

# **Glendye Wind Farm Overhead Line Grid Connection**

## **Environmental Impact Assessment: Scoping Report November 2024**





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## GLOSSARY

| Term                                              | Definition                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alignment                                         | A centre line of an overhead line, along with location of key angle structures.                                                                                                                                                                                                                                                                                                                                   |
| Alignment (proposed)                              | An alignment taken forward to consent application. It comprises a defined centre line for the overhead line and includes an indicative support structure (tower or pole) schedule, also specifying access arrangements and any associated construction facilities.                                                                                                                                                |
| Amenity                                           | The natural environment, cultural heritage, landscape and visual quality. Also includes the impact of SSEN Transmission's works on communities, such as the effects of noise and disturbance from construction activities.                                                                                                                                                                                        |
| AOD                                               | Above Ordnance Datum                                                                                                                                                                                                                                                                                                                                                                                              |
| Ancient Woodland Inventory (AWI)                  | The Ancient Woodland Inventory (AWI) is a provisional guide to the location of Ancient Woodland. It contains three main categories of woodland, all of which are likely to be of value for their biodiversity and cultural value by virtue of their antiquity: Ancient Woodland (1a and 2a); Long-established woodlands of plantation origin (LEPO) (1b and 2b); and other woodlands on 'Roy' woodland sites (3). |
| Biodiversity Net Gain (BNG)                       | Biodiversity Net Gain (BNG) is an approach to development that aims to leave the natural environment in a measurably better state than it was pre-development. It focuses on the change in the biodiversity value of a site, comparing the pre and post construction biodiversity values to ensure a positive impact overall.                                                                                     |
| 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.                                                                                                                                                           |
| 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.                                                                                                                                                                                                                                         |
| GWDTE                                             | 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.                                                                                                                                                                                                                                                              |
| HVAC                                              | High Voltage Alternating Cable                                                                                                                                                                                                                                                                                                                                                                                    |
| 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                                                                                                                                                                                                                                                            |

| Term                                        | Definition                                                                                                                                                                                                                            |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                             | Buildings and Conservation Areas) (Scotland) Act 1997' and other planning legislation. Classified categories A – C(s).                                                                                                                |
| Limit of Deviation (LOD)                    | The area within which micro-siting of structures or infrastructure 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.                                                                                                                                          |
| 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. |
| Route (proposed)                            | A route taken forward following stakeholder consultation to the alignment selection stage of the overhead line routeing process.                                                                                                      |
| Routeing                                    | The work undertaken which leads to the selection of a proposed alignment, capable of being taken forward into the consenting process under Section 37 of the Electricity Act 1989.                                                    |
| Scheduled Monument                          | A monument which has been scheduled by the Scottish Ministers as being of national importance under the terms of the 'Ancient Monuments and Archaeological Areas Act 1979'.                                                           |
| Semi-natural Woodland                       | 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 Aberdeenshire 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.                                                                      |

| Term     | Definition                                                                                                                                                                                           |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |

## EXECUTIVE SUMMARY

Scottish Hydro Electric Transmission plc ("the Applicant") who, operating and known as Scottish and Southern Electricity Networks Transmission ("SSEN Transmission"), own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands. In this Scoping Report, the Applicant and SSEN Transmission are used interchangeably unless the context requires otherwise.

The Applicant has a statutory duty under section 9 of the Electricity Act 1989 to develop and maintain an efficient, co-ordinated and economical transmission system in its licenced areas. The Applicant also has obligations to offer non-discriminatory terms for connection to the transmission system.

Having regard to those duties, the Applicant is proposing to submit an application under section 37 of the Electricity Act 1989 for consent to construct and operate a new 132 kV Overhead Line (OHL) to connect the consented Glendye Wind Farm to the electricity transmission network. Short sections of underground cable would be required at either end of the OHL to facilitate connection to the Glendye Wind Farm onsite substation and Fetteresso substation, given the presence of wind turbines and electrical infrastructure at these points. New permanent and temporary access tracks would also be required. The project is recognised as National Development under National Planning Framework 4.

The project is known as the Glendye Wind Farm Overhead Line Grid Connection 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 that 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 proposed scope of the EIA has been defined through a process of preliminary environmental appraisal of the Proposed Development, drawing on information gathered during a routeing process, which has included consultation responses from statutory consultees and other stakeholders.

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 for the Proposed Development?**
- **Do you agree with the proposed approach for collection of baseline data, 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 by one of the following means:

Email: [Representations\\_Mailbox@gov.scot](mailto:Representations_Mailbox@gov.scot)

Website: [www.energyconsents.scot](http://www.energyconsents.scot)

In writing to:

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: [Jamie.Watt@sse.com](mailto:Jamie.Watt@sse.com)

Or, by writing to:

For the Attention of Jamie Watt  
Scottish and Southern Electricity Networks Transmission  
Grampian 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 and assessment Ltd. (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, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands.
- 1.1.2 The Glendye Wind Farm was granted consent by Scottish Ministers under section 36 of the Electricity Act 1989 in October 2023. The wind farm will be constructed on the Glen Dye and Fasque Estate situated approximately 8 km northwest from the village of Fettercairn, and 12 km west from the village of Strachan. The wind farm is anticipated to generate in excess of 104 megawatts (MW) and to comprise of 26 turbines which require connection to the electricity transmission network by late 2028.
- 1.1.3 The Applicant has a statutory duty under section 9 of the Electricity Act 1989 to develop and maintain an efficient, co-ordinated and economical transmission system in its licenced areas. The Applicant also has obligations to offer non-discriminatory terms for connection to the transmission system. SSEN Transmission are therefore required to provide a connection for the proposed wind farm. The proposed connection is in accordance with an agreement between SSEN Transmission, National Grid Electricity System Operator (as operator of the National Grid) and the wind farm developer.
- 1.1.4 To facilitate the connection, the Applicant is proposing to submit an application under section 37 of the Electricity Act 1989 for consent to construct and operate a new single circuit 132 kV Overhead Line (OHL), supported by steel trident pole structures over a distance of approximately 20 km in length from the consented Glendye Wind Farm on site substation to the existing Fetteresso substation. Short sections of 132 kV underground cable (UGC) would be required at either end of the OHL to complete the connection. A number of new permanent and temporary access tracks would also be required.
- 1.1.5 The connection is referred to as the 'Proposed Development' in this Scoping Report. An Overview of the Proposed Development is shown on **Figure 1**.
- 1.1.6 The Proposed Development has been subject to a routeing process, which has involved consultation with key stakeholders and the local community at both the route option and alignment selection stage of the project (see Section 1.6 for further details). As alignment selection work is on-going, the scoping assessment work carried out within this report is based on a proposed route.

## 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 2017<sup>1</sup>, (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)

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<sup>1</sup> 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.

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.

- 1.2.4 The UGC elements are considered as part of ancillary works 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 Request<sup>2</sup> was issued to the Energy Consents Unit (ECU) in August 2024 seeking a Screening Opinion from the Scottish Ministers under Regulation 9 of the EIA Regulations.
- 1.3.3 A Screening Opinion was received 20th November 2024 (ECU Ref: ECU00005197) 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 Statutory and Non-Statutory Consultees. 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 because they would not be predicted to have significant environmental effects, and which can be ‘scoped out’ of detailed assessment.
- 1.4.2 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.
- 1.4.3 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
  - additional supporting information or representations from the Applicant.

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<sup>2</sup> SSSEN Transmission (August 2024), *Glendye Wind Farm Overhead Line Grid Connection - Screening Request*

## 1.5 Scoping Report Approach

1.5.1 This report provides information on the individual factors (key issues) which require consideration under 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, based on the current understanding of the baseline conditions and the characteristics 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, Tourism and Recreation;
- Land Use and Agriculture;
- Population and Human Health;
- Air Quality and Climate Change; and
- 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 Process

1.6.1 The Proposed Development has been subject to a routeing process. A route selection study has been carried out for the Proposed Development between October 2023 and June 2024. The route selection study identified a total of five route options (comprising three western route options and two eastern route options) that were subject to environmental and engineering appraisal, prior to seeking the views of statutory consultees and other stakeholders, including the local community. Following this consultation, a proposed route (see **Figure 1**) was confirmed within a Report on Consultation<sup>3</sup>, and comprised Route Options 1b and Route Option 2a, given the strong preference from community responses.

1.6.2 Following the identification of a Proposed Route, a number of technically feasible and economically viable OHL alignment options were identified and appraised. In a similar manner to the route option stage of the project, consultation has been undertaken on the alignment options considered, with public consultation events undertaken in October 2024 within the vicinity of the Proposed Development. Conclusion of the alignment selection process is anticipated in November 2024, at which point identification of a proposed alignment will be confirmed by the Applicant.

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<sup>3</sup> SSEN Transmission (June 2024) Glendye Wind Farm Overhead Line Grid Connection Project: Report on Consultation (Route Stage)

1.6.3 Information on the route and alignment stages of the project can be found on the project website<sup>4</sup>.

## 1.7 Scoping Report Structure

1.7.1 This report is comprised of the following sections:

- 1 - Introduction – sets out the purpose of the Scoping Report and document structure;
- 2 - Description of the Proposed Development – sets out the principal components of the Proposed Development and information relating to construction activities;
- 3 - EIA approach and methodology - sets out the proposed approach to the assessment of environmental effects in the EIA Report;
- 4 to 11 - Topics to be taken forward to the EIA Report – provides the rational for including the detailed assessment of certain topics in the EIA Report;
- 12 - Topics to be scoped out of the EIA –provides the rational for excluding the detailed assessment of certain topics from the EIA Report; and
- 13 - Next Steps – provides an overview of the steps to be undertaken following completion of the EIA Report.

1.7.2 The main body of this document is supported by a series of figures which are included at the end of this document.

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<sup>4</sup> SSEN Transmission (2024) *Glendye Wind Farm Overhead Line Grid Connection Project Website*, available online at: <https://www.ssen-transmission.co.uk/projects/project-map/glendye-windfarm-connection/>

## 2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

### 2.1 Proposed Development Components

- 2.1.1 The following description is provided to inform the request for a Scoping Opinion from Scottish Ministers. The EIA Report will provide a comprehensive description of the Proposed Development, in accordance with Regulation 5 and Schedule 4 to the EIA Regulations, to inform assessment of the likely significant effects of the proposals and for the purpose of defining the Proposed Development for the section 37 application.
- 2.1.2 The 'Proposed Development' would comprise the construction of approximately 20 kilometres (km) of a single circuit 132 kV steel trident pole OHL, with a nominal height of approximately 13 m.
- 2.1.3 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 comprise:
- short sections of underground cable, required at either end of the OHL to facilitate connection to the Glendye Wind Farm onsite substation and Fetteresso substation, given the presence of wind turbines and electrical infrastructure at these points;
  - New permanent and temporary access tracks would also be required to facilitate construction and on-going maintenance where required;
  - temporary working areas along the route; and
  - tree and vegetation clearance.

### 2.2 Limit of Deviation

- 2.2.1 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 poles and construction access to reflect localised land, engineering and environmental constraints.
- 2.2.2 The horizontal LOD, for which consent will be sought, will be refined through the OHL alignment design and EIA process. It is anticipated that the horizontal LOD would be approximately 100 m LOD (i.e. 50 m either side of the centre line of the proposed OHL alignment) to allow for micro-siting of the OHL during construction.
- 2.2.3 A vertical LOD, i.e. the maximum height of a pole above ground level, would be confirmed through the EIA process as more detailed design information is obtained. Whilst indicative pole heights are known based on pole designs, some structure heights may vary depending on topography.

### 2.3 Description of an Overhead Line

- 2.3.1 The proposed OHL would comprise of a new 132 kV single circuit, supported by steel trident poles.
- 2.3.2 The average span length (distance between poles) would vary depending on topography and land usage but would typically be approximately 100 m. Pole heights would also vary, depending on local topography, but a nominal height of approximately 13 m (including insulators and support) is anticipated.
- 2.3.3 The proposed steel trident poles would support three conductors (wires) in a horizontal flat formation.
- 2.3.4 Photographs showing typical steel trident poles are shown in **Plate 2.1**.

**Plate 2.1: Example Steel Trident H Poles**



## 2.4 Key Construction Activities for Overhead Line Infrastructure

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

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

### ***Phase 1 - Enabling Works***

#### *Forestry / Vegetation Clearance*

2.4.2 Construction of the project would require the removal of sections of forestry, although detailed design would seek to minimise the impact of any removal as far as practicable. This would be undertaken in consultation with affected landowners. The project would comply with the Scottish Government's Control of Woodland Removal Policy<sup>5</sup>.

2.4.3 An Operational Corridor (OC) of approximately 72 m would be required through commercial forestry plantations to enable the safe operation and maintenance of the UGC and OHL. In areas of woodland, the width of the OC could vary depending on the type of woodland (based on species present) in proximity to the UGC and OHL.

2.4.4 Compensatory planting would comply with the UK Forestry Standard (2023)<sup>6</sup> sustainable approach to forestry and associated guidelines which may apply, or any such replacement standard applied or proposed by the consenting authority. Planting would be supported by an approved replanting plan that would identify the following;

- The location to which replanting should be undertaken;
- Species of tree to be replanted;
- Woodland design plans;
- Timing to which replanting should be undertaken;
- Maintenance of replanted areas;
- Monitoring methods of the replanted areas; and

<sup>5</sup> Forestry Commission Scotland (2009) Control of Woodland Removal Policy

- Reporting standards to be met by the plan.

2.4.5 After felling, any timber removed that is commercially viable would be sold and the remaining forest materials such as arisings / brash would likely be mulched on site.

#### Site Compounds and Borrow Pits

2.4.6 Temporary site compounds would be required during construction to provide welfare facilities for site staff, parking, laydown areas, holding and servicing space for construction plant.

2.4.7 Borrow pits may also be required to enable the extraction of stone for use in access track construction.

#### Access Tracks

2.4.8 Construction access to the Proposed Development would be taken via the existing public road network as far as possible.

2.4.9 During construction, access would be achieved by making use of existing tracks where possible, including forestry and estate tracks (upgraded as required).

2.4.10 The installation of new tracks, both temporary and permanent would also be required to facilitate construction of the Proposed Development. Floating stone road or trackway panel construction (typically a short-term solution) may be installed in sensitive areas such as over deeper areas of peat. All new tracks would be constructed in accordance with best construction methods, and with reference to NatureScot's good practise guide on constructing tracks in Scottish uplands<sup>7</sup>.

2.4.11 For the short sections of UGC, a construction haul road would be required within the UGC construction corridor to facilitate its construction. Once installed, it is anticipated that the construction corridor would be reinstated, with an OC being maintained.

2.4.12 Track widths during construction are typically expected to have a running width of 5 m, with an overall construction corridor of approximately 8 m to allow for suitable drainage and pollution prevention measures. Tracks to be retained would be partially reinstated on commissioning of the OHL to reduce their width to approximately 2.5 m for use by SSEN Transmission for maintenance access.

#### Delivery of Structures and Materials

2.4.13 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. It is anticipated that there would be no abnormal load deliveries required as part of the Proposed Development.

#### Watercourse Crossings

2.4.14 Where new watercourse crossings are required, the design of the crossing would be in accordance with best practice guidelines and taking account of any ecological or hydrological constraints. The design of crossings would be agreed with SEPA prior to construction and be regulated by the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR). A watercourse crossing schedule for permanent watercourse crossings would be included in the EIA Report.

