Cloiche Wind Farm

Scoping Report

August 2018

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Executive Summary

Overview

SSE Renewables Developments (UK) Limited, "the Developer" is preparing an application on behalf of the Applicant, SSE Generation Ltd (SSEG), for Cloiche Wind Farm (the Proposed Development), located on Glendoe and Garrogie Estates, in the Monadhliath Mountains east of Fort Augustus. The Application will be made to Scottish Ministers under Section 36 of the Electricity Act 1989, and associated deemed planning permission under Section 57(2) of the Town and Country Planning (Scotland) Act 1997.

The Proposed Development is located adjacent to Stronelairg Wind Farm, currently under construction, and the operational 100 Megawatt (MW) Glendoe Hydroelectric Scheme.

The total installed capacity of the Proposed Development is unknown at this early stage of the design process. However, it is proposed to be over 50 MW, comprising turbines with a tip height of up to 175 metres (m). Preliminary analysis has enabled a Proposed Development Area to be identified comprising up to 40 turbines. This would be subject to further technical and environmental review throughout the Environmental Impact Assessment (EIA) process.

This Scoping Report forms part of the EIA process and is provided to the Energy Consents Unit (ECU) of the Scottish Government under Regulation 12 of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (the EIA Regulations) in support of a request for a Scoping Opinion. The aim of the document is to inform stakeholders about the Proposed Development and provide information on the approach to the EIA. For each environmental feature, the potential effects of the Proposed Development that require further investigation are identified and the proposed scope of assessment in terms of studies and surveys to be undertaken is discussed. The detailed assessment methodologies for the various environmental features will be further informed by responses to this Scoping Report and ongoing consultation with relevant statutory consultees.

1 Introduction

1.1 Background Information

SSE Generation Ltd (SSEG), "the Applicant", is proposing to construct a new onshore wind farm to generate renewable electricity from wind power. The proposed development is located on Glendoe and Garrogie Estates, adjacent to Stronelairg Wind Farm (currently under construction) and the operational 100 Megawatt (MW) Glendoe Hydroelectric Scheme, and approximately 11 kilometres (km) to the south-east of Fort Augustus, (see Figure 1: Location Plan).

The proposals for which consent under Section 36 of the Electricity Act 1989 will be sought by the Applicant, are referred to in this report as 'the Proposed Development' and are described below. The application for Section 36 consent is being prepared by SSE Renewables Developments (UK) Limited (SSE Renewables), "the Developer", on behalf of the Applicant.

The total installed capacity of the Proposed Development is unknown at this early stage of the design process. However, it is proposed to be over 50 MW, comprising turbines with a tip height of up to 175 metres (m). Preliminary analysis has enabled a Proposed Development Area to be identified, comprising up to 40 turbines (see Figure 2: Proposed Development Area). This would be subject to further technical and environmental review throughout the Environmental Impact Assessment (EIA) process.

An EIA Report will be required to accompany the Section 36 Application under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ("the EIA Regulations"), as the Proposed Development comprises a wind farm with a generation capacity greater than 50 MW and for which Section 36 consent is required. It is therefore considered to fall within the definition of Schedule 2 development contained in Regulation 2(1) of the EIA Regulations. The Developer has voluntarily agreed to prepare an EIA Report in accordance with the EIA Regulations, rather than requesting a Screening Opinion. In terms of the application for Section 36 consent, deemed planning permission under Section 57 (2) of the Town and Country Planning (Scotland) Act 1997, as amended, will also be sought.

1.2 Purpose of this Report

This report is submitted as the basis of a request to the Energy Consents Unit (ECU) of the Scottish Government for a formal EIA Scoping Opinion for the Proposed Development under Regulation 12 of the EIA Regulations.

The scoping process allows statutory consultees and others to comment on the Proposed Development, the scope of the EIA and the proposed assessment methodologies. It also provides an opportunity for consultees to raise any issues that they consider to be relevant to the EIA process.

The aims of this document are to:

- set out the overall approach to the EIA;
- summarise key baseline information;
- describe the proposed assessment methodology;
- identify key potential effects at all stages of development;
- identify topics not requiring further assessment that can be scoped out; and
- describe the proposed content and structure of the EIA Report.

The document is divided into nine sections:

- Section 1: introduces the Proposed Development and provides a context for the Scoping Report;
- Section 2: summarises the consultation input;
- Section 3: describes the Proposed Development;
- Section 4: outlines the planning policy context;
- Section 5: provides information on the approach to EIA and the structure of the EIA Report;
- Section 6: details the environmental features to be assessed as part of the EIA;
- Section 7: describes those environmental features that are to be scoped out of the EIA;
- Section 8: details how responses to the Scoping Report should be provided; and
- Section 9: provides a list of references.

The EIA process enables the likely significant effects of the Proposed Development on the environment to be fully understood and taken into account during consideration of the application. The process is also used to develop mitigation measures to avoid, reduce or offset any adverse effects of the Proposed Development.

