

APPENDIX 4.3: SCOPING REPORT – OCTOBER 2023

Melgarve Cluster Project

Environmental Impact Assessment: Scoping Report

October 2023



CONTENTS

GLOSSARY	IV
EXECUTIVE SUMMARY	1
1. INTRODUCTION	2
1.1 The Proposals	2
1.2 Legislative and Statutory Context	2
1.3 The EIA Regulations	3
1.4 Purpose of the EIA Scoping Report	3
1.5 Scoping Report Methodology	4
1.6 Route and Alignment Selection	4
2. DESCRIPTION OF THE PROPOSED DEVELOPMENT	6
2.1 Introduction	6
2.2 Proposed Development Components	6
2.3 Limit of Deviation	6
2.4 Overhead Line (OHL) Design and Construction	7
2.5 Cable Sealing End (CSE) Design and Construction	8
2.6 Underground Cable (UGC) Design and Construction	9
2.7 Proposed Development Construction Practices and Mitigation	10
2.8 Biodiversity Net Gain	12
3. EIA APPROACH AND METHODOLOGY	14
3.1 Introduction	14
3.2 Structure of the EIA Report	14
3.3 Cumulative Effects	15
3.4 Mitigation	15
3.5 Habitats Regulation Appraisal	15
3.6 Scoping Methodology	15
4. PLANNING POLICY	17
4.1 Introduction	17
4.2 National Planning Policy	17
4.3 Local Planning Policy	18
5. LANDSCAPE AND VISUAL AMENITY	19
5.1 Introduction	19
5.2 Baseline Conditions	19
5.3 Characteristics of the Potential Impact	20
5.4 Mitigation	21
5.5 Proposed Scope and Assessment Methodology	21
5.6 Issues to be Scoped Out	23
6. ECOLOGY AND NATURE CONSERVATION	24
6.1 Introduction	24
6.2 Baseline Conditions	24
6.3 Characteristics of the Potential Impact	26
6.4 Mitigation	26
6.5 Proposed Scope and Assessment Methodology	27
6.6 Issues to be Scoped Out	28
7. ORNITHOLOGY	29
7.1 Introduction	29
7.2 Baseline Conditions	29
7.3 Characteristics of the Potential Impact	30
7.4 Mitigation	31
7.5 Proposed Scope and Assessment Methodology	31
7.6 Issues to be Scoped Out	32
8. SOILS, GEOLOGY AND HYDROGEOLOGY (HYDROLOGY & HYDROGEOLOGY)	33
8.1 Introduction	33
8.2 Baseline Conditions	33

8.3	Characteristics of the Potential Impact	34
8.4	Mitigation	35
8.5	Proposed Scope and Assessment Methodology	35
8.6	Issues to be Scoped Out	37
9.	TRAFFIC AND TRANSPORT	38
9.1	Introduction	38
9.2	Baseline Conditions	38
9.3	Characteristics of the Potential Impact	38
9.4	Mitigation	39
9.5	Proposed Scope and Assessment Methodology	39
9.6	Issues to be Scoped Out	40
10.	TOPICS TO BE SCOPED OUT OF THE EIA REPORT	41
10.1	Introduction	41
10.2	Cultural Heritage	41
10.3	Forestry	42
10.4	Socio-economics, Recreation and Tourism	42
10.5	Land Use and Agriculture	44
10.6	Population and Human Health	44
10.7	Air Quality and Climate Change	45
10.8	Accidents and Disasters	46
11.	NEXT STEPS	47
11.1	Inviting Comments	47

Appendices

Appendix 1: Melgarve Cluster – ECU Screening Opinion

Figures

Figure 1: Site Context and Location Plan

Figure 2: Proposed Development

Figure 4: Landscape and Visual Context

Figure 3: Indicative Zone of Theoretical Visibility

Figure 5: Environmental Designations and Constraints

Figure 6: Phase 1 Habitat and National Vegetation Classification (NVC) survey

Figure 7: Peatland Classification

Figure 8: Peat Depth

GLOSSARY

Term	Definition
Alignment	A centre line of an overhead line, along with location of key angle structures.
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.
AOD	Above Ordnance Datum
Construction Environmental Management Plan (CEMP)	A site specific environmental management plan setting out the environmental management procedures, legislation and requirements for a particular project and site.
Conductor	A metallic wire strung from structure to structure, to carry electric current.
Consultation	The dynamic process of dialogue between individuals or groups, based on a genuine exchange of views, normally, with the objective of influencing decisions, policies or programmes of action.
Environmental Impact Assessment (EIA)	A formal process set down in The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 used to systematically identify, predict and assess the likely significant environmental impacts of a proposed project or development.
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.
General Environmental Management Plan (GEMP)	Developed by the Applicant to document general procedures, legislation and requirements for a variety of processes, typically during the construction phase of a project.
GWDE	Ground Water Dependent Terrestrial Ecosystem
Habitat	Term most accurately meaning the place in which a species lives, but also used to describe plant communities or agglomerations of plant communities.
Kilovolt (kV)	One thousand volts.
Landscape Character Type	A defined area of consistent landscape character identified in the NatureScot National Landscape Character Assessment of Scotland.
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(s).
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.
Micro-siting	The process of positioning individual structures to avoid localised environmental or technical constraints.
Mitigation	Term used to indicate avoidance, remediation or reduction 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 or poles.

Term	Definition
Plantation Woodland	Woodland of any age that obviously originated from planting.
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.
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	Woodland that does not obviously originate from planting. The distribution of species will generally reflect the variations in the site and the soil. Planted trees must account for less than 30% of the canopy composition.
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.
Special Landscape Area (SLA)	Landscapes designated by The Highland Council which are considered to be of regional/local importance for their scenic qualities.
Special Protection Area (SPA)	An area designated under the Wild Birds Directive (Directive 74/409/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.
The National Grid	The electricity transmission network in Great Britain.
Underground Cable	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 comprising 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 these areas are considered to be nationally important.

EXECUTIVE SUMMARY

Scottish Hydro Electric Transmission plc ("the Applicant") who, operating and known as Scottish and Southern Electricity Networks Transmission ("SSEN Transmission"), own and develop the high voltage electricity transmission system in the north of Scotland and remote islands. SSEN Transmission holds a license under the Electricity Act 1989 to develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

SSEN Transmission is proposing to submit an application under Section 37 of the Electricity Act 1989 for consent to construct and operate a new 132 kV overhead line (OHL) to connect the proposed Cloiche and Dell Wind Farms to the electricity transmission network at Melgarve substation. A combination of underground cable (UGC) and OHL is proposed to complete the connection, with the transition between them being achieved by two cable sealing end compounds. The project is known as the Melgarve Cluster Project and is referred to in this report as the "Proposed Development".

An Environmental Impact Assessment (EIA), supported by appropriate surveys and specialist assessments, will be carried out to inform an EIA Report. This will form part of an application to Scottish Ministers under section 37 of the Electricity Act 1989 for consent to construct the project.

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:

- 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?

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: Representations_Mailbox@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: teresa.jackson@sse.com

OR

For the Attention of Teresa Jackson
Scottish and Southern Electricity Networks Transmission
Inveralmond House
200 Dunkeld Road
Perth,
PH1 3AQ

1. INTRODUCTION

1.1 The Proposals

- 1.1.1 This Scoping Report has been prepared by ASH design+assessment Limited ("ASH") on behalf of Scottish Hydro Electric Transmission plc ("the Applicant") who, operating and known as Scottish and Southern Electricity Networks Transmission ("SSEN Transmission"), own and develop the high voltage electricity transmission system in the north of Scotland and remote islands.
- 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 overhead line (OHL) to connect the proposed Cloiche and Dell Wind Farms to the electricity transmission network at Melgarve substation. The proposed Cloiche Wind Farm, consisting of up to 29 turbines, and the proposed Dell Wind Farm, consisting of up to 10 turbines, are located in the Monadhliath mountain range approximately 10 km to the southeast of Fort Augustus. Both wind farms require a new 132 kV single circuit connection to facilitate a grid connection to the electricity transmission network at Melgarve 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. The project is referred to as the Melgarve Cluster Project ("Proposed Development"). An overview of the Proposed Development is shown on **Figure 1**.

1.2 Legislative and Statutory Context

- 1.2.1 Consent for the OHL elements of the project is sought from Scottish Ministers under section 37 of the Electricity Act (1989). The Electricity Act 1989 (as amended) is the primary legislation governing the electricity supply industry in Great Britain and places statutory and licence obligations upon a licence holder.
- 1.2.2 The requirement to undertake an EIA for developments requiring consent under section 37 of the 1989 Act (subject to stipulations and thresholds) is set out in the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017¹, (hereafter referred to as 'the EIA Regulations').
- 1.2.3 Construction of the elements of the Proposed Development relating to the OHL works and ancillary works constitutes development in terms of section 26 of the Town and Country Planning (Scotland) Act 1997 (as amended) ("the Planning Act"). Accordingly, these works require planning permission. However, section 57(2) of the Planning Act provides that on the granting of a consent under section 37 of the Electricity Act 1989, for overhead transmission lines and ancillary development, the Scottish Ministers may direct that planning permission for that development shall be deemed to be granted. Deemed planning permission under section 57 of the Planning Act would therefore also be sought from the Scottish Ministers in terms of a future application. The site context and location plan of the Proposed Development can be seen in **Figure 1**.
- 1.2.4 The elements of the Proposed Development subject to consent under Section 37 of the Electricity Act 1989 can be seen in **Figure 2** and comprise the following:
- Approximately 7.0 km of 132 kV OHL double circuit L7 lattice towers carrying both connections.
- 1.2.5 The Applicant will also seek deemed planning permission under section 57(2) of the Town and Country Planning (Scotland) Act 1997 for certain elements of the project, or ancillary development required to facilitate its construction and operation. This ancillary development is likely to include:
- Two Cable Sealing End (CSE) compounds or two towers with a cable sealing end platform (TBC) to facilitate the transition between OHL and UGC. The indicative locations of these are shown on **Figure 1**;

¹ The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, available at <https://www.legislation.gov.uk/ssi/2017/101/contents/made>. Accessed 13/06/2023.

- Approximately 7.4 km of 132 kV UGC commencing from the proposed Dell Wind Farm on-site substation;
- Approximately 1.6 km of 132 kV UGC commencing from the proposed Cloiche Wind Farm on-site substation; and
- Approximately 0.7 km of two 132 kV UGC running parallel to each other upon final approach into Melgarve substation;
- Access tracks to facilitate construction and on-going maintenance of OHL/UGC where required; and
- Any tree and vegetation clearance (if required).

1.2.6 The UGC elements are classed as permitted development under Class 40 1(a) of The Town and Country Planning (General Permitted Development) (Scotland) Order 1992. However in this case, given that there is no technical alternative to the UGC at either end of the OHL and following review of the recent Screening Opinion, it is intended that the UGC be considered as part of the Ancillary Development for which deemed planning permission under section 57(2) of the Town and Country Planning (Scotland) Act 1997 (as amended) is sought.

1.3 The EIA Regulations

1.3.1 The Proposed Development that will be the subject of an application to Scottish Ministers for Section 37 consent under the Electricity Act 1989 is classified as Schedule 2 development under the EIA Regulations by virtue of it being classed as:

“The carrying out of development (other than development which is Schedule 1 development) to provide any of the following -

(2) an electric line installed above ground –

(a) with a voltage of 132 kilovolts or more”

1.3.2 A Screening Request² was issued to the Energy Consents Unit (ECU) in June 2023 seeking a Screening Opinion from the Scottish Ministers under Regulation 9 of the EIA Regulations.

1.3.3 A Screening Opinion was received 20th September 2023 (ECU Ref: ECU00004850), and is included in **Appendix 1**. The Scottish Ministers took into account the selection criteria, all of the information submitted in respect of the request for a screening opinion, and the views of The Highland Council (THC) and NatureScot. The Screening Opinion concluded that the Proposed Development does constitute Environmental Impact Assessment (EIA) development, and it was deemed that the forthcoming application for consent (under section 37 of the Electricity Act 1989) does require to be accompanied by an EIA Report.

1.4 Purpose of the EIA Scoping Report

1.4.1 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.

1.4.2 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.

² SSEN Transmission (June 2023), *Melgarve Cluster Project - Screening Request and Proposed Scope of Environmental Appraisal*.

1.5 Scoping Report Methodology

1.5.1 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;
- Soils, Geology and the Water Environment
- Traffic and Transport;
- Cultural Heritage
- Forestry
- Socio-economics, Recreation and Tourism
- Land Use and Agriculture
- Population and Human Health
- Air Quality and Climate Change
- Accidents and Disasters

1.5.2 The proposed scope of the EIA Report is set out within this Scoping Report on a topic by topic basis.

1.5.3 For each topic, an overall description of the baseline environment is provided. 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 to determine effects, and identify appropriate mitigation measures. Issues to be scoped out of assessment are also provided.

1.5.4 This Scoping Report also takes into consideration the comments provided within the Screening Opinion (see **Appendix 1**).

1.6 Route and Alignment Selection

1.6.1 The Proposed Development has been subject to a routeing process in which alternative routes and design solutions for the proposed connection were compared to find the best option based on the most appropriate balance between environmental, engineering and cost factors.