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<sup>7</sup> . Constructed tracks in the Scottish Uplands - NatureScot. (online) available at: Planning and development presentation - Good practice for track construction | NatureScot

**Phase 2 – Construction Works****OHL Pole Foundations**

- 2.4.15 The foundations for trident H poles comprise an excavation of approximately 3 m long and 3 m wide for each pole. The total working area at each pole may extend to 20 m by 10 m to facilitate pole assembly / dressing and lifting into position. Excavated turf and sub soils would be stacked separately according to type so that they can be replaced in reverse order, with the turf being replaced on top. Some backfilling may require the addition of hardcore to provide additional stability in areas where the natural sub soils have poor compaction qualities.
- 2.4.16 Where shallow rock is encountered along the route, this would require a hydraulic breaker to break into the rock to a sufficient depth of around 2.0 - 2.5 m.
- 2.4.17 Stays, where required, would be installed at the same time as a pole is erected, involving the placement of a wooden sleeper block beneath the surface at a depth of approximately one metre.
- 2.4.18 Foundation types and designs for each pole would be confirmed by the Contractor following analysis of detailed geotechnical investigation at each pole position.

**Tident H Pole Construction**

- 2.4.19 Pole structures would be assembled completely, adjacent to the pole position. Assembled H Poles erected utilising either, one or two excavators or a Tracked ATV vehicle equipped with a HIAB, dependant on the complete H pole assembled weight. Stays would be installed at angle poles and potentially on cross slopes for stability or higher wind loadings.
- 2.4.20 Pole erection teams would likely consist of five to six operatives per team, each equipped with two tracked excavators, specialist tracked ATVs, rock breaking equipment and excavation formwork.

**OHL Conductor Stringing**

- 2.4.21 Prior to stringing the conductors, temporary protection measures (normally netted scaffolds) would be required across existing access tracks where necessary.
- 2.4.22 Conductor stringing equipment (i.e. winches, tensioners and ancillary equipment) are set out at either end of pre-selected sections of the OHL.
- 2.4.23 Prior to wiring operations, Equi-Potential Zones (EPZ) pulling positions need to be assessed and established where deemed necessary. The typical size of a working area required for an EPZ or non EPZ pulling location is approximately 8 m x 12 m. This would likely be set up on trackway panels. The winch and tensioner positions are switched as each pulling section progresses.
- 2.4.24 Pilot wires would be pulled through the section to be strung. These would be hung on running blocks (wheels) at each suspension pole and connected to a winch and tensioner at the respective end of the section. The winch, in conjunction with the tensioner is used to pull the pilot wires between the structures. The conductor is pulled via the pilot wires through the section under tension to avoid contact with the ground and any underrunning obstacles. Once the conductor has been strung between the ends of the section it is then tensioned and permanently clamped at each pole.

### ***Phase 3 – Commissioning***

2.4.25 The OHL and support poles would then be subject to an inspection and snagging process. This allows the Contractor and SSEN Transmission to check that the works have been built to specification and are fit to energise. The circuits would then be energised from the substation.

### ***Phase 4 – Reinstatement***

2.4.26 Following commissioning of the Proposed Development, it is anticipated that all areas disturbed during construction would be reinstated. Reinstatement will form part of the contract obligations for the Principal Contractor and will include the removal of all temporary access tracks, all work sites around the pole locations and the re-vegetation (or other such means) of laydown areas to recreate the former habitat as far as possible.

2.4.27 Further detail on typical construction activities and work methods would be set out in the EIA Report.

## **2.5 Underground Cable (UGC) Design and Construction**

2.5.1 The indicative underground cable alignments required to connect to Glendye Wind Farm on-site substation and Fetteresso substation at either end of the connection are shown on **Figure 1**. The overall cable construction corridor would typically be approximately 40 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.

2.5.2 It is anticipated that the installation of an UGC, required at either end of the connection, would involve the following tasks:

- Establishment of one or more construction compounds;
- Establishment of suitable laydown areas for materials;
- Establish a working corridor approximately 40 m wide;
- Installation of an access haul road and temporary bridges where/if required;
- Excavate a trench up to 2 m in depth and 1 m wide, widening through benching and battering where stability and safety concerns arise;
- Clear out 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, reinstatement to sub-soil level;
- Excavation and formation of power cable joint bays with above ground electrical link pillars and associated demarcation;
- reinstate excavated surface layers in reverse order;
- Transportation of and installation of power cable;
- Mobilisation of jointing containers and jointing of power cable;
- Reinstatement of joint bays; and
- Reinstatement excavated surface layers in reverse order.

## **2.6 Construction Programme**

2.6.1 It is anticipated that construction of the project would take place over an approximately 18-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.

- 2.6.2 Construction activities would in general be undertaken during daytime periods only, seven days a week. Working hour assumptions would be set out within the EIA Report and confirmed with Aberdeenshire Council.

## **2.7 Construction Environmental Management**

- 2.7.1 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).
- 2.7.2 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.
- 2.7.3 A Construction Traffic Management Plan (CTMP) would be implemented for the works and would be reviewed throughout the project and updated as necessary.

## **2.8 Operation and Maintenance**

- 2.8.1 It is anticipated that the Proposed Development would require very little maintenance. Regular inspections would be undertaken to identify any unacceptable deterioration of components, so that they can be replaced.

## **2.9 Decommissioning**

- 2.9.1 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 Aberdeenshire Council, setting out the detail of the decommissioning process. However, efforts would be made to repurpose the OHL for future connections prior to any decommissioning.

## **2.10 Biodiversity Net Gain**

- 2.10.1 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<sup>8</sup>, 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.
- 2.10.2 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***

- 2.10.3 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 has

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<sup>8</sup> Natural England Biodiversity Metric 2.0 <http://publications.naturalengland.org.uk/publication/5850908674228224>

made commitments within its Environmental Legacy<sup>9</sup>, Sustainability Strategy (2018)<sup>10</sup>, Sustainability Plan (2019)<sup>11</sup> and RIIO-T2 Business Plan<sup>12</sup>, 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;
- Positively contribute to the UN and Scottish Government Biodiversity strategies by achieving an overall 'No Net Loss' on new infrastructure projects gaining consent in 2020 onwards and achieving a 10% Net Gain on all new projects gaining consent in 2023 onwards; and
- Work with their supply chain to gain the maximum benefit during asset replacement and upgrades.

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

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9 Scottish and Southern Electricity Networks: Delivering a positive Environmental Legacy (online) available at: <https://www.ssen-transmission.co.uk/globalassets/documents/sustainability-and-environment/environmental-legacy-booklet> (last accessed 13/08/2024)

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

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

12 A Network for Net Zero - SSEN Transmission ([ssen-transmission.co.uk](https://www.ssen-transmission.co.uk))

### 3. EIA APPROACH AND METHODOLOGY

#### 3.1 Introduction

- 3.1.1 The EIA Report will be prepared in accordance with the EIA Regulations, and the Good Practice Guidance published by the Scottish Government's Energy Consents Unit in July 2022<sup>13</sup>. Consideration will also be given to advice contained in Scottish Government Planning Advice Note (PAN) 1/2013 (revision 1.0)<sup>14</sup>, and Planning Circular 1/2017<sup>15</sup>, and other good practice guidance documents where relevant.
- 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.

#### 3.3 Approach to Assessment of Significant Environmental Effects

- 3.3.1 The purpose of the EIA will be to focus the assessment on environmental effects which have the potential to be significant, drawing on the preliminary findings of the assessments undertaken in this Scoping Report. The description of predicted effects in the EIA Report will take account of the following characteristics:

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<sup>13</sup> Scottish Government (2022) Electricity Act 1989 – Good Practice Guidance for Applications under Section 36 and 37 of the Electricity Act 1989 Available at: <https://www.gov.scot/publications/good-practice-guidance-applications-under-sections-36-37-electricity-act-1989/>

<sup>14</sup> Scottish Government (2013, revised 2017) Planning Advice Note 1/2013 (revision 1.0): Environmental Impact Assessment.

<sup>15</sup> Scottish Government (2017) Planning Circular 1/2017: Environmental Impact Assessment Regulations 2017.

- Temporary – where an effect occurs for a limited period of time and the change for a defined receptor can be reversed;
- Permanent – where an effect represents a long-lasting change for a defined receptor;
- Direct – where an effect is a direct result (or primary effect) of the Proposed Development;
- Indirect – a knock-on effect which occurs within or between environmental components, may include effects on the environment which are not a direct result of the Proposed Development, often occurring away from the proposals or as a result of a complex biological or chemical pathway;
- Secondary – an induced effect arising from the actions or presence of a project, such as changes to the pattern of future land use or improvements to local road networks;
- Cumulative – these effects may arise when more than one development of a similar scale and nature combine to create a potentially greater impact than would result from the Proposed Development alone (see also Section 3.4 of this Chapter);
- Beneficial – an effect beneficial to one or more environmental receptors; and
- Adverse – a detrimental, or adverse, effect on one or more environmental receptors.

3.3.2 Where more appropriate definitions to the above terms are applicable to a particular technical discipline, this would be clearly outlined within the relevant technical chapter of the EIA Report.

3.3.3 The result of the assessment would be the determination of whether the likely effect of the Proposed Development on the receptors in the study area would be significant or not significant, and, adverse or beneficial. Receptors should be defined as meaning the factors of the natural and built environment, including people and communities, that may be significantly affected by the Proposed Development. Examples include cultural heritage, landscapes, populations, animal and plant species, and the water environment.

3.3.4 Where no published standards exist for a particular topic, the assessments presented in the EIA Report would describe the professional judgements (assumptions and value systems) that were used to underpin the attribution of significance. For certain technical topics, such as ecology, widely recognised published significance criteria and associated terminology have been applied and these would be presented in the technical chapters and associated appendices where relevant.

3.3.5 The assessment of significance would typically consider the magnitude of change (from the baseline conditions), the sensitivity of the affected environmental factors / receptors and (in terms of determining residual effects) and the extent to which mitigation and enhancement can reduce or reverse adverse effects. In addition, further considerations such as those listed below would be factored into the assessment using professional judgement:

- likelihood of occurrence;
- geographical extent;
- the value of the affected resource;
- the compatibility of the Proposed Development with the provisions of legislation and planning policy; and
- reversibility and duration of the likely effect.

3.3.6 The magnitude (scale) of change for each effect would be identified and predicted as a deviation from the established baseline conditions for the construction and operational phases of the Proposed Development. The scale typically uses high, medium, low, and negligible criteria, as outlined in **Table 3.1** below. This would be defined within each of the technical chapters of the EIA Report.

3.3.7 The sensitivity of the receptor / receiving environment to change would be determined using professional judgement, consideration of existing designations (such as Sites of Special Scientific Interest (SSSIs)) and

quantifiable data, where possible. The scale typically uses high, medium, low, and negligible criteria, as outlined in **Table 3.1** below. This would also be defined within each of the technical chapters of the EIA Report.

- 3.3.8 Effects would be assessed taking account of the predicted magnitude of change and the sensitivity of the receptor / receiving environment as shown in **Table 3.1** and defined within each of the technical chapters of the EIA Report to determine an overall significance of effect.

**Table 3.1: Matrix for Determining the Significance of Effects**

| Magnitude of Change/Effect | Sensitivity of Receptor/Receiving Environment to Change/Effect |               |            |                   |
|----------------------------|----------------------------------------------------------------|---------------|------------|-------------------|
|                            | <u>High</u>                                                    | <u>Medium</u> | <u>Low</u> | <u>Negligible</u> |
| High                       | Major                                                          | Major         | Moderate   | Negligible        |
| Medium                     | Major                                                          | Moderate      | Minor      | Negligible        |
| Low                        | Moderate                                                       | Minor         | Minor      | Negligible        |
| Negligible                 | Negligible                                                     | Negligible    | Negligible | Negligible        |

- 3.3.9 Major and moderate effects are generally considered to be significant in the context of the EIA Regulations. Minor and negligible effects are not considered significant. Where different terms or levels of effect to the above are used, they would be defined within the methodology section within each of the technical chapters of the EIA Report.
- 3.3.10 The characteristics of an effect will vary depending on the duration of the activity causing the effect, the sensitivity of the receptor and the resultant change. It is therefore necessary to assess whether the effect is temporary or permanent; beneficial or adverse; and indirect or direct. Effects that are temporary are usually reversible and generally confined to the construction period.
- 3.3.11 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.
- 3.3.12 A more detailed overview of the guidance and methodology adopted for each technical study proposed to be scoped into the EIA is provided within **Chapters 4 to 12** of this Scoping Report.

### 3.4 Cumulative Effects

- 3.4.1 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 3.2** 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 3.2: Cumulative Developments**

| Development Name and Type                                         | Application Status                                                           |
|-------------------------------------------------------------------|------------------------------------------------------------------------------|
| Glendye Wind Farm <sup>16</sup>                                   | Consented October 2023 <sup>17</sup>                                         |
| Fetteresso Wind Farm (Mid Hill Extension)                         | Consented September 2022 <sup>18</sup>                                       |
| Fetteresso Substation Extension works (Fetteresso 400 kV Upgrade) | Scoping stage <sup>19</sup>                                                  |
| Tealing to Kintore 400 kV Overhead Line                           | Routeing and Alignment, pre-application stage <sup>20</sup>                  |
| Hurlie Substation Works and Associated offshore grid connections. | Scoping stage <sup>21</sup>                                                  |
| Quithel BESS (Battery Energy Storage System)                      | Pre-Application (determined as non-EIA development, July 2024) <sup>22</sup> |

### 3.5 Mitigation

- 3.5.1 The routeing selection process (see **Section 1.6**) has sought to avoid or minimise likely significant environmental effects of the Proposed Development through careful routeing where practicable.
- 3.5.2 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.
- 3.5.3 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.

### 3.6 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 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

<sup>16</sup> Note that in the Landscape and Visual Impact Assessment, it is proposed to include the consented Glendye Wind Farm as part of the baseline (see Chapter 8 of this Scoping Report).

<sup>17</sup> ECU Ref (ECU00000676)

<sup>18</sup> ECU Ref (ECU00001851)

<sup>19</sup> Aberdeenshire Council Planning Reference (ENQ/2024/1176)

<sup>20</sup> SSEN Transmission (2024) Kintore – Tealing 400 kV Connection (available online) <https://www.ssen-transmission.co.uk/projects/project-map/kintore-tealing-400kv-ohl-connection/> (last accessed 11/11/2024)

<sup>21</sup> Aberdeenshire Council Planning Reference (ENQ/2024/1176)

<sup>22</sup> ECU Ref (ECU00005005)

baseline data collection and brief details of the proposed methodology for impact assessment which would be employed for each topic.

## 4. ECOLOGY AND NATURE CONSERVATION

### 4.1 Introduction

- 4.1.1 This Chapter of the Scoping Report provides an overview of existing data available to identify the ecological baseline conditions, the potential effects associated with the Proposed Development and the proposed scope of assessment methodology to be considered in the EIA Report.

