operation of the Proposed Development. Each IEF would be assigned a geographic level of importance (e.g. international, national, regional, local) in the context of the Proposed Development based on its conservation status, population/assemblage trends and other relevant criteria (including size, naturalness, rarity, and diversity). Impacts associated with the Proposed Development would then be assessed to determine whether they may result in significant effects on each IEF (adverse or beneficial), based on factors such as their scale (wide ranging or localised), permanence (permanent or temporary) and duration (short, medium, or long term).

6.6.5 Where appropriate, mitigation measures will be recommended within the EcIA to avoid or minimise any adverse effects. Measures to enhance the local ecology will also be incorporated within the assessment. An assessment of residual effects will then be undertaken and reported within the EIA Report with cumulative impacts also considered.

6.6.6 To complement the EcIA, a BNG assessment would be undertaken, to achieve the Applicant's target of a 10% BNG. Baseline conditions would be derived from the habitat surveys described. The BNG assessment, together with the conclusions of the EcIA, would inform compensation measures and/or a HMP (if required). Given the nature of the works and the need to maintain clearance under the new OHL so that it remains free of taller vegetation such as trees, it is possible that offsite solutions for BNG may be required to achieve gains for any woodland and upland habitats in particular.

6.7 Summary

6.7.1 Desk study results and consultations will be interpreted in combination with targeted field surveys of sensitive areas, and it is anticipated that this approach will provide sufficient current information to inform a robust EcIA. Any actions likely to have a significant effect on important features, such as vegetation clearance, earthworks, creation of new access tracks and permanent foundations on bog and wetland habitats or accidental pollution of surface watercourses, will be evaluated within the EIA Report. The EIA Report will address all potential impacts during construction and will incorporate essential mitigation through design, to reduce effects which could result in residual impacts, not considered significant in EIA terms.

[47] Scottish Badgers (2018). Surveying for Badgers: Good Practice Guidelines. Version 1. Available at: https://www.scottishbadgers.org.uk/userfiles/file/planning_guidelines/Surveying-for-Badgers-Good-Practice-Guidelines_V1.pdf

[48] NatureScot (nd). Standing advice for planning consultations – Badgers. Available at: https://www.nature.scot/doc/standing-advice-planning-consultations-badgers

[49] Amphibian and Reptile Groups of the United Kingdom (2010) ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index. ARG UK, UK

[50] Scottish Fisheries Coordination Centre (2007). Habitat Surveys Training Course Material.

[51] CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3. Chartered Institute of Ecology and Environmental Management, Winchester

6.7.2 Operational impacts are anticipated to be limited, infrequent and unplanned, with minimal loss or degradation of upland habitat during operational maintenance. These impacts have been scoped out of further assessment.

7. ORNITHOLOGY

7.1 Introduction

7.1.1 This Chapter of the Scoping Report provides a brief overview of the field survey methodologies, the ornithology baseline conditions, the potential effects associated with construction and operation of the Proposed Development, and the proposed scope and assessment methodology to be considered in the EIA Report.

7.2 Baseline Conditions

7.2.1 As part of the previous Alignment Options Appraisal[52], an ornithological desk study was undertaken for legally protected and notable species of conservation concern (referred to hereafter as 'Target Species'). Target Species include those corresponding to any of the following criteria;

- Annex I of the EU Directive on the Conservation of Wild Birds 79/409/EEC (the 'Birds Directive') (Annex I);
- Schedule 1 (including Schedule 1A and/or A1) of the Wildlife and Countryside Act (1981) (Schedule 1);
- 'Red' Birds of Conservation Concern 2021 (BoCC)[53]; and
- Scottish Biodiversity List (SBL species).

7.2.2 Ornithology surveys were undertaken in 2022-23 to inform optioneering and assessments for the Proposed Development. The Study Area for ornithology comprised the alignment options 500 m buffer (hereafter the 'Alignment Buffer') plus an additional 2 km. Survey results for target species[54] that were recorded within the Study Area during 2022-23 are described below. Flight activity for two target species with the highest amount of flight activity, golden eagle *Aquila chrysaetos* and hen harrier *Circus cyaneus* are shown on **Figure 7.3.** Flight activity is illustrated in the context of the current iteration of the Proposed Development.

Flight Activity Surveys

- Black grouse *Lyrurus tetrix* – one flight at Potential Collision Height (PCH) across the central section of the Proposed Development;
- Barnacle goose *Branta leucopsis* – two flights, both at PCH, to the south of the Proposed Development. Both flights originated from Tangy Loch, flying south;
- Golden eagle– 73 flights, 55 of which were at PCH. Majority of flights were concentrated over upland areas at northern end of the Proposed Development and to the east of Lussa Loch;
- Goshawk *Accipiter gentilis* – two flights, both of which were at PCH. Flights were recorded south of the Proposed Development, south of Tangy Loch;
- Golden plover *Pluvialis apricaria* – seventeen flights, fifteen of which were at PCH. All flights were recorded across upland areas at the north end of the Proposed Development;
- Hen harrier– eighty-one flights, seventy-five of which were at PCH. The majority of flights were recorded in upland areas across the centre of the Proposed Development and to the east of Lussa Loch (to the east of the Proposed Development);
- Red kite *Milvus milvus*– three flights, two of which were at PCH. Flights were recorded at the southern end of the Proposed Development, west of Lussa Loch, and west of the Proposed Development at Glenbarr;

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[52] Scottish and Southern Electricity Networks (2024). LT337 Tangy IV Wind Farm and LT404 Cnoc Buidhe Wind Farm OHL Connection. Environmental Alignment Selection Study.

[53] Birds of Conservation Concern (2021) Available at: https://www.bto.org/sites/default/files/publications/bocc-5-a5-4pp-single-pages.pdf

[54] Listed on Schedule 1 of the WCA (Sch1), Annex 1 of the Birds directive (Annex 1) and/or listed as qualifying interest for a designated sites potentially affected by the Proposed Development.

- Merlin *Falco columbarius* – three flights, all of which were at PCH. Flights were recorded to the south of the Proposed Development;
- Osprey *Pandion haliaetus* – twelve flights, eight of which were at PCH. Flights were recorded across the southern end of the Proposed Development, particularly travelling to and from waterbodies;
- Peregrine falcon *Falco peregrinus* – four flights, two of which were at PCH. Flights were recorded at the southern end of the Proposed Development and west of the Proposed Development at Glenbarr;
- Short-eared owl *Asio flammeus*– three flights, all of which were at PCH. Flights were recorded across the central section of the Proposed Development;
- White-tailed eagle *Haliaeetus albicilla* – eleven flights, nine of which were at PCH. Flights were typically recorded across the central and southern sections of the Proposed Development;
- Greenland White-fronted goose *Anser albifrons flavirostris* – fifty-three flights, all of which were at PCH. All flights were at the southern end of the Alignment Buffer, associated with Tangy Loch and Lussa Loch; and
- Whooper swan *Cygnus cygnus* – four flights, three of which were at PCH. Majority of flights were to the south of the Proposed Development.

Scarce breeding bird survey

- Golden eagle – an occupied golden eagle nest site was recorded approximately 800 m from the Proposed Development; and
- Hen harrier – five nest sites were identified within 2 km of the Proposed Development.

Goose foraging surveys

- Foraging Greenland white-fronted goose were recorded during two of the four surveys undertaken with a peak count of 79 recorded in November 2022. The closest record was located approximately 3.5 km west of the Proposed Development..

Goose Roost surveys

- Lussa loch – roosting Greenland white-fronted geese were recorded on three occasions with a peak count of 180 in March 2023;
- Tangy loch - roosting Greenland white-fronted geese were recorded on four occasions with a peak count of 1,875 in January 2023; and
- Loch Arnicle – no roosting Greenland white-fronted geese were recorded.

7.2.3 No breeding waders or lekking black grouse were recorded during the respective surveys in 2022-23.

7.2.4 Notable records returned by the Argyll Raptor Study Group (ARSG) included the following:

- Golden eagle – three breeding sites within approximately 3.5 km of the Alignment Buffer. The closest of which is approximately 800 m from the Proposed Development (same site as detailed under the scarce breeding bird surveys);
- Hen harrier – five breeding sites within 2 km of the Proposed Development;
- Osprey – one breeding site at the southern end of the Proposed Development. This breeding site was not present during WSP surveys in 2022; and
- Barn owl *Tyto alba*– seven breeding sites within 2 km of the Proposed Development.

Designated Sites

7.2.5 The Proposed Development is within 930 m of sites included in the Kintyre Goose Roosts Special Protection Area (SPA) (As shown on **Figure 7.1 Special Protection Areas Relevant to the Proposed Development**), specifically Lussa Loch, which is designated for over wintering Greenland white-fronted goose. The Proposed Development also lies 1.7 km from Sound of Gigha SPA which is designated for non-breeding eider *Somateria mollissima*, great northern diver *Gavia immer*, red-breasted merganser *Mergus serrator* and Slavonian grebe *Podiceps auritus*.

7.3 Issues to be Scoped Out

7.3.1 The following ornithological receptors will be scoped out for construction and operation:

- Sound of Gigha SPA (non-breeding great northern diver, red-breasted merganser, and Slavonian grebe). The Proposed Development and surrounding area is unsuitable for these specialist marine species; and
- Breeding bird assemblage (waders and passerines). No breeding waders were recorded during previous surveys[52]and passerines are not considered to be significantly impacted by OHL developments due to their high reproductive rates and their high-density populations.