1.6.2 Following this, a study of alignment options within the chosen route was carried out, prior to selecting a proposed alignment and design solution to take forward for section 37 consent (that chosen alignment being the Proposed Development). Consultation was undertaken at both route and alignment selection stage as part of this process, and the Applicant is continuing to review elements of the Proposed Development in relation to comments received by statutory consultees, particularly in relation to minimising impacts on peatland by utilising existing and proposed access tracks as far as is feasible. Information on the route and alignment stages of the project can be found on the project website.³

Public Consultation Events

³ SSEN Transmission (2023) *Melgarve Cluster Project Website*, available online at: <https://www.ssen-transmission.co.uk/projects/project-map/melgarve-cluster/>

In-person consultation events took place during the alignment selection stage at the following times and locations:

- 8 February 2023 2-6pm,⁴ Laggan Community Hall; and
- 9 February 2023 2-7pm, Fort Augustus Village Hall.

⁴ The consultation event at Laggan Community Hall on 8 February 2023 was originally scheduled to be 2-7pm, however, due to weather warnings relating to snow, this concluded an hour early due to safety concerns;

2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Introduction

2.1.1 The Proposed Development is driven by the requirement to connect the proposed Dell and Cloiche wind farms, located in the Monadhliath mountain range approximately 10 km to the east of Fort Augustus, to the National Grid. The proposed wind farms, as well as the existing Stronelairg Wind Farm and its grid connection to Melgarve substation (UGC) and the operational Glendoe Hydroelectric Scheme, are all technical constraints that the proposed connection solution requires to consider.

2.1.2 The connection point at Melgarve substation is located to the south of the proposed wind farms and is located adjacent to the Beauly to Denny 400 kV OHL. The boundary of the Cairngorms National Park lies to the east of the proposed connection, and Laggan, the nearest village to Melgarve substation, is located approximately 11 km to the east.

2.2 Proposed Development Components

2.2.1 The proposed OHL would commence from a CSE approximately 1.5 km southeast of the proposed Cloiche Wind Farm substation. From the CSE, the proposed OHL would continue to travel to the southeast for approximately 2.5 km, crossing Allt Creag Chomaich, passing to the northeast of Lochan Iain and Dubh Lochan. Approximately 1.5 km to the west of Meall na h-Aisre, the Proposed Development would turn in a generally more southerly direction for approximately 4.5 km. It would pass between Meall nan Ruadhag and Sherramore Forest and cross the Allt Gilbe. It would pass to the east of the Meall a Ghiubhais and approximately 0.7 km northeast of Melgarve substation, it would then terminate at another CSE.

2.2.2 As stated in Section 1.2, the elements of the Proposed Development subject to consent under Section 37 of the Electricity Act 1989, comprise:

- Approximately 7.0 km of 132 kV OHL double circuit L7 lattice towers carrying both connections.

2.2.3 The Applicant is also seeking deemed planning permission under section 57(2) of the Town and Country Planning (Scotland) Act 1997 for certain elements of the project, or ancillary works required to facilitate its construction and operation. These ancillary works (which also form part of the Scoping Report) are likely to include:

- Two Cable Sealing End (CSE) compounds or two towers with a cable sealing end platform (TBC) to facilitate the transition between OHL and UGC. The indicative locations of these are shown on **Figure 1**;
- Approximately 7.4 km of 132 kV UGC commencing from the proposed Dell Wind Farm on-site substation;
- Approximately 1.6 km of 132 kV UGC commencing from the proposed Cloiche Wind Farm on-site substation;
- Approximately 0.7 km of two 132 kV UGC running parallel to each other upon final approach into Melgarve substation;
- Access tracks to facilitate construction and on-going maintenance where required; and
- Any tree and vegetation clearance (if required).

2.3 Limit of Deviation

2.3.1 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.

2.3.2 A 100 m LOD (i.e. 50 m either side of the centre line of the proposed OHL alignment) is sought to allow for micro-siting of the OHL during construction. A 50 m LOD is sought for the construction of new access tracks and a 100m LOD is sought for the construction of the CSEs. A 100 m LOD is sought for the UGC LOD is sought for the UGC elements.

2.3.3 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 tower designs, some structure heights may vary depending on topography.

2.4 Overhead Line (OHL) Design and Construction

2.4.1 It is currently anticipated that the steel lattice structures would be of the L7 suite of towers. The span length (distance between towers) would vary slightly depending on topography and land usage. The span lengths for the Proposed Development would be between approximately 124 m and 308 m. Tower heights would also vary, depending on local topography, but would typically be in the region of 25 m to 37 m in height.

2.4.2 The steel lattice towers to be used for this project 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**). Three types of tower 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 CSE.

2.4.3 The towers would carry two circuits, each with three conductors supported from either glass, porcelain, or composite insulators attached to the horizontal cross arms on both sides of each steel lattice tower. An Optical Ground Wire (OPGW)⁵ would be suspended between tower peaks, above the conductors. Plate 2.1 shows a photograph of a typical steel lattice tower for illustrative purposes.

Plate 2.1: Photograph of Steel Lattice Tower Double Circuit (L7 series)



⁵ Optical Ground Wire is a dual functioning cable, providing a 'shield' to conductors from lightning, whilst also comprising optical cables for telecommunication purposes.

2.4.4 Key tasks during construction of the OHL elements of the Proposed Development would relate to:

- establishment of one or more construction compounds;
- establishment of suitable laydown areas for materials;
- construction of stone tracks (both temporary and permanent) and other temporary access solutions as necessary;
- delivery of structures and materials to site, including tower steelwork, which 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;
- formation of foundations, where different approaches may be used, subject to ground conditions. Foundation types and designs for each tower are likely to comprise:
 - spread type e.g. concrete pad and chimney;
 - piled type e.g. driven concrete, tube and micro pile; or
 - augered.
- tower construction (typically can commence two weeks after the foundations have been cast, subject to weather conditions and concrete curing rates)
- stringing of conductors using hauling ropes and winches;
- excavation and construction works associated with foundations, as necessary;
- assembly and erection of OHL support structures;
- remedial works to reinstate the immediate vicinity of the structures, and any ground disturbed, using excavated material;
- reinstatement of temporary access tracks and construction compound(s) as necessary; and
- inspections and commissioning.

2.4.5 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.

2.5 Cable Sealing End (CSE) Design and Construction

2.5.1 As stated two CSE compounds or CSE towers would be required to facilitate the transitions from UGC to OHL and vice versa. The exact technology to facilitate the transitions has yet to be determined however the requirements for each are listed below:

- Typical CSE compounds comprise a platform surrounded by a steel palisade security fence of usually 2.4 m in height. The compounds would be anticipated to be approximately 50 m x 50 m. Within the CSE compounds there would be a terminal tower, and associated gantry infrastructure. A permanent access track would be required at each CSE compound. A typical CSE compound is shown on **Plate 2.2** overleaf.
- Typical CSE 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 CSE structure is shown on **Plate 2.3** overleaf.

2.5.2 In accessing the environmental impacts of the CSE, the worst-case will be assumed in each instance. For example, the highest tower and the biggest footprint will be assessed regardless of technology type.

Plate 2.2: Typical Cable Sealing End Compound



Plate 2.3: Typical Cable Sealing End Tower



2.6 Underground Cable (UGC) Design and Construction

- 2.6.1 The cable alignments are shown on **Figure 2**, along with their LOD of 100 m. Cables would be installed through open cut trench techniques. The overall cable construction corridor would typically be approximately 37 m wide to accommodate excavation and cable installation equipment and store excavated materials during construction for reinstatement once the installation process is complete. A temporary haul road would be constructed along the length of the cable during the construction phase, with the circuits installed side by side. Similarly, access points and tracks from existing wind farm tracks/estate tracks to link to the proposed haul road would be required. A photograph showing an underground cable being laid as part of a double circuit installation is included in **Plate 3.4** overleaf.

Plate 3.4: Photograph of Underground Cable Installation



2.6.2 Key tasks during construction of the UGC elements of the Proposed Development would relate to:

- establishment of one or more construction compounds;
- establishment of suitable laydown areas for materials;
- establishment of a working corridor approximately 30 - 40 m wide;
- installation of access haul road and temporary bridges where required;
- strip topsoil and shallow peat layers to facilitate cable trenching;
- excavation of a trench for each circuit up to approximately 2 m in depth and 1 m wide, widening through benching and battering where stability and safety concerns arise;
- clearing out of all materials likely to damage cable ducts, e.g. clods, rocks, stones and organic debris, and employ use of pumps to remove any water;
- installation of ducting within the trench, surrounded by engineered backfill in suitable layers for protection, with protection tile and warning tape placed above the cable line, reinstated to sub-soil level;
- Excavation and formation of power cable joint bays with above ground electrical link pillars and associated demarcation;
- Transportation of and installation of power cable;
- Mobilisation of jointing containers and jointing of power cable;
- Reinstatement of joint bays and installation of fencing at link pillar locations;
- Reinstatement of excavated surface layers in reverse order; and
- Commissioning of cable system.

2.7 Proposed Development Construction Practices and Mitigation

Access during Construction

2.7.1 It is anticipated that traffic for the construction and operation of the Proposed Development would access the site via two main access points. The first would be to the plateau of higher ground where the proposed Cloiche and Dell wind farms would be located and where the Glendoe Hydro Scheme and Stronelairg Wind Farm exist. Construction traffic would reach this via the A82 onto the B862, then onto the existing Glendoe access track which connects into the B862 approximately 2 km east of Fort Augustus. This existing access track was constructed to carry construction vehicles and has been maintained for the operation of both Glendoe Hydro Scheme and Stronelairg Wind Farm (see **Figure 1**). The existing access track network on the plateau (and

new tracks proposed as part of the Cloiche and Dell wind farm proposals) would be utilised as far as practicable to limit new access track construction.

- 2.7.2 The second main access point would be from Melgarve substation. Access to this area would utilise existing access tracks from the A86 constructed for the Beauly – Denny OHL and Melgarve substation. To access the area between Melgarve substation and the plateau, use would be made of the existing track constructed to install Stronelaig UGC, where possible to limit new access track construction.

Delivery of Structures and Materials

- 2.7.3 All materials would be delivered to construction compounds. Concrete would be expected to be delivered to site pre-mixed, however this will be confirmed by the contractor in due course.
- 2.7.4 It is anticipated that there would be no abnormal load deliveries required as part of the Proposed Development.

Programme

- 2.7.5 It is anticipated that construction of the project would take place over a 24-month period, following the granting of consents, although detailed programming of the works would be the responsibility of the Contractor in agreement with SSEN Transmission.
- 2.7.6 Construction activities would in general be undertaken during daytime periods. Weekend working would also be proposed with timings to be confirmed by the contractor in due course. Working hour assumptions would be set out within the EIA and confirmed with The Highland Council.

Construction Environmental Management

- 2.7.7 Best practice construction measures would 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).
- 2.7.8 A Construction Environment Management Plan (CEMP) would 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 would aim to define good practice as well as specific actions required to implement mitigation identified in the EIA, the planning process and / or other licencing or consenting processes. 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.
- 2.7.9 A Construction Traffic Management Plan (CTMP) would be implemented for the works would be reviewed throughout the project and updated as necessary. An Access Plan would form part of the CTMP.

Forestry Clearance

The Proposed Development would not pass through or close to areas of woodland and commercial forestry, therefore forestry clearance is not anticipated to be required.

Site Compounds

- 2.7.10 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.

Reinstatement

- 2.7.11 Following commissioning of the Proposed Development, all temporary construction areas would be reinstated and restored. Reinstatement would form part of the contract obligations for the Principal Contractor and would include the removal of all temporary access tracks and work sites.

Operation and Management

- 2.7.12 The OHL sections of the Proposed Development would be anticipated to require very little maintenance, as is generally the case with OHL. Regular inspections would be undertaken to identify any unacceptable deterioration of components, so that they can be replaced. In the event of a fault on a line, the fault can be detected and rectified in a matter of days with OHL. UGC would require additional time for a fault to be detected and there could be the potential requirement for servitude on cable to ensure access. The steel lattice towers typically have a lifespan of 80 years.

Decommissioning

- 2.7.13 The Proposed Development would not have a fixed operational life. If the Proposed Development were to be decommissioned all components of the OHL, inclusive of trident poles, conductors and fittings, would be removed from site and either recycled or disposed of appropriately. A method statement would also be agreed with THC, setting out the detail of the decommissioning process. However, efforts would be made to repurpose the OHL for future connections prior to any decommissioning.

2.8 Biodiversity Net Gain

- 2.8.1 Biodiversity Net Gain (BNG) is a process which leaves nature in a better state than before development work started. SSEN Transmission has developed a BNG toolkit based upon the Natural England Biodiversity Metric,⁶ which aims to quantify biodiversity based upon the value of habitats for nature. It is an efficient and effective method for demonstrating whether development projects have been able to maintain or increase the biodiversity value of a development site after construction works.
- 2.8.2 The BNG toolkit would be applied on this project to quantify the overall potential biodiversity impacts for the Proposed Development; this includes a biodiversity baseline assessment, analysis of habitat losses due to temporary works and permanent structures during construction works, and analysis of biodiversity gains following reinstatement of habitats in *areas of temporary construction work*.