### 4.2 Baseline Conditions

- 4.2.1 The only non-avian European designated site present within 10 km of the Proposed Development is the River Dee Special Area of Conservation (SAC), as shown on **Figure 2**. The River Dee SAC is designated for otter *Lutra lutra*, freshwater pearl mussel *Margaritifera margaritifera* and Atlantic salmon *Salmo salar*. Depending on the final alignment of the Proposed Development, it could pass within approximately 2 km of one of the lower tributaries of the River Dee. The Proposed Development would be hydrologically connected to this tributary via the Stag Burn, which it would cross at up to three locations. Several other tributaries are present within the wider area.
- 4.2.2 The following Sites of Special Scientific Interest (SSSI's) are located within 10 km of the Proposed Development as shown on **Figure 2**:
- Loch of Lumgair: designated for Fens (Basin fen 'schwingmoor' type) and Woodlands (Wet woodland) – located approximately 7 km to the south-east of the Proposed Development;
  - Gannochy Gorge: designated for Bryophyte, Lichen and Beetle assemblages, and Non-marine Devonian strata – located approximately 8 km south-west of the Proposed Development; and
  - Eslie Moss: designated for Fens (Basin fen) – located approximately 10 km south of the Proposed Development.
- 4.2.3 The following Local Nature Conservation Sites (LNCS) are located within 5km of the Proposed Development, as shown on **Figure 2**:
- Strathfinella: designated for its botanical interest - the Proposed Development crosses part of this LNCS;
  - Elfhill: supports locally important habitats – located approximately 1.5 km north-west of the Proposed Development;
  - Mergie: supports locally important habitats and botanical interest – located approximately 2.5 km south-west of the Proposed Development; and
  - Feughside: designated for its botanical and geological interest – located approximately 4.5 km north of the Proposed Development.
- 4.2.4 The Proposed Development traverse non-statutory designations of woodland included on the Ancient Woodland Inventory (AWI). AWI areas crossed include category 2b, listed as 'long-established woodlands of plantation origin' (LEPO), as shown on **Figure 2**. These areas have been interpreted as plantation from maps of 1860 and continuously wooded since, therefore developing semi-natural characteristics. However, current land use practices within these areas involve cyclical felling for commercial forestry which have resulted in forestry of a mixture of age classes or clear fell which is considered to limit its ecological value.
- 4.2.5 Along the route of the Proposed Development there are also areas of non-designated woodland (including coniferous plantation and broadleaved woodland), moorland, agricultural land, running water and standing water with associated aquatic habitats and built-up areas. These habitats and those within the statutory and non-statutory designated sites mentioned previously may support the following legally protected or notable (e.g. Scottish or local biodiversity priority) fauna:
- Amphibians including common toad *Bufo bufo*;
  - Reptiles including common Lizard *Zootoca vivipara* and adder *Vipera berus*;

- Otter *Lutra lutra*;
- Mountain hare *Lepus timidus*;
- Water vole *Arvicola amphibius*;
- Pine marten *Martes martes*;
- Red squirrel *Sciurus vulgaris*;
- Badger *Meles meles*;
- Bats *Chiroptera .spp*;
- Salmonids *Salmonidae. spp*;
- Freshwater pearl mussel *Margaritifera margaritifera*;
- Wildcat *Felis silvestri*; and
- Aquatic and terrestrial invertebrates.

4.2.6 There are several potential Ground Water Dependant Terrestrial Ecosystems (GWDTE) habitats across the western portion of the Proposed Development. These include upland flushes, fens and swamps and rush pastures. Further hydrogeology assessments may be required to confirm whether these habitats are truly groundwater dependent. Protected species such as amphibians, waterfowl, raptors and wading birds may be present in these areas.

4.2.7 Annex I habitats, as defined in the Habitats Directive<sup>23</sup>(as amended by the Conservation (Natural Habitat, &c) Regulations 1994<sup>24</sup>), are habitats with priority status due to the habitat being in danger of disappearance and for which there is a particular responsibility to preserve<sup>25</sup>. Annex 1 habitats present within the vicinity of the Proposed Development include blanket bog and heathland. Blanket bog is the dominant Annex I habitat type across the western extent of the Proposed Development. The blanket mire is often found in mosaics with heathland and modified bog. Priority peatland mapping indicates that Class 1 and 2 priority peatland habitats are present within the western extent of the Proposed Development, and preliminary peat probing suggests a range of peat depths throughout this western area. Habitat surveys completed to date indicate that although there are areas of blanket bog, it is in combination with modified bog that has been subject to historical management pressures as well as other erosional factors.

4.2.8 Invasive non-native (INNS) species of flora and fauna that are considered to be outside their native range are also likely to be present.

#### 4.3 Sensitive Receptors

4.3.1 Based on the available baseline data, the important ecological features which have the potential to be impacted by the Proposed Development due to the habitat connectivity, proximity or presence within the vicinity are as follows:

- SAC – River Dee;
- LNCs – Strathfinella;
- AWI - Shoolbraid / Belhangie woods and Wood ID: 21980;
- Rivers (which flow through the Proposed Development) – Pitlethian Burn, Stag Burn, Cairn Burn, Spital Burn, Bervie Water, Maxie Burn, West Burn, Burn of Guinea and Burn of Annamuick; and
- Rivers (within a 350m buffer) - Slack Burn, Old Hangy, West Grain, Burn of Brumlieshank, Burn of Bankhead, Cleuch Burn, Killer Burn, Whiting Burn.

<sup>23</sup> Habitats Directive online available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31992L0043>

<sup>24</sup> The Conservation (Natural Habitats, &c.) Regulations 1994 available online at: The Conservation (Natural Habitats, &c.) Regulations 1994 (legislation.gov.uk)

<sup>25</sup> Joint Nature Conservation Committee 2024 habitats list available online at: Habitat Interest Features - Special Areas of Conservation (jncc.gov.uk)

- Annex I Habitats (NVC/UKHab):
  - H10 *Calluna vulgaris* – *Erica cinerea* heath / Hh1b5 Dry heaths; upland;
  - H12 *Calluna vulgaris*–*Vaccinium myrtillus* heath / Hh1b5 Dry heaths; upland;
  - M2 *Sphagnum cuspidatum/ recurvum* bog pool community / f1a5 Blanket bog (H7130);
  - M6 *Carex echinata* – *Sphagnum recurvum/auriculatum* mire / f2c Upland flushes, fens and swamps;
  - M19 *Calluna vulgaris* – *Eriophorum vaginatum* blanket mire / f1a5 Blanket bog;
  - M20 *Eriophorum vaginatum* blanket and raised mire / f1a5 Blanket bog;
  - M23 *Juncus effusus/acutiflorus* – *Galium palustre* rush-pasture / f2b Purple moor-grass and rush pastures;
  - U20 *Pteridium aquilinum* – *Galium saxatile* community / g1c Bracken; and
  - S9 *Carex rostrata* swamp / f2c Upland flushes, fens and swamps.
- LBAP only Habitats:
  - MG6 *Lolium perenne* - *Cynosurus cristatus* grassland / g4 Modified grassland;
  - MG7 *Lolium perenne* leys and related grasslands / g4 Modified grassland;
  - MG9 *Holcus lanatus* – *Deschampsia cespitosa* grassland / g3c Other neutral grassland;
  - MG10 *Holcus lanatus* - *Juncus effusus* rush pasture / g3c Other neutral grassland; and
  - U4 *Festuca ovina* - *Agrostis capillaris* - *Galium saxatile* grassland / g1b6 Other upland acid grassland.
- Potential GWDTE Habitats:
  - M6 *Carex echinata* – *Sphagnum recurvum/auriculatum* mire – High;
  - M23 *Juncus effusus/acutiflorus* – *Galium palustre* rush-pasture / f2b Purple moor-grass and rush pastures – High;
  - MG9 *Holcus lanatus* – *Deschampsia cespitosa* grassland / g3c Other neutral grassland – Moderate;
  - MG10 *Holcus lanatus* - *Juncus effusus* rush pasture / g3c Other neutral grassland - Moderate;
- Species:
  - Amphibians;
  - Bat *Chiroptera* spp.;
  - Badger *Meles meles*;
  - Otter *Lutra lutra*;
  - Pine marten *Martes martes*;
  - Red squirrel *Sciurus vulgaris*;
  - Common lizard *Zootoca vivipara*;
  - Adder *Vipera berus*;
  - Atlantic salmon *Salmo salar*; and
  - Freshwater pearl mussel *Margaritifera margaritifera*.

#### 4.4 Potential Effects

4.4.1 The Proposed Development has the potential during its construction and operation to result in potential effects associated with:

- temporary or permanent direct or indirect loss of, or damage to statutory and non-statutory designated sites, GWDTEs and sensitive terrestrial and aquatic habitats;
- temporary or permanent loss of, obstruction of, or disturbance to legally protected and notable species' resting sites;

- temporary or permanent loss of, modification or disturbance to protected species foraging areas and commuting routes;
- accidental killing and injury of protected and notable species during construction and advance site clearance activities;
- pollution of surface watercourses from suspended sediment, hydrocarbon and oil pollution. Potential sources of suspended sediments on construction sites include excavations, exposed ground and stockpiles, plant and wheel washing, dust, and mud on access roads. Sources of oils and hydrocarbons include leaks from access vehicles and powered hand tools;
- soil erosion, compaction and excavation losses during access and construction; and
- pollution to habitats with indirect effects on associated protected and notable species.

4.4.2 It is anticipated that significant effects during the construction phase should be possible to avoid through the design, planning and implementation stages of the Proposed Development. For example, the positioning of poles and other infrastructure relative to watercourses, priority habitats and protected species resting or breeding sites will be considered in order to reduce the impact on these receptors.

#### **4.5 Mitigation**

4.5.1 Embedded mitigation will include:

- Site design to minimise loss and damage to sensitive habitats; and
- Good practice measures during construction to protect IEFs and ensure compliance with relevant legislation, including measures to avoid pollution and prevent harm to protected species.

4.5.2 If the EcIA identifies any potential impacts from the Proposed Development that are predicted to have a significant adverse effect on IEFs, additional mitigation measures will be detailed within the Ecology Chapter of the EIA Report to address these. Where appropriate, ecological monitoring and/or enhancement measures will also be identified.

4.5.3 During the alignment selection and EIA process, mitigation measures will follow the recognised hierarchy of avoidance, reduction, enhancement, and compensation.

4.5.4 All ecological mitigation will be incorporated into a Construction Environmental Management Plan (CEMP), both as a result of the outcome of the EcIA and in order to comply with relevant legislation mentioned above. The implementation and audit of these measures will be overseen by an Environmental Clerk of Works (ECOW).

4.5.5 Additionally, in line with requirements outlined in NPF4 (Policy 3. Biodiversity), an Outline Biodiversity Enhancement and Management Plan (OBEMP) will also be produced to detail biodiversity enhancement measures and will be supported by a biodiversity metric assessment. The OBEMP will be submitted as an Appendix to the EIA. All enhancements proposed within the OBEMP will be additional to any residual mitigation required for features once the impact assessment has been completed. The aim of the recommended enhancements will be to provide a gain for biodiversity within the vicinity of the Proposed Development. Where this is not possible, off-site enhancements may be required. The scope of any subsequent BEMP will be defined once baseline surveys are fully completed and the EcIA has been undertaken.

#### **4.6 Proposed Scope and Assessment Methodology**

4.6.1 The EIA Report will include an Ecological Impact Assessment (EcIA), completed in accordance with the Chartered Institute of Ecological and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment. This will consider the potential direct, indirect and cumulative effects that the construction and operation of the Proposed Development could have on any identified IEFs scoped into the assessment.

- 4.6.2 Although decommissioning may also result in effects on IEFs, the level of impact would depend on the habitats and species present at the time of decommissioning, which cannot be reliably predicted. It is proposed, therefore, that potential effects on IEFs during the decommissioning phase of the Proposed Development are scoped out of the assessment. However, as decommissioning activities are generally of a similar type and intensity as construction activities, it is considered that the potential effects of decommissioning would be similar in nature to the potential effects of construction, with the exception that habitat would likely be restored.
- 4.6.3 To inform the EclA, the following surveys are proposed:
- National Vegetation Classification (NVC) survey of the Proposed Development and up to a 350 m buffer;
  - Protected mammal surveys of the Proposed Development, and appropriate buffer distances in accordance with standard guidance; and
  - Preliminary ground level tree roost assessment (PGLTRA) of trees and structures/buildings within the route of the Proposed Development, and up to 150 m buffer.
- 4.6.4 From surveys undertaken to date, evidence of the following protected species have been noted on site: badger, pine marten, red squirrel, otter, common lizard and adder. Several trees were noted to provide bat roost potential (BRP). Further review of protected species survey results may require additional survey effort to be undertaken, for example camera trapping.
- 4.6.5 As the Proposed Development is hydrologically connected to the River Dee SAC, a European designated site, a Habitats Regulations Appraisal (HRA) Screening report will be undertaken to inform the requirement for a Stage 2 Appropriate Assessment.

#### 4.7 Issues to be Scoped Out

- 4.7.1 Maintenance of the OHL infrastructure post-construction is scoped out as there is not expected to be any significant impacts due to the infrastructure being in place and no further habitat removal would be required, other than periodic cut-back of vegetation to maintain safety clearance distances within the operational corridor.
- 4.7.2 Impacts on the following designated sites are scoped out due to their distance from the Proposed Development:
- SSSI – Loch of Lumgair, Gannochy Gorge and Eslie Moss; and
  - LNCS – Elfhill, Mergie and Feughside.
- 4.7.3 Habitats which are of low conservation value, are generally common and widely distributed habitats and are not of value to protected species are to be scoped out:
- U20 Pteridium aquilinum – Galium saxatile community / g1c Bracken; and
  - W23 Ulex europaeus – Rubus fruticosus scrub / h3e Gorse scrub.
- 4.7.4 Mountain Hare *Lepus timidus* and Wildcat *Felis silvesti* are currently excluded due to the lack of evidence recorded on site from previous surveys, however they have the potential to be scoped back in should evidence be found through subsequent surveys.

## 5. ORNITHOLOGY

### 5.1 Introduction

- 5.1.1 This Chapter considers the potential effects of the Proposed Development on ornithological features along the route and within the local area, based on available data and information collected from targeted bird surveys. The proposed scope of field surveys and assessment methodology to be considered in the EIA Report is also set out.

### 5.2 Baseline Conditions

- 5.2.1 There are three Special Protection Areas (SPA's) within 20 km of the Proposed Development which are designated for ornithological interest and support populations of Annex 1 species as listed below and shown on **Figure 2:**

- Cairngorms Massif SPA: Designated for breeding population of Golden Eagle *Aquila chrysaetos* – approximately 13 km west of the Proposed Development.
- Glen Tanar SPA: Designated for regularly supporting populations of Capercaillie *Tetrao urogallus*, Hen harrier *Circus cyaneus*, Osprey *Pandion haliaetus* and scottish crossbill *Loxia scotica* – approximately 12 km north-west of the Proposed Development.
- Montrose basin SPA and RAMSAR site: Designated for supporting populations of migratory birds of European importance including pink footed geese *Anser brachyrhynchus*, greylag geese *Anser anser* and redshank *Tringa tetanus*. The site is also designated for supporting over 20,000 waterfowl including nationally important populations of oystercatcher *Haematopus ostralegus*, eider *Somateria mollissima*, wigeon *Anas penelope*, redshank, knot *Calidris canutus*, pink footed goose, greylag goose, dunlin *Calidris alpina alpina* and shelduck *Tadorna tadorna* – approximately 20 km south of the Proposed Development.

- 5.2.2 Information on ornithological baseline conditions has been obtained from breeding bird surveys and vantage point surveys carried out during the routeing stage of the project between 2023 and 2024.
- 5.2.3 Breeding bird surveys undertaken to inform consideration of alignment options identified a probable peregrine falcon *Falco peregrinus* nest and potential nesting Goshawk *Accipiter Gentilis* and red kite *Milvus milvus* in the vicinity of the Proposed Development. Goshawk and red kite have also been observed in the plantation forest near Fetteresso substation, but nesting has not been confirmed. Lekking black grouse *Tetrao tetrix* have been observed within the survey area but not within proximity to the Proposed Development.
- 5.2.4 Vantage point (VP) surveys have indicated migratory geese have been seen flying over all sections of the Proposed Development, however they were observed to be flying at height at over 30m and use of habitats within the survey area was not recorded therefore there appears to be likely minimal risk of collision with the OHL. Red kite *Milvus milvus* have been observed foraging within the survey area and raptors have been observed flying over or using areas within the vicinity of the OHL route therefore collision risk should be considered but is considered likely to be minimal based on the low flight numbers.

### 5.3 Sensitive Receptors

- 5.3.1 Based on the available baseline data, the important ornithological features (IOF) which have the potential to be impacted by the Proposed Development are as follows:
- SPA qualifying species including migratory geese species;
  - Schedule 1 raptor species during the breeding season, including peregrine, red kite and goshawk;
  - All other bird species present during the breeding season;
  - Lekking black grouse; and
  - Commuting or foraging raptors, waders or geese.