7.4 Potential Significant Effects

7.4.1 Construction and operation of the Proposed Development has the potential to result in the following effects without appropriate controls or mitigation:

- effects on the integrity of qualifying features of designated nature conservation sites. Based on survey results and desk study for a previous iteration of the project, potential effects to Greenland white-fronted goose as a qualifying interest of the Kintyre Goose Roosts SPA will be assessed. Potential effects are visual and audial disturbance to roosting geese during the construction phase and collision risk during the operational phase;
- reductions in productivity and/or survival of target bird species following displacement from key habitats due to disturbance during construction, direct loss of habitat and avoidance of otherwise suitable habitat because of the Proposed Development's presence. Sensitive species most likely to be affected are golden eagle and hen harrier; and
- increased mortality of target bird species due to accidental collision with the OHL during the operational phase. Sensitive species most likely to be affected are golden eagle and hen harrier.
- The EIA report will also consider potential effects to the integrity of the Central Kintyre Habitat Management Plan (HMP) including loss of suitable foraging habitat for golden eagle. The main purpose of the HMP is to mitigate against possible negative impacts arising from the presence of Beinn an Tuirc and Deucheran Hill Wind Farms on a pair of breeding golden eagle. A secondary requirement of the HMP is to mitigate against negative impacts of the Deucheran Hill windfarm on the local population of breeding red-throated divers.

7.5 Mitigation

7.5.1 The routeing and alignment selection process for the Proposed Development has considered the potential for significant adverse effects on ornithological receptors throughout the evolution of the Proposed Development. Any such effects will be avoided wherever possible or at least minimised to an acceptable level through the design process.

7.5.2 Further assessment will continue through the EIA process, and mitigation measures will be developed and embedded into the Proposed Development's design, to minimise the potential for adverse effects on ornithological receptors.

7.6 Proposed Scope and Assessment Methodology

7.6.1 The findings of the ornithological survey programme will be supplemented by an updated request for data from the Argyll Raptor Study Group and the Royal Society for the Protection of Birds (RSPB). Data will be requested for all target species within 2 km (6 km for golden eagle) of the Site.

7.6.2 The bird survey programme, which has been developed in line with industry standard methods 55, 56, 57 will comprise the following (**Figure 7.2**):

- Raptor Roost Surveys. Habitually used golden eagle and hen harrier roosts will be identified within suitable habitat within 1 km of the site. Signs of roosting birds e.g. pellets, features and whitewash will be identified during a daytime walkover of the survey area undertaken in September and October. Flight activity surveys will be scheduled so that at least two of the surveys on each Vantage Point (VP) between September and January inclusive are undertaken to encompass the dawn or dusk periods.
- Flight activity surveys. A total of 36 hours survey between October 2024 and February 2025 (non-breeding season) and March 2025 and August 2025 (breeding season) are currently being undertaken.
- Scarce Breeding Bird Survey. Where access permits and there is suitable habitat, this will be undertaken within the Proposed Development footprint and extend to a maximum of 2 km from the Proposed Development footprint. The surveys will focus on identifying target species breeding territories (e.g., Schedule 1 raptors).
- Black grouse lek surveys will be undertaken across areas of suitable habitat within a maximum of 1.5 km of the Proposed Development.

7.6.3 The results of the surveys and information obtained from the data consultation and desk study exercises will be used to inform the Ornithology Impact Assessment (OIA) of the Proposed Development which will be undertaken in accordance with the CIEEM Guidelines for Ecological Impact Assessment (201858), and with due consideration of any other relevant legislation, policy or guidance.

7.6.4 Important ornithological features taken forward for assessment will be confirmed at the assessment stage, informed by the updated surveys conducted in 2024-25. The likely important ornithological features based on the surveys to date are listed below:

- Golden eagle;
- Hen Harrier; and
- Greenland white-fronted goose.

7.6.5 Where appropriate, mitigation measures will be recommended within the OIA to avoid or minimise any adverse effects. Standard good practice construction and operating measures, such as sensitive timing of works and pre-works checks for nesting birds, will be implemented in line with SSEN Transmission's Bird Species Protection Plan (SPP). Where significant effects on ornithological receptors are identified, measures to prevent, reduce, and where possible offset these adverse effects will be investigated and proposed. Where necessary, a bespoke Bird Protection Plan (BPP) will be produced, focussing on the specific species and aspects of the Proposed Development which pose a risk of adverse impacts, to ensure that all reasonable precautions are taken to protect ornithological receptors from significant adverse effects. Additionally, habitat enhancement measures of potential benefit to features of ornithological interest will be identified and incorporated into the assessment, where relevant and feasible. An assessment of residual effects would then be undertaken and reported within the EIA Report.

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[55] SNH (2017). Recommended bird survey methods to inform impact assessment of onshore windfarms. Version 2, March 2017. Available at: https://www.nature.scot/sites/default/files/2018-06/Guidance%20Note%20-%20Recommended%20bird%20survey%20methods%20to%20inform%20impact%20assessment%20of%20onshore%20windfarms.pdf

[56] SNH (2016). Assessment and mitigation of impacts of power lines and guyed meteorological masts on birds. Version 1, July 2016. Available at: https://www.nature.scot/doc/guidance-assessment-and-mitigation-impacts-power-lines-and-guyed-meteorological-masts-birds

[57] Coleman, M., Fitchet, A., Seller, J., Williams, F. & Wright, P. (2016). SHE Transmission Ornithology Workshop – Ornithology Methods for Transmission Developments. SHE Transmission.

[58] CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (version 1.2 updated April 2022). Chartered Institute of Ecology and Environmental Management, Winchester. Available at: https://cieem.net/wp-content/uploads/2018/08/ECIA-Guidelines-2018-Terrestrial-Freshwater-Coastal-and-Marine-V1.2-April-22-Compressed.pdf

7.6.6 A Habitats Regulations Appraisal (HRA)[59] considering likely significant effects on Greenland white-fronted goose as a qualifying interest of Kintyre Goose Roosts SPA will be carried out in parallel with the EIA.

7.7 Summary

7.7.1 Desk study results and consultations will be interpreted in combination with field surveys for target species, and it is anticipated that this approach will provide sufficient current information to inform a robust EcIA. Potential significant effects to important ornithological features, such as audial and visual disturbance during the construction phase or collision risk during the operational phase, will be evaluated within the EIA Report.

7.7.2 The EIA report will also consider potential effects to the integrity of the Central Kintyre HMP.

7.7.3 The EIA Report will address all potential impacts during construction and will incorporate essential mitigation through design, to reduce effects which could result in residual impacts, not considered significant in EIA terms.

7.7.4 A HRA considering likely significant effects on Greenland white-fronted goose as a qualifying interest of Kintyre Goose Roosts SPA will be carried out in parallel with the EIA.

[59] The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) (hereafter, the 'Habitats Regulations') place a duty upon 'Competent Authorities', to consider the potential for Likely Significant Effects (LSE) upon European sites arising from projects or plans. European sites considered through HRA are Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), as well as those currently proposed for designation. Wetlands of International Importance (Ramsar sites) are also considered through HRA.

8. CULTURAL HERITAGE

8.1 Introduction

8.1.1 This Chapter of the Scoping Report provides an overview of the cultural heritage baseline in relation to the Proposed Development, describes the potential effects associated with construction and operation of the Proposed Development on a section-by-section basis, and presents the assessment methodology to be used in the EIA.

The specific objectives of the EIA chapter will be to:

- identify the cultural heritage baseline within the Proposed Development, including the Limit of Deviation (LoD) that is anticipated would be 100 m either side of proposed infrastructure (i.e. 200 m in total);
- assess the Proposed Development in terms of its archaeological potential;
- identify designated heritage assets within 1 km of the Proposed Development where there is the potential for effects arising through changes within the setting of heritage assets;
- consider the potential direct, indirect, and cumulative effects through physical impacts, and changes within the setting of heritage assets;
- identify measures, where appropriate, to mitigate any predicted physical impacts on heritage assets, or any significant adverse effects from impacts arising through change within the setting of heritage assets; and
- to assess residual effects taking this mitigation into account.

8.2 Baseline Conditions

8.2.1 A detailed desk study will be undertaken to inform the cultural heritage baseline and will include consultation with Historic Environment Scotland (HES) and the Local Planning Authority (LPA) archaeological advisors for Argyll and Bute.

8.2.2 A 1 km assessment buffer was applied around the Proposed Development to take into consideration the potential effects through changes within the setting on cultural heritage assets.

Designated Heritage Assets

8.2.3 There are no designated heritage assets listed within the boundary of the Proposed Development. Further, the 1 km buffer around the Proposed Development does not contain any Conservation Areas, Inventory Gardens and Designed Landscapes, Inventory Battlefields or World Heritage Sites.

8.2.4 A single scheduled monument is recorded within the 1 km buffer around the Proposed Development. This is the scheduled Crois Mhic Aoidhe standing stone (SM251).

Non-Designated Heritage Assets

8.2.5 There are four non-designated heritage assets within the Proposed Development identified in Canmore and WoSAS records. These comprise the following:

- An exposed partially finished millstone of 18th-19th century date (Canmore ref 38841, WoSAS pin 3433);
- Summit cairns of unidentified date recorded at Diollaid Mhor (WoSAS pin 58630) and Saddell & Skipness (WoSAS pin 51640); and
- Structural remains of likely post-medieval date associated with a former croft at Colluska (WoSAS pin: 58408).

8.2.6 Designated and non-designated historic assets are shown on **Figure 8.1.**

8.2.7 A walkover survey carried out in 2022 recorded a point of interest within the Proposed Development corresponding to the croft remains noted above.

8.2.8 Due to the area surrounding the Proposed Development primarily consisting of open moorland, there also remains the potential for hitherto unknown archaeological remains to survive within the Proposed Development footprint.

Sensitive Receptors

8.2.9 The designated heritage assets identified within the baseline section above have the potential to be impacted through changes within their setting during the operational phase of the Proposed Development.

8.2.10 Non-designated heritage assets noted within the Proposed Development have potential to be directly impacted by the construction of the Proposed Development. Furthermore, the potential for previously unrecorded archaeological remains to be discovered along the Proposed Development would be considered and assessed.

8.3 Issues to be Scoped Out

8.3.1 It is proposed that assessment of potential effects of the Proposed Development on Listed Buildings, Inventory Gardens and Designed Landscapes, Conservation Areas, Battlefields and World Heritage Sites be scoped out at this stage. There are no heritage assets of this nature within 1 km of the Proposed Development and their settings would not be affected by the Proposed Development.