SSEN Transmission's Biodiversity Ambition

- 2.8.3 SSEN Transmission is committed to protecting and enhancing the environment by minimising the potential impacts from their construction and operational activities. As part of this approach, SSEN Transmission plc has made commitments within its Sustainability Strategy (2018)⁷, Sustainability Plan (2019)⁸ and RIIO-T2 Business Plan, for new infrastructure projects to:
- Ensure natural environment considerations are included in decision making at each stage of a project's development;
 - Utilise the mitigation hierarchy to avoid impacts by consideration of biodiversity in project design;

⁶ Natural England Biodiversity Metric 2.0 <http://publications.naturalengland.org.uk/publication/5850908674228224>

⁷ Delivering a smart, sustainable energy future: The Scottish Hydro Electric Transmission Sustainability Strategy (2018) <https://www.ssen-transmission.co.uk/media/2701/sustainability-strategy.pdf>

⁸ Our Sustainability Plan: Turning Ambition into Action. (2019) SHE Transmission. <https://www.ssen-transmission.co.uk/media/3215/our-sustainability-plan-consultation-report.pdf>

- Positively contribute to the UN and Scottish Government Biodiversity strategies by achieving an overall Net Gain; and
- Work with their supply chain to gain the maximum benefit during asset replacement and upgrades.

2.8.4 The design and evolution of this project will be carried out in line with these commitments.

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 approach to the assessment would be informed by current best practice guidance, including the following:

- Scottish Government Planning Advice Note (PAN) 1/2013 (revision 1.0)⁹; and
- Planning Circular 1/2017¹⁰.

3.1.2 The EIA work will comprise a series of specialist environmental studies which will be 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 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 Structure of the EIA Report

3.2.1 It is anticipated that the EIA Report will be structured as follows:

- Volume 1 – Main Report. This volume will provide an introduction to the EIA Report, a description of the project, the alternatives considered, the EIA process and will report on the baseline environment, potential effects, mitigation and likely significant environmental effects across all EIA topics scoped into the assessment.
- Volume 2 – Figures. This volume would provide supporting figures (primarily A3 size) to the assessments carried out as part of Volume 1.
- Volume 3 – Visualisations. This volume would provide visualisations of the Proposed Development from agreed viewpoint locations.
- Volume 4 – Appendices. This volume would include supporting appendices to the assessments carried out as part of Volume 2, and other information such as scoping and consultation responses, and assessment methodologies.
- A Non Technical Summary would form part of the EIA Report, summarising the project and its likely significant effects.
- A Planning Statement would also be provided, assessing the Proposed Development against the planning context.

3.2.2 The description of the likely significant effects will cover direct effects and indirect (including secondary) effects. The description of effects will typically identify the effect duration (short-term, medium-term and long-term), whether effects are permanent or temporary, and if effects can be categorised as adverse or beneficial.

⁹ Scottish Government (2013, revised 2017) Planning Advice Note 1/2013 (revision 1.0): Environmental Impact Assessment.

¹⁰ Scottish Government (2017) Planning Circular 1/2017: Environmental Impact Assessment Regulations 2017.

- 3.2.3 It is considered that there would be no potential for transboundary effects associated with the Proposed Development, and therefore no further assessment of transboundary effects is proposed.
- 3.2.4 A more detailed overview of the guidance and methodology adopted for each technical study is provided within Chapters 5 to 10 of this Scoping Report.

3.3 Cumulative Effects

- 3.3.1 The appraisal of cumulative effects would be considered in relation to those topics scoped into the EIA. The individual topic based chapters would set out the justification for developments to be included in each of the topic based cumulative effects assessment, but **Table 3.1** lists the developments that are broadly considered to be relevant. Such developments typically include those for which consent has been granted, or future development for which it is reasonable to assume, at the date that the list of cumulative developments is frozen, that the developer will proceed with an application for consent. The final list of development to be considered in the cumulative effects assessment would be frozen three months prior to publication of the EIA Report to allow sufficient time for its compilation.

Table 3.1: Cumulative Developments

Development Name and Type	Application Status
Dell Wind Farm	Section 36 application submitted to the Scottish Government's Energy Consents Unit in April 2020 (subject to variation). ¹¹
Cloiche Wind Farm	Section 36 application submitted to the Scottish Government's Energy Consents Unit in April 2020. ¹²

3.4 Mitigation

- 3.4.1 The routeing and alignment selection process described has sought to avoid or minimise likely significant environmental effects of the Proposed Development through careful routeing where practicable.
- 3.4.2 Further review of the Proposed Development to take account of the emerging findings of the EIA will provide further opportunity to mitigate likely significant effects, for example through the micro-siting of infrastructure and construction access, and the implementation of good practice during construction.
- 3.4.3 The EIA will identify and assess potentially significant effects prior to mitigation. Where mitigation measures are proposed to reduce or avoid a potential effect, the significance of the 'residual' effect will then be assessed. The Applicant and / or the successful contractor will be committed to implementing all the mitigation measures identified in the EIA Report. Where there are opportunities for offsetting and/or positively enhancing effects, these will be identified through the EIA process.

3.5 Habitats Regulation Appraisal

- 3.5.1 The Proposed Development passes within close proximity of a European designated site (the River Spey Special Area of Conservation (SAC)). A Habitats Regulation Appraisal (HRA) will therefore be required to be carried out by the Competent Authority upon submission of a consent application. In this case, a shadow HRA will be provided within the EIA Report.

3.6 Scoping Methodology

- 3.6.1 The following Chapters of this Scoping Report aim to provide sufficient detail to characterise the potential interactions between the Proposed Development and the environmental receptors identified. In presenting a

¹¹ ECU Application Reference: ECU00003440

¹² ECU Application Reference: ECU00002054

rationale for the proposed scope of environmental assessment, this report has taken the sensitivity of the current state of the environment into account, based on an understanding of the baseline conditions. The Scoping Report has also been prepared with reference to the potential magnitude of impacts, considering the typical construction and operational activities, physical characteristics and potential emissions/residues associated with the Proposed Development.

- 3.6.2 Where there is sufficient evidence to support scoping a topic out of the EIA process, this is presented. Otherwise, where it is considered that there is the potential for likely significant effects, the scoping report provides details of the proposed scope or detailed impact assessment, including the approach to further baseline data collection and brief details of the proposed methodology for impact assessment which would be employed for each topic.

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

4.2.1 The National Planning Framework (NPF) is a long-term plan for Scotland that sets out where development and infrastructure is needed. NPF4 came into force on 13 February 2023.

4.2.2 Section 13 of the 2019 Planning Act amends Section 24 of the 1997 Planning Act regarding the meaning of the statutory Development Plan, such that for the purposes of the 1997 Act, the Development Plan for an area is taken to consist of the provisions of:

- The National Planning Framework; and
- Any Local Development Plan (LDP).

4.2.3 NPF4 therefore now forms part of the statutory Development Plan and should be afforded substantial weight. A key provision of the 2019 Planning Act is that in the event of any incompatibility between the provisions of NPF4 and a provision of an LDP then whichever of them is the later in date will prevail. That will include where a LDP is silent on an issue that is now provided for in NPF4.

4.2.4 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 132kv or more; and*
- *New and/or upgraded infrastructure directly supporting high voltage electricity lines and interconnectors including converter stations, switching stations and substations.'*

4.2.5 The Proposed Development is therefore classed as national development under NPF4.

4.2.6 NPF4 will be the key policy consideration for the determination of the Proposed Development as part of the statutory Development Plan. In particular, the key NPF4 policies relevant to the Proposed Development are **Policy 5: Soils** and **Policy 11: Energy**. The following are also relevant to the Proposed Development:

- Policy 1: Tackling the climate and nature crises;
- Policy 2: Climate mitigation and adaptation;
- Policy 3: Biodiversity;
- Policy 4: Natural Places;
- Policy 7: Historic assets and places;
- Policy 14: Design, quality and place;

- Policy 22: Flood risk and water management;
- Policy 29: Rural Development; and
- Policy 30: Tourism.

4.3 Local Planning Policy

4.3.1 The site lies entirely within the jurisdiction of The Highland Council. The Proposed Development would be considered against the following Local Development Plan documents.

Highland-wide Local Development Plan

- 4.3.2 The Highland Wide Local Development Plan (HwLDP) 2012 provides the local planning framework for the area and provides the general policy context against which the Proposed Development would be assessed.
- 4.3.3 Policy 69 is the policy of most relevance to the Proposed Development given that it is specific to electricity transmission infrastructure. The policy acknowledges the significance and importance of proposals for electricity transmission infrastructure and provides support for proposals which are assessed as not having an unacceptable significant impact on the environment, taking into consideration mitigation measures.
- 4.3.4 Other relevant policies from the HwLDP are listed in Table 5.1.

Table 5.1: List of Relevant HwLDP Policies

Policy Reference	Name
Policy 36	Development in the Wider Countryside
Policy 28	Sustainable Design
Policy 29	Design Quality and Place-Making
Policy 30	Physical Constraints
Policy 53	Minerals
Policy 55	Peat and Soils
Policy 56	Travel
Policy 57	Natural, Built and Cultural Heritage
Policy 58	Protected Species
Policy 59	Other Important Species
Policy 60	Other Important Habitats and Article 10 Features
Policy 61	Landscape
Policy 62	Geodiversity
Policy 63	Water Environment
Policy 64	Flood Risk
Policy 69	Electrical Transmission Infrastructure
Policy 72	Pollution
Policy 77	Public Access
Policy 78	Long Distance Routes

Area Local Development Plan

4.3.5 The West Highlands and Islands Local Development Plan (WestPlan) (adopted 2019) also forms part of the development plan. It is used to guide decisions on planning applications and sets out the policies and land allocations to guide development over the next 20 years.

5. LANDSCAPE AND VISUAL AMENITY

5.1 Introduction

5.1.1 This Chapter of the Scoping Report provides a brief overview of the landscape character and visual amenity baseline conditions, the likely significant effects associated with the construction and operation of the Proposed Development, and the proposed scope of assessment methodology to be considered in the EIA Report.

5.2 Baseline Conditions

Landscape and Visual Context

5.2.1 The landscape context of the Proposed Development is broadly separated into two areas. To the north, the landscape is characterised by a broad and expansive upland plateau of sweeping moorland, featuring open, loosely defined, scooped valleys and rounded hills with no clear landform focal points or summits. A more distant backdrop of mountains is seen from higher ground within the wider setting to the south, east and west.

5.2.2 This upland plateau is currently characterised by Glendoe Hydro Infrastructure and the turbines and tracks of Stronelaig Wind Farm as can be seen in **Figure 1**. This characterisation would be expanded over a wider area with the construction of the proposed Dell and Cloiche Wind Farms.

5.2.3 To the south, a ridgeline of small, steep rounded hills, defined by narrow, steep-sided glens, separates the upland plateau from the wide valley of the upper River Spey. This valley is characterised by rough grassland and small squared coniferous forest plantations with a wide, sinuous river flowing through the base fed by smaller streams which rush down the narrow side glens. Existing electricity transmission infrastructure is present within the valley, comprising the existing Melgarve substation and the Beauly – Denny 400 kV OHL which is routed along the length of the valley. Various tracks and a narrow road are also present leading through the valley and into the adjacent hills. Despite the presence of these features, there is a sense of remoteness within the valley with few buildings present and a long journey up a single-track road to reach it. This sense increases when moving further to the west and south-west as the roads and tracks deteriorate in structure and the more remote mountainous landscape becomes more influential.

Protected and Designated Landscapes

5.2.4 The Proposed Development does not fall within any designated or otherwise protected landscapes. However, the following areas fall within 5 km of the Proposed Development (see **Figure 3**):

- National Context:
 - The Cairngorms National Park (CNP); and
 - Braeroy – Glen Shirra – Creag Meagaidh Wild Land Area (WLA 19) – 1.6 km to the south of the Proposed Development.
- Regional Context:
 - Ben Alder, Laggan and Glen Banchor Special Landscape Area (SLA) – 2.8 km to the south-east of the Proposed Development.

5.2.5 The boundary of the CNP lies approximately 2.2 km to the south-east of the Proposed Development. The CNP was established in 2003 with the aim of conserving and enhancing the natural and cultural heritage, as well as promoting sustainable development and public enjoyment of its resources. Forty-three Special Landscape Qualities (SLQs)¹³ have been identified for the CNP.

¹³ NatureScot and The Cairngorms National Park Authority (2010) The Special Landscape Qualities of the Cairngorm National Park.

- 5.2.6 WLA 19 extends to the south and south-west of the Proposed Development at minimum distance of around 1.6 km and is one of forty-two areas identified by NatureScot as portraying the most extensive areas of wild land characteristics. NatureScot have produced descriptions and identified particular wild land qualities for each of these WLAs.¹⁴
- 5.2.7 The Ben Alder, Laggan and Glen Banchor SLA is a regional level designation identified by THC through spatial planning. It lies around 2.8 km to the south-east of the Proposed Development. Citations for SLAs and special qualities are identified in the document: 'Assessment of Highland Special Landscape Areas'¹⁵.

Landscape Character

- 5.2.8 The Proposed Development would be located within and therefore would directly affect two Landscape Character Types (LCTs) from the NatureScot suite of National Landscape Character Types (see **Figure 3**). The majority of the alignment would be within LCT 221: Rolling Uplands. The southern 0.25 km of the Proposed Development on the approach to Melgarve Substation would be within LCT 231: Upland Glen – Inverness. There would also be potential wider, indirect effect to LCT 126: Upland Glen – Cairngorms.
- 5.2.9 The area within the CNP is also covered by the separate Cairngorm National Park Landscape Character Assessment which identifies Landscape Character Areas (LCAs) with a greater level of detail. However, as the CNP is relatively peripheral to the Proposed Development, and it is considered that significant effects are unlikely, it is proposed that the NatureScot LCTs would be used in preference for this LVIA.