## 5.4 Potential Effects

### ***Potential for Significant Effects during Construction***

- 5.4.1 During the construction phase, there is potential for significant adverse effects on protected and conservation priority species which may occur within the Proposed Development's zone of influence and meet the IOF threshold. Potential significant effects are set out below:
- Disturbance, displacement, and harm to qualifying species of SPAs within the zone of influence (migratory geese species); and
  - Temporary or permanent loss and/or degradation of bird habitat and features, as a result of tree felling or vegetation removal.

### ***Potential for Significant Effects during Operation***

- 5.4.2 During the operational phase, there is potential for significant adverse effects on a reduced number of receptors, which are considered below:
- Harm (collision-related deaths) to qualifying SPA species; and
  - Harm (collision-related deaths) to other Schedule 1 raptor species.

### ***Potential for Significant Effects during Decommissioning***

- 5.4.3 It is considered that effects during the decommissioning phase would be similar to, or less than, those during the construction phase, and therefore are not discussed further here.

## 5.5 Mitigation

- 5.5.1 Where appropriate, mitigation measures will be prescribed within the EcIA to remedy any adverse impacts and measures to enhance the local ornithological interest will also be incorporated. Where significant adverse effects are predicted, mitigation measures designed to avoid or minimise such effects to an acceptable, non-significant level will be proposed.
- 5.5.2 Significant effects upon ornithological receptors will be avoided/minimised where possible through the design process. Good practice during construction of the Proposed Development will also be implemented (for example through the sensitive timing of works and pre-construction checks for nesting birds).
- 5.5.3 Where significant effects on IOFs are identified, measures to prevent, reduce, and where possible offset these adverse effects will be investigated and proposed. The Applicant's Bird Species Protection Plans will be implemented to ensure that all reasonable precautions are taken to protect ornithological features of interest associated with the Proposed Development, which may include sensitive timing or implementation of appropriate non-disturbance buffers.

## 5.6 Enhancements

- 5.6.1 In line with requirements outlined in NPF4 (Policy 3. Biodiversity) (Scottish Government, 2023), an Outline Biodiversity Enhancement and Management Plan (OBEMP) will be produced to detail biodiversity enhancement measures to include ornithological features.

## 5.7 Proposed Scope and Assessment Methodology

- 5.7.1 Ornithological surveys have been completed and cover the proposed route. These surveys commenced in Autumn 2023 in order to capture the 2023-24 migratory season. NatureScot were consulted on the proposed scope of survey work in November 2023 and confirmed the vantage point (VP) locations and VP coverage to be

sufficient, along with other breeding bird, raptor and black grouse survey effort which has followed the advice on survey methods set out in NatureScot's guidance<sup>26</sup>.

#### **Activity Surveys - Vantage Point (VP) Survey**

- 5.7.2 Given the 2 km viewsheds offered per VP, it was considered that a total of six VPs would be required in order to adequately cover the proposed route.
- 5.7.3 Surveys comprised the standard minimum of 36 hours per VP in both breeding season (April to August) and the non-breeding season (September to March), which equates to two 3hr VP watches per VP per month over 12 months. The methods of watching and recording the birds followed the NatureScot guidance. These surveys aimed to identify the presence and movements of Annex 1 listed, Schedule 1 listed or other notable species actively using the site and wider area.

#### **Breeding Bird Survey**

- 5.7.4 A Brown and Shepherd type method of census was used for assessing the upland breeding wader populations (Brown and Shepherd, 1993<sup>27</sup>) to survey the option route for breeding birds (as per Bibby et al., 2000<sup>28</sup>; Gilbert et al., 2011<sup>29</sup>).
- 5.7.5 A total of four breeding bird survey visits were undertaken between April and July 2024. Surveys took cognisance of NatureScot guidance and focussed on identifying approximate numbers of breeding pairs of each target species including: Birds Directive Annex 1, Wildlife and Countryside Act 1981 (as amended) Schedule 1, Birds of Conservation Concern Red List, and/or SBL (or the soon to be published Scottish Biodiversity Strategy)/ and Local Biodiversity Action Plan (LBAP) species.

#### **Breeding Raptor Survey**

- 5.7.6 Surveys for breeding raptors were completed following methods as described in Hardey et al. (2013)<sup>30</sup>. A four-visit walkover survey approach was used, with survey visits being spaced between April and July 2024 and covering the proposed route and a 2 km survey buffer (where access permissions allow).
- 5.7.7 The survey area was continuously scanned for target species during the walkover. This includes stops at "mini" vantage points where the view is scanned for a period (usually 15-20 minutes) across suitable habitat for target species. Surveys for breeding moorland raptors generally require four visits between April and July.

#### **Black Grouse Lek Surveys**

- 5.7.8 The black grouse (*Tetrao tetrix*) lek survey was based on methods as outlined in Gilbert et al. (2012) and focussed on areas of optimal habitat for this species. The survey was conducted during the spring lekking 2024 season when the male birds hold lek and display for the attention of females. The assessment was based on confirming numbers of lekking males and any female birds registered in the vicinity. This survey was timed to start at dawn and requires two survey visits.

<sup>26</sup> SNH (2017). Recommended Bird Survey Methods to inform Impact Assessment of Onshore Wind Farms. SNH Guidance Note Series.

<sup>27</sup> Brown, A. F. and Shepherd, K. B. (1993) A method for censusing upland breeding waders. Bird Study, 40, pp. 189-195.

<sup>28</sup> Bibby, J., Burgess, N., Hill, D., and Mustoe, S. (2000). Bird Census Techniques. 2nd Edition - August 10, 2000

<sup>29</sup> Gilbert, G, Gibbons D W & Evans J, 2011. Bird Monitoring Methods: A Manual of Techniques for Key UK Species.

<sup>30</sup> Hardey, J., Crick, H., Riley, H., Etheridge, B., and Thompson, D. (2013) Raptors: A field guide to surveys and monitoring. The Stationery Office; 3rd revised edition.

### **Assessment**

- 5.7.9 The EIA Report will include an assessment of the potential effects of the Proposed Development on IOF's scoped into the detailed assessment. The assessment will be completed in accordance with the Chartered Institute of Ecological and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment. The assessment will use the ecological baseline to identify the important ecological features that could be affected by the construction of the Proposed Development. Important ornithological features will be assigned a geographic level of importance based on their conservation status and population / assemblage trends and other relevant criteria (including size, naturalness, rarity and diversity). Details of the Proposed Development will then be used to assess what level of effect each receptor is likely to receive and whether or not that impact will be beneficial or adverse, temporary or permanent and significant or not significant. The potential for cumulative effects will also be considered.
- 5.7.10 The baseline data will be evaluated to assess whether Collision Risk Modelling (CRM) is required for raptors, waders and geese. If required, CRM will be completed to inform the assessment of impacts and risks presented by the presence of the OHL to migrating/commuting and foraging birds.
- 5.7.11 As the route of the Proposed Development may support qualifying geese species of the SPAs, a Habitats Regulations Appraisal (HRA) Screening report will be undertaken to assess the potential for Likely Significant Effects (LSE). Where LSE on the SPA is identified and may negatively impact the conservation status of SPA populations, a Stage 2 Appropriate Assessment will be undertaken.

### **5.8 Effects Scoped Out**

- 5.8.1 It is proposed that the following receptors are scoped-out of the EIA:
- Species not recorded during the field surveys to inform the Proposed Development or those undertaken for other developments in the immediately surrounding area will be scoped-out of the EIA in accordance with NatureScot (2019) guidance, unless otherwise informed by consultation.
  - Displacement and disturbance effects of bird species during the operational phase can likely be scoped out as it is considered that once the OHL is completed, minimal works and maintenance will occur on an occasional basis at a relatively small scale.

## 6. HYDROLOGY, GEOLOGY AND HYDROGEOLOGY

### 6.1 Introduction

6.1.1 This Chapter of the Scoping Report 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. It also presents a summary of the proposed assessment methodology. It has been informed by assessments that have been undertaken nearby, associated with other developments and surveys completed as part of the route optioneering stage to confirm the extent, distribution of peat and the location and presence of private water supplies.

6.1.2 Baseline conditions relevant to the water environment are described below.

### 6.2 Baseline Conditions

6.2.1 As a consequence of previous nearby planning applications and developments, including Fetteresso<sup>31</sup> and Glendye<sup>32</sup> wind farm projects, the soils, geology and water environment of the area are already well understood and characterised and these as well as published information sources, have been used to describe the baseline conditions. In addition, a programme of field investigation has been undertaken to collect data regarding the depth, distribution and condition of peat in support of the route and alignment optioneering studies. A survey to locate potential private water supply sources has also been undertaken.

#### *Soils, Geology and Hydrogeology*

6.2.2 Review of the National Soil Map of Scotland<sup>33</sup> indicates that the western extent of the Proposed Development is underlain by peat whilst the eastern extent of the Proposed Development is underlain by peaty podzols and humus-iron podzols.

6.2.3 British Geological Survey (BGS) mapping<sup>34</sup> indicates that the Proposed Development is underlain by several metamorphic units comprising of psammities, semipelites and pelites. Small igneous intrusions of the North Britain Siluro-Devonian Calc-Alkaline Dyke Suite and Appinite Suite (granite and felsite) are also noted beneath the Proposed Development. The geological and soils mapping confirms that the bedrock is overlain by peat within the western extent of the Proposed Development. The eastern extent is generally shown to be absent of any superficial deposits, with the exception of small areas of Banchory Till Formation, alluvium and peat.

6.2.4 Priority peatland mapping published by NatureScot<sup>35</sup> indicates that approximately 8 km of the western extent of the Proposed Development is located within areas of potential priority peatland (Class 1). The eastern extent of the Proposed Development is generally shown to be located within areas of Class 4 and mineral soils (Class 0) which are defined as areas where peatland habitats are not typically recorded. The published data sources have been validated by field investigation and several programmes of peat depth, condition and geomorphology mapping. In the western extent of the Proposed Development the presence of peat has been proven and larger areas of peat are recorded where there is shallow relief, from the area south of Rough Bank hill extending to the Glen Dye Moor peatland restoration area northeast of Whitelaws and beyond to Cairn o' Mount and the Waird of Cairn. During the surveys extensive peat haggings and erosional features were recorded and areas of deepest peat were witnessed not to cover large areas. Peat is generally absent in the east.

<sup>31</sup> Fetteresso Wind Farm, ECU Reference ECU00001851, <https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00001851>

<sup>32</sup> Glendye Wind Farm, ECU Reference ECU00000676, <https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00000676>

<sup>33</sup> The James Hutton Institute, National Soil Map of Scotland, available online at <https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/> [Accessed October 2024]

<sup>34</sup> British Geological Survey, Onshore Geoindex, available online at <https://mapapps2.bgs.ac.uk/geoindex/home.html> [Accessed October 2024]

<sup>35</sup> NatureScot, Carbon and Peatland 2016 Map, available online at <https://soils.environment.gov.scot/maps/thematic-maps/carbon-and-peatland-2016-map/> [Accessed October 2024]

- 6.2.5 The bedrock has been classified by BGS<sup>34</sup> as a low productivity aquifer where small amounts of groundwater may be present within the near surface weathered zone or secondary fractures. Shallow groundwater is likely to be present in the more permeable superficial deposits (e.g. alluvium deposits) and is likely to be in hydraulic connectivity with larger watercourses.

### ***Hydrology and Designated Sites***

- 6.2.6 The Proposed Development is located within the Water of Dye surface water catchment to the west, the surface water catchment of the River North Esk (including the Devily Burn sub catchment) in the centre and surface water catchments of the Bervie Water and Carron Water to the east. None of the surface water catchments which drain the Proposed Development have been designated as a Drinking Water Protected Area (DWPA).
- 6.2.7 Scottish Environment Protection Agency (SEPA) flood mapping<sup>36</sup> shows that the majority of the Proposed Development is not considered to be at flood risk (from all sources) now or in the future. The areas denoted to be at risk of flooding are generally confined to the watercourse channels and do not encroach onto the Proposed Development.
- 6.2.8 Review of the NatureScot SiteLink<sup>37</sup> website confirms that the Water of Dye has been designated as part of the River Dee SAC. The SAC has been designated for Atlantic salmon, freshwater pearl mussel and otters which are considered sensitive to changes in water quality. Whilst the Proposed Development will not cross the area designated as part of the SAC, the western extent of the Proposed Development (which is located within the Water of Dye surface water catchment) is hydraulically connected to the SAC.
- 6.2.9 A private water supply (PWS) survey has been undertaken which has confirmed that there are PWS sources in the area and that most are associated with properties and farms in the east. SEPA's environmental database indicates that there are a number of Controlled Activity Regulation (CAR) authorisations.

## **6.3 Potential Effects**

- 6.3.1 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 and water supplies;
- disturbance of watercourses via the construction of access tracks; and
- an adverse effect on surface water or groundwater quality from pollution, fuel, oil, concrete or other hazardous substances.

### ***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;

<sup>36</sup> Scottish Environment Protection Agency, Flood Maps, available online at <https://beta.sepa.scot/flooding/flood-maps/> [Accessed October 2024]

<sup>37</sup> NatureScot SiteLink, available online at <https://sitelink.nature.scot/home> [Accessed October 2024]

- 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.

## 6.4 Mitigation

- 6.4.1 Analysis and interpretation of data gathered during the assessment process will be used ensure that the Proposed Development is carefully sited to ensure potential effects on soils (inc. peat), geology and the water environment are minimised where practicable through design.
- 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 General Environmental Management Plans (GEMPs). The Proposed Development would be constructed in accordance with these plans. A project specific CEMP would also be developed and implemented which will also outline measures to ensure that the works minimise the risk to soils, geology, groundwater and surface water, and water users.
- 6.4.3 Where necessary, additional mitigation measures to manage any residual risks will be identified.

## 6.5 Proposed Scope and Assessment Methodology

- 6.5.1 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;
  - The Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments (Second Edition), 2017;
  - Guidance on Developments on Peatland – Peatland Survey (2017);
  - Advising on peatland, carbon-rich soils and priority peatland habitats in development management, 2023;
  - 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.
- 6.5.2 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.
- 6.5.3 The desk study will identify sensitive features which may potentially be affected by the Proposed Development and will confirm the geological, hydrogeological and hydrological environment. Where necessary, a further field

programme of investigation will be undertaken to verify (or otherwise) the desk study. The desk study and field programme will be used to further inform the emerging development proposals.

- 6.5.4 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.
- 6.5.5 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.
- 6.5.6 Having regard to the nature of the Proposed Development and key baseline characteristics, at this early stage it is considered that the assessment will include:
- potential effects on priority peatland;
  - potential effects on the hydrological regime, including water quality, flow and drainage;
  - assessment of potential effects on water users and private water supply sources;
  - assessment of potential effects on designated sites;
  - 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.
- 6.5.7 Consultation and data requests will be conducted with the following bodies:
- Aberdeenshire Council;
  - SEPA;
  - NatureScot;
  - Scottish Water;
  - River Dee Trust and Dee (Aberdeenshire) District Salmon Fishery Board; and
  - The Esk Rivers and Fisheries Trust and Esk District Salmon Fishery Board.
- 6.5.8 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.
- 6.5.9 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.
- 6.5.10 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.
- 6.5.11 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.
- 6.5.12 With regard to peat, in accordance with National Planning Framework 4 (NPF4), the mitigation hierarchy would be applied so that impacts are avoided, or minimised as far as possible, and where they cannot be avoided appropriate measures would be proposed to safeguard peat and carbon rich soils. This would be clearly shown, and it is anticipated that the assessment would be supported by the following Technical Appendices which will specifically consider peat resources:
- Peatland Condition Assessment;

- Outline (Stage 1) Peat Management Plan (compliant with the requirements of NPF4); and
- Peat Landslide Hazard Risk Assessment.