8.3.2 It is proposed to scope out temporary construction phase impacts through change to setting, owing to the lack of likely significant effects associated with this phase.

8.3.3 It is not anticipated that there will be any indirect impacts from the construction or operation of the Proposed Development, therefore the assessment of indirect impacts on all heritage assets has been scoped out.

8.4 Potential Significant Effects

8.4.1 The potential cultural heritage effects associated with the construction and operation of the Proposed Development include:

- Physical impacts to heritage assets during construction; and
- Impacts through changes within the setting of heritage assets during operation.

Construction

8.4.2 The potential effects related to construction of the Proposed Development on known heritage assets are not deemed to be significant due to the low value that would be attributed to the currently known heritage assets, and the potential to demarcate and avoid the impacts through micro-siting. However, there is the potential for effects on currently unknown heritage assets within the Proposed Development boundary given the lack of development of the area and the potential for encountering unknown heritage assets.

8.4.3 The type of effects on known and unknown heritage assets include:

- permanent, complete or partial loss of an archaeological feature or deposit as a result of ground excavation;
- permanent or temporary loss of the physical and/or visual integrity of a feature, monument, building, or group of monuments;
- damage to resources as a result of ground excavation;
- damage to resources due to compaction, desiccation, or waterlogging; and
- damage to resources as a result of ground vibration caused by construction processes.

Operation

8.4.4 There is the potential for significant effects related to the operation of the Proposed Development, through change within the setting of the scheduled monuments and listed buildings noted above. The impacts would relate to the visual presence of the Proposed Development negatively impacting

on the setting of the scheduled Crois Mhic Aoidhe standing stone (SM251), and cumulative effects with other existing or proposed developments.

8.5 Mitigation

8.5.1 At this stage, mitigation requirements are anticipated to be as follows:

- known non-designated heritage assets within the Proposed Development will be demarcated and avoided by construction phase works where possible;
- archaeological recording of features that cannot be avoided;
- protocols detailed in the Construction Environmental Management Plan for unknown non-designated heritage assets to be recorded, should they be identified during construction works; and
- input to the design in order to minimise potential effects through change to setting.

8.6 Proposed Scope and Assessment Methodology

8.6.1 The Cultural Heritage Chapter would set out the planning framework in respect of cultural heritage along with the methodology for assessing the environmental effects predicted during the construction and operation phases. It would provide a summary overview of the baseline conditions, supported by a fully illustrated gazetteer and detailed historical background of the Proposed Development.

8.6.2 The chapter will:

- quantify the heritage assets that may be affected by the Proposed Development;
- assess any previous impacts which may have affected heritage asset survival;
- provide an assessment of archaeological potential based on the heritage asset data gathered;
- provide an evaluation of heritage asset value based on statutory designation, or in the absence of designation, professional judgement against values set out in HES Designation Policy and Selection Guidance[60] and the Historic Environment Policy for Scotland[61];
- assess development impacts and hence the significance of environmental effects arising from the Proposed Development during the construction phase and operation phase;
- provide recommendations for mitigation that would reduce or offset any adverse effects; and
- quantify any residual effects (those that might remain after mitigation) and, where required, cumulative effects.

8.6.3 The work will be undertaken in accordance with the standards set by the Chartered Institute for Archaeologists, as well as HES's Managing Change in the Historic Environment: Setting guidance note series[62].

8.7 Summary

8.7.1 The proposed approach to the assessment has been designed to identify and evaluate any heritage assets present within the LoD and within 1 km of the Proposed Development, through examination of desk-based sources and detailed field survey.

8.7.2 The effects of the Proposed Development on heritage assets will be assessed and mitigation measures, where appropriate, will be proposed to prevent, reduce, or offset any physical impacts on heritage assets, or any likely significant adverse effects arising from change within the setting of

[60] Historic Environment Scotland (2019). Designation Policy and Selection Guidance.

[61] Historic Environment Scotland (2019). Historic Environment Policy for Scotland.

[62] Historic Environment Scotland (2020) Managing Change in the Historic Environment: Setting

heritage assets. Cumulative effects from the Proposed Development in combination with other developments will also be considered, where appropriate.

9. HYDROLOGY, HYDROGEOLOGY, GEOLOGY AND SOILS

9.1 Introduction

9.1.1 This Chapter of the Scoping Report provides a brief overview of the hydrology, hydrogeology, geology and soils environment, the potential effects associated with the Proposed Development, and the proposed scope of assessment methodology to be considered in the EIA Report.

9.2 Baseline Conditions

Study Area

9.2.1 The study area for hydrology, hydrogeology, geology, and soils receptors is the OHL Alignment (and LoD) as shown on **Figure 1.1.**

9.2.2 SEPA's guidance on assessing the impacts of developments on Groundwater Dependent Terrestrial Ecosystems (GWDTE) (LUPS-GU31)[63] requires assessment of potential GWDTE located within 250 m of excavations greater than 1 m in depth and within 100 m of excavations less than 1 m in depth. Therefore, the 'GWDTE study area' includes the area within 250 m of the LOD for the Proposed Development.

Geology and Soils (including peat)

9.2.3 Given the large extent of the Proposed Development, British Geological Survey (BGS) GeoIndex Onshore[64] indicates numerous records of bedrock and superficial deposits at 1:625,000 scale which underly the Proposed Development.

9.2.4 The National Soil Map of Scotland indicates a range of soil types including peat throughout the OHL Alignment. NatureScot Carbon and Peatland mapping indicates a range of peatland 'Classes' throughout the OHL Alignment, including Classes 1 and 2 (nationally important carbon-rich soils, deep peat, and priority peatland habitat), particularly in the central extents of the OHL Alignment. Furthermore, Class 5 peat, which is also carbon rich deep peat, takes precedence over the lack of peatland habitat. This is found in the northern and southern extents adjacent to the Class 1 and 2.

Hydrogeology

9.2.5 The online BGS hydrogeology map (1:625,000 scale)[65] shows the Proposed Development is underlain by a low productivity aquifer.

9.2.6 The Proposed Development is underlain by Oban and Kintyre is a groundwater (ID: 150698) body, classified by SEPA as having 'Good' overall status in 2023[66] in their most recent assessment.

Hydrology

9.2.7 There is a complex network of rivers and burns throughout the Proposed Development and 1 km buffer which are both classified and non-classified by SEPA. These either flow east into the Kilbrannan Sound or West to the Sea of the Hebrides.

9.2.8 Starting from the north of the Proposed Development to the south of the Proposed Development, the main watercourses which are crossed are:

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[63] SEPA. SEPA Guidance Note 31 (2017). Available at: https://www.sepa.org.uk/media/144266/lups-gu31-guidance-on-assessing-the-impacts-of-development-proposals-on-groundwater-abstractions.pdf

[64] BGS (2023). GeoIndex Onshore. Available at: https://mapapps2.bgs.ac.uk/geoindex/home.html?_ga=2.214383955.519299777.1698760637-1329375161.1698760637

[65] BGS (2023). GeoIndex Onshore. Available at: https://mapapps2.bgs.ac.uk/geoindex/home.html?_ga=2.214383955.519299777.1698760637-1329375161.1698760637

[66] SEPA Water Classification Hub (2023). [online] Available at: https://www.sepa.org.uk/data-visualisation/water-classification-hub/

- Carradale Water, ID 10241 – Good overall status, 2023;
- Allt Starraidh/Rhonadale Burn;
- Allt an Tuirc;
- Abhainn a' Chnoeain, ID 10239 – Good ecological status, 2023;
- Allt nan Calltuinn; and
- Strathduie Water.

9.2.9 The Proposed Development may require crossings or culverting of existing watercourse channels shown on OS 1:50,000 mapping. These may potentially be subject to Controlled Activities Regulations (CAR) licensing from SEPA. It would be reasonable to anticipate a combination of smaller or ephemeral surface channels and sub-surface field drainage in this area, which may be more apparent during wet conditions.

9.2.10 OS 1:10,000 scale mapping and aerial imagery indicate several small unnamed watercourses and drainage channels, crossed by the Proposed Development.

Flood Risk

9.2.11 SEPA's indicative flood risk mapping [67], suggests that there are two locations with high risk of river flooding within the Proposed Development. These areas are related to Carradale Water in the north of the Proposed Development and the Strathduie Water in the south.

9.2.12 There are very small, localised areas at high risk of surface water flooding throughout the Proposed Development and within 1 km.

9.2.13 There is a no risk of coastal, sewage or groundwater flooding within the Proposed Development.

Designated sites

9.2.14 No SACs, SPAs, Ramsar sites, SSSIs or Marine Protection Areas (MPA) have been identified within 1 km of the Proposed Development.

Water Supplies

9.2.15 According to information provided by the Scottish Environment Protection Agency (SEPA) and Argyll and Bute Council there are two SEPA authorised abstractions within 1 km of the OHL Alignment.

- CAR/S/1192396 – Carradale SS, Kintyre, Carradale Village; and
- CAR/R/1192623 – Beinn an Tuirc Windfarm phase 3, Campbeltown.

9.2.16 There are no Private Water Supplies within 1 km of the Proposed Development.

9.2.17 It is recognised that there are Scottish Water assets, including a Ground Water borehole (titled: Carradale Water Treatment Works (WTW) and associated Ground Water Source) approximately 850 m south-east of the Proposed Development.

9.2.18 One Drinking Water Protected Area (DWPA) for surface water, the Carradale Water (ID 337) is within the Proposed Development to the north. In addition, the Proposed Development is in an area also subject to DWPA for groundwater.

Fisheries

9.2.19 The Argyll Fisheries trust are responsible for the management of rivers their tributaries and associated fish populations, including Atlantic salmon and sea trout (*Salmo Salar* and *Salmo trutta morpha trutta*), occurring within the Proposed Development and surrounding locale.