The Developer will appoint a team of independent specialists to advise on the environmental issues associated with the Proposed Development. These specialists will work with the Developer during the design process, carry out environmental impact assessment work, and will prepare chapters for inclusion in the EIA Report.

The EIA Report will be based on the Scoping Opinion.

1.3 Need for Onshore Wind in Scotland

The Climate Change (Scotland) Act 2009 received Royal Assent in August 2009. The Act commits Scotland to a greenhouse gas emission reduction target of at least 80% of 1990 levels by 2050. This compares with the UK Government target of an 80% reduction by 2050 (https://www.gov.uk/guidance/2050-pathways-analysis (accessed 10th August 2018)). The European Union's (EU) current commitment is for a reduction of 80-95% of 1990 levels by 2050 (European Commission, 2011).

The Scottish Government's Energy Strategy (Scottish Government 2017), sets out the target of achieving the "equivalent of 50% of the energy for Scotland's heat, transport and electricity consumption… from renewable sources" by 2030.

In order to meet this and their wider renewable energy targets by 2030, approximately 17GW of installed capacity will be required. The document recognises that onshore wind offers the lowest cost renewable technology deployable at scale. As such, it will be a key part of achieving these targets.

The Scottish Government's Onshore Wind Policy Statement (Scottish Government 2017a), recognises the need to deliver new onshore wind farms subsidy free and acknowledges the technology shift towards larger turbines.

The Scottish Government published a Renewables Action Plan (RAP) in 2009 which sets out a framework for action in the renewable energy sector. Since its publication, the Action Plan has been updated in February 2010, August 2010, February 2011 and March 2011. Key objectives of the action plan include:

- to establish Scotland as a UK and EU leader in the field;
- to ensure maximum returns for Scotland's domestic economy; and
- to meet Scotland's targets for energy from renewables and emissions reductions to 2020 and beyond.

1.4 Local Supply Chain and Community Benefit

The Applicant is committed to proactively engaging with the local supply chain to ensure that local companies are aware of and know how to tender for contracts related to the Proposed Development. As part of its commitment to developing these relationships, the Applicant hosts a dedicated supplier portal called Open for Business (O4B) Highlands and Islands.

This web-based portal provides a platform for the Applicant to promote opportunities that enable the local supply chain to view opportunities, register as a supplier and respond to notices free of charge. Users of the site can also use the portal to advertise their own sub-contracting opportunities to the local supplier base.

To help promote opportunities more widely the Applicant also hosts 'Meet the Buyer' events designed to provide an opportunity for local businesses to find out about the opportunities available within the Applicant's pipeline of projects. Initiatives such as these demonstrate the Applicant's strong commitment to maximising the positive economic effects of its projects through local companies where possible.

2 Consultation

2.1 Scoping Stage Consultation

The Developer will issue this Scoping Report to the statutory consultees listed below:

- The Highland Council (THC);
- Scottish Environment Protection Agency (SEPA);
- Scottish Natural Heritage (SNH); and
- Historic Environment Scotland (HES).

In addition to the statutory consultees above, the Developer will issue this Scoping Report to the following consultees:

- AM Geomorphology;
- British Telecom;
- Cairngorms National Park Authority (CNPA);
- Civil Aviation Authority (Airspace);
- Defence Infrastructure Organisation;
- Fisheries Management Scotland;
- Forestry Commission Scotland (FCS);
- Friends of the Earth Scotland;
- Highlands and Islands Airports;
- Inverness Chamber of Commerce;
- John Muir Trust;
- Joint Radio Company;
- Marine Scotland;
- Mountaineering Scotland;
- National Air Traffic Services (NATS) Safeguarding;
- Ness and Beauly Fisheries Trust;
- Ness District Salmon Fisheries Board;
- Nuclear Safety Directorate (HSE);
- RSPB Scotland;
- Scottish Council for Development and Industry (SCDI) (Highlands);
- Scottish Water;
- Scottish Wildland Group;
- Scottish Wildlife Trust;
- Scotways;
- The Crown Estate Scotland;
- Transport Scotland;
- Visit Scotland; and
- WWF Scotland

The Scoping Report will also be issued to the following Community Councils:

- Fort Augustus and Glenmoriston Community Council; and
- Stratherrick and Foyers Community Council.

The Developer's project liaison manager will contact the MSP and local Councillors to offer copies of the Scoping Report if required and to provide further information about Public Exhibitions.

2.2 EIA Consultation

During the EIA process, further consultation will be undertaken with the consultees listed above. Additional groups, organisations or individuals identified during the scoping process will be contacted as appropriate during the progression of the EIA.

The scoping and consultation process will be reported in a chapter in the EIA Report.

A Pre-Application Consultation Report (PACR) will be prepared as a supporting document for the Section 36 application. A PACR is not formally required as part of a Section 36 application (PACR is a requirement of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 for categories of national development and major development), but is submitted by the Developer as best practice for both planning applications and Section 36 applications.

2.3 Public Exhibitions