6.5.13 The assessment will also include a private water supply risk assessment which will outline any potential effects on nearby private water supplies, and if required mitigation measures to safeguard both the quantity and quality of water at private water supply sources. This will also be presented as a Technical Appendix.

## **6.6 Issues to be Scoped out**

- 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 will be illustrated on supporting drawings to the assessment.
- A Drainage Impact Assessment (DIA). Measures that would be used to control the rate and quality of runoff would be specified in the assessment. The layout and specification of specific drainage measures would be provided at a later date as part of the detailed design stage of the project and in the final project CEMP.
- Baseline 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 of required watercourse crossings, as photographs and records of key existing or baseline water features would be recorded and presented in the assessment.
- An assessment of potential cumulative effects. With regard to the Proposed Development, it is likely that mitigation measures would be proposed that would have a neutral effect or provide betterment compared to baseline conditions. Other nearby and recent developments would also be designed, developed and managed in accordance with best practice, industry standards and relevant legalisation, planning policy and guidance regulated by statutory consultees. These standards ensure, with respect to the water and soils environment, potential impacts are mitigated and controlled at source and therefore it is considered unlikely that there would be any significant cumulative impacts to report.

## 7. CULTURAL HERITAGE

### 7.1 Introduction

- 7.1.1 This Chapter sets out the proposed approach to the assessment of the likely significant effects of the Proposed Development on Cultural Heritage. It sets out the proposed Study Areas to be adopted in the EIA and the currently recorded baseline within those Study Areas, along with the methodology that will be employed in the EIA.
- 7.1.2 The Cultural Heritage chapter of the EIA Report will assess the potential for direct and indirect effects on the cultural heritage within the Proposed Development Site, arising from construction activities, and the effects upon the settings of heritage assets with statutory and non-statutory designations in the wider landscape around the Proposed Development.

### 7.2 Baseline Conditions

- 7.2.1 The cultural heritage baseline summarised below was identified through a desktop study carried out during the route and alignment selection stages of the project, drawing on data from the Aberdeenshire Council Historic Environment Record (HER) and designation lists held by Historic Environment Scotland (HES). The data was obtained from the HER in September 2023 and from HES in October 2024. An updated digital extract will be obtained from the HER to inform further desk-based assessment for the EIA Report.

#### ***Designated Heritage Assets***

- 7.2.2 There are three Scheduled Monuments within 1.5 km of the Proposed Development:
- Cairn o' Mount, cairns (SM 4968), situated in a prominent position adjacent to the B974 (Old Military Road);
  - Cowie Line, pillbox and earthworks 945 m southwest of Stonehouse (SM 6437), located on the Cowie Water within Fetteresso Forest; and
  - Clochanshiels, cairns, houses and field systems 500 m ESE of (SM 4857), situated on a north-facing slope overlooking the Cowie Water.
- 7.2.3 There are five Listed Buildings within 1.5 km of the Proposed Development. Two are Category A listed and one is Category B listed; all have rural settings situated within the valley floor of the Glen of Drumtochty, enclosed by managed woodland. Two are Category C listed, partially enclosed by woodland and surrounded by arable fields.
- 7.2.4 There are no other designated heritage assets within 1.5 km of the Proposed Development.

#### ***Non-Designated Heritage Assets***

- 7.2.5 The local HER records 23 non-designated heritage assets within the proposed route. The recorded assets are all associated with settlement and farming of medieval or post medieval date and comprise elements of the historic farming landscape, including crofts and enclosures, commonly depicted on historic maps. One asset comprises the route of a former drove road of probable medieval date.

### 7.3 Characteristics of the Potential Impact

- 7.3.1 The potential cultural heritage effects associated with the construction and operation of the Proposed Development include:
- Direct physical damage to, or destruction of, cultural heritage assets arising from construction activities, including from the installation of poles and pull through working areas, installation of the underground cables, the establishment of construction compounds and laydown areas, and from track construction (temporary or permanent).

- Effects on the settings of cultural heritage assets resulting from the introduction of the proposed overhead line (OHL) into their settings, detracting from their cultural significance.

### **Sensitive Receptors**

- 7.3.2 Based on the characteristics of the Proposed Development and taking account of the proposed route, the designated heritage asset most likely to be sensitive to change within its setting is Cairn o' Mount, cairns (SM 4968). This scheduled monument lies at a recognised viewpoint beside the B974 and is within approximately 450 m of the Proposed Development, depending on alignment.
- 7.3.3 Taking account of the scale and characteristics of the Proposed Development, in addition to the screening effect of intervening topography, it is considered that significant adverse effects on the settings of Cowie Line, pillbox and earthworks (SM 6437) and Clochanshiels, cairns, houses and field systems (SM 4857) are unlikely to arise. Both scheduled monuments are situated to the north within the Cowie Water valley and are topographically separated from the Proposed Development.
- 7.3.4 Category A listed Saint Palladius' Episcopal Church (LB 9634) and Drumtochty Castle (LB 9664), along with its Category B listed stables (LB 9632), and Category C listed East Lodge (LB 9633), lie in a secluded, valley setting enclosed by managed woodland, primary views of and from the listed buildings are directed along and across the Glen of Drumtochty to the west, east and south. The integrity of their rural settings is unlikely to be adversely affected by the operation of the Proposed Development, which lies approximately 1.2 km to the north beyond the valley.
- 7.3.5 Category C listed Brawliemuir farmhouse (LB 9311) is situated approximately 150m to the southeast of the Proposed Development and has a more localised setting, characterised by the surrounding agricultural landscape of arable fields and working farms. The introduction of the Proposed Development is unlikely to significantly adversely affect the integrity of the rural setting.

## **7.4 Mitigation**

- 7.4.1 The routeing and alignment selection process has enabled consideration of likely significant effects on cultural heritage receptors throughout the evolution of the project to date. Effects on the settings of heritage assets within the Outer Study Area will be avoided or reduced where possible through design. Further assessment will continue through the EIA process, and mitigation measures will be developed to avoid or minimise adverse effects on cultural heritage where practicable.
- 7.4.2 Standard mitigation measures that will be applied to the Proposed Development, and incorporated into the CEMP, include the following:
- A professionally qualified Archaeological Contractor will be appointed to act as an Archaeological Clerk of Works (ACoW) during the construction phase, as required. The role of the ACoW will be to provide advice to the appointed Construction Contractor regarding archaeological matters as they might arise, and to undertake archaeological monitoring of topsoil stripping operation in areas designated and approved by Aberdeenshire Council's Archaeologist. The activities of the ACoW would be carried out according to the scope of work and terms specified in a Written Scheme of Investigation (WSI) submitted to and approved by the Council's Archaeologist prior to any construction works (including enabling works) commencing on-site.
  - Implementation of the scope of works outlined in the WSI during the construction phase.
  - Any heritage asset identified as potentially being affected by construction works that can be avoided would be marked out for avoidance, where possible, or other mitigation to be agreed with by the Council's Archaeologist, would be implemented to reduce and offset unavoidable impacts.
  - Written guidelines would be issued for use by all construction contractors, outlining the need to avoid causing unnecessary damage to known heritage assets. The guidelines would set out arrangements for

calling upon retained professional support if buried archaeological remains of potential archaeological interest (such as building remains, human remains, artefacts, etc.) should be discovered in areas not subject to archaeological monitoring. The guidelines would make clear the legal responsibilities placed upon those who disturb artefacts or human remains.

7.4.3 Additional mitigation, in the form of archaeological investigations, excavations or watching briefs, may be required under the terms of any planning conditions applied. Details of the agreed scope of work would be set out in a WSI for the approval of Aberdeenshire Council's Archaeologist and would be implemented in accordance with the terms of the agreed WSI.

7.4.4 If new, archaeologically significant discoveries are made during any archaeological investigations or watching briefs, and it is not possible to preserve the discovered remains in situ, provision would be made for the excavation, where necessary, of any archaeological deposits encountered. The provision would include the consequent production of written reports on the findings, with post-excavation analysis and publication of the results of the works, where appropriate.

#### ***Residual Effects***

7.4.5 Residual effects will be assessed taking into account the effectiveness of proposed mitigation measures.

### **7.5 Proposed Scope and Assessment Methodology**

7.5.1 Direct effects on archaeological remains will be assessed, informed by the results of the desk-based study already undertaken and by further desk-based assessment of historic maps, aerial photography, and verified by field survey along the route of the Proposed Development, including access requirements.

#### ***Study Areas***

7.5.2 The following study areas will be adopted for the cultural heritage assessment:

- Inner Study Area: a study area comprising a 200 m wide corridor centred on the OHL alignment and a 100 m wide corridor centred on the proposed access track routes will be used for the identification of cultural heritage assets that could receive direct or indirect effects during the construction of the Proposed Development.
- Outer Study Area: a wider study area extending 1.5 km from the OHL alignment will be used, in combination with the Proposed Development ZTV model, to identify those designated heritage assets with statutory or non-statutory designations (Scheduled Monuments, Listed Buildings, Conservation Areas, Gardens and Designed Landscapes, etc) that could have their settings adversely affected by the Proposed Development (including cumulative effects). This study area is consistent with that proposed in **Chapter 8: Landscape and Visual Amenity**. No designated assets beyond 1.5 km from the OHL alignment have been identified as having settings that are sensitive to significant impacts from the Proposed Development.

#### ***Desk-Based Assessment***

7.5.3 Further desk-based assessment will be carried out covering the Inner Study Area. The following information sources will be consulted:

- HES Spatial Data Warehouse: for up-to-date data on the locations and extents of Scheduled Monuments, Listed Buildings, Conservation Areas, Inventory status Garden and Designed Landscapes and Inventory status Historic Battlefields;
- Aberdeenshire Council's Historic Environment Record (HER): for up-to-date information on the character and condition of the known archaeological sites and features within the Inner Study Area;
- The National Record of the Historic Environment (NHRE) database (Canmore): for any information additional to that contained in the HER;

- Map Library of the National Library of Scotland: for Ordnance Survey maps and other historical map resources that may provide information of historic settlement and land-use;
- Modern aerial photography and satellite imagery (Google Earth, Bing maps, ESRI World Imagery): for the identification of sites and features potentially of historic environment value not recorded elsewhere or shown on historic maps;
- Lidar imagery, where available through the Scottish Remote Sensing Portal; and
- Historic Land-Use Assessment Data for Scotland (HLAMap): for information on the historic land use character of the Inner Study Area.

### **Field Survey**

- 7.5.4 A walk-over field survey will be carried out along the OHL alignment (including working corridor) and along off-line construction access routes in order to:
- Locate and record the baseline character and condition of heritage assets identified through the desk-based assessment;
  - Identify any others not revealed through the desk-based study;
  - Identify any area of archaeological potential; and
  - Assess and record the heritage value of the heritage assets identified through the desk-based assessment and field survey.
- 7.5.5 Where the OHL alignment working corridor and off-line construction access routes cross areas covered by commercial forestry, the route will not be surveyed in detail, but attempts will be made to access any sites identified through the desk-based assessment to verify their continuing survival and record their baseline character and condition.
- 7.5.6 Site visits to key heritage assets in the Outer Study Area will be carried out, in as far as access is possible, to assess the predicted effect of the Proposed Development on their settings. Site visits will include any assets specifically identified by consultees as requiring assessment and those identified through analysis of the Proposed Development ZTV, where it is considered, on the basis of professional judgement, that the effect on their settings could be significant.

### **Assessment Method**

- 7.5.7 The effects of the Proposed Development on heritage assets will be assessed on the basis of their type (direct effects, indirect effects, and effects on setting (including cumulative effects)) and nature (adverse or beneficial). The assessment will take into account the value/sensitivity of the heritage asset and its setting and the magnitude of the predicted impact.
- Direct impacts: occur where the physical fabric of the asset is removed or damaged, or where it is preserved or conserved, as a direct result of the proposal. Such impacts are most likely to occur during the construction phase and are most likely to be permanent.
  - Indirect impacts: occur where the fabric of an asset, or buried archaeological remains, is removed or damaged, or where it is preserved or conserved, as an indirect result of the proposal even though the asset may lie some distance from the proposal. Such impacts are most likely to occur during the construction phase and are most likely to be permanent.
  - Setting impacts: these are generally direct and result from the proposal causing change within the setting of a heritage asset that affects its cultural significance or the way in which it is understood, appreciated, and experienced. Such impacts are generally, but not exclusively, visual, occurring directly as a result of the appearance of the proposal in the surroundings of the asset. However, they may relate to other senses or factors, such as noise, odour or emissions, or historical relationships that do not relate entirely to intervisibility, such as historic patterns of land-use and related historic features. Such impacts may occur at any stage of a proposal's lifespan and may be permanent, reversible, or temporary.

- Cumulative impacts: can relate to the physical fabric or setting of assets. They may arise as a result of impact interactions, either of different impacts of the proposal itself, or additive impacts resulting from incremental changes caused by the proposal together with other projects already in the planning system or allocated in a Local Development Plan.
- Adverse effects are those that detract from or reduce cultural significance or special interest of heritage assets.
- Beneficial effects are those that preserve, enhance, or better reveal the cultural significance or special interest of heritage assets.

### **Assigning Sensitivity to Heritage Assets**

7.5.8 Cultural heritage assets are assigned value/importance through the designation process. Designation ensures that sites and places are recognised and protected by law through the planning system and other regulatory processes. The level of protection and how a site or place is managed varies depending on the type of designation and the laws and policies that apply to it (HES 2019<sup>38</sup>).

7.5.9 **Table 7.1** summarises the relative sensitivity of heritage assets (including their settings) relevant to the Proposed Development, based on the guidance set out in the SNH/HES EIA Handbook (version 5; 2018<sup>39</sup>).

**Table 7.1: Sensitivity of Heritage Assets**

| Sensitivity of Heritage Asset | Definition/Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High                          | Assets valued at an international or national level, including: <ul style="list-style-type: none"> <li>• World Heritage Sites</li> <li>• Scheduled Monuments</li> <li>• Category A Listed Buildings (Buildings of special architectural or historic interest which are outstanding examples of a particular period, style or building type)</li> <li>• Inventory Gardens and Designed Landscapes</li> <li>• Inventory Historic Battlefields</li> <li>• Non-designated assets that meet the relevant criteria for designation (including sites listed in the HER as being non-statutory register (NSR) sites deemed to be of potential national importance)</li> </ul> |
| Medium                        | Assets valued at a regional level, including: <ul style="list-style-type: none"> <li>• Archaeological sites and areas that have regional value (contributing to the aims of regional research frameworks)</li> <li>• Non-Inventory Designed Landscapes (NIDL) (where these are identified in Local Authority records)</li> <li>• Category B Listed Buildings (Buildings of special architectural or historic interest which are major examples of a particular period, style or building type)</li> <li>• Conservation Areas</li> </ul>                                                                                                                               |
| Low                           | Assets valued at a local level, including: <ul style="list-style-type: none"> <li>• Archaeological sites that have local heritage value</li> <li>• Category C listed buildings (Buildings of special architectural or historic interest which are representative examples of a period, style or building type)</li> <li>• Unlisted historic buildings and townscapes with local (vernacular) characteristics</li> </ul>                                                                                                                                                                                                                                               |

<sup>38</sup> Historic Environment Scotland (2019b). Designation Policy and Selection Guidance, Edinburgh. Available at:

<https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b>

<sup>39</sup> SNH & HES (2018). Environmental Impact Assessment Handbook, Scottish Natural Heritage and Historic Environment Scotland, Edinburgh. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0>

|            |                                                                                                                                                                                                                                                                                                                                                                  |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Negligible | <p>Assets of little or no intrinsic heritage value, including:</p> <ul style="list-style-type: none"> <li>• Artefact find-spots (where the artefacts are no longer in situ and where their provenance is uncertain)</li> <li>• Poorly preserved examples of particular types of features (e.g. quarries and gravel pits, dilapidated sheepfolds, etc)</li> </ul> |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Criteria for Assessing the Significance of Effects

7.5.10 The magnitude of impact (adverse or beneficial) will be assessed in the categories, high, medium, low and negligible and described in **Table 7.2**.