Visual Receptors

- 5.2.10 Visual receptors with the potential to gain views of the Proposed Development include those occupying nearby buildings, using routes or enjoying other popular and/or promoted outdoor viewing locations.
- 5.2.11 The area is remote with very little population, limited to a few scattered properties around Garvamore and Garvabeg within upper Glen Spey, around 2.5 km to the east of Melgarve substation. There are also a few recorded and publicised recreational routes within the area giving the potential for views of the Proposed Development. These include the General Wade's Military Road which passes to the south of Melgarve, and forms part of the popular Corrieyairack Pass route (part of Scottish Hill Tracks 236 and 237¹⁶). In addition, the main spine road of the Stronelairg Wind Farm is promoted by the South Loch Ness Access Group as part of the Monadhliath Trail between Fort Augustus and Whitebridge. There are also some path routes leading from Glen Spean which provide access to local mountains, notably a route from Garva Bridge, ascending the Corbett Meall na h-Aisre which follows the ridgeline to the east of the Proposed Development.
- 5.2.12 A small public car park at Garva Bridge within the upper Glen Spey around 2 km to the southeast of the Proposed Development also forms a popular viewing location as it marks the end of the public road and is sited on the boundary of the CNP.

5.3 Characteristics of the Potential Impact

- 5.3.1 The potential for landscape and visual effects associated with the construction and operation of the Proposed Development include:
- Temporary or long-term physical effects on landscape fabric, relating to the construction of temporary access routes, excavation of tower foundations, construction and reinstatement works and long term presence of the proposed development within the landscape;

¹⁴ Scottish Natural Heritage (2017) Description of the Braeroy, Glenshirra and Creag Meagaidh Wild Land Area. Available at: <https://www.nature.scot/sites/default/files/2021-06/Wild%20land%20Description%20Braeroy-Glenshirra-Creag-Meagaidh-July-2016-19.pdf>

¹⁵ Horner + MacLennan and Wood, Mike (2011) Assessment of Highland Special Landscape Areas.

¹⁶ Scottish Rights of Way and Access Society (2012). Scottish Hill Tracks, 5th Edition. Scottish Mountaineering Club

- Temporary or long-term direct or indirect effects on landscape character which may occur as a result of changes to the landscape fabric on the intrinsic qualities of the immediate landscape and wider setting;
- Temporary or long-term effects on views, such as those experienced by visual receptors occupying properties at Garvamore and Garvabeg, visitors to Garvabridge and recreational users of the landscape; and
- Potential cumulative effects with other proposed infrastructure within the area.

5.4 Mitigation

- 5.4.1 Mitigation would be included where possible in order to minimise potential landscape and visual effects. Given the nature of the Proposed Development and existing landscape character, the most suitable mitigation is likely to involve the development of a design which limits the potential landscape and visual effects as far as is practicable when taking into consideration other constraints, along with good working practices to enable a high standard of landscape reinstatement. There may also be some opportunity for localised landform creation to reduce the visual appearance of sealing end compounds.
- 5.4.2 The Proposed Development has already undergone a routeing and alignment exercise which has taken landscape and visual issues into consideration.

5.5 Proposed Scope and Assessment Methodology

- 5.5.1 It is proposed that a Landscape and Visual Impact Assessment (LVIA) would be undertaken for the Proposed Development. The LVIA would be undertaken in accordance with best practice guidance, Guidelines for Landscape and Visual Impact Assessment (3rd Edition)¹⁷ (GLVIA3).
- 5.5.2 The LVIA would separately consider the potential landscape and visual effects of the Proposed Development during both construction and operation. It would also give consideration to potential cumulative effects which may take place. Operational effects would be assessed at an assumed 10 years after construction and would take into account the likely growth of existing planting areas around Melgarve substation.
- 5.5.3 Potential effects will be presented as ratings of Negligible, Minor, Moderate and Major, taking into account ratings for sensitivity and magnitude of change and on the basis of professional judgement. Where appropriate, interim ratings will be allocated (e.g. Minor to Moderate or Moderate to Major). Effects identified as being at a level of Moderate or greater are considered significant in accordance with the EIA Regulations.

Study Area

- 5.5.4 The assessment would be informed by the Zone of Theoretical Visibility (ZTV) for the Proposed Development.
- 5.5.5 A preliminary ZTV has been produced for the Proposed Development (see **Figure 4**). This has been based on an assumed tower height of 27 m which reflects the standard height of the type of tower proposed. The actual height of towers would vary depending on local topography and the ZTV would be updated once more detailed information is available
- 5.5.6 Following review of the preliminary ZTV for the Proposed Development, and taking into account ASH's experience of the landscape and visual effects of similar steel lattice tower projects to those proposed, a 3 km study area is considered appropriate to identify all potentially significant effects. At greater than 3 km, the steel lattice structure of towers at the scale proposed results in them being difficult to perceive, particularly with a

¹⁷ Landscape Institute (LI) and Institute of Environmental Management and Assessment (2013) *Guidelines for Landscape and Visual Impact Assessment*. 3rd edition. Published by Routledge

landform backdrop, and therefore significant landscape and visual effects beyond this distance are highly unlikely.

Landscape Assessment

- 5.5.7 The landscape assessment would describe the key components, features and characteristics that make up the character of the landscape within the study area. It would consider the extent to which any potential loss of features and the introduction of the Proposed Development would influence the local landscape character and the broader, National LCTs. The landscape assessment would be informed by the descriptions of the CNP LCAs in the identification of key characteristics and evaluation of landscape value and sensitivity but given the very limited theoretical visibility of the Proposed Development within the CNP area, would not include additional, separate assessment of these LCAs.
- 5.5.8 Only a very small part of the CNP falls within the study area, in the Spey Valley around Garvamore where the ZTV indicates some theoretical visibility of the Proposed Development at distances of over 2 km. Beyond the edge of the study area, ZTV coverage over more elevated areas is shown only along the very edge of the CNP boundary which typically follows the ridgeline which forms the viewshed. At over 3 km, these areas are distant from the Proposed Development and the lattice structure of towers is likely to be of very limited perceptibility.
- 5.5.9 The area around Garvamore within the study area is characterised by a farm and surrounding rough fields and grazing land on the valley floor, surrounded by small coniferous plantation areas. The existing Beauly – Denny steel lattice OHL (which comprises towers of a greater scale than those proposed) crosses through this area and has a notable influence.
- 5.5.10 Given the very limited area of the CNP which would be potentially affected all at distances of over 2 km and in areas already very influenced by the closer Beauly – Denny OHL, the likelihood of any significant effects resulting from the Proposed Development is considered small. It is therefore proposed that a detailed Special Landscape Qualities assessment should not be required. However, a review of effects in relation to the SLQs would be included in the LVIA chapter. A photomontage is proposed from the Garvamore area, within the CNP, to illustrate the appearance of the Proposed Development within the context of this part of the CNP (see paragraph 5.5.14).
- 5.5.11 It is proposed that assessment of WLA 19 and the Ben Alder, Laggan and Glen Banchor SLA would be scoped out of the LVIA, as detailed in **Section 5.6** below.

Visual Assessment

- 5.5.12 The visual assessment would be receptor-based and would give consideration to views obtained by all those living, working, travelling and undertaking recreation within the study area including all building locations, recreational routes and other identified valued viewing locations.

Cumulative Assessment

- 5.5.13 The LVIA cumulative assessment would consider both landscape and visual effects of the Proposed Development in addition to other proposed and consented developments which may influence the character of the study area and are not present within the baseline at the time of assessment. At the current stage, it is proposed that the cumulative baseline would include the Cloiche and Dell Wind Farms as well as the UGC works associated with the Proposed Development. Cumulative effects would be assessed during the operational phase only.

Visualisations

- 5.5.14 Photomontages would be prepared to inform and support the LVIA to meet THC (2016) visualisation standards and NatureScot (2017), formerly Scottish Natural Heritage (SNH), guidance. It is proposed that these would

illustrate the appearance of the Proposed Development within the landscape during its operational phase. The following preliminary locations are proposed for visualisations:

- Visualisation 1: Garva Bridge (approximate grid reference NN 52330 95172) – Representative of views obtained by members of the public within upper Glen Spey, and near a recognised stopping and viewing location on the edge of the CNP. The view would also be similar, albeit at a closer distance, to views from residential properties at Garvabeg.
- Visualisation 2: Meall na h-Aisre (approximate grid reference NH 51529 00052) – Representative of high level views from the south.
- Visualisation 3: General Wade's Military Road near Garvamore (approximate grid reference NH 53072 93999) – Illustrative of the appearance of the Proposed Development from the affected area of the CNP.

5.5.15 The photomontages would be supportive of the LVIA, intended to show the appearance of the Proposed Development within the landscape setting. These locations would not comprise particular viewpoints for assessment purposes, as the assessment would include all potential visual receptor locations within the study area. However, they would be otherwise covered by the visual receptor assessment as they comprise areas where visual receptors are likely to be present.

5.6 Issues to be Scoped Out

5.6.1 As discussed in **Section 5.5** above, it is considered that a full SLQ assessment of the CNP should not be required, but a review of the result of the LVIA with respect to the CNP SLQs would form part of the LVIA chapter.

5.6.2 The Proposed Development would not be situated within WLA19 and would be seen only in the context of other similar developments including the Melgarve substation and Beauly – Denny 400 kV OHL from within a very small and peripheral part of it. It is therefore considered that it would be unlikely to lead to any significant loss of wild land characteristics within the WLA and it is proposed that a WLA assessment should not be required.

5.6.3 The Ben Alder, Laggan and Glen Banchor SLA lies around 2.8 km to the south-east of the Proposed Development with only a very peripheral part falling within the study area (see **Figure 3**). Any areas where potential intervisibility with the Proposed Development would occur fall wholly within the CNP. It is therefore considered very unlikely to be significantly affected by the Proposed Development and therefore it is proposed that it would also be scoped out of further landscape assessment.

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 construction and operation of the Proposed Development, and the proposed scope and assessment methodology to be considered in the EIA Report.

6.2 Baseline Conditions

6.2.1 The Proposed Development is not located within any international or national natural heritage designations (See **Figure 5**). The following natural heritage designations (non-avian) fall within the vicinity of the Proposed Development:

- The River Spey Special Area of Conservation (SAC) (site code: 8365) and Site of Special Scientific Interest (SSSI) (site code: 1699) are approximately 0.3 km south of the Proposed Development. The River Spey SSSI and SAC are designated for biological features including Atlantic salmon (*Salmo salar*), freshwater pearl mussel (*Margaritifera margaritifera*) (FWPM), otter (*Lutra lutra*) and sea lamprey (*Petromyzon marinus*).
- Creag Meagaidh SAC (site code: 8235), SSSI (site code: 457), and National Nature Reserve (NNR) (site code: 5021) are approximately 1.5 km south of the Proposed Development, designated for natural biological features including a diverse mosaic of upland habitats of European importance. SAC qualifying features comprise: acidic scree, alpine and subalpine heaths, blanket bog (priority habitat), clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels, dry heaths, montane acid grasslands, mountain willow scrub, plants in crevices on acid rocks, plants in crevices on base-rich rocks, tall herb communities, and wet heathland with cross-leaved heath. SSSI qualifying features include: breeding bird assemblage, rocky slopes (includes inland cliff, rocky outcrops, chasmophytic vegetation), upland assemblage, upland birch woodland, and vascular plant assemblage.
- Monadhliath SAC (site code: 8324) and SSSI (site code: 1180) are located approximately 2.3 km east of the Proposed Development. The SAC is designated for blanket bog and the SSSI is designated for blanket bog and a range of upland habitats supporting rare vascular plants, as well as the black mountain moth (*Glacies coracina*), breeding bird assemblage and breeding dotterel (*Charadrius morinellus*), which is a species of national importance.
- Ness Woods SAC (site code: 8337), located approximately 5 km west of the Proposed Development, designated for European mixed woodlands on base-rich soils associated with rocky slope, western acidic oak woodland and for otter.
- Glen Tarff SSSI (site code: 725), located approximately 5 km west of the Proposed Development, forms part of the Ness Woods SAC, and is designated for its biological features including upland mixed ash woodland and the rare beetle *Bolitophagus reticulatus*.

6.2.2 A review of the Ancient Woodland Inventory (AWI)¹⁸ identifies that no ancient woodland is within or adjacent to the Proposed Development. The nearest woodland listed on the AWI is located approximately 1.2 km south of the Proposed Development at NN498944 Coill Bheag and approximately 1.4 km south of the Proposed Development at NN510940 Coill Coire A Bhein. Other areas are present to the north-east, along the Allt Odhar, to the north, along the River Killin, and to the west, along the River Tarff.

6.2.3 Sightings or signs of otter, water vole, mountain hare, brown hare and common lizard were recorded during surveys for the Proposed Development. Squirrel feeding signs were noted in areas of conifer plantation. In addition, a pine marten den box and a bat box were recorded in the vicinity of Melgarve substation; it is

¹⁸ <https://www.nature.scot/doc/guide-understanding-scottish-ancient-woodland-inventory-awi>

unknown whether either are in use. Watercourses and water bodies throughout are considered suitable for supporting foraging and commuting otter; with many of the smaller watercourses in the north of the site also suitable for supporting water vole, with burrows and latrines recorded. No otter protected features (holts or couches) were recorded and it was noted that there was limited opportunity for resting sites. Other reptile species (slow worm and adder) may also be present. No badger signs were recorded.