[67] Scottish Environment Protection Agency (SEPA) (2022) Flood Maps. Available at: https://map.sepa.org.uk/floodmap/map.htm.

9.2.20 The Argyll fisheries have undertaken surveys on 12 rivers as part of the Knapdale and Kintyre rivers project. The Carradale river was part of this study, and ongoing studies take place on coastal streams to inform renewable projects.

9.2.21 These projects objectives are to better understand and improve fish populations, their habitats, and recreational fisheries for freshwater and migratory fish, including Atlantic salmon and brown trout.

9.2.22 Fisheries are considered to be of medium sensitivity and the Proposed development is within catchments hold protect species of salmonids.

Groundwater Dependent Terrestrial Ecosystems

9.2.23 Habitat survey as discussed in **Chapter 7: Ecology and Nature Conservation**, has shown potential GWDTE are anticipated to be present within the Proposed Development and will be considered further as part of the EIA.

9.3 Issues to be Scoped Out

9.3.1 Based on professional judgement and with the assumption of good design and implementation of good practice construction measures including the Applicant's GEMPs, it is considered that the following would not give rise to significant construction effects and therefore can be scoped out:

- accidental release of sediments or pollutants: the Applicant's GEMPs will reduce the potential; for pollutants or sediment to be released into water bodies as a result of the Proposed Development; and
- impacts on hydrologically relevant designated sites from chemicals, fuels and sedimentation pollution to groundwater and surface water, changes on groundwater flows, levels and surface water drainage patterns;

9.4 Potential Significant Effects

9.4.1 Construction and operation of the Proposed Development has potential to result in the following effects without appropriate controls or mitigation:

Construction

- impacts on public and private water supplies, including DWPAs, both in terms of water quality and security of supply;
- flooding; including from the obstruction of watercourses during construction and increased runoff due to soil compaction;
- soil erosion, compaction and excavation losses during access or construction;
- mobilisation of contaminated soil / bedrock;
- peat disturbance and losses during access or construction;
- the carbon emissions arising from loss or disturbance to peatland;
- impact on water resource availability, including impacts to groundwater levels from any dewatering required;
- modifications to groundwater conditions, including levels and flows, which may cause alteration to receptors such as GWDTE or groundwater-fed water supplies; and
- impact of pollution on fisheries; including from suspended sediment in surface water bodies, hydrocarbon, and oil pollution;

Operation

- Impacts on groundwater levels and flows as a result of the proposed permanent access tracks;
- modifications to groundwater conditions, including levels and flows, which may cause alteration to receptors such as GWDTE or groundwater-fed water supplies; and

- flooding, through increased surface water runoff from new impermeable areas.

9.5 Mitigation

9.5.1 The EIA process will advise the iterative design process for the Proposed Development, to ensure the careful siting of infrastructure and construction access, where practicable, to reduce the potential effects to the hydrology, hydrogeology, geology, and soils environment. With the assumption that construction good practice will be applied and through implementation of standard mitigation measures detailed within the Applicant's GEMPs, it is anticipated that potential effects will be further reduced.

9.5.2 Specific mitigation measures will be proposed, where required, for potential significant effects. In this case, it is anticipated that the main issues are potential significant effects related to:

- impacts on public and private water supplies, including Drinking Water Protected Area (DWPA) both in terms of water quality and security of supply;
- peat disturbance and losses during access or construction; and
- modifications to groundwater conditions, including levels and flows, which may cause alteration to receptors such as GWDTE or groundwater-fed water supplies.

9.6 Proposed Scope and Methodology of Assessment

9.6.1 The assessment of effects will be carried out in accordance with a range of standard guidance documents from Construction Industry Research and Information Association (CIRIA), Forestry and Land Scotland (FLS), SEPA, NatureScot, the Scottish Government and Scottish Renewables relating to water pollution, abstractions, watercourse crossings, sustainable drainage, peat management and forestry; taking into account that the Applicant's GEMPs and the project CEMPs will be adhered to.

9.6.2 The following tasks will be undertaken in the completion of the assessment:

- desk-based study to obtain baseline and historical data;
- site-based work (private water supplies and peat surveys);
- identification of the potential impacts of the Proposed Development and assessment of their significance based on the magnitude of the impact and the sensitivity of receptors; and
- identification of options for the mitigation of potential effects in accordance with applicable legislation, policies and guidance.

9.6.3 The desk-based study will be designed to assist in determining the baseline characteristics within the specified study areas and will collate baseline information from available sources. The desk-based study will typically involve the following elements:

- use of Ordnance Survey (OS) maps to identify watercourse catchments and standing water bodies within 1 km of the Proposed Development;
- identification of any relevant designated or protected sites within 1 km of the Proposed Development;
- collation of historical hydrological and flooding information (where available);
- review of SEPA flood risk areas;
- collation of preliminary data on public and private water abstractions;
- collation of available meteorological data for the eastern and northern Scotland climate regions;
- collation of available surface water and groundwater quality data for the region;
- interpretation and collation of habitat information in relation to potential GWDTEs; and
- collation of current land use information.

9.6.4 Site surveys will establish specific receptors considered to be at risk. The impact assessment will be undertaken in accordance with the EIA Regulations and the significance of effects will be determined using a combination of magnitude of effect, sensitivity of receptor and probability.

9.6.5 This assessment will include the impacts of any works required for access routes. Particular attention will be paid to the potential hydrological and water quality impacts upon any water supplies within the vicinity of the Proposed Development and any aquatic ecological features identified within the ecology assessment. The potential water quality impacts through enhanced erosion of disturbed peat will also be considered.

9.6.6 The design will aim to maintain a 50 m buffer from water features in general and a 10 m minimum buffer in accordance with SEPA advice (20 m if a watercourse is identified as having geomorphic risk as specified by SEPA). If this minimum buffer cannot be achieved further detail will be provided of the location and what is proposed in terms of engineering works.

9.6.7 A private water supply screening assessment will be undertaken to identify supplies at risk of adverse effect from the Proposed Development. Consultation with supply owners and site visits will verify information collated, where required. Detailed private water supply risk assessment will be undertaken as required, in accordance with SEPA guidance[68].

9.6.8 Phase 1 peat depth data to inform the OHL alignment selection stage and access strategy has been gathered using a combination of 100 m resolution modelled soil carbon mapping data from the James Hutton Institute[69] and validation peat probing across the study area. This approach is considered to be proportionate considering the large spatial extent of the study area.

9.6.9 Conventional Phase 2 peat probing and coring will subsequently be undertaken in identified peatland habitats occurring within the Proposed Development to inform the EIA. This will be used in combination with known areas of nationally important carbon-rich soils, deep peat and priority peatland habitat, to provide a comprehensive understanding of site baseline peat stability conditions. A Peat Landslide Hazard and Risk Assessment (PLHRA) will be undertaken, which shall include characterisation of peatland features, description of observed peat instability, interpretation of aerial imagery, analysis of peat depth and factor of safety stability data, to highlight any areas of specific initial concern (high or moderate risk). This will be informed by best practice guidance[70]. This will utilise peat depth and condition survey data (probing and coring) collected in accordance with Scottish Government Peat Survey guidance[71].

9.6.10 An Outline Soil and Peat Management Plan (SPMP) is proposed to define the likely excavation volume based on the Proposed Development's layout and underlying peat conditions, which will evaluate options to minimise/re-use excavated volumes. The findings of this Outline SPMP will be used by the appointed Principal Contractor as a basis for preparing the detailed construction SPMP, as part of a Construction Environmental Management Plan (CEMP) during construction.

9.6.11 A peatland carbon emission assessment will be undertaken in line with the Peatland Carbon Code[72] and the NPF4 Policy 5 to assess the potential effects of the Proposed Development through peatland disturbance. This assessment will utilise the peat depth and condition survey data (probing and coring) collected in accordance with Scottish Government peat survey guidance.

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[68] SEPA (2017). SEPA Guidance Note 31 (2017). Available at: https://www.sepa.org.uk/media/144266/lups-gu31-guidance-on-assessing-the-impacts-of-development-proposals-on-groundwater-abstractions.pdf

[69] James Hutton Institute soils. Available at: https://www.hutton.ac.uk/soil-maps/

[70] Scottish Government (2017). Peat Landslide Hazard and Risk Assessment: Best Practice Guide for Proposed Electricity Generation Developments. Available at: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2017/04/peat-landslide-hazard-risk-assessments-best-practice-guide-proposed-electricity/documents/00517176-pdf/00517176-pdf/govscot%3Adocument/00517176.pdf

[71] Scottish Government (2017), Scottish Natural Heritage, SEPA (2017). Peatland Survey. Guidance on Developments on Peatland. Available at: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2018/12/peatland-survey-guidance/documents/peatland-survey-guidance-2017/peatland-survey-guidance-2017/govscot%3Adocument/Guidance%2Bon%2Bdevelopments%2Bon%2Bpeatland%2B-%2Bpeatland%2Bsurvey%2B-%2B2017.pdf

[72] International Union for the Conservation of Nature (ICUN) (2023). Peatland Carbon Code. Available at: https://www.iucn-uk-peatlandprogramme.org/peatland-code-0

9.6.12 A GWDTE assessment will be completed as part of the EIA Report, and the assessment will be informed by the findings of the UKHab habitat and NVC surveys, and hydrogeological information from BGS.

9.6.13 The Proposed Development will be assessed for flood risk in line with NPF4. A basic flood risk assessment will be undertaken, which will involve a review of previous flood risk assessment undertaken during routeing and alignment stages, and current SEPA flood risk mapping. A full flood risk assessment would be carried out, if required.

9.7 Summary

9.7.1 The above provides a comprehensive summary of the tasks to be undertaken during the EIA with regards to Hydrology, Hydrogeology, Geology and Soils. Any effects likely to have a significant effect on sensitive receptors, such as pollution of surface watercourses, groundwater, and private water supplies, will be evaluated within the EIA Report.