**Table 7.2: Magnitude of Impact**

| Magnitude of Impact | Criteria                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                     |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     | <u>Adverse</u>                                                                                                                                                                                                                                                                           | <u>Beneficial</u>                                                                                                                                                                                                                                                                                   |
| High                | <p>Changes to the fabric or setting of a heritage asset resulting in the complete or near complete loss of the asset's cultural significance.</p> <p>Changes that substantially detract from how a heritage asset is understood, appreciated, and experienced</p>                        | <p>Preservation of a heritage asset in situ where it would otherwise be completely or almost completely lost.</p> <p>Changes that appreciably enhance the cultural significance of a heritage asset and how it is understood, appreciated, and experienced.</p>                                     |
| Medium              | <p>Changes to those elements of the fabric or setting of a heritage asset that contribute to its cultural significance such that this quality is appreciably altered.</p> <p>Changes that appreciably detract from how a heritage asset is understood, appreciated, and experienced.</p> | <p>Changes to important elements of a heritage asset's fabric or setting, resulting in its cultural significance being preserved (where this would otherwise be lost) or restored.</p> <p>Changes that improve the way in which the heritage asset is understood, appreciated, and experienced.</p> |
| Low                 | <p>Changes to those elements of the fabric or setting of a heritage asset that contribute to its cultural significance such that this quality is slightly altered.</p> <p>Changes that slightly detract from how a heritage asset is understood, appreciated, and experienced.</p>       | <p>Changes that result in elements of a heritage asset's fabric or setting detracting from its cultural significance being removed.</p> <p>Changes that result in a slight improvement in the way a heritage asset is understood, appreciated, and experienced.</p>                                 |
| Negligible          | <p>Changes to fabric or setting of a heritage asset that leave its cultural significance unchanged and do not affect how it is understood, appreciated, and experienced.</p>                                                                                                             |                                                                                                                                                                                                                                                                                                     |

### Assessment of Effects on Setting

7.5.11 The SNH/HES EIA Handbook (2018) Appendix 1, paragraph 42 advises that:

*"In the context of cultural heritage impact assessment, the receptors are the heritage assets and impacts will be considered in terms of the change in their cultural significance".*

7.5.12 HES's guidance document, 'Managing Change in the Historic Environment: Setting' (HES, 2016), notes that:

*"Setting can be important to the way in which historic structures or places are understood, appreciated, and experienced. It can often be integral to a historic asset's cultural significance."*

*"Setting often extends beyond the property boundary or 'curtilage' of an individual historic asset into a broader landscape context".*

7.5.13 The guidance also advises that:

*"If proposed development is likely to affect the setting of a key historic asset, an objective written assessment should be prepared by the applicant to inform the decision-making process. The conclusions should take into account the significance of the asset and its setting and attempt to quantify the extent of any impact. The methodology and level of information should be tailored to the circumstances of each case".*

7.5.14 The guidance recommends that there are three stages in assessing the impact of a development on the setting of a historic asset or place:

- Stage 1: identify the historic assets that might be affected by the proposed development.
- Stage 2: define and analyse the setting by establishing how the surroundings contribute to the ways in which the historic asset or place is understood, appreciated, and experienced; and,
- Stage 3: evaluate the potential impact of the proposed changes on the setting, and the extent to which any negative impacts can be mitigated.

7.5.15 The SNH/HES EIA Handbook (2018) Appendix 1, paragraph 43 advises that:

*"When considering setting impacts, visual change should not be equated directly with adverse impact. Rather the impact should be assessed with reference to the degree that the proposal affects those aspects of setting that contribute to the asset's cultural significance".*

7.5.16 Adopting this approach, the ZTV for the Proposed Development will be used to identify those heritage assets from which there would be theoretical visibility of the Proposed Development, and the degree of theoretical visibility. A photomontage visualisation will accompany the assessment of potential setting impacts on Cairn o' Mount, cairns (SM 4968).

### **Assessing the Significance of Effects**

7.5.17 The sensitivity of the asset (**Table 7.1**) and the magnitude of the predicted impact (**Table 7.2**) are used to inform an assessment of the significance of the effect (direct effect or effect on setting), summarised using the formula set out in the matrix in **Table 7.3**. The matrix employs a graduated scale of significance (from negligible to major effects) and where two outcomes are possible through application of the matrix, professional judgment supported by reasoned justification, will be used to determine the level of significance.

**Table 7.3: Significance of Effects**

| Magnitude of Impact | Sensitivity of Asset |                    |                  |                    |
|---------------------|----------------------|--------------------|------------------|--------------------|
|                     | <u>High</u>          | <u>Medium</u>      | <u>Low</u>       | <u>Negligible</u>  |
| High                | Major                | Major / Moderate   | Moderate / Minor | Minor / Negligible |
| Medium              | Major / Moderate     | Moderate           | Moderate / Minor | Minor / Negligible |
| Low                 | Moderate / Minor     | Moderate / Minor   | Minor            | Negligible         |
| Negligible          | Minor / Negligible   | Minor / Negligible | Negligible       | Negligible         |

- 7.5.18 Major and Moderate effects are considered to be 'significant' in the context of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (EIA Regulations). Minor and Negligible effects are considered to be 'not significant'.

## **7.6 Issues to be scoped out**

- 7.6.1 Assessment of the effect of the Proposed Development on the settings of World Heritage Sites, Inventory Garden and Design Landscapes, Conservation Areas and Inventory Historic Battlefields will be scoped out. There are no assets with those designations within 1.5 km of the Proposed Development.
- 7.6.2 Assessment of the effects of the Proposed Development on the settings of designated heritage assets arising from underground cable installation are scoped out on the basis that underground cables would not give rise to any such effects.
- 7.6.3 Assessment of the settings of designated heritage assets that fall outside of the zone of theoretical visibility (ZTV) for the Proposed Development will be scoped out. Because of the characteristics of the above-ground infrastructure of the Proposed Development (steel pole mounted overhead line), where there is no predicted visibility of the Proposed Development from these assets, their settings would not be adversely affected.
- 7.6.4 Assessment of the effect of the Proposed Development on the settings of designated heritage assets more than 1.5 km from the Proposed Development will be scoped out. None have been identified through initial analysis as having settings sensitive to adverse effects from the Proposed Development. Also, because of the characteristics of the above-ground infrastructure of the Proposed Development (steel pole mounted overhead line), it is considered that the settings of assets more than 1.5 km from the Proposed Development would not be adversely affected.

## 8. LANDSCAPE AND VISUAL AMENITY

### 8.1 Introduction

- 8.1.1 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.

### 8.2 Baseline Conditions

#### *Landscape and Visual Context*

- 8.2.1 The area to the west of the Proposed Development is characterised by largely uninhabited, regionally prominent hills and open moorland, which add a sense of remoteness and wild characteristics to this area. Distant views across low lying farmland and the settled Howe of Mearns further enhance the feeling of isolation.
- 8.2.2 Between western and central parts of the Proposed Development, the prominent hills and ridges transform into broad, expansive upland plateau, largely covered with heather and grass moorland. The central area of lower slopes becomes more modified further east, with conifer plantations and wind farm developments to the north and scattered farms and estate buildings to the south. To the south of the central and eastern parts of the Proposed Development, shallow valleys are covered by a patchwork of green pastures, arable fields and shelterbelts.
- 8.2.3 Settlement within the vicinity of alignment options and variants is concentrated to the east, where a number of scattered properties and farm buildings are present, as shown on **Figure 6b**. To the west, the presence of residential properties is generally absent.
- 8.2.4 Renewable energy and energy / electricity related developments are already present within the landscape. The presence of such developments is likely to increase with the construction of consented projects such as Glendye and Fetteresso Wind Farms, and other projects within the vicinity of the Proposed Development that are either within the planning system, or future applications are anticipated, such as the Tealing to Kintore 400 kV OHL Project, Quithel Battery Energy Storage System (BESS), Hurlie Substation and the extension to Fetteresso Substation.

#### *Protected and Designated Landscapes*

- 8.2.5 The Proposed Development would pass through two Special Landscape Areas (SLA's). Approximately 5 km of the Proposed Development would fall within Clachnaben and Forest of Birse (SLA) (see **Figure 6b**). An area of approximately 5.7 km along the southern part of the Proposed Development falls within the Braes of the Mearns (SLA). Both SLAs are recognised as regionally important landscapes.

#### *Landscape Character*

- 8.2.6 The Proposed Development would be located within two Landscape Character Types (LCT) defined by NatureScot <sup>40</sup> (see **Figure 6a**). The majority of the Proposed Development falls within LCT 29: Summits and Plateaux – Aberdeenshire. The key features of LCT 29 include lowlands hills, rising up into characteristic highland ridges, terminating in an expansive upland plateau. The LCT provides a backdrop from the transition of the Cairngorms National Park to the Howe of the Mearns and more settled coast. Within the Proposed Development the LCT is characterised by the largely managed forested areas. Areas that exhibit more wild characteristics are present to the west of the Proposed Development, where the B974 also stretches north to south. There are numerous routeways present which extend into the forest and lower hills. Settlement within the LCT is sparse, focused around the Bridge of Dye and Strachan and Glensaugh, with only scattered

<sup>40</sup> NatureScot (2019) Landscape Character Types Maps and Descriptions(Online) available at: <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions> (last accessed 07/11/2024)

farmsteads located in the central area. Further to the west, the landscape is more remote with dramatic steep scarp slopes leading to the uplands.

- 8.2.7 LCT 24: Coastal Farmed Ridges and Hills – Aberdeenshire covers a small area within the Proposed Development, to the south of Boy's Hill and south of the Junction Point. The Proposed Development would also border this LCT to the east, crossing over to the LCT briefly north of East Town. LCT 24 is comprised of an extensive area of farmsteads and patchwork farmland around Glenbervie and to the south of the Proposed Development.

### **Visual Receptors**

- 8.2.8 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.
- 8.2.9 The Proposed Development would cross the B974 (Old Military Road) as well as a number of recreational routes (including Scottish Hill Tracks 196-198). There are a number of smaller local roads situated to the east which may also obtain views. To the west, views would be obtained from the vicinity of the Cairn o'Mount view point, however the Proposed Development would not likely be visible from the viewpoint itself due to screening by localised topography.
- 8.2.10 To the east, the Proposed Development would generally pass through forestry or closely follow the forest edge, which would serve to screen or back cloth the Proposed Development from visual receptors including properties, recreational routes and local roads.

## **8.3 Characteristics of the Potential Impact**

- 8.3.1 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 pole foundations, construction and reinstatement works and long-term presence of the Proposed Development within the landscape;
  - Temporary or long-term direct or indirect effects on landscape character and designated landscapes 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, recreational users of the landscape; and
  - Potential cumulative effects with other proposed infrastructure within the area.

## **8.4 Mitigation**

- 8.4.1 The Proposed Development has undergone a routeing and alignment exercise which has taken landscape and visual issues into consideration and sought to minimise potential effects on sensitive receptors where possible.
- 8.4.2 Further mitigation would be considered 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.

## **8.5 Proposed Scope and Assessment Methodology**

- 8.5.1 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 (3<sup>rd</sup> Edition)<sup>41</sup> (GLVIA3).
- 8.5.2 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. The consented Glendye Wind Farm would be considered within the baseline for the assessment, as the Proposed Development is reliant on its construction and operation. Operational effects would assume all proposed reinstatement and restoration had taken place, including removal of temporary access tracks.
- 8.5.3 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**

- 8.5.4 The study area for the assessment would be informed by the type and scale of the OHL infrastructure, professional judgement, field survey and Zone of Theoretical Visibility (ZTV) mapping.
- 8.5.5 Following preliminary appraisal and taking into account experience of the landscape and visual effects of similar projects, a 1.5 km study area either side of the final OHL alignment is considered appropriate to identify all potentially significant effects. Although theoretical visibility may be possible further than this, the scale and structure of the steel trident poles would make them difficult to perceive from farther away, particularly against a backdrop of landform and forestry. Therefore, it is considered that significant landscape and visual effects beyond 1.5 km distance are highly unlikely.

### **Landscape Assessment**

- 8.5.6 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. The landscape assessment would be informed by the descriptions of the NatureScot LTCs in the identification of key characteristics and evaluation of landscape value and sensitivity.
- 8.5.7 The assessment of effects on landscape character will also consider the potential for effects to the Braes of the Mearns SLA and to the Clachnaben and Forest of Birse (SLA).

### **Visual Assessment**

- 8.5.8 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 of the Proposed Development including all building locations, recreational routes and other identified valued viewing locations.

### **Cumulative Assessment**

- 8.5.9 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 of the Proposed Development and are not present within the baseline at the time of assessment.

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<sup>41</sup> Landscape Institute (LI) and Institute of Environmental Management and Assessment (2013) *Guidelines for Landscape and Visual Impact Assessment*. 3<sup>rd</sup> edition. Published by Routledge

The consented Glendye Wind Farm would be considered within the baseline for the main LVIA, as the Proposed Development is reliant on its construction and operation. At the current stage, it is proposed that the cumulative assessment would include those developments included in **Table 3.2** of this Scoping Report. Cumulative effects would be assessed during the operational phase only.

### **Visualisations**

8.5.10 Photomontages would be prepared to inform and support the LVIA, produced in accordance with NatureScot (formerly Scottish Natural Heritage) guidance<sup>42</sup>. It is proposed that these would illustrate the appearance of the Proposed Development within the landscape during its operational phase. The following locations are proposed for visualisations:

- Visualisation 1: Cairn o'Mount Cairns Scheduled Monument (approximate grid reference NO 64830 80627) – Representative of views obtained by members of the public from a recognised stopping and scenic viewing location near Cairn o'Mount Cairns Scheduled Monument and viewpoint.
- Visualisation 2: Minor Road near Cleuchhead (approximate grid reference NO 76404 84104) – Representative of views obtained by members of the public travelling via the minor road near Cleuchhead.

8.5.11 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.

## **8.6 Issues to be Scoped Out**

8.6.1 Effects arising from the process of decommissioning are considered to be of a similar nature and duration to those arising from the construction process and it is therefore proposed to scope out an assessment of decommissioning effects from the LVIA.

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<sup>42</sup> NatureScot (2019) available online at: <https://www.nature.scot/sites/default/files/2019-09/Guidance%20-%20Visual%20representation%20of%20wind%20farms%20-%20Feb%202017.pdf> (last accessed 11/11/2024)

## 9. FORESTRY

### 9.1 Introduction

- 9.1.1 This Chapter describes the existing forest resource, identifies potential for effects to occur and details the scope of information and assessment to be included in the EIA Report.