- 6.2.4 Resident brown trout (*Salmo trutta*) are likely to be present in various life stages within watercourses within the site, although densities may be low. There is potential that these trout populations could support FWPM if habitat conditions are suitable. European eel (*Anguilla Anguilla*) may be present in low numbers. Migratory species, including Atlantic salmon, river lamprey (*Lampetra fluviatilis*) and sea lamprey, are not likely to be present in the site. The Ecological Impact Assessment for Cloiche Wind Farm concluded that brown trout are likely to be the only species present within the wind farm site, due to barriers to fish passage which make the area inaccessible to most fish species, and trout density in streams draining the site is likely to be low¹⁹. Fish surveys conducted at Stronelairg wind farm found trout to be present, however population density at all sites was very low; watercourses within the Stronelairg wind farm site are upstream of known impassable barriers and therefore considered to be inaccessible to migratory fish species, with the possible exception of European eel. No other fish species were caught or seen during surveys, and no FWPM were recorded. In the area of the Dell Wind Farm site, it was assessed that migratory fish would not be present due to the impassable Foyers waterfalls downstream of the site, in addition, watercourses located within the plateau section of the site are considered too steep and shallow to maintain trout populations²⁰, also indicating that FWPM populations would not be present. In the south of the site, watercourses are hydrologically connected via the Allt Coire Iain Ogg and Allt Gilbe to the River Spey SAC and SSSI, which are classified for Atlantic salmon, FWPM and sea lamprey. However, Allt Coire Iain Ogg contributes to SEPA river ID:23154, River Spey – source to Garva, which is part of the Water Framework Directive (WFD) classification and was classified as Poor overall condition in 2014, with Poor access for fish migration, due to Spey Reservoir downstream presenting a barrier²¹. Progress is being made at the Spey Dam which should improve fish passage²². Electrofishing surveys completed as part of the Glenshero Wind Farm submission²³ found a robust and healthy resident trout population on the Allt Coire Iain Oig. No fish were recorded on the Allt Gilbe. Juvenile salmon were present downstream, below the large waterfall on the Feith Talagian, a short distance above the River Spey; the waterfall is considered unpassable to migratory salmonids.
- 6.2.5 In terms of habitats, blanket bog dominates the site, followed by wet dwarf shrub heath, bare peat, and unimproved acid grassland. The blanket bog is mainly represented by the M17 *Trichophorum germanicum* – *Eriophorum vaginatum* and the M19 *Calluna vulgaris* – *Eriophorum vaginatum* blanket mire communities; these communities are likely to be considered as priority peatland in relation to NatureScot guidance²⁴. Within and around these predominant habitats are patches of other habitat types such as lichen/bryophyte heath, acid dry dwarf shrub heath, conifer plantation, montane heath, and acid neutral flushes (see **Figure 6**). Much of the peatland habitat is degraded to some extent. The site is dissected by a number of watercourses, including Allt Gilbe, Allt Coire Iain Oig, Allt Creag Chomaich, and the Allt na Craidhleig. There are also a number of lochans within the site, namely Lochan Iain, Dubh lochan, and Loch nan Sidhean.
- 6.2.6 The Carbon and Peatland Map 2016²⁵ was consulted to determine likely peatland classes present at the site. The map is a predictive tool that provides an indication of the likely presence of peat at a coarse scale. The Carbon and Peatland map has been developed as a high-level planning tool and identifies areas of nationally

¹⁹ SSE (2020). Cloiche wind farm: Environmental Impact Assessment Report.

²⁰ LUC (2022). Dell Wind Farm: EIA Scoping Report.

²¹ www.sepa.org.uk/data-visualisation/water-environment-hub/ [Accessed May 2023]

²² NatureScot (2020). Conservation Advice Package for the River Spey SAC.

²³ Spey Fishery Board (2018). Glenshero Wind Farm EIA Report – Technical Appendix 6.4 - Electrofishing & Habitat Survey

²⁴ NatureScot (2023). Advising on peatland, carbon-rich soils and priority peatland habitats in development management.

²⁵ SNH (2016). Carbon and Peatland 2016 map. Available at: <https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/soils/carbon-and-peatland-2016-map>

important carbon-rich soils, deep peat and priority peatland habitat²⁶ as Class 1 and Class 2 peatlands. According to this predictive tool, the site contains a large amount of Class 1 peatland within the central and northern areas, with a much smaller area of Class 2 peatland to the west of Sherramore Forest to the south of the site. The habitats survey data collected indicates the presence of peatland, through the presence of blanket bog and wet modified bog which is dominant within the vicinity of the Proposed Development.

- 6.2.7 The site falls within the area covered by the Highland Nature Biodiversity Action Plan (BAP) 2021-2026²⁷. The Highland BAP includes a number of priority habitats and species for the Highlands region including the following habitats and their related species which are present within the site: upland and moorland, peatland and wetland, woodland and forest, and freshwater.

6.3 Characteristics of the Potential Impact

- 6.3.1 The potential terrestrial ecology and nature conservation impacts associated with the construction and operation of the Proposed Development comprise:
- Temporary or permanent, direct and/or indirect impacts, on the integrity or qualifying features of designated nature conservation sites;
 - Temporary or permanent, direct (e.g. from land-take) and/or indirect (e.g. through changes caused by impacts to supporting systems such as groundwater or overland flow) losses or alteration/disturbance of habitats of nature conservation value, including peatland;
 - Temporary or permanent direct impacts on protected species, such as loss of life as a result of the Proposed Development, loss of key habitat, displacement from key habitat, barrier effects preventing movement to/from key habitats, and general disturbance;
 - Temporary or permanent indirect impacts on protected species through loss/changes of/to food resources, population fragmentation, or degradation of key habitat (e.g. as a result of pollution); and
 - Cumulative impacts – ecological impacts arising from the addition of the Proposed Development in combination with other projects.

6.4 Mitigation

- 6.4.1 The routing and alignment selection process for the Proposed Development has enabled consideration of potential significant effects on habitats and species, and for such effects to be avoided or minimised where practicable through this process. This will continue and will inform the detailed siting of infrastructure and construction access, where technically feasible, to avoid and minimise effects on habitats and species where practicable.
- 6.4.2 In addition, the Applicant has established best practice construction techniques and procedures that have been agreed with statutory consultees, including SEPA and NatureScot. These are set out within the Applicant's GEMPs and SPPs. The Proposed Development would be constructed in accordance with these plans.
- 6.4.3 A contractual management requirement on the successful Principal Contractor would be the development and implementation of a comprehensive and site-specific robust Construction Environmental Management Plan (CEMP). This document would detail how the successful Principal Contractor would manage the works in accordance with all commitments and mitigation detailed in the EIA, SSE's GEMPs, statutory consents and authorisations, and industry best practise and guidance, including pollution prevention guidance.

²⁶ Priority peatland habitat is land covered by peat-forming vegetation or vegetation associated with peat formation.

²⁷ <https://www.highlandenvironmentforum.info/biodiversity/action-plan/>

6.4.4 As discussed above, the Proposed Development would meet biodiversity enhancement requirements in line with NPF4 Policy 3.

6.5 Proposed Scope and Assessment Methodology

6.5.1 A Phase 1 Habitat and National Vegetation Classification (NVC) survey of the site was undertaken in October 2022 to identify habitats and vegetation communities at and around the Proposed Development, covering a 200 m corridor from the alignment options, see **Figure 6**. Due to design iterations, approximately 1 km of the indicative UGC near Dell Wind Farm does not fall within the NVC survey area (marked as “Non-Surveyed Area” on **Figure 6**); it is intended to use surveyor knowledge of the site, aerial photography and other remotely sensed data, and if possible, existing habitat survey data from surrounding projects to extrapolate habitats information for this area, including a 200m buffer. The habitat surveys followed the NVC scheme²⁸ using standard methods²⁹ and incorporating Phase 1 Habitat Survey characterisation³⁰. The NVC data would also be used to identify areas of potential GWDTE within the survey area. Potential GWDTE habitats would be identified in line with SEPA guidance³¹. The NVC data collected were cross-referenced to the Phase 1 Habitat Survey Classification to allow a broader characterisation of habitats. The habitats are shown on **Figure 6** which displays all data collected during surveys. The Phase 1 symbology has been used to broadly characterise stands of vegetation based on the dominant NVC community within a particular area³². Detailed NVC labelling is shown for the habitats within a 200 m buffer of the Proposed Development.

6.5.2 Walkover surveys for protected species have been undertaken in October 2022 within areas of suitable habitat in accordance with best practice methodologies, focussing on otter, badger, water vole, pine marten, red squirrel and bats. As well as surveys for the aforementioned species, any incidental records or signs of any other protected species (e.g. reptiles or hares) or any features of particular importance (i.e. potential hibernacula) were recorded. The surveys were undertaken within a 200 m corridor of the alignment options, further buffered by 30m (for red squirrel³³ and bats³⁴), 100m (for badger³⁵ and pine marten³⁶) and 200m (for otter³⁷ and water vole³⁸).

6.5.3 For the EIA, the results of these surveys would be used to inform an Ecological Impact Assessment (EclA) of the Proposed Development, carried out in accordance with the Chartered Institute of Ecology and

²⁸ Rodwell, J.S. (Ed) *et al.* (1991 – 2000). *British Plant Communities* (5 volumes). Cambridge University Press, Cambridge.

²⁹ Rodwell, J.S. (2006). *NVC Users' Handbook*. ISBN 978 1 86107 574 1.

³⁰ Joint Nature Conservancy Council. (2010). *Handbook for phase 1 habitat survey – a technique for environmental audit*. JNCC, Peterborough.

³¹ SEPA. (2017). Land Use Planning System Guidance Note 4 - Planning guidance on on-shore windfarm developments and SEPA (2017). Land Use Planning System Guidance Note 31 - Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems.

³² The Phase 1 characterisation has been utilised to allow a broader visual representation of the habitats within the survey area. Polygons or areas where there are mosaic NVC communities have generally been assigned a single Phase 1 classification based on the dominant NVC type (despite some polygons containing multiple Phase 1 types, often in low percentages). Therefore, the Phase 1 characterisation is generally a broader overview, and the NVC data should be referred to for further detail in any specific area.

³³ Surveyed in line with NatureScot (2023). Standing advice for planning consultations – red squirrels. Online. Available at: <https://www.nature.scot/doc/standing-advice-planning-consultations-red-squirrels> [Accessed May 2023].

³⁴ Surveyed in line with Collins, J. (ed) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). The Bat Conservation Trust, London.

³⁵ Surveyed in line with Scottish Badgers (2018). *Surveying for Badgers: Good Practice Guidance*.

³⁶ Surveyed in line with O' Mahony D., O' Reilly, C. & Turner, P. (2006). *National Pine Marten Survey of Ireland 2005*. Council for Forest Research and Development, Ireland.

³⁷ Surveyed in line with NatureScot (2023). Standing advice for planning consultations – otter. Online. Available at: <https://www.nature.scot/doc/standing-advice-planning-consultations-otters> [Accessed May 2023].

³⁸ Surveyed in line with Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016). *The Water Vole Mitigation Handbook* (The Mammal Society Mitigation Guidance Series). Eds Fiona Matthews and Paul Chanin. The Mammal Society, London.

Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment (2018³⁹), and with due consideration of any other relevant legislation, policy or guidance.

6.5.4 Where appropriate, mitigation measures would be recommended within the EclA to remedy any adverse effects and measures to enhance the local ecology and deliver a notable biodiversity enhancement would also be incorporated within the assessment. An assessment of residual effects would then be undertaken and reported within the EIA.

6.5.5 The Proposed Development would be subject to a Habitat Regulations Appraisal (HRA) under the 2017 Habitat and Species Regulations given that the Proposed Development would pass approximately 0.3 km to the north of the River Spey SAC and is hydrologically linked. As part of a HRA, the competent authority would be required to undertake an Appropriate Assessment. The EIA would include sufficient information to allow the competent authority to undertake this assessment.

6.6 Issues to be Scoped Out

6.6.1 It is proposed that the following are scoped out of the detailed terrestrial ecology and nature conservation assessment:

- Creag Meagaidh SAC, SSSI and NNR, Monadhliath SAC and SSSI, Ness Woods SAC, and Glen Tarff SSSI; the sites are situated over 1.5 km from the Proposed Development and there is no hydrological connectivity. Due to the distance, the nature of works, and the adoption of best practice construction methods, no potential effects on these designated sites have been identified, and the sites are proposed to be scoped out of the detailed EclA; and

Effects on habitats that are considered to be of low conservation value⁴⁰ and are common habitat types locally and regionally are scoped out of the assessment, this would likely include, but not be limited to conifer plantation (including clearfell areas), and acid and neutral grasslands. The full list of habitats recorded and scoped-out would be detailed in the EclA.

³⁹ CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (version 1.1).

Chartered Institute of Ecology and Environmental Management, Winchester.

⁴⁰ That is, habitats outwith the following categories: Habitats listed in Annex I to the Habitats Directive, Biodiversity Action Plan (UKBAP) or Scottish Biodiversity List (SBL) Priority Habitats, Highland Nature Biodiversity Action Plan (2021-2026) Habitats for Action, or Habitats or species protected by legislation such as The Wildlife and Countryside Act 1981 (as amended) and/or the Nature Conservation (Scotland) Act 2004 (as amended).