9.7.2 A high-level approach will be adopted to the assessment considering the geographical extent of this study and the nature of the Proposed Development. Mitigation measures will be proposed, where required, for likely significant effects. In this case, we would anticipate the main issues to be:

- potential water quality impacts to private water supplies from construction activities;
- potential pollution impacts to water bodies resulting from access and construction activities; and
- potential for impact to GWDTEs from construction activities, which may not recover during operations due to potentially altered groundwater levels.

10. FORESTRY

10.1 Introduction

10.1.1 This Chapter of the Scoping Report provides a brief overview of the forestry baseline conditions, the potential effects associated with construction and operation of the Proposed Development and the proposed scope of assessment methodology to be considered in the EIA Report.

10.2 Baseline Conditions

10.2.1 Baseline conditions have been established through a desk-based study which identified tree groups and woodland intersecting with the Proposed Development and with contiguous areas of woodland beyond the boundary. An initial forestry reconnaissance survey was undertaken in November 2024. The baseline has been derived from Scotland's environmental web[73] and Scottish Forestry map viewer[74]. These digital mapping tools have enabled identification of woodland within the National Forest Inventory (NFI).

Lussa forest

Within this section the proposed development interacts with areas of commercial forest plantations. Primarily consisting of Sitka Spruce and occasionally individual riparian trees along the Allt Nan Calltuinn tributary. Compartments are of varying ages. Extensive windblow right at the start of the line all the way to the river edge.

Carradale forest

10.2.2 Only around 600m of the OHL have impact on forestry. The remaining ground has been left fallow in accordance with the Carradale Long Term Forest Plan commitments. It primary impact a mature Sitka Spruce compartment, growing on the ridge of the hill and a mixed broadleaf compartment on the lower part of the hill.

10.2.3 The linear measurement of woodland affected by creation of an operational corridor is approximately 2.5 km of the Proposed Development 13 km Alignment.

10.2.4 The predominant woodland type within the Proposed Development is commercial conifer plantation. Areas of native broadleaved woodland are affected to a lesser extent. The area impacted is in the located within the last span and impacts a section of upland birchwood.

10.2.5 Forestry and woodland within the Proposed Development include several identified receptors, including some sensitive receptors. Sensitivity may relate particularly to the environmental services provided by trees and woodlands and forestry impacts should be considered in relation to habitat and visual impacts referenced in Ecology and Landscape sections.

10.2.6 Forestry receptors impacted by the proposed development are: Lussa and Carradale forests.

10.3 Issues to be Scoped Out

10.3.1 The forestry assessment will not include a full BS5837: 2012 assessment of all arboricultural features, due to lack of trees bearing significant biological or cultural importance. However, measurements of tree stem diameters density and species will be recorded.

10.3.2 Ancient and veteran trees have been scoped out, as non were identified.

10.3.3 Secondary effects resulting from forestry activities, including effects on ecology, ornithology, and hydrology, will be considered within their respective chapters of the EIA Report and would not be included within the forestry chapter.

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[73] Scotland's Environment Web Map | Scotland's environment web

[74] Scottish Forestry Map Viewer Scottish Forestry Map Viewer (arcgis.com)

10.3.4 Access has been scoped out, as no definite access plans available at the time of this report. The requirement to consider access will be considered at design freeze and appropriate consultations will be undertaken to establish any assessment requirements.

10.4 Potential Significant Effects

10.4.1 The Proposed Development would require the felling of commercial conifer forestry plantation and native broadleaved woodland during the construction phase, this will include the creation of an OHL operational corridor and access track corridors. On completion of the Proposed Development the established operational corridor would be maintained for the safe energisation of the OHL.

10.4.2 The Proposed Development would require the felling of commercial forestry plantation during construction, and the creation of a managed wayleave once operational. The potential forestry effects associated with the construction and operation of the Proposed Development therefore includes:

- temporary or Permanent woodland cover loss and fragmentation;
- potential for wind throw risk and identification of wind firm boundaries;
- potential for forest landscape impact and identification of forest landscape design boundaries; and
- loss of timber volume production due to early felling.

10.4.3 Removal of highway, riparian trees and groups may have significant effects on ecological connectivity (addressed principally in Ecology chapter) and reduction in landscape distinctiveness (addressed principally in Landscape chapter).

10.4.4 Removal of trees in commercial forestry is not necessary a significant effect if the rotation is at or close to economic felling age. Equally, removal or coppicing of trees from NWSS woodlands may not present a significant effect if soils remain intact and the measures are appropriate to habitat management objectives.

10.4.5 Commercial forestry and the NWSS woodland are identified as potential sensitive receptors. AWI is absent. There is no comprehensive database of ancient and veteran trees, but the citizen science database, the Ancient Tree Inventory (ATI), maintained by the Woodland Trust does not identify any specimens.

10.5 Mitigation

10.5.1 The routeing and alignment selection process for the Proposed Development has enabled consideration of likely significant effects on forestry throughout the evolution of the project to date.

10.5.2 In-line with the Scottish Government's Control of Woodland Removal Policy (CoWRP)[75], compensatory planting would be required for all areas of woodland loss associated with the Proposed Development, therefore, achieving no net loss of woodland cover.

10.5.3 The 2024 survey results will be the basis of forestry impact assessment. Consideration will be given to include coordinated requirements for tree removal, beyond the footprint of the Proposed Development, to secure stability and health of neighbouring woodland.

10.5.4 Forestry design planning will integrate with ecology design. Compliance with current forestry practice and guidance would be identified within a Construction Environment Management Plan (CEMP).

10.6 Proposed Scope and Methodology of Assessment

10.6.1 An initial walkover survey of the Proposed Development has been conducted. This identified the extent of replanting and natural regeneration within the clear-felled forest areas of the Proposed Development. A further forest mensuration survey will record species, stocking density and growth stage.

75 Scottish Government's Control of Woodland Removal Policy. Available at: fcfc125.pdf

10.6.2 The forestry assessment will focus on areas of commercial forestry through which the Proposed Development would be routed. Consideration will be undertaken on achieving resilience from tree fall e.g. Powerline tree 'Red Zone' assessment based on a pragmatic appraisal of the maximum growth height of trees. Tree growth height appraisal will consider all site and species factors. Where necessary, forestry wind throw hazard and forest landscape assessment will be considered on the impact of woodland removal areas. Where wind throw and forest landscape impact is predicted, consideration will be made as to the requirement of felling to desirable wind firm and forest landscape boundaries.

10.6.3 This assessment will be based on the requirement to form an Operational Corridor (OC), while recognising the potential impact over broader forest management from the Proposed Development. The assessment will consider the OC only and is not proposed to address overall Forest Plans. Any felling undertaken out with the OC would be solely under the control of the landowner, and the Applicant would not have any influence or control over such. Consequently, the assessment is limited to consideration of the effects of the Proposed Development on forest composition and yield.

10.6.4 In the UK there is a strong presumption against permanent deforestation unless it addresses other environmental concerns or where it would achieve significant and clearly defined additional public benefits. In Scotland, such deforestation is dealt with under the Scottish Government's "Control of Woodland Removal Policy" (2009)[76]. The purpose of the policy is to provide direction for decisions on woodland removal in Scotland.

10.6.5 It will be essential that the requirements of the Policy are addressed within the EIA and reported in the EIA Report. The integration of the Proposed Development into the forest design would be a key part of the development process. The forestry proposals would be prepared in accordance with the current industry best practice and guidance including, but not limited to:

- Forestry Commission (2023): The UK Forestry Standard, The Government's Approach to Sustainable Forestry. Forest Research[77];
- Scottish Forestry (2019): Scotland's Forestry Strategy 2019 to 2029. The Scottish Government, Edinburgh[78];
- UKWAS (2017): The UK Woodland Assurance Standard Fourth Edition. UKWAS.uk.org[79];
- Forestry Commission Scotland (2009): The Scottish Government's Policy on Control of Woodland Removal. Forestry Commission Scotland, Edinburgh[80]; and
- SEPA (2017) Guidance on the Management of Forestry Waste (SEPA, WST-G-027 version 3)[81].

10.7 Summary

10.7.1 The initial desk-based study and woodland site visits have identified that the Proposed Development would affect woodland areas. The predominant woodland type being commercial conifer plantation with areas of native broadleaved woodland to a lesser extent. The further detailed assessment of the Proposed Development's operational corridor through woodland, will include the consideration of all associated forestry effects and mitigation measures.

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76 Scottish Government's Control of Woodland Removal Policy. Available at: fcfc125.pdf

77 Forestry Commission (2023): The UK Forestry Standard, The Government's Approach to Sustainable Forestry. Forest Research. Available from: UK Forestry Standard (UKFS)

78 Scottish Forestry (2019): Scotland's Forestry Strategy 2019 to 2029. The Scottish Government, Scotland's Forestry Strategy 2019–2029 - gov.scot Available at: www.gov.scot

79 UKWAS (2017): The UK Woodland Assurance Standard Fourth Edition. Available at: UKWAS.uk.org

80 Forestry Commission Scotland (2009): The Scottish Government's Policy on Control of Woodland Removal. Forestry Commission Scotland/ Available from: The Scottish Government's Policy on Control of Woodland Removal forestry.gov.scot

81 SEPA (2017) Guidance on the Management of Forestry Waste (SEPA, WST-G-027 version 3) Available from: forestry_waste_guidance_note.pdf sepa.org.uk

11. TRAFFIC AND TRANSPORT

11.1 Introduction

11.1.1 This Chapter of the Scoping Report provides a brief overview of the traffic and transport baseline conditions, the potential effects associated with construction and operation of the Proposed Development and the proposed scope of assessment methodology to be considered in the EIA Report.