### 9.2 Baseline Conditions

- 9.2.1 Approximately 10 km of the Proposed Development would be routed through or adjacent to forest / woodland plantation, most of which is under the management of Forestry and Land Scotland (FLS) as part of the National Forest and Land.
- 9.2.2 Publicly owned forests are managed through land management plans (LMP). A LMP sets out the intended plans to manage a specific area of land for a period of ten years. The area covered by a plan is a forest or woodland, but it will often include open areas too. Part of the Proposed Development is within the Mearns LMP, which is made up of three areas, namely Fetteresso, Glenfarquhar and Drumtochty. The LMP represents a predominantly upland environment with poorer soils which have been planted with commercial conifers. It is one of the main production areas for Moray & Aberdeenshire Forest District. The main objectives of the area are to produce good quality timbers whilst dealing with *Dothistroma* needle blight (DNB) disease, an economically important disease of conifer trees, and particularly pine (trees in the *Pinus* genus). It is caused by the fungus *Dothistroma septosporum* (*D. septosporum*).
- 9.2.3 It is noted that this LMP runs from 2015 through to 2024 and is presently being revised.
- 9.2.4 Within this forest area there are areas of woodland which are recorded within the Ancient Woodland Inventory (AWI) as long established of plantation origin) (LEPO1860), antiquity category 2b. The Native Woodland Survey of Scotland (NWSS) records areas of upland birchwood, upland oakwood and open land habitat.
- 9.2.5 It is also noted that there are recent woodland creation schemes adjacent to the existing forest.

### 9.3 Potential Effects

- 9.3.1 Construction of the project would require the removal of areas of commercial forest, which would be undertaken in consultation with FLS and other affected forest landowners. After felling, any timber removed that is commercially viable would be sold and the remaining forest materials such as arisings / brash would be mulched on site.
- 9.3.2 An operational corridor would be required in areas of woodland to enable the safe operation and maintenance of the OHL, and UGC as it connects to Fetteresso Substation. The operational corridor is anticipated to be approximately 72 m in width, determined by several factors including ground conditions, topography and species of tree present. The operational corridor will be confirmed in the EIA Report, and the area of woodland to be removed would be assessed in a Forest Impact Assessment, contained within a specific Forestry Chapter which will be part of the EIA Report.
- 9.3.3 The detail of future land management areas affected will influence the residual significance as felling and replanting are ongoing.
- 9.3.4 The Proposed Development would result in some loss of forested area, and the construction and operation of the OHL has the potential to affect forestry operations.

## 9.4 Mitigation

- 9.4.1 The Proposed Development has undergone a routeing and alignment exercise which has sought to minimise loss of forest and woodland resources where possible, whilst giving consideration to other environmental and land use factors.
- 9.4.2 Wherever possible, and ensuring that relevant health and safety requirements are met, the Applicant will seek to minimise the operational corridor.
- 9.4.3 Permanent woodland loss will be planted offsite as compensatory planting following the guidance provided in the Scottish Government's policy on control of woodland removal<sup>43</sup>.

## 9.5 Proposed Scope and Assessment Methodology

- 9.5.1 The preparation of the Forest Impact Assessment will refer to relevant industry guidance including, but not limited to:
- Scottish Government (2023) National Planning Framework 4 (NPF4);
  - Aberdeenshire Council (2017): Forestry and Woodland Strategy;
  - Forestry Commission (2023): The UK Forestry Standard 5<sup>th</sup> edition, The Government's Approach to Sustainable Forestry. Forestry Commission, Edinburgh (and guidelines in the series);
  - Scottish Government (2019) Scotland's Forestry Strategy 2019-2029. Scottish Government, Edinburgh;
  - UKWAS (2018): The UK Woodland Assurance Standard Fourth Edition. UKWAS, Edinburgh;
  - Forestry Commission Scotland (2009): The Scottish Government's Policy on Control of Woodland Removal. Forestry Commission Scotland, Edinburgh;
  - Scottish Government's policy on control of woodland removal: implementation guidance, February 2019; and
  - SEPA (2013) Guidance on the Management of Forestry Waste. SEPA.
- 9.5.2 The Forest Impact Assessment will include the following activities:
- calculation and description of areas required to be cleared of woodland and areas which could be returned for replanting;
  - an assessment of the effects of changes to the woodland composition and existing felling and replanting programmes; and
  - proposals for mitigation if required under the terms of the EIA Regulations.
- 9.5.3 The Forest Impact Assessment will identify and quantify areas of forest which would need to be removed to accommodate the Proposed Development, those available for replanting once construction is complete and the net area of forest land lost and will assess the potential impacts of this loss on the forest resource and structure. It will also detail how forest residues will be managed in line with the waste regulations and any proposals for mitigation where a significant adverse effect is predicted under the terms of the EIA Regulations. The Forest Impact Assessment will be presented as a chapter in the EIA Report.
- ## 9.6 Issues to be Scoped Out
- 9.6.1 The operational corridor defines the limit for which the Applicant is seeking consent under section 37 of the Electricity Act 1989. As such, the Forest Impact Assessment will not provide an assessment of any felling or restocking requirements outwith the operational corridor. These works are the responsibility of the landowner and will be undertaken in accordance with the requirements set out within the Forestry and Land Management (Scotland) Act 2018.

<sup>43</sup> Forestry Commission Scotland (2009) Control of Woodland Removal Policy

- 9.6.2 Secondary effects resulting from forestry activities including effects on habitats and species, ornithology, hydrology and landscape and visual effects will be considered within their respective chapters of the EIA Report and not covered by the Forest Impact Assessment.

## 10. TRAFFIC AND TRANSPORT

### 10.1 Introduction

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

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

10.1.3 The following policy and guidance documents will be used to inform the Transport & Access Chapter:

- Transport Assessment Guidance (Transport Scotland, 2012);
- Environmental Assessment of Traffic and Movement (IEMA, 2023); and
- National Planning Framework 4 (2023).

### 10.2 Baseline Conditions

10.2.1 The proposed study area will be based upon the roads used to move material and staff used to construct the Proposed Development. These include the C1k (between Stonehaven and Auchenblae) and the B974 Carin 'o Mount road (between Strachan and Clattering Bridge).

10.2.2 New Automatic Traffic Count (ATC) survey will be undertaken on both roads. Wider area traffic data will be obtained from Transport Scotland's traffic database and from the Department for Transport (DfT) road traffic database.

10.2.3 In addition to traffic flow data, traffic accident data for a five-year period for both roads will be obtained from the public website source, Crashmap.co.uk.

10.2.4 A site visit will also be undertaken to review the route and obtain further baseline data and characteristics.

10.2.5 Material for the construction of access tracks for the Proposed development is anticipated to be taken from local material sources (quarries, readymix concrete suppliers, etc). Temporary access junctions may be required and if necessary, these will be designed in accordance with the appropriate Aberdeenshire Council design standard.

10.2.6 No Abnormal Indivisible Loads (AIL) are associated with development infrastructure. Should plant required for the construction be categorised as an AIL, an appropriate assessment would be undertaken.

10.2.7 Sensitive receptors to be considered in the assessment will include communities within the study area and users of the road links. All receptors, both communities and users, will be considered in detail.

### 10.3 Potential Effects

10.3.1 Potential impacts that may arise during the assessment may include the following for users of the road and those resident along the delivery routes:

- Severance;
- Driver delay;
- Pedestrian delay;
- Pedestrian amenity;
- Fear and intimidation; and

- Accidents and safety.

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

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

#### **10.4 Mitigation**

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

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

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

#### **10.5 Proposed Scope of Assessment**

10.5.1 Environmental Assessment of Traffic and Movement (IEMA, 2023) sets out a methodology for assessing potentially significant environmental effects. In accordance with this guidance, the scope of assessment will 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.

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

10.5.3 A cumulative assessment will take place where a proposed development has planning consent and would have a significant impact on the study network (i.e. over 30% increase in traffic flows). These traffic flows would be included into the baseline flows used within the assessment.

10.5.4 Planning proposals that are in scoping but not have planning consent are not committed development and as such would not be included in the assessment.

10.5.5 The following rules taken from the guidance 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.

10.5.6 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 will therefore be assumed to result in no discernible environmental impact and as such no further consideration will be given to the associated environment effects.

10.5.7 The estimated traffic generation of the Proposed Development will be compared with baseline traffic flows, obtained from existing traffic survey data, in order to determine the percentage increase in traffic.

10.5.8 Potentially significant environmental effects will then be assessed where the thresholds as defined above are exceeded. Suitable mitigation measures will be proposed, where appropriate.

10.5.9 The assessment will consider the impact of construction traffic in a future year. Baseline traffic flows will be subject to Low National Road Traffic Growth factors to allow for the future year baseline.

#### **10.6 Issues to be Scoped Out**

10.6.1 Once operational, it is envisaged that the level of traffic associated with the Proposed Development would be minimal. Regular maintenance visits would be made using 4x4 vehicles. It is considered that the effects of operational traffic would be negligible and therefore no detailed assessment of the operational phase of the development is proposed.

10.6.2 The application is for permission in perpetuity and as such no decommissioning phase is included. Should the Proposed Development ever be decommissioned, it is anticipated that traffic generation levels associated with the dismantling phase will be less than those associated with the development phase. As such, the construction phase is considered the worst-case assessment to review the impact on the study area. An assessment of the decommissioning phase would therefore not be undertaken.

#### **10.7 Summary**

10.7.1 The access, traffic and transport issues relating to the construction phase will be examined in detail. The Transport and Access Chapter will be accompanied by a Transport Assessment (TA) which will review the impact of construction traffic on the proposed study area.

## 11. SOCIO-ECONOMICS, TOURISM AND RECREATION

### 11.1 Introduction

11.1.1 This Chapter provides an overview of potential socio-economic, recreation and tourism effects of the construction and operation of the Proposed Development and how these will be considered in the EIA Report. This includes consideration of employment and Gross Value Added (GVA) generation, and tourism effects, and any indirect supply chain economic effects from the Proposed Development.

11.1.2 The assessment will include a description of the current socio-economic, tourism and recreation baseline within the local area. This will include a summary of economic performance data for the Study Area and a description of the relevant tourism and recreation assets that will be covered in the assessment. The baseline will be assessed to present the economic effects associated with the Proposed Development. The effects will be based on the estimated impacts of the Proposed Development.

### 11.2 Baseline Conditions

11.2.1 The baseline study will consider:

- The demographic profile of the local area within the context of the regional (Aberdeenshire) and national (Scotland) demographic trends;
- Employment and economic activity in the local area within the context of regional and national economies;
- The industrial structure of the local area within the context of regional and national economies;
- The role of the tourism sector in the local area, and comparing this against statistics for the regional visitor economy (VisitAberdeenshire) and Scotland as a whole;
- An analysis of tourism statistics in Scotland, Aberdeenshire and the local area (Banchory and Mid Deeside);
- Identification of local tourism assets, including accommodation providers, visitor attractions and assets;
- Wage and salary levels within the local and regional economies compared to the Scottish levels; also including educational attainment levels within the regional area and compared to the national level;
- An assessment of relative deprivation based on a review of the Scottish Index of Multiple Deprivation, over the period from 2004, through to 2024, to show how the local area has changed over time, compared to the national level; and
- Recreational assets and tourist attractions will be identified within 10 km of the Site boundary. Tourist attractions include permanent fixtures (e.g., museums, attractions, castles and trails) as well as temporary events (e.g., music, sport, cultural or arts festivals). Recreational assets include walking and cycling routes.

11.2.2 The quantifiable socio-economic effects will be quantified and presented for the Aberdeenshire and Scotland Study Areas. The modelling deployed does not allow for a 'local' assessment of quantifiable socio-economic impacts. However, the local socio-economic effects will be presented in a qualitative manner.

11.2.3 Important attractions attributed to Aberdeenshire and Banchory and Mid Deeside will also be identified due to their increased sensitivity. A specific focus will be on tourism assets within 10 km of the Site boundary.

11.2.4 In terms of recreation and land-use assets and activities, these will also be assessed in terms of their vicinity to the Proposed Development. This will be based on a review of recreation and land-use assets within 10 km of the Proposed Development, including hill summits and walks and other recreational land uses such as forestry and waterways.

11.2.5 The baseline environment will cover and compare three study areas:

- Local area, comprising electoral wards (Banchory and Mid Deeside) that cover the location of the Proposed Development and nearest settlements (for instance Banchory to the north, Fettercairn to the south and Stonehaven to the east);
- Aberdeenshire Council; and
- Scotland.

11.2.6 As noted above recreational assets and tourist attractions will be identified within 10 km of the Site boundary.

### 11.3 Potential Effects

11.3.1 The issues that will be considered in the assessment will include the potential socio-economic and tourism effects associated with the Proposed Development. This will be based on knowledge of grid infrastructure projects and will be based on a review of available data sources.

11.3.2 The potential socio-economic effects that will be considered are:

- Temporary effects on the local, regional and national economy due to expenditure during the construction phase;
- Permanent effects on the local, regional and national economy due to expenditure associated with the ongoing operation and maintenance of the Proposed Development;
- Permanent effects as a result of any additional public expenditure that could be supported by the additional tax revenue that would be generated by the Proposed Development during the operational phase; and
- Permanent effects on the local economy that could be supported by any community funding and/or shared ownership proposals during the operational phase of the Proposed Development.

11.3.3 In order to calculate the economic effect of new jobs, the GVA per head for civil engineering related projects in Aberdeenshire and Scotland will be utilised. These figures will be sourced from the Scottish Annual Business Statistics.

11.3.4 A review of socio-economic effects during operation will also be completed.

11.3.5 In addition to the stated quantifiable jobs and GVA effects during the construction and operational phases, there is also a variety of wider economic impacts which are excluded from the employment and GVA assessment from the construction and operational economic impact assessment. These additional impacts, some of which are harder to measure and are more qualitative in nature, and should also be noted as having positive effects on the regional and national economies include:

- Supporting national, regional and local policy objectives;
- Local supply chain opportunities;
- Pre-development costs, such as consultancy fees and legal costs;
- Exchequer impacts;
- Perception benefits, promoting the area as a place to work and invest; and
- Community benefits, such as those afforded to local communities through SSEN Transmission's new Community Benefit Fund.

11.3.6 The recreation and tourism sector is an important contributor to the local and Scottish economy and so there is merit in considering whether the Proposed Development will have any effect on the tourism sector. The assessment will consider the potential effects that the Proposed Development could have on tourism attractions, tourism businesses, local accommodation, and tourism and recreational trails in Banchory and Deeside.

- 11.3.7 The link between renewable energy developments and the tourism sector is a subject of debate. However, the most relevant research has not found a link between tourism employment, visitor numbers and renewable developments. For example, research completed by the Scottish Government found that there is no relationship between the development of renewable related developments and tourism employment at the level of the Scottish economy, at the local authority level nor in the areas immediately surrounding developments. There have been other studies in Wales and also a recent study commissioned by Aberdeen and Grampian Chamber of Commerce as into the public attitudes of grid investments, including pylons. The latest Public Attitudes Tracker from the Department of Energy Security and Net Zero has also recorded growing support for renewable energy developments.
- 11.3.8 The assessment in the EIA Report will consider the implications of any effects identified for the tourism sector in the local area and wider region, and consider their significance for the resource in question.

#### **11.4 Mitigation**

- 11.4.1 The Applicant is committed to implementing good practice measures during construction and operation, thereby ensuring that many potential adverse social and economic effects can be avoided or reduced. Such measures will be considered as part of the assessment.
- 11.4.2 Other socio-economic opportunities to enhance positive effects resulting from the Proposed Development could include:
- Local promotion of contract and supply chain opportunities during construction and operation to maximise the use of local business and labour;
  - Skills development and training programmes to increase local take up of training, apprenticeship and employment opportunities associated with the Proposed Development;
  - Establishing effective linkages with local job centres, employability programmes and partners;
  - Promotion of the wider area as part of the marketing of the Proposed Development, for example waymarking and signposting opportunities; and
  - Potential for community benefit funding, in the form of SSEN Transmission's new Community Benefit Fund, which is in line with Scottish Government best practice on community funding. The Fund can be used to deliver a wide range of initiatives and encourage the communities receiving the funds to maximise the opportunity through engaging locally to develop a community action plan. This helps to identify local priorities and the delivery of strategic initiatives with long term benefits.