7. ORNITHOLOGY

7.1 Introduction

7.1.1 This Chapter of the Scoping Report provides an overview of the field surveys that have been undertaken to inform the ornithological baseline conditions, the potential effects associated with the Proposed Development and the proposed scope of assessment methodology to be considered in the EIA Report.

7.2 Baseline Conditions

7.2.1 Approximately 4 km west of the study area lies Loch Knockie and nearby Lochans Special Protection Area (SPA). This SPA is designated for supporting populations of Slavonian Grebe (*Podiceps auratus*) (up to six pairs comprising 10 % of the UK population).

7.2.2 Creag Meagaidh SPA lies approximately 1.3 km south of the Proposed Development. The qualifying feature of this SPA is breeding Dotterel (*Charadrius morinellus*).

7.2.3 To capture all bird species, including wider countryside birds, the following surveys were undertaken for the Proposed Development between October 2021 and September 2022:

- vantage point surveys;
- moorland breeding bird surveys;
- winter walkover surveys;
- breeding raptor surveys; and
- Lochan/waterbody searches.

7.2.4 A total of 52 species were recorded during the surveys undertaken. Of these, eleven species are listed as Schedule 1 species. These are:

- Golden Eagle (*Aquila chrysaetos*) – A total of 73 Golden Eagle flightlines were recorded during the vantage point surveys between October 2021 and September 2022. The majority of flightlines were observed around Creag Mhor, Carn Dearg and Gairbeinn Cairn to the south and west of the Proposed Development, around Leathad Gaothach to Meall na h-Aisre and the ridgeline running north to the east of the Proposed Development and around Carn Easgann Bana to the north and west of the Proposed Development. Of the 73 flightlines observed, only ten flights bisected the proposed OHL route, with five of these flights at collision risk height. Three Golden Eagle territories are known in the vicinity of the Proposed Development, but no nest sites occur within 2 km.
- White-tailed Eagle (*Haliaeetus albicilla*) – A total of twelve White-tailed Eagle flightlines were recorded during the vantage point surveys between October 2021 and September 2022. The majority of the flights were recorded around Carn Easgann Bana and Coire Odhar in the north of the survey area. One White-tailed Eagle flightline was recorded bisecting the OHL route during the survey period, at a height considered within the risk height window. No White-tailed Eagle nests were recorded within 2 km of the Proposed Development.
- Hen Harrier (*Circus cyaneus*) – A total of four Hen Harrier flightlines were recorded during the vantage point surveys between October 2021 and September 2022. One flightline bisected the Proposed Development at collision risk height. No Hen Harrier nests were recorded within 1 km of the Proposed Development.

- Red Kite (*Milvus milvus*) - A total of four Red Kite flightlines were recorded during the vantage point surveys between October 2021 and September 2022. No Red Kite flights bisected the Proposed Development. No Red Kite nests were recorded within 1 km of the Proposed Development.
- Osprey (*Pandion haliaetus*) – One Osprey flightline was recorded during the vantage point surveys, commuting through Coire Odhar to hunt at the reservoir to the west of the Proposed Development. No Osprey nests were recorded within 1 km of the Proposed Development.
- Peregrine (*Falco peregrinus*) – A total of five Peregrine flightlines were recorded during the vantage point surveys, predominately around Creag Mhor towards the southern end of the Proposed Development. A pair successfully bred approximately 1.2 km from the Proposed Development.
- Merlin (*Falco columbarius*) – A total of four Merlin flightlines were recorded during the vantage point surveys. A pair successfully bred at a location between 750-900 m from the Proposed Development.
- Goshawk (*Accipiter gentilis*) – One Goshawk flightline was recorded during the vantage point surveys, heading south past Creag Mhor. No Goshawk nest were recorded within 1 km of the Proposed Development.
- Greenshank (*Tringa nebularia*) – A pair were on territory on a small lochan approximately 500 m from the Proposed Development.
- Crossbill (*Loxia curvirostra*) – Commonly recorded in the plantation forest blocks east of the Melgarve substation during the winter.
- Common Scoter (*Melanitta nigra*) – This species was not recorded during the suite of surveys undertaken for the Proposed Development, however two ad-hoc sightings were noted during travel into and out of the site. Two pairs were present on Lochan a'Choire Ghalsi on 28th April 2022 and relocated to the reservoir the following week. It is assumed that these birds went to known breeding lochans within the Loch Knockie and nearby lochans SPA as they were not seen subsequently.

7.2.5 A total of seven species are on the Red List of Birds of Conservation Concern (BoCC). These are:

- Hen Harrier;
- Merlin;
- Common Scoter;
- Dunlin (*Calidris alpina*) – A total of five Dunlin territories were present within 500 m of the Proposed Development;
- Ringed Plover (*Charadrius hiaticula*) – A pair of Ringed Plover were present within 500 m of the Proposed Development;
- Skylark (*Alauda arvensis*) – widespread throughout the survey area; and
- Ptarmigan (*Lagopus muta*) – a small number were present at the top of Meall na h-Aisre during the winter.

7.2.6 No Slavonian Grebe or Dotterel, qualifying features for Loch Knockie and nearby lochans SPA and Creag Meagaidh SPA respectively, were recorded during any of the suite of surveys undertaken for the Proposed Development.

7.3 Characteristics of the Potential Impact

7.3.1 The potential ornithology effects associated with the construction and operation of the Proposed Development could include:

Construction

- habitat loss;
- disturbance (visual and noise);
- displacement; and
- indirect effects e.g. disruption to habitat function, effects on prey

Operation

- collision risk;
- Electrocutation;
- habitat loss;
- disturbance (visual and noise);
- displacement and barrier effects; and
- indirect effects e.g. disruption to habitat function, effects on prey.

7.3.2 Of the flightlines recorded, five Golden Eagle, one White-tailed Eagle one Hen Harrier flightlines were recorded bisecting the proposed OHL route at collision risk height. However, the time spent within the collision risk height is very small, so any collision risk effects are unlikely to be significant.

7.3.3 Although the installation of an OHL would present a new feature for birds in this location, birds are able to access from either the east or west. In addition, an OHL at between 25-37 m height would have no discernible effect on a bird's ability to continue to fly over or under the new OHL and be of no consequence in the context of daily energy budgets. Barrier effects are therefore considered unlikely to be significant.

7.3.4 There has been a large amount of research on the risk of electrocution to birds and it has been understood within the industry for many years how to design towers which minimise or remove the risk of electrocution. From this research, it has been established that the recommended minimum horizontal distance of phased conductors is stated as 1.5 m for the wrist-to-wrist measurement of a bird and 1 m for head-to-foot measurement. Based on this, the design of the Proposed Development would have little risk of bird mortality by electrocution.

7.3.5 Habitat loss as a result of the Proposed Development could result in the loss or displacement of up to three Golden Plover (*Pluvialis apricaria*) and one Dunlin territory. However, suitable habitat is widespread across the site that any impact would be considered unlikely to be significant.

7.4 Mitigation

7.4.1 The surveys undertaken have played a large role in the route and alignment selection of the Proposed Development, particularly the siting of the proposed OHL to avoid areas of higher avian activity, to minimise any impacts on all bird species, including wider countryside birds.

7.4.2 Pre-checks for nesting birds and the production of species-specific protection plans during construction and maintenance works (operational phase) would be undertaken and implemented. Other mitigation measures will be considered and set out in the EIA where relevant.

7.5 Proposed Scope and Assessment Methodology

7.5.1 The survey results, along with desk study data would be incorporated into an Ornithological Technical Report and appended to the EIA.

7.5.2 The surveys and subsequent Technical Report would be used to inform an Ornithological Chapter within the EIA, carried out in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM)

Guidelines for Ecological Impact Assessment (2018), and with due consideration of any other relevant legislation, policy or guidance.

- 7.5.3 Where appropriate, mitigation measures, including those detailed above, would be recommended within the chapter to remedy any adverse effects and measures for enhancement would also be incorporated within the assessment. An assessment of residual effects would then be undertaken and reported within the chapter.

7.6 Issues to be Scoped Out

- 7.6.1 Given the very low risks associated with barrier effects (see paragraph 7.3.3), collision risk and risk of electrocution of birds (see paragraph 3.4.11) these can be scoped out of further assessment.

8. SOILS, GEOLOGY AND HYDROGEOLOGY (HYDROLOGY & HYDROGEOLOGY)

8.1 Introduction

- 8.1.1 This section provides an overview of the soils, geology and water environment (hydrology and hydrogeology), the potential effects associated with the construction and operation of the Proposed Development, and a summary of the proposed assessment methodology.
- 8.1.2 The scope of the proposed assessment has been informed by responses from THC, SEPA, NatureScot and Scottish Water during previous consultation and comments made by these consultees during the route and alignment selection process and well as in response to the screening request.

8.2 Baseline Conditions

- 8.2.1 Baseline conditions relevant to the water environment are described below. Reference should also be made to **Figure 7** and **Figure 8**.
- 8.2.2 Through the appraisal of route and alignment options, the soils, geology and water environment are well understood, and peat depth probing along a number of potential alignment options has been undertaken. This data, as well as published information sources, have been used to describe and characterise the baseline conditions.

Soils, Geology and Hydrogeology

- 8.2.3 British Geological Survey mapping (BGS) indicates that the Proposed Development overlies several units of psammites and semipelites to the north (Monadhliath Semipelite Formation, Loch Laggan Psammite Formation, Coire nan Laogh Semipelite Formation and Gairbeinn Pebbly Psammite Formation) with small extents of felsite (North Britain Siluro-Devonian Calc-Alkaline Dyke Suite - Felsite) and Meladorite (Appinite Suite - Meladorite, Hornblende).
- 8.2.4 Granodiorites are more prominent in the south (Allt Crom Complex, Allt Crom Granodiorite with rafts of the Loch Laggan Psammite and Garva Bridge Psammite Formations) with some small fragments of Microdiorites.
- 8.2.5 The bedrock beneath the Proposed Development is shown to be partially overlain by superficial deposits of Glacial Till (Diamiction and Hummocky Glacial Deposits) and peat. Glaciofluvial Ice Contact deposits and Alluvium are present adjacent to larger watercourses, including the River Spey. Neither the superficial or bedrock geology is rare as it is common regionally, and with the exception of peat, it is considered that it does not pose a development constraint.
- 8.2.6 Priority peatland mapping published by NatureScot indicates that the Proposed Development is located in areas of priority peatland (Class 1 and 2), see (**Figure 7**). Peat depth probing has been completed to support and inform the route and alignment selection stages of the project. Recorded peat depths are shown on **Figure 8**. Further targeted peat probing would be undertaken to support the assessment on peat, filling any data gaps in the current peat depth dataset, and to gather data for peat depth beneath any proposed access tracks used to construct and maintain the Proposed Development. As part of these further works and in consultation with the project ecologists the condition of the peat will also be assessed and reported.
- 8.2.7 The bedrock beneath the Proposed Development has been classified by BGS as a low productivity aquifer where small amounts of groundwater may be present within the near surface weathered zone or secondary fractures. The volume of groundwater is therefore likely to be low. Shallow groundwater is likely to be present

in the more permeable superficial deposits adjacent to watercourses, including those that bound the River Spey.

Hydrology and Designated Sites

- 8.2.8 The Proposed Development is located across two surface water catchments; the River Spey in the south and the River Ness in the north. In the north watercourses drain to Glen Doe reservoir. The watercourses and the reservoir are designated as a Drinking Water Protected Area (DWPA) and form part of the surface water catchment which drains to Loch Ness, where Scottish Water maintain a raw water abstraction. Loch Ness supplies Invermoriston Water Treatment Works (WTW).
- 8.2.9 Following review of route stage and alignment stage consultation responses, Scottish Water confirmed that the Loch Ness catchment is a relatively large catchment and that the Proposed Development is a sufficient distance from the intake that it is likely to be low risk, however care should be taken and water quality protection measures must be implemented.
- 8.2.10 The River Spey is an important watercourse and high value fishery. It is also designated as a SSSI and SAC.
- 8.2.11 Review of NatureScot SiteLink website confirms that the River Spey is the only water dependent designated site located within 500 m of the Proposed Development. It is located approximately 350 m south of Melgarve substation at its closest extent. The SSSI / SAC is designated for its population of Freshwater Pear Mussel, Sea Lamprey, Atlantic Salmon and Otter. It is an important potential receptor. There are no sites designated for their soils or rocks within 500 m of the Proposed Development.
- 8.2.12 Review of The Highland Council private water supply (PWS) database indicates that there are no private water supplies located within 500 m of the Proposed Development.
- 8.2.13 SEPA flood mapping shows discrete areas near to the Proposed Development that are considered to be at a high risk of flooding from rivers (10% annual probability) but these typically bound watercourses and are not considered to pose a development constraint. Small areas are also considered to be at high to low risk of flooding from surface water, with annual probabilities ranging from 10% and 0.1%; again these areas are discrete and typically correspond to low points or depressions in surface topography.