11.2 Baseline Conditions

11.2.1 It is expected that some construction vehicles (Light and Heavy Vehicles) will use the B842 to access the site from the east, and the cross Kintyre haul route having accessed this from the A83 which forms part of the trunk road network. The majority of construction traffic will access the site from the A83 utilising forestry access routes through Deucheran forest (cross kintyre haul route) and Lussa Forest (Beinn an Tuirc access). Existing forestry and windfarm access tracks will be improved where necessary to support access to the tower installation locations. Preliminary investigations confirm that the overhead line (OHL) route does not cross over any 'formal'/paved roads; however it does cross over a number of existing forestry tracks in the northern and southern ends. There are a number of less formal footpaths and cycle routes that the OHL may cross, which would be considered as part of the study.

11.2.2 The B842 is a one way single track road between the A83 and the site access, being approximately 5 m in width with passing place provision. The Agreed Route Map for Timber Transport Forum has been developed by timber transport groups at local authority level, and it categorises roads supporting access to forest areas in terms of their capacity to sustain the likely level of timber haulage vehicles. The routes are categorised into four groups, namely; 'Agreed Routes,' 'Consultation Routes,' 'Severely Restricted Routes' and 'Excluded Routes.'

11.2.3 'Agreed Routes' are categorised as routes used for timber haulage without restriction as regulated by the Road Traffic Act 1988. 'A' classification roads are classified as 'Agreed Routes' by default unless covered by one of the other road classifications. Those routes classed as 'Consultation Routes' are categorised as a route which is key to timber extraction, but which are not up to 'Agreed Route' standard. The Timber Transport Forum confirms that consultation with the Local Authority is required, and it may be necessary to agree limits of timing, allowable tonnage, etc., before 'Consultation Routes' can be used. The majority of the road has been identified as a route which is key to timber extraction activities by the Timber Transport Forum and is therefore considered to be suitable to accommodate the temporary increase in traffic generated by construction of the Proposed Development.

11.2.4 We would also propose to obtain baseline traffic survey data, which may be available from the local authority, otherwise we would arrange to carry out traffic surveys on the B842 and A83.

11.2.5 In addition, we would obtain relevant personal injury accident information from the Local Authority / Transport Scotland or Crashmap for the agreed study network for the Proposed Development.

11.3 Potential Effects

11.3.1 It is intended to review the potential effects of the Proposed Development on traffic and transport in accordance with the Institute of Environmental Management Assessment (IEMA) Guidelines for the Environmental Assessment of Road Traffic and Movement[82]. This guidance confirms that an assessment should be undertaken in accordance with the following two rules:

- Rule 1: On road links where traffic flows are predicted to increase by more than 30% (or where the number of heavy goods vehicles is predicted to increase by more than 30%); and
- Rule 2: On road links of high sensitivity where traffic flows have increased by 10% or more.

[82] Institute of Environmental Management and Assessment (IEMA), (2023). Environmental Assessment Traffic and Movement - July 2023. Available at: https://www.iema.net/resources/blog/2023/07/12/new-iema-guidance-environmental-assessment-of-traffic-and-movement

11.3.2 Where the predicted growth in traffic flow is below the thresholds, IEMA guidelines suggest effect significance is considered negligible and further detailed assessment is not warranted.

11.3.3 The following groups and special interests will also be considered for each link on the agreed study network in line with the IEMA guidance, to determine the sensitivity of receptors:

- people at home;
- people at work;

sensitive locations – including hospitals, schools, places of worship and historical buildings;

- people walking;
- people cycling;
- recreational and shopping areas;
- ecological/nature conservation sites; and
- tourist/visitor attractions.

11.3.4 The above receptors would be considered for potential effects, which may include:

- increased traffic flows;
- severance;
- fear and intimidation;
- driver delay;
- accidents and safety; and
- pedestrian amenity and pedestrian delay.

11.4 Mitigation

11.4.1 The Proposed Development's construction will be supported by the implementation of a Construction Traffic Management Plan (CTMP) which will set out the mitigation measures to be implemented during the construction phase. The measures will manage the impact of all construction traffic on the operation of the local road network.

11.4.2 The CTMP will be developed by the Principal Contractor and agreed with Argyll & Bute Council (ABC) prior to the commencement of construction activities.

11.5 Proposed Scope of Assessment

11.5.1 The EIA Traffic and Transport chapter will be prepared in accordance with relevant guidance and policy including the IEMA Guidelines for the Environmental Assessment of Road Traffic and Movement[82] and will include the following:

- A review of the Proposed Development's impact on the operation of the B842, and potentially the A83, which will likely be included in the Study Area.
- Where either of the two IEMA thresholds are exceeded, the impact of construction traffic will be assessed in terms of the following effects:
    - severance;
    - driver delay;
    - pedestrian delay;
    - pedestrian amenity;
    - fear and intimidation; and
    - accidents and safety.
- It is not intended to undertake a detailed assessment where neither of the two IEMA thresholds are exceeded;
- A cumulative assessment taking cognisance of consented developments which may have an impact on the operation of the study area's road network;

- Baseline traffic flow data will be obtained from Transport Scotland (TS) or the Department for Transport (DfT) for the most recently available period. Annual Average Daily Flow (AADF) information will be obtained for the agreed study network, which will confirm the traffic levels including Heavy Goods Vehicles (HGVs) using the B842 and A83; and
- The most recently available five year period of personal injury accident data will be obtained from the online Crashmap database (www.crashmap.co.uk) for the Study Area.

11.5.2 The Principal Contractor will prepare an initial CTMP to accompany the EIAR, with this identifying a range of measures to mitigate the impact of construction traffic on the operation of the local road network.

11.5.3 It is anticipated at this stage that there will be no requirement for any components to be transported to the site as abnormal loads, with standard HGVs supporting construction activities. Should a requirement for abnormal loads be identified by the Principal Contractor at a later date, an assessment of the impact of abnormal loads will be undertaken.

11.6 Issues to be Scoped Out

11.6.1 The potential for the Proposed Development to give rise to traffic impacts is limited to the construction phase only. No traffic or transportation impacts are anticipated during the operational phase as the Proposed Development would not generate any new traffic, apart from during infrequent maintenance activities. On this basis, operational traffic assessment is scoped out of the EIA in its entirety.

11.6.2 Similarly, as the Proposed Development would not have a fixed operational life. The effects associated with the construction phase are considered representative of worst-case decommissioning effects,. Therefore, the traffic assessment of the OHL's decommissioning is therefore scoped out of the EIA.

11.7 Summary

11.7.1 Consultation will be undertaken with Argyll and Bute Council and Transport Scotland to agree on the traffic and transportation EIA assessment methodology.

11.7.2 The assessment will focus on the likely significant effects arising during the construction phase of the Proposed Development. Likely effects arising from the operation of the Proposed Development have been scoped out.

12. OTHER ISSUES SCOPED OUT OF EIA

12.1 Introduction

12.1.1 This Chapter of the EIA Scoping Report provides the rationale for excluding certain effects on specified environmental topics from the EIA. The following topics are included:

- Land use;
- Air Quality;
- Climate Change;
- Material Assets and Waste;
- Major Accidents and Disasters;
- Noise and Vibration;
- Population and Health;
- Recreation and Tourism;
- Electric and Magnetic Field; and
- Radio and TV Interference.

12.2 Land Use

Baseline Conditions

12.2.1 The majority of the Proposed Development comprises forestry / woodland as well as areas of arable farmland and improved grassland. The project does not interface with any areas allocated for future development as listed in the Local Development Plans for Argyll and Bute Council.

12.2.2 Impacts on forests and forestry specifically are discussed in **Section 10: Forestry** and are not discussed further here.

Potential for Significant Effects

12.2.3 Potentially significant effects which can arise on land use from developments of this type include temporary or permanent loss of utilised land, including agricultural land; temporary or permanent severance and impact on the viability of existing activities. Significant effects may also include impacts on land designated for future development.

12.2.4 Land use impacts associated with the Proposed Development are anticipated to be limited. The construction work may result in some temporary loss of land or access restriction. However, it is considered that this can be adequately managed through the use of a Construction Access Management Plan.

12.2.5 The permanent loss of land to tower locations and new access tracks would be managed through agreements with the relevant landowners and farmers. This is not considered to result in a likely significant effect on land use during the operational lifetime of the Proposed Development.

12.2.6 Dialogue would be maintained by the Applicant and the Principal Contractor with landowners, local tenants, and property owners throughout the construction period to ensure any potential disruption as a result of the proposed works is kept to a minimum.

Issues Scoped Out

12.2.7 Regarding land use specifically, no likely significant effects are predicted as a result of the Proposed Development and therefore an assessment on land use (with the exception of forestry) is proposed to be scoped out of the EIA Report in its entirety.

12.3 Air Quality and Climate Change

Potential for Significant Effects

12.3.1 There are no Air Quality Management Areas near the Proposed Development. Impacts can arise on air quality and contribution to climate change from developments of this type; primarily due to generation and dispersal of dust, airborne particulate matter and emissions from plant, construction traffic and construction activities. Construction of the Proposed Development would be temporary and short term in nature; therefore, when considered in line with the relatively small amount of emissions generating plant or vehicles required, potential effects on air quality would be localised, short term and intermittent, and not considered to be significant. The potential for nuisance effects on residential or recreational amenity from change in air quality would be limited and where occurring would be strictly controlled in accordance with a detailed CEMP.

12.3.2 With regards to the vulnerability of the Proposed Development to the effects of climate change, given its nature to facilitate a Wind Farm connection, it is considered that it would provide a minor benefit to the vulnerability of climate change. The new infrastructure would be robust and support the Scottish government in achieving renewable energy targets. The OHL Alignment is also being designed to take factors such as flood risk and proximity to watercourses into consideration, which can further influence the OHL resilience to climate change.

Issues Scoped Out

12.3.3 The Proposed Development will not result in significant adverse effects on air quality and climate change during the construction and operational phases. Therefore, this topic has been scoped out of the EIA and no further assessment of air quality is proposed as part of the EIA Report.