#### **11.5 Proposed Scope and Assessment Methodology**

- 11.5.1 There is no established guidance for conducting a socio-economic and tourism assessment as part of the EIA process. It is therefore proposed that the assessment uses desk-based information sources to assess the likely scale of effects, supplemented by consultation with local stakeholders, informed by professional judgement.
- 11.5.2 A range of existing surveys and assessments of socio-economic and visitor profiles, land use and ownership, and public attitudes will be collated to provide background information against which to assess the potential for effects.
- 11.5.3 In respect of recreation and access, visual effects upon these receptors that have been scoped into the assessment will be considered in the Landscape and Visual Impact Assessment Chapter. These will be used in the Socio-Economic and Tourism Assessment to address possible knock-on effects in terms of the possible visibility that the Proposed Development may have on the tourism and recreational resource.

11.5.4 An assessment of effects upon tourism receptors will also be undertaken and will take into account published data on visitor numbers and the value of tourism to the economy of Aberdeenshire and Banchory and Mid Deeside. This may also include consultations with local businesses such as:

- accommodation associations and providers;
- tourism businesses;
- transport operators; and
- visitor attractions and tourism agencies such as VisitScotland, Aberdeenshire Council, VisitAberdeenshire and other relevant consultees within the vicinity of the Proposed Development.

11.5.5 A cumulative assessment will also be presented, and this will take into account other similar renewable and infrastructure projects ongoing, in planning or consented. This will assess the cumulative impact of such developments, alongside the Proposed Development. The assessment will review the agreed list of the other similar renewable and infrastructure projects being assessed across all technical chapters.

## **11.6 Issues to be Scoped Out**

11.6.1 The longer-term impacts associated with the decommissioning phase of the Proposed Development are not assessed, and are therefore scoped out, given the time lapse between planning and decommissioning phases.

## 12. TOPICS TO BE SCOPED OUT OF THE EIA REPORT

### 12.1 Introduction

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

- Noise and Vibration;
- Land Use and Agriculture;
- Population and Human Health;
- Air Quality and Climate Change;
- Major Accidents and Disasters; and
- Material Assets.

### 12.2 Noise and Vibration

#### ***Baseline Conditions***

12.2.1 The proposed route is located within a predominantly remote and rural area. Noise sensitive receptors within 500 m of the Proposed Development are limited to a small number of properties located to the eastern extent of the route.

12.2.2 Through the alignment selection process, it is anticipated that close proximity to noise sensitive receptors would be avoided and the Applicant endeavours to maintain a minimum 100 m separation buffer between the OHL and properties.

#### ***Potential for Effects***

12.2.3 Construction noise and vibration associated with installation and stringing of OHL poles, the construction of access tracks and traffic noise (including on public roads) is considered to be short term and intermittent and can be controlled through the implementation of a noise management plan, which would include working hours agreed with Aberdeenshire Council.

12.2.4 Once operational, OHL noise is generally associated with a phenomenon known as “corona discharge”. This is essentially a limited electrical breakdown of the air which, in the main, occurs during damp weather. Corona discharge will create a source of audible noise (a crackling sound occasionally accompanied by a low frequency hum in certain wet conditions). Power transmission line conductors are designed to minimise corona discharge, but this may be affected by minor surface irregularities caused by damage, insects, raindrops or pollution.

12.2.5 Operational noise impacts from an OHL development of this type are likely to be minimal.

#### ***Issue Scoped Out***

12.2.6 Given the nature of the Proposed Development, the potential effects during the construction and operational stages in relation to Noise and Vibration is anticipated to be limited, and not significant. Therefore, it is proposed to scope out an assessment of noise and vibration from the EIA Report.

## 12.3 Land Use and Agriculture

### ***Baseline Conditions***

- 12.3.1 Areas of agricultural land are classified by The Macaulay System (now Hutton Institute) of Land Capability for Agriculture<sup>33</sup>. Based on this data, the western extent of the Proposed Development would traverse areas of Class 6.3 agricultural land, which is suitable for rough grazing only. To the east, the Proposed Development would pass through land capable of use as improved grassland with areas of Class 5.1 and 5.2.
- 12.3.2 No prime agricultural land (Class 1, 2 or 3) would be crossed by the Proposed Development.

### ***Potential for Effects***

- 12.3.3 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 agreements with the relevant landowners. The permanent loss of land to pole locations would be negligible and it would remain possible for grazing to continue around and under poles during their operational lifetime.

### ***Issues Scoped Out***

- 12.3.4 As no prime agricultural land would be crossed by the Proposed Development, construction effects would be minimal, and it would remain possible for grazing to continue around and under poles during their operational lifetime. As such, no significant effects are likely, and it is proposed to scope out an assessment on land use and agriculture from the EIA Report.
- 12.3.5 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.

## 12.4 Population and Human Health

### ***Baseline Conditions***

- 12.4.1 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 Fettercairn approximately 5 km to the southwest, and Auchenblae, Drumlithie and Glenbervie, located approximately 3 km southeast from the Proposed Development.

### ***Potential for Significant Effects / Issues Scoped Out***

- 12.4.2 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, 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, 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.

## 12.5 Air Quality and Climate Change

### ***Baseline Conditions***

- 12.5.1 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.
- 12.5.2 Current and predicted annual average and short term NO<sub>2</sub> and PM<sub>10</sub> within the region are compliant with all applicable objectives.

### ***Potential for Significant Effects***

- 12.5.3 In the context of the EIA process, 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.
- 12.5.4 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.

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

***Issues Scoped Out***

- 12.5.6 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.
- 12.5.7 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.
- 12.5.8 Based on the above, and on professional judgement and experience in the assessment of effects associated with OHL projects, this issue is scoped out of the EIA and no specific assessment of air quality and climate change is included as part of the EIA Report. Where relevant, consideration of the implications of climate change would however be considered in the technical chapters of this EIA Report.

**12.6 Major Accidents and Disasters*****Potential for Significant Effects***

- 12.6.1 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 poles, as well as the potential for risks during the construction phase.

***Issues Scoped Out***

- 12.6.2 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.
- 12.6.3 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).
- 12.6.4 Where there are roads or built-up area crossings under the route of the OHL, 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.
- 12.6.5 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.

## 12.7 Material Assets

### ***Baseline Conditions***

- 12.7.1 The Proposed Development is not located on prime agricultural land and would be routed predominantly across land used for rough grazing and commercial forestry.
- 12.7.2 There is existing grid infrastructure in the area surrounding the Proposed Development, but it is not anticipated any notable modifications to existing infrastructure will be made as part of the Proposed Development.
- 12.7.3 The Proposed Development would cross the B974 (Old Military Road) and two gas pipelines.

### ***Potential for Significant Effect***

- 12.7.4 There are unlikely to be significant effects on material assets as a result of the Proposed Development.
- 12.7.5 The permanent loss of land at pole locations would be small in size and it would remain possible for grazing to continue around and under poles during the operational lifetime of these support structures.
- 12.7.6 The alignment selection stage of the project will seek to minimise interaction with forestry where practicable. Where there is interaction, the Applicant will continue discussions with forest owners to ensure the Proposed Development minimises impacts on long term forest plans. The Applicant also commits to compensatory planting for any woodland loss in line with the Scottish Government's Policy on Control of Woodland Removal.

### ***Issue Scoped Out***

- 12.7.7 Given the nature of the Proposed Development, the potential effects in relation to Material Assets is anticipated to be limited.

## 13. SUMMARY

### 13.1 Issues Scoped In and Scoped Out of EIA

13.1.1 **Table 13.1** below summarises the topics proposed to be Scoped in and out of the EIA Report for the Proposed Development.

**Table 13.1: Summary of topics Scoped in and Scoped out of the EIA Report**

| Topic                           | Issues Scoped in                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Issues Scoped Out                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ecology and Nature Conservation | <p>The EIA Report will include an Ecological Impact Assessment (EclA), completed in accordance with the Chartered Institute of Ecological and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment. This will consider the potential direct, indirect and cumulative effects that the construction and operation of the Proposed Development could have on any identified IEFs scoped into the assessment.</p> <p>To inform the EclA, NVC, protected mammal and preliminary ground level tree roost assessment of trees and structures/buildings within the vicinity of the Proposed Development will be carried out. Further review of protected species survey results may require additional survey effort.</p> <p>As the Proposed Development is hydrologically connected to the River Dee SAC, a European designated site, a Habitats Regulations Appraisal (HRA) Screening report will be undertaken to inform the requirement for a Stage 2 Appropriate Assessment.</p> | <p>Potential effects on IEFs during the decommissioning phase of the Proposed Development are scoped out of the assessment.</p> <p>Impacts on the following designated sites are scoped out due to their distance from the Proposed Development:</p> <p>SSSI – Loch of Lumgair, Gannochy Gorge and Esle Moss; and</p> <p>LNCS – Elfhill, Mergie and Feughside.</p> <p>Habitats which are of low conservation priority, are generally common and widely distributed habitats and are not of value to protected species are to be scoped out.</p> <p>Mountain Hare (<i>Lepus timidus</i>) and Wildcat (<i>Felis silvestri</i>) are currently excluded due to the lack of evidence recorded on site from previous surveys.</p> |
| Ornithology                     | <p>The EIA Report will include an assessment of the potential effects of the Proposed Development on IOF's scoped into the detailed assessment. The assessment will be completed in accordance with the Chartered Institute of Ecological and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment.</p> <p>The assessment will be informed by data collected from VP surveys, along with other breeding bird, raptor and black grouse survey effort which has followed the advice on survey methods set out in NatureScot's guidance.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p>Species not recorded during the field surveys to inform the Proposed Development or those undertaken for other developments in the immediate surrounding area will be scoped-out of the EIA in accordance with NatureScot (2019) guidance.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hydrology, Geology and Hydrogeology | <p>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.</p> <p>With regard to peat, the assessment would be supported by the following Technical Appendices which will specifically consider peat resources:</p> <ul style="list-style-type: none"> <li>• Peatland Condition Assessment;</li> <li>• Outline (Stage 1) Peat Management Plan (compliant with the requirements of NPF4); and</li> <li>• Peat Landslide Hazard Risk Assessment.</li> </ul> <p>The assessment will also include a private water supply risk assessment which will outline any potential effects on nearby private water supplies, and if required mitigation measures to safeguard both the quantity and quality of water at private water supply sources. This will also be presented as a Technical Appendix.</p> | <p>The following matters are proposed to be scoped out:</p> <ul style="list-style-type: none"> <li>• Effects on geology;</li> <li>• A detailed Flood Risk Assessment (FRA);</li> <li>• A Drainage Impact Assessment (DIA);</li> <li>• Water quality monitoring;</li> <li>• Cumulative impacts;</li> <li>• Increased flood risk caused by blockages to flow in watercourses during operation and maintenance of the Proposed Development; and</li> <li>• A Geomorphological Assessment.</li> </ul>                                                                                          |
| Cultural Heritage                   | <p>Direct effects on archaeological remains would be assessed, informed by the results of the desk-based study already undertaken and by further desk-based assessment of historic maps, aerial photography, and verified by field survey along the route of the Proposed Development, including proposed access requirements.</p> <p>Effects on the setting of cultural heritage assets within the outer study area.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p>Assessment of the potential effects of the Proposed Development on:</p> <ul style="list-style-type: none"> <li>• the settings of World Heritage Sites, Conservation Areas, Inventory Gardens and Designed Landscapes, and Inventory Historic Battlefields;</li> <li>• the settings of key heritage assets more than 1.5 km from the Proposed Development.</li> <li>• Designations which fall outwith the zone of theoretical visibility for the Proposed Development; and</li> <li>• the settings of designated heritage assets arising from underground cable installation.</li> </ul> |
| Landscape and Visual                | <p>A LVIA is proposed as part of the EIA Report. The assessment will consider potential effects on landscape character, landscape designations and visual receptors within a defined study area, anticipated to be 1.5 km from the Proposed Development. Cumulative effects will also be considered.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>Effects arising from the process of decommissioning are considered to be of a similar nature and duration to those arising from the construction process and therefore will not be assessed separately</p>                                                                                                                                                                                                                                                                                                                                                                              |

|                                        |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                        | Photomontages would be prepared from two locations along the route to inform and support the LVIA, in accordance with NatureScot guidance.                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                          |
| Forestry                               | As assessment will consider the direct effect of woodland losses from the requirement to form an operational corridor for the Proposed Development. This will be reported in a specific Forestry Chapter which will be part of the EIA Report.                                                      | Effects relating to the decommissioning of the existing OHL would not be included.<br><br>Secondary effects resulting from forestry activities including effects on habitats and species, ornithology, hydrology and landscape and visual effects will be considered within their respective chapters of the EIA Report and not covered by the Forest Impact Assessment. |
| Traffic and Transport                  | The access, traffic and transport issues relating to the construction phase will be examined in detail. The Transport and Access Chapter will be accompanied by a Transport Assessment (TA) which will review the impact of construction traffic on the proposed study area.                        | No detailed assessment of the operational phase of the development is proposed.<br><br>An assessment of the decommissioning phase would also be scoped out.                                                                                                                                                                                                              |
| Socioeconomics, Recreation and Tourism | A socio-economic assessment will be undertaken as part of the EIA Report. This will include consideration of tourism and recreation receptors in the area.                                                                                                                                          | The long-term impacts associated with the decommissioning phase of the Proposed Development will not be included for assessment.                                                                                                                                                                                                                                         |
| Land Use and Agriculture               | A Land Use and Agriculture Assessment is not proposed as part of the EIA for the Proposed Development.                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                          |
| Noise and Vibration                    | All elements of this topic are scoped out from assessment in the EIA Report. A noise management plan will be put in place for the Proposed Development, containing working hours in agreement with Aberdeenshire Council.                                                                           |                                                                                                                                                                                                                                                                                                                                                                          |
| Radio and TV Interference              | Effects on TV and radio interference as a result of the Proposed Development are unlikely and would not be included.                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                          |
| Population and Human Health            | Potential effects of the Proposed Development on water quality would be considered in the Hydrology, Geology and Hydrogeology Chapter of the EIA Report.<br><br>Potential visual effects of the Proposed Development on nearby receptors would be considered in the LVIA Chapter of the EIA Report. | Assessment of the potential effects of the Proposed Development on:<br><ul style="list-style-type: none"><li>Noise and Vibration (see Noise and Vibration above);</li><li>Air Quality (see Air Quality and Climate above)</li></ul>                                                                                                                                      |

|                                            |                                                                                                                                                                                             |                                                                                                                                                                                                                                                                         |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                            |                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>• EMF;</li> <li>• Electromagnetic Interference; and</li> <li>• Light Disturbance.</li> </ul> <p>A separate Population and Human Health Assessment is therefore not proposed as part of the EIA for the Proposed Development.</p> |
| Air Quality and Climate                    | None – an assessment of the potential significant effects of the Proposed Development on Air Quality and Climate would be scoped out of the EIA Report in its entirety.                     |                                                                                                                                                                                                                                                                         |
| Risk of Major Accidents and / or Disasters | None - an assessment of the potential significant effects on the vulnerability of the Proposed Development to accidents and disasters would be scoped out of the EIA Report in its entirety |                                                                                                                                                                                                                                                                         |
| Material Assets                            | Potential effects are unlikely to be significant on material assets as a result of the Proposed Development, and no separate assessment is proposed.                                        |                                                                                                                                                                                                                                                                         |

## 14. NEXT STEPS

### 14.1 Inviting Comments

14.1.1 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?**

14.1.2 All responses should be addressed to:

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

14.1.3 Email: [Representations\\_Mailbox@gov.scot](mailto:Representations_Mailbox@gov.scot)

14.1.4 Website: [www.energyconsents.scot](http://www.energyconsents.scot)

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

14.1.6 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:

14.1.7 Email to: [Jamie.Watt@sse.com](mailto:Jamie.Watt@sse.com)

14.1.8 Or, by writing to:

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

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