8.3 Characteristics of the Potential Impact

- 8.3.1 The construction and operation of the Proposed Development has the potential to result in the following effects without appropriate controls or mitigation:
- Construction:
 - Disturbance and loss of peat deposits;
 - Increased flood risk to areas downstream of the proposed development during construction through increased surface water runoff;
 - Potential adverse change of surface water and groundwater flow paths and contribution to areas of peat and Groundwater Dependant Terrestrial Ecosystems (GWDTE), water dependent habitat (such as the River Spey and Glen Doe DWPA) and water supplies;
 - Disturbance of watercourses from the construction of the proposed development;
 - An adverse effect on surface water or groundwater quality from pollution, fuel, oil, concrete or other hazardous substances; and
 - Potential pollution impacts and adverse effect to public and private water supplies, including DWPA's.
 - Operation:

- Adverse changes to surface water flow paths, watercourse discharge rates and volumes, and alteration to watercourse geomorphology;
- As a result of alteration to groundwater and surface water flow paths, an adverse effect on water abstractions and water dependant habitat;
- An adverse effect on surface water or groundwater quality from pollution, fuel, oil, concrete or other hazardous substances from site traffic associated with maintenance activities; and
- Increased flood risk through increased surface water runoff from new impermeable areas.

8.4 Mitigation

8.4.1 Analysis and interpretation of data gathered during the assessment process would ensure that the Proposed Development and associated works are carefully sited to ensure potential effects on soils, geology and the water environment are minimised where practicable through design. This has been the case for the project to date through the route and alignment selection stages which has sought to avoid areas of sensitivity where possible.

8.4.2 In addition, the Applicant has established best practice construction techniques and procedures that have been agreed with statutory consultees, including SEPA and NatureScot. These are set out within the Applicant's GEMPs. The Proposed Development would be constructed in accordance with these plans. A CEMP would also be developed and implemented. The CEMP would also outline measures to ensure that the works minimise the risk to soils, geology, groundwater and surface water, and water users.

8.4.3 Where necessary, and informed by the assessment of potential additional mitigation measures to manage any residual risks will be identified.

8.5 Proposed Scope and Assessment Methodology

8.5.1 An assessment of the potential impacts of the Proposed Development on the soils, geology, and the water environment would be undertaken with reference to relevant legislation, policies and best practice guidance, including, but not limited to:

- EC Water Framework Directive (2000/60/EC);
- National Planning Framework 4 (2023);
- Water Environment and Water Services (Scotland) Act 2003;
- Water Environment (Controlled Activities) Regulations 2011;
- Land Use Planning System – SEP Guidance Note 31 (Guidance on Assessing Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependant Terrestrial Ecosystems), Version 3, SEPA, 2017;
- Control of Water Pollution from Linear Construction Projects – Technical Guidance, C648, CIRIA, 2006;
- The SuDS Manual C753, 2015; and
- Environmental Good Practice on Site C741, CIRIA, 2015.

8.5.2 Further desk study would be undertaken to determine and confirm the baseline characteristics by reviewing available information relating to soils and peat, geology, hydrology, and hydrogeology such as groundwater resources, licensed and unlicensed groundwater and surface water abstractions, public and private water supplies, surface water flows, flooding, rainfall data, water quality and soil data. This would include review of published geological maps, Ordnance Survey maps, aerial photographs and site-specific data such as site investigation data, geological and hydrogeological reports, digital terrain models (slope plans) and geological

literature. Feedback provided as part of the project screening stage will also be reviewed and further consultation undertaken with consultees as required.

- 8.5.3 The desk study, and screening assessment will be used to confirm sensitive features (such as priority peatland, the River Spey SAC and Glen Doe DWPA) which may potentially be affected by the Proposed Development and would confirm the geological, hydrogeological and hydrological environment. A further field programme of investigation undertaken to verify (or otherwise) the desk study and obtain for example, additional peat depth data where there are currently gaps, to collate a schedule of watercourse crossing and visit areas of potential GWDTE (in consultation with the project ecologists). The desk study and field programme would be used to further inform the final design.
- 8.5.4 The hydrological assessment specialists will liaise closely with the project ecologists, geology/geotechnical specialists and engineers to ensure that appropriate information is gathered to allow a comprehensive impact assessment to be completed.
- 8.5.5 Once the desk study is completed and sensitive soil and peat, geological and water features are confirmed an impact assessment would be undertaken to assess the potential effects on soils and peat, geology and the water environment as a result of the construction and operation of the Proposed Development.
- 8.5.6 Having regard to the nature of the Proposed Development and key baseline characteristics, at this early stage it is considered that the assessment would include:
- potential effects on priority peatland;
 - potential effects on the hydrological regime, including water quality, flow and drainage, and any direct or indirect impacts on the River Spey SAC and Glen Doe DWPA;
 - assessment of potential effects on water uses and water sources;
 - assessment of potential effects on designated sites and in particular the River Spey SAC;
 - in consultation with the project geologists and ecologists, assessment of potential effects on water (including groundwater) dependant habitats, including peat habitat and GWDTE, if confirmed; and
 - assessment of potential flood risk and drainage during construction and operation.
- 8.5.7 The assessment would include consideration of temporary and permanent ancillary works, such as compounds and access tracks, required during the construction and operational phase of the Proposed Development.
- 8.5.8 Consultation and data requests will be conducted with the following bodies:
- The Highland Council;
 - SEPA;
 - NatureScot;
 - Scottish Water;
 - Ness District Salmon Fisheries Board; and
 - Spey District Salmon Fisheries Board.
- 8.5.9 A qualitative risk assessment methodology would be used to assess the significance of the potential effects. Two factors would be considered: the sensitivity of the receiving environment and the potential magnitude should that potential impact occur.

- 8.5.10 This approach provides a mechanism for identifying the areas where mitigation measures are required, and for identifying mitigation measures appropriate to the risk presented by the Proposed Development. This approach also allows effort to be focused on reducing risk where the greatest benefit may result.
- 8.5.11 The sensitivity of the receiving environment (i.e., the baseline quality of the receiving environment as well as its ability to absorb the effect without perceptible change) and the magnitude of impacts would each be considered through a set of pre-defined criteria.
- 8.5.12 The sensitivity of the receiving environment together with the magnitude of the effect defines the significance of the effect, which would be categorised into levels of significance.
- 8.5.13 With regard to peat, NatureScot has confirmed in previous consultation at the routeing and alignment stage of the project that the mitigation hierarchy should be applied so that impacts are avoided, or minimised as far as possible, and where they cannot be avoided appropriate restoration measures are secured. NPF4 also requires that this approach is adopted. It is confirmed this would be clearly shown in the assessment.
- 8.5.14 It is anticipated that the assessment would be supported by the following Technical Appendices:
- Outline Peat Management Plan (compliant with the requirements of NPF4);
 - Peat Landslide Hazard Risk Assessment; and
 - Schedule of Permanent Watercourse Crossings.

8.6 Issues to be Scoped Out

- 8.6.1 Having regard to the nature of the Proposed Development and key baseline characteristics, at this stage it is considered the following can be scoped out of further assessment:
- Effects on geology as, with the exception of peat, no sensitive geological features have been identified within the proposed study area.
 - A detailed Flood Risk Assessment (FRA). It is proposed a screening assessment of all flooding sources is presented in the assessment and areas shown to be at potential flood risk are shown on supporting drawings to the assessment.
 - A Drainage Impact Assessment (DIA) whereby measures that would control the rate and quality of runoff would be specified in the assessment, with specific drainage measures provided in the CEMP.
 - Water quality monitoring as water quality data is published by SEPA and can be used to characterise baseline water quality. However, if the assessment concludes that water quality monitoring is required prior to, during and post construction, this would be specified in the assessment.
 - A Geomorphological Assessment, as photographs and records of key existing or baseline water features would be recorded and presented in the assessment.

9. TRAFFIC AND TRANSPORT

9.1 Introduction

9.1.1 This section 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.

9.2 Baseline Conditions

9.2.1 The study area network for use in the assessment has been assumed to be as follows:

- The A82 at Fort Augustus;
- The B862 between Fort Augustus and the Glendoe access track; and
- The A86 between Spean Bridge and Dalwhinnie.

9.2.2 The study area is based upon the likely origin points for materials, staff and components required for use during the construction phase of the Proposed Development.

9.2.3 To fully capture the baseline traffic and transport conditions for the Proposed Development, the following would be undertaken;

- Traffic survey data for use in the assessment would be obtained from the Traffic Scotland database (where such data exists) for the following links:
 - The A82 to the north and south of Fort Augustus; and
 - The A86 between Spean Bridge and Dalwhinnie.
- Automatic Traffic Count (ATC) surveys at the existing Melgarve substation access junction and Glendoe access track junction would also be undertaken during a neutral month for a one week period.
- In addition to traffic flow data, traffic accident data for a five year period for the A86 and B862 within 2 km of the existing access junctions would be obtained from the public website source, Crashmap⁴¹
- A site visit would also be undertaken to review the access route and obtain further baseline data and characteristics.

9.2.4 As described in Section 2.2, construction access for the Proposed Development would be taken from both the B862 Glendoe access junction, and the existing access tracks from the A86 constructed for the Beauly – Denny OHL and Melgarve substation. Sensitive receptors to be considered in the assessment would include communities within the study area and users of the road links.

9.3 Characteristics of the Potential Impact

9.3.1 Potential impacts that may arise during the construction phase of the Proposed Development may include the following for users of the road and those resident along the delivery routes:

- Severance;
- Driver delay;
- Pedestrian delay;
- Pedestrian amenity;

⁴¹ <https://www.crashmap.co.uk/>

- Fear and intimidation; and
- Accidents and safety.

9.3.2 The impacts on receptors within the study area would be reviewed during the construction phase, with a peak construction period assessment undertaken. This would review the maximum impact and present a robust assessment of the effects of construction traffic on the local and trunk road networks.

9.3.3 The effects that would be considered would be based upon percentage increases in traffic flow and reviewed against the impacts noted above.

9.4 Mitigation

9.4.1 Standard mitigation measures that are likely to be included in the assessment are:

- Production of a Construction Traffic Management Plan (CTMP);
- The design of suitable access arrangements with full consideration given to the road safety of all road users; and
- A Staff Sustainable Access Plan.

9.4.2 Site Specific measures may also be required, depending upon the results of the assessment.

9.5 Proposed Scope and Assessment Methodology

9.5.1 A Transport Assessment (TA) would be provided to review the impact of transport related matters associated with the Proposed Development. This would be appended to the EIA and would be summarised into a Transport Chapter within the EIA.

The following policy and guidance documents would be used to inform the Transport Chapter:

- Transport Assessment Guidance (Transport Scotland, 2012);
- The Guidelines for the Environmental Assessment of Road Traffic (Institute of Environmental Assessment (IEA), 1993);
- National Planning Framework 4 (Scottish Government, 2023); and
- The Highland Council Guidance on the Preparation of Transport Assessments (2014).

9.5.2 The Guidelines for the Environmental Assessment of Road Traffic (IEMA 1993) sets out a methodology for assessing potentially significant environmental effects. In accordance with this guidance, the scope of assessment would focus on:

- Potential impacts (of changes in traffic flows) on local roads and the users of those roads; and
- Potential impacts (of changes in traffic flows) on land uses and environmental resources fronting these roads, including the relevant occupiers and users.

9.5.3 The main transport impacts would be associated with the movement of general HGV traffic travelling to and from the site during the construction phase of the development.

9.5.4 A cumulative assessment would take place typically where a proposed development has planning permission or consent under the Electricity Act 1989 and would have an impact on the study network of over 30% increase in traffic flows. These traffic flows would be included into the baseline flows used within the assessment.

- 9.5.5 Planning proposals that do not have planning permission or consent under the Electricity Act 1989 are not considered committed development and as such would not be included in the assessment.
- 9.5.6 The following rules taken from the guidance (IEMA, 1993) would be used as a screening process to define the scale and extent of the assessment:
- Rule 1: Include highway links where traffic flows are predicted to increase by more than 30% (or where the number of HGVs is predicted to increase by more than 30%); and
 - Rule 2: Include any other specifically sensitive areas where traffic flows are predicted to increase by 10% or more.
- 9.5.7 Increases below these thresholds are generally considered to be insignificant given that daily variations in background traffic flow may fluctuate by this amount. Changes in traffic flow below this level predicted as a consequence of the Proposed Development would therefore be assumed to result in no discernible environmental impact and as such no further consideration would be given to the associated environment effects.
- 9.5.8 The estimated traffic generation of the Proposed Development would be compared with baseline traffic flows, obtained from existing traffic survey data, in order to determine the percentage increase in traffic.
- 9.5.9 Potentially significant environmental effects would then be assessed where the thresholds as defined above are exceeded. Suitable mitigation measures would be proposed, where appropriate.
- 9.5.10 The assessment would consider the impact of construction traffic in a future year. Baseline traffic flows would be subject to Low National Road Traffic Growth factors to allow for the future year baseline.

9.6 Issues to be Scoped Out

- 9.6.1 The Proposed Development would not result in additional operational traffic flows and as such, it is proposed that the assessment of the operational phase is scoped out of the assessment.
- 9.6.2 As there are no Abnormal Indivisible Load (AIL) access required, no alterations to access junctions would be required and no AIL assessment would be required.

10. TOPICS TO BE SCOPED OUT OF THE EIA REPORT

10.1 Introduction

10.1.1 This Chapter provides the rationale for excluding the detailed assessment of certain topics from the EIA Report. The topics proposed to be scoped out of the EIA Report include:

- Cultural Heritage;
- Forestry;
- Socio-economics, Recreation and Tourism;
- Landuse and Agriculture;
- Population and Human Health;
- Air Quality and Climate Change; and
- Accidents and Disasters.