12.4 Material Assets and waste

Potential for Significant Effects

12.4.1 The Proposed Development would require material consumption for the realignment of the OHL and conductors, insulators, other fittings, steel, and foundation works. Waste would be generated from the removal of the existing OHL and general construction waste from the compounds and sub-yards which would be recycled where possible.

12.4.2 Considering the nature and scale of the Proposed Development, material use, and waste generation will be limited in type and quantity, and no significant effects are anticipated. The use of recycled materials where feasible and minimisation of waste will be advocated. This will be included in the CEMP, which would be produced and implemented by the Principal Contractor.

Issues Scoped Out

12.4.3 No likely significant effects relating to material assets and waste are predicted as a result of the Proposed Development; therefore, it is proposed that an assessment on material assets and waste is scoped out of the EIA Report in its entirety.

12.5 Major Accidents and Disasters

12.5.1 The EIA Regulations require the consideration of the vulnerability of the Proposed Development to accidents and disasters. This requirement is interpreted as requiring the consideration of low likelihood / high consequence events which would result in serious harm or damage to environmental receptors.

Potential for Significant Effects

12.5.2 Given the nature of the Proposed Development, the potential for effects related to the vulnerability to accidents and disasters are likely to be limited to those associated with unplanned power outages, due to extreme weather or structural damage.

12.5.3 Crisis management and continuity plans are in place across the SSE Group. These are tested regularly and are designed for the management of, and recovery from, significant energy infrastructure failure events. Where there are material changes in infrastructure (or the management of it) additional plans are developed.

12.5.4 Other accident and disaster risks associated with an OHL relate to electrical discharge through accidental contact with live lines or structural collapse of the towers.

12.5.5 Minimal clearance distances are set for construction of lines in order to minimise risk of contact from moving plant or vehicles. Vegetation below active lines is cleared and maintained so as to prevent contact with conductors. Warning signs are placed on all towers to warn of risk of electrocution and, where necessary, fencing, or other barriers are installed around the base as a safeguard.

12.5.6 Towers and their accessory components, such as insulators and brackets, undergo regular inspection and maintenance to prevent both structural and electrical failure. Towers are also positioned at a safe distance from residences and other properties so that the risk of damage or injury is minimal in the unlikely event of structural failure.

Issues Scoped Out

12.5.7 The vulnerability of the Proposed Development to accidents and disasters is considered low and is therefore proposed to be scoped out of the EIA Report.

12.6 Noise and Vibration

Baseline conditions

12.6.1 The Proposed Development is located within a predominantly rural area. Therefore, it is expected that existing noise levels are low. Small settlements and individual properties are distributed to the east of the Proposed Development.

12.6.2 Noise sensitive receptors (NSRs) in this instance are defined as residential properties within 300 m of the scoping boundary (**Figure 1.1**), defined as the Study Area. There are two NSRs within the Study Area which are located to the east of the Proposed Development.

- Dwelling along the B842 (British National Grid Coordinates Easting: 179220, Northing: 639133), approximately 250m from the scoping boundary; and
- Rhonadale dwelling (British National Grid Coordinates Easting: 178666, Northing: 638960), approximately 50m from the scoping boundary.

Potential for Significant Effects

Construction Noise

12.6.3 Construction noise will be short term and intermittent, with potential noisy activities, such as tower steel reinforcements and foundation construction, taking approximately two to three weeks to complete per tower location depending on local ground conditions. As such, it is considered that construction noise can be controlled through the implementation of a Noise Management Plan, which would be developed as part of the CEMP prepared by the Principal Contractor. The Noise Management Plan would detail how construction noise would be mitigated in line with BS5228-1:2009+A1:2014 – Noise and Vibration Control on Construction and Open Sites. In the event that any towers requiring significant foundation construction are located within close proximity to residential properties, these works would be assessed on a case-by-case basis with specific measures included within the Noise Management Plan as required.

Operational Noise

12.6.4 An energised electricity transmission line can be a source of a phenomenon known as ‘corona discharge’ (a limited electrical breakdown of the air). Whilst the conductor systems of overhead lines are designed and constructed to minimise corona, surface irregularities on the conductors caused by physical damage such as burrs, or debris such as insects, pollen, industrial pollution, raindrops or other forms of contamination may locally enhance the electrical field strength sufficiently for

discharges to occur. Any corona discharge would act as a source of audible noise (a crackling sound occasionally accompanied by a low frequency hum in certain wet conditions).

12.6.5 It is not expected that this phenomenon, during operation, is of concern for the Proposed Development given that the OHL is 132 kV. Evidence-based studies have confirmed that the noise from corona discharge is only likely to become a significant effect at voltages higher than 350 kV.

12.6.6 There are no known vibration (structural / ground borne) issues associated with the operation of the Proposed Development at nearby NSRs. It is therefore proposed that vibration is scoped of the EIA.

12.6.7 Any operational maintenance works required along the line will be short term and intermittent and are not anticipated to give rise to significant effects relating to noise and vibration. As such, this topic is proposed to be scoped out of the EIA.

Issues Scoped Out

12.6.8 The Proposed Development will not result in significant adverse effects on noise and vibration during the construction and operational phases. Therefore, this issue has been scoped out of the EIA and no further assessment of noise and vibration is proposed as part of the EIA Report.

12.7 Population and Health

12.7.1 This sub-section of the Scoping Report covers factors considered to fall under the heading of population and human health, as referenced under regulation 4(3) of the EIA Regulations.

Baseline conditions

12.7.2 The Proposed Development is in a rural setting on the Kintyre Peninsula in Argyll and Bute, the local authority with the second largest area in Scotland. A major proportion (43%) of the population live in areas classified as 'remote rural'. The number of permanent residents is small compared to other areas of Scotland. Argyll and Bute has a population of 87,810 in 2023. the population density is 13 person per hectare compared to the Scottish average of 70 per hectare. [83]

12.7.3 Although sparsely populated, the Kintyre Peninsula has concentrated coastal settlements. The main town, Campbeltown (population 4,500[83]) supports a local economy and has areas of deprivation statistically significant in national reporting. The nearest settlements to the Proposed Development are Carradale. Traffic levels are low and roads other than the main A483 are small.

12.7.4 Visitors are an important part of the economy and support a recognisable local hospitality sector based on trade provided by the steady seasonal tourist traffic, linked along the peninsula by summer ferry routes between Campbeltown, Ardrossan near Glasgow, and Northern Ireland.

Potential for Significant Effects

12.7.5 The impacts on population and human health for a development of this nature and scale are limited and comprise a composite of the effects of other topics such as noise, air quality, hydrology (private water supplies), recreation and electromagnetic fields (EMFs), which are considered separately within this EIA Scoping Report.

12.7.6 Socio-economic factors will be considered in a separate Socio-economic report which will accompany the application.

Issues Scoped Out

12.7.7 The topics which collectively comprise Population and Human Health are dealt with separately and therefore a standalone assessment of Population and Human Health has been scoped out. However, the cumulative impact of effects from different topics on a common receptor, in this instance residents, will be considered within the EIA Report under the cumulative effects section.

[83] Argyll and Bute Council (2024) Population: Where We Live. Available at: https://www.argyll-bute.gov.uk/my-community/population-where-we-live

12.8 Recreation and Tourism

Baseline Conditions

12.8.1 Tourism, including the pursuit of recreational activities, contributes significantly to the local economy of the area annually. Tourism and recreation sites are distributed throughout the area surrounding the Proposed Development and are often clustered near settlements and main roads. The nearest recreational and tourist receptors are outlined below and shown on Figure 5.2:

- the Kintyre Way;
- Glenbarr Abbey;
- the C088 Campbelltown to Cloanaig Core Path;
- Campbelltown to Tarbert cycle route (recently delisted National Cycle Network Route 78);
- Locally promoted trails around Carradale;
- Lussa Loch;
- B842 in Carradale; and
- Barr Glen Road.

12.8.2 The OHL Alignment will not interact with the recreational features listed above. Given the distance between the recreational features and the OHL Alignment and the terrain in between, views of the Proposed Development will be limited.

Potential for Significant Effects

12.8.3 Due to the nature of the Proposed Development, disruption of recreation and tourist activities would most likely be limited to the construction phase. Construction may cause temporary disruption to core paths and other walkways/access routes, where used to gain access required for the works. There may also be indirect impacts upon the amenity of nearby tourism and recreation facilities, due to noise, dust, and visual impacts resulting from construction. However, these effects would be localised, temporary and negligible, therefore are not anticipated to be significant.

12.8.4 Any disruption to foot and cycle paths would be signposted and, if necessary and appropriate, a safe diversion would be put in place in agreement with Argyll and Bute Council. The CEMP would also contain an Outdoor Access Plan, which would identify any locations where public and private access would be impacted by construction works. This would also include means to mitigate the effects, such as appropriate signage and maps detailing diversion routes. The CEMP and CTMP would contain industry best practice measures to minimise noise, dust, and visual impacts during construction.

Issues Scoped Out

12.8.5 No likely significant effects are predicted as a result of the Proposed Development; therefore it is proposed that assessment of recreation and tourism is scoped out of the EIA report in its entirety.

12.9 Electric and Magnetic Fields

12.9.1 Electromagnetic Fields (EMF) arise from electric charges. Transmission lines comply with the government policy of adopting the guidelines of the International Commission on Non-Ionising Radiation Protection (ICNIRP) on exposure to EMF. The Applicant will ensure compliance with relevant legislation at all times[84], which in turn is based on the advice of the government's independent scientific advisers, the National Radiological Protection Board (NRPB) (now part of the Health Protection Agency). This will ensure the appropriate level of protection for the public from EMFs. The NRPB keeps the results of EMF health studies under constant review to ensure that the guidelines for limiting exposure are based on the best available scientific information.

[84] Energy Network Association (nd), What are electromagnetic fields? Available at: http://www.energynetworks.org/electricity/she/emfs.html

Potential for Significant Effects

12.9.2 Both electric and magnetic fields diminish quickly with distance. For a 132 kV OHL, typical magnetic fields diminish to near zero at around 50 m from the centreline, while electric fields do so in around half the distance[85]. It is therefore considered unlikely that significant effects on human health associated with EMFs would result from the Proposed Development.

Issues Scoped Out

12.9.3 No likely significant effects from EMFs are predicted as a result of the Proposed Development and therefore it is proposed that assessment on EMF is scoped out of the EIA Report in its entirety.

12.10 Radio and TV interference

12.10.1 At sufficiently high voltages and in particularly adverse weather, radio interference may occur due to corona, this is a phenomenon which causes the air surrounding conductors to become ionized, resulting in the conductors partially discharging. This only affects longwave (LW) and medium wave (MW) signals, which carry Amplitude Modulation (AM) radio.

12.10.2 Corona discharge is usually an intermittent phenomenon and is associated with either a faulty electrical connection or a faulty component. It is rarely found on steel-structure lines, as hardware tends to remain tightly fastened. It is not considered a source of long-term annoyance as the equipment is built and maintained to high standards and any such discharge would be the subject of remedial action.

12.10.3 LW and MW interference is very common and can occur for a wide variety of reasons[86] including weather due to differences in atmosphere, electric motors within common household appliances, light-emitting diode (LED) lights, street lighting and passing traffic. Under certain weather conditions, there are likely to be cases of limited AM radio interference at properties in close proximity to the OHL.

12.10.4 The Radio and Television Investigation Service (RTIS) is the regulatory body The Office of Communications (Ofcom) undertake investigations into complaints of radio and television interference of all kinds and from all sources. Published information[87],[88]indicates few cases of interference attributable to OHLs of 100 kV and over, and the number of complaints has fallen over recent years.

Potential for Significant Effects

12.10.5 The most likely impacts caused by the Proposed Development would be upon LW and MW signals which carry AM radio. AM is the oldest radio broadcasting system and over the years the number of radio stations broadcasting on AM is reducing, as they move to more reliable, higher-quality FM or digital platforms and there are now only a limited number of radio stations still operating on AM. The Proposed Development is not considered to cause interference to TV, FM, or Digital Audio Broadcasting (DAB) signals.

12.10.6 Interference to AM signals is already very common from a variety of sources and it is considered that the Proposed Development would not cause a significant effect to AM interference. Any complaints by nearby residents raised to Ofcom or RTIS and found to be attributable to the Proposed

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[85] EMFs.info (2018) Summaries of fields from all power lines. Available at: http://www.emfs.info/sources/overhead/summaries/

[86] Troubleshooting interference to AM radio. RTIS. Available at: https://www.radioandtvhelp.co.uk/help-guides/radio/troubleshooting-interference-to-am-radio

[87] TV or radio interference problems. Ofcom. Webpage. Available at: https://www.ofcom.org.uk/tv-radio-and-on-demand/how-to-report-a-complaint/tv-or-radio-interference-or-reception-problems

[88] Radio and Television Investigation Service. Webpage. Available at: https://www.radioandtvhelp.co.uk/what-are-you-having-problems-with.

Development would be appropriately dealt with by the Applicant on a case-by-case basis and therefore potential for significant effect is therefore considered limited.

Issues Scoped Out

12.10.7 No likely significant effects are predicted as a result of the Proposed Development and therefore an assessment on Radio and TV interference is proposed to be scoped out of the EIA Report in its entirety.

13. SUMMARY OF SCOPING

13.1.1 This Scoping Report sets out the environmental topics and aspects whereby significant effects are considered likely and therefore proposed to be included in the EIA. Where no significant effects are predicted, it is proposed that topics and aspects are scoped out of the EIA.

13.1.2 **Table 13.1** below lists each topic, the elements scoped in and out from further assessment and a summary of the justification for doing so.

Table 13.1: Environmental Topics and Aspects Scoped in and out of the EIA

Topic	Scoped In	Scoped Out
Landscape and Visual Impact	Landscape construction and operation impacts as a result of the OHL towers, forestry clearance and access tracks are scoped in. The assessment will consider: • LCT 39 – Plateau Moor and Forest; • LCT 36 – Coastal Glens; and • the effects on a local scale. The visual assessment will consider receptors within a 10km study area. This includes residential, tourism, recreation, and transport receptors, as defined in the visual baseline.	Landscape Assessment of the following receptors are scoped out as the potential for significant landscape effect is considered sufficiently low: • National Scenic Areas and Wild Land on Arran; • The West Kintyre (coast) LLA; and • The Rocky Coastland LCT. Visual Receptors on Arran may be scoped out if detailed investigation in the early stages of the assessment find that the risk of significant effect is very low.
Ecology and Nature Conservation	Construction impacts – an EcIA will be undertaken which will consider: • Impacts on ecologically designated sites such as the Carradale LNCS • Impacts on legally protected and notable species; and • Impacts on habitats.	Construction impacts on the following are scoped out: • Statutory designated sites of conservation importance (non-avian); • The remaining UKHab habitat types; and • European beaver. Operational impacts are scoped out as they are anticipated to be limited with minimal loss or degradation of habitats anticipated during maintenance.
Ornithology	Construction and operation impacts upon protected ornithological species.	The following receptors will be scoped out for both construction and operation; • Sound of Gigha SPA; and • Breeding bird assemblage
Cultural Heritage and Archaeology	Construction impacts on undesignated heritage assets.	The assessment of effects on the following receptors are scoped out for construction and operation:

Topic	Scoped In	Scoped Out
	Unknown archaeological and heritage assets along the Proposed Development. Setting impact on heritage assets, including Scheduled Monuments, during operation.	• Listed Building; • Inventory Gardens and Designated Landscapes; • Conservation areas; • Battlefields; and • World Heritage Sites. Temporary construction phase impacts through change to setting are also scoped out, as are indirect impacts from construction or operation.
Hydrology, Hydrogeology, Geology and Soils	Construction impacts – assessment will consider: • public and private water supplies • flooding, • soil erosion, compaction, and excavation • mobilisation of contaminated soil • peat disturbance/losses and resultant carbon emissions • groundwater conditions • pollution on fisheries. Assessment of operation impacts will consider groundwater levels and flows as a result of access tracks, alterations to GWDTE/groundwater-fed water supplies receptors and flooding.	The accidental release of sediments or pollutants, the impact on hydrologically relevant designated sites from chemicals, fuels, sedimentation pollution, changes to groundwater flows and levels/surface water drainage patterns are scope out for both construction and operational phases.
Forestry	Construction and operational impacts on forestry.	Assessment of ancient and veteran trees, timber volumes and harvesting plans, secondary effects.
Traffic and Transport	Construction phase impacts on traffic and transport.	Operational and decommissioning phase traffic assessment is scoped out as no impacts are anticipated.
Noise and Vibration	None	Construction impacts are scoped out as the impacts are anticipated to be minor, temporary, and localised.

Topic	Scoped In	Scoped Out
Land Use	None	Construction impacts are scoped out as the impacts are anticipated to be minor, temporary, and localised. Operational impacts are scoped out as the permanent loss of land to towers and access tracks would be managed through agreements with relevant landowners and farmers.
Air Quality and Climate Change	None	Construction impacts are scoped out as no significant effects are anticipated and impacts would be minimised through standard industry best practice measures. Operational impacts are scoped out as no adverse effects are anticipated on air quality, and it is anticipated to provide a minor benefit to the vulnerability of climate change.
Material Assets and Waste	None	Construction impacts are scoped out as although materials would be used and waste generated during construction, the quantities are not anticipated to be significant and would be minimised by mitigation measures. Operational impacts are scoped out as the situation would be no different than to the baseline.
Major Accident and Disasters	None	Construction and operation impacts are scoped out as no significant effects are anticipated. Any operational maintenance works required along the line will be short term and intermittent and are not anticipated to give rise to significant effects relating to noise and vibration. As such, this topic is proposed to be scoped out of the EIA
Population and Health	None	Construction and operation impacts are scoped out as the topics which collectively comprise this topic such as noise, air quality and hydrology will be considered separately within the EIA Report.
Recreation and Tourism	None	Construction impacts are scoped out as impacts are anticipated to be minor, temporary, and localised.

Topic	Scoped In	Scoped Out
		Operational impacts are scoped out as the situation would be no different to the baseline.
Electric and Magnetic Fields	None	Construction impacts are not applicable. Operation impacts are scoped out as no significant effects are anticipated.
Radio and TV Interference	None	Construction impacts are not applicable. Operation impacts are scoped out as no significant effects are anticipated.

14. NEXT STEPS

14.1 Inviting Comments

14.1.1 The Applicant invites consultees to comment on the following:

- What environmental information do you hold or are aware of that will assist in the EIA described here?
- Do you agree with the proposed approach for baseline collection, and that the range of surveys across particular topics is sufficient and appropriate to inform the assessment of environmental effects?
- Is there any other relevant existing baseline data that should be taken into account?
- Are there any key issues or possible effects which have been omitted?
- Do you agree with the list of issues to be scoped out, and the rationale behind the decision?

14.1.2 Responses to this Scoping Report should be directed to the Energy Consents Unit (ECU) of the Scottish Government to ensure all responses are collated and included within the Scoping Opinion. Responses should be directed to:

Email: Econsents_Admin@gov.scot

OR

Energy Consents Unit

Scottish Government

5 Atlantic Quay

150 Broomielaw

Glasgow, G2 8LU

14.1.3 When submitting a response to the Scoping Report, the Applicant would be grateful if you could also send a copy of your response to the address below:

Email to: agnieszka.gallagher@sse.com

OR

For the Attention of Agnieszka Gallagher

Scottish and Southern Electricity Networks Transmission

1 Waterloo Street, Glasgow, G2 6AY

14.1.4 The Scoping Opinion provided will be used to finalise the scope of the EIA and the specific approach to the individual assessments.

14.1.5 All comments received will be included in the EIA Report for reference, unless consultees request otherwise.

FIGURES