10.2 Cultural Heritage

Baseline Conditions

10.2.1 Baseline information on known cultural heritage assets recorded within the vicinity of the Proposed Development has been obtained during the route and alignment selection stages of the project from datasets curated by Historic Environment Scotland and the Highland Historic Environment Record (HER), as well as the results of survey work carried out in advance of the Beauly – Denny OHL replacement in 2004 – 2005 and the Stronelaig Wind Farm UGC connection in 2014. Desk-based evaluation, making use of all available archival material and historic mapping, indicates that the study area contains no permanent settlement, being used historically only for summer shielings and, later, sporting activities. This conclusion is supported by the results of field survey undertaken in June 2021 as part of the route and alignment selection stages of the project.

10.2.2 There are no designated assets within the area surrounding the Proposed Development. Designated assets within 3 km of the Proposed Development include two listed buildings, Garva Bridge (LB6900) and Garvamore Barracks (LB6899).

10.2.3 Within the vicinity of the Proposed Development and surrounding area, the following non-designated assets were identified during field survey:

- Allt na Creidh Leig, shieling site at NH 49102 04525
- Allt Gilbe, single shieling structure at NH 51042 96564
- Meall na h-Aisre fence line at NH 51290 00101

Potential for Significant Effects

10.2.4 Of these three sites, only the Meall na h-Aisre fence line is located directly across the Proposed Development. Traversing the watershed over several miles and visible as iron posts and some rubble banking, this non-designated asset dates to the late 19th century and is a minor feature of Local significance and negligible sensitivity to the potential impacts of the Proposed Development.

10.2.5 The two shieling sites (Allt na Creidh Leig and Allt Gilbe) are both located adjacent to water courses, and are respectively 500 m and 100 m away from the Proposed Development. The Allt na Creidh Leig site consists of a small group of small structures while the Allt Gilbe site consists of only one small structure. Both of these non-

designated sites, dating to the Early Modern period, are minor features of Local significance and negligible sensitivity to the potential indirect, visual impacts of the Proposed Development

- 10.2.6 Potential direct impacts are predicted for only one cultural heritage asset: the Meall na h-Aisre fence line. As a minor feature of Local significance it is of low sensitivity to impacts and, given that this feature is several miles in length and that any damage would be confined to a very small section, this sensitivity is reduced to negligible.
- 10.2.7 Detailed field survey has already been carried out within the whole of the Proposed Development through evaluations for Glendoe Hydro Scheme (C.Dagg 2002 EHG4333), Stronelaig Wind Farm (C.Dagg 2011, ENG4606), Stronelaig Wind Farm Buried Cable Grid Connection Route (C. Dagg 2014 EHG4697) and Glenshero Wind Farm (Headland Archaeology Ltd 2017, EHG5440) as well as additional field survey during the route and alignment stage for the Melgarve Cluster Project in June 2021. As such it is considered that no further site survey would be required.

Issues Scoped Out

- 10.2.8 It is not considered that the Proposed Development would give rise to any significant effects on designated heritage assets or significant direct impacts on non-designated heritage assets. As such, it is proposed that cultural heritage as an environmental topic should be scoped out of the EIA for the Proposed Development.

10.3 Forestry

Baseline Conditions

- 10.3.1 There is limited forestry within proximity to the Proposed Development. The Proposed Development does not intersect or come into close proximity to any forestry plantation.

Potential for Significant Effects

- 10.3.2 Sherramore Forest, situated north-east of Melgarve substation, which includes pockets of native woodland is avoided by the Proposed Development by approximately 250 m. There is native woodland west of Melgarve substation, however, it is anticipated that this would also be avoided by the Proposed Development by approximately 350 m.

Issues Scoped Out

- 10.3.3 As the Proposed Development would not require felling of any commercial/native forestry plantation, there is no requirement for a forestry assessment to be undertaken.

10.4 Socio-economics, Recreation and Tourism

Baseline Conditions

- 10.4.1 The economy within the region varies, though it is dominated by the tourism sector, with tourism related jobs representing up to 43% of regional employment.⁴²
- 10.4.2 There are a number of walking and cycling routes throughout the area, many of which are noted as Core Paths by THC or identified as Rights of Way and Wider Path Network paths. These include:

⁴² Highlands and Islands Enterprise (2023) <https://www.hie.co.uk/our-region/our-growth-sectors/tourism/>

- Scottish Hill Track 235 (Laggan to Whitebridge) which passes to the east of the Proposed Development;
- Scottish Hill Track 231 (Tomatin to Whitebridge) which passes to the north-east of the Proposed Development;
- Scottish Hill Track 236 (Laggan to Fort Augustus by the Corrieyairack Pass) which passes along the glen to the south of the Proposed Development; and
- 237 (Laggan to Roybridge or Glenfintaig Lodge (Spean Bridge)), which also passes along the glen to the south of the Proposed Development.

10.4.3 In addition, the main spine road of the Stronelaig Wind Farm is promoted by the South Loch Ness Access Group as part of the Monadhliath Trail between Fort Augustus and Whitebridge.

10.4.4 In terms of Hill Walking, the closest Munro is Geal Charn, which is approximately 21 km to the south of the Proposed Development. Two Corbetts (a mountain over 2,500 feet, but under 3,000 feet) are within the vicinity of the Proposed Development. These are Meall na h'Aisre approximately 1.5 km to the east and Gairbeinn, approximately 4.5 km to the west.

10.4.5 The Estates within the vicinity of the Proposed Development are managed for sporting activities (mainly grouse shooting and deer stalking), as well as some trout fishing.

Potential for Significant Effects

10.4.6 The potential effects associated with the Proposed Development on socio-economic factors would be related to the construction phase, including the creation of jobs and the indirect effects to the local supply chain and businesses. Other potential effects on recreation and tourism assets of infrastructure projects such as this can relate to the temporary or permanent disruption to recreational activities and sites, associated visual effects, and the consequential impact the proposed works on tourism related businesses.

10.4.7 An Outdoor Access Plan would be prepared, a draft of which would be included within the EIA, to demonstrate how continued access for recreational users along routes in the area would be managed during construction. The outdoor access plan would be prepared as part of the CEMP and signage would be erected at suitable locations to warn recreational users of construction traffic. The Applicant and Principal Contractor would consider the potential effects on tourism related businesses during the phasing of construction works. The potential for effects on the visual amenity of recreational and tourist receptors would be fully considered through the LVIA.

10.4.8 The Proposed Development would result in the creation of temporary jobs during the construction period. It is currently envisaged that a small proportion of the workforce would be from the local area. In addition, there would be potential beneficial effects through temporary increased spending on the supply of goods and services during construction. It is anticipated that these effects, while beneficial, are unlikely to be significant beyond the local area. In the long term, the Proposed Development would facilitate the increase in renewable generation planned for the area. These beneficial effects would be highlighted within the EIA, however no separate assessment chapter is proposed to cover these issues.

Issues Scoped Out

10.4.9 As the Proposed Development's potential effects on socio-economic factors would be related to the construction phase, there is no requirement for a forestry assessment to be undertaken.

10.5 Land Use and Agriculture

Baseline Conditions

Areas of agricultural land are classified by The Macaulay System (now Hutton Institute) of Land Capability for Agriculture.³³ Based on this data the majority of the land within the vicinity of the Proposed Development is Class 6.3, land of very limited agricultural value.

10.5.1 Other common land uses within the vicinity of the Proposed Development include shooting estate land.

Potential for Significant Effects

10.5.2 Land use impacts associated with the Proposed Development are anticipated to be minimal. 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 wayleave agreements with the relevant landowners. The permanent loss of land to tower locations and cable sealing end compounds would be negligible and it would remain possible for grazing to continue around and under towers during their operational lifetime.

Issues Scoped Out

10.5.3 As construction effects would be minimal, and as it would remain possible for grazing to continue around and under towers during their operational lifetime, is thus proposed that this topic is scoped out of the EIA in its entirety.

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

10.6 Population and Human Health

Baseline Conditions

10.6.1 The Proposed Development is located within a remote rural area. There are no main settlements that are within the general vicinity of the Proposed Development. The closest residential settlements are limited to include Fort Augustus, approximately 10 km to the west, and Laggan, located approximately 11 km southwest from the Proposed Development.

Potential for Significant Effects / Issues Scoped Out

10.6.2 Possible effects associated with construction and operation of the Proposed Development in relation to population and human health could include the below, and a summary is included for each point in relation to it being scoped out of further assessment:

- Noise and vibration during the construction phase:
 - Construction noise and vibration would be short term and intermittent and could be controlled through the implementation of a noise management plan, which would be developed as part of the CEMP prepared by the Principal Contractor. As such, and given the remoteness of construction activity for much of the project, no detailed assessment of construction noise and vibration associated with plant noise or traffic is proposed as part of the EIA.
- Operational effects of noise from the OHL:
 - Given the nature of the Proposed Development, its remoteness and distance from residential dwellings, no operational noise effects are expected.

- Electric and Magnetic Fields (EMF):
 - EMFs arise from electric charges and current flow. Transmission lines comply with the government policy of adopting the guidelines of the International Commission on Non-Ionising Radiation Protection (ICNIRP) on exposure to EMFs. SSEN believe that compliance with government policy on levels of exposure to EMFs, 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), ensures the appropriate level of protection for the public from these fields. 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. It is therefore concluded that no likely significant effect on human health associated with EMFs is predicted, and it is therefore proposed to scope this out of the assessment in its entirety from the EIA.
- Operational effects of additional electromagnetic interference to medium and long wave (AM) radio signals and TV signals:
 - Electromagnetic interference to medium and long wave (AM) radio signals at properties within close proximity to OHLs can be known to occur. Corona discharge is unlikely to cause significant interference to VHF reception (i.e. FM radio or digital radio and television which operate in the UHF range). Micro-gap discharge can affect digital television and radio reception, but is not considered to be a source of long term annoyance as equipment is built and maintained to high standards and any such discharge would be the subject of remedial action. It is therefore proposed to scope out impacts to digital television, digital radio and FM radio reception from the EIA.
 - Potential effects from OHLs on TV signals can occur due to physical obstruction of the signal. The Proposed Development would not represent a significant obstruction and it is not anticipated that any adverse effects on TV reception would be experienced. The operation of high voltage OHLs can generate electromagnetic fields over a wide range of frequencies, from power (50 Hz) to radio frequencies. It is anticipated that the Proposed Development would emit low-level radio frequency interference (RFI) but that in practice little radio and television interference would arise, except when directly beneath the OHL. Therefore, this topic would be scoped out of the EIA in its entirety.

10.7 Air Quality and Climate Change

Baseline Conditions

10.7.1 Local air quality is a combination of background air quality, representative of general levels of pollution away from busy roads and industrial activity and added emissions from local emission sources such as road traffic. Due to the generally rural nature of the Proposed Development and sensitive receptors, contribution from road traffic and polluting industrial sources are minimal. Current and predicted annual average and short term NO₂ and PM₁₀ within the region are compliant with all applicable objectives.

Potential for Significant Effects

- 10.7.2 Potentially significant effects which can arise on air quality and climate change from developments of this type relate primarily to generation and dispersal of dust and airborne particulate matter from plant, construction traffic and construction activities.
- 10.7.3 In the context of environmental appraisal, climate change is considered both in relation to the contribution of the proposed development to increasing or decreasing gaseous emissions with global warming potential (GWP), and in relation to climate change adaptation.
- 10.7.4 Emissions associated with the Proposed Development would be limited to temporary and short-term emissions of exhaust gases from vehicles and construction plant, and the potential for the release of carbon dioxide as a

result of dewatering and exposing peat and peat soils during construction. Neither source is considered likely to be significant in terms of GWP.

- 10.7.5 With regard to climate adaptation, consideration would be given to the potential implications of climate change on the OHL design and the design of tower support structures (e.g. design for increased flood risk and adverse weather); however, no potential for impacts have been identified.

Issues Scoped Out

- 10.7.6 The Proposed Development has limited potential to impact upon air quality. There is a potential to give rise to some localised and temporary construction related releases associated with dust and construction traffic exhaust emissions. However, the nature of construction activities means these would be localised, short term and intermittent. Potential effects would further be minimised through the implementation of mitigation measures, in particular the project CEMP and relevant GEMPs.
- 10.7.7 The Proposed Development would contribute to connecting renewable electricity generation capacity to the transmission network, in turn displacing emissions associated with fossil fuel-based electricity generation elsewhere.
- 10.7.8 As such, this issue is scoped out of the EIA and no assessment of air quality and climate change is proposed as part of the EIA Report.

10.8 Accidents and Disasters

Potential for Significant Effects

- 10.8.1 Potentially significant effects which can arise in relation to accidents and disasters from developments of this type include severe weather events and structural damage to towers, as well as the potential for risks during the construction phase.

Issues Scoped Out

- 10.8.2 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. 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.
- 10.8.3 Furthermore, the Principal Designer would need to fully assess risks and mitigate as appropriate during the construction stage as part of the requirements of the Construction (Design and Management) Regulations (2015).
- 10.8.4 Where there are major road, rail or built up area crossings under the section of the route being updated, it is likely that a form of mechanical protection, such as scaffolding or other approved method, would need to be supplied and erected to provide protection to members of the public and property in case of equipment failure.
- 10.8.5 Potential significant effects relating to the vulnerability of the Proposed Development to accidents and disasters is therefore proposed to be scoped out of the EIA Report in its entirety.

11. NEXT STEPS

11.1 Inviting Comments

11.1.1 SSEN Transmission 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?

11.1.2 All responses should be addressed to:

Energy Consents Unit
Scottish Government
4th Floor
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

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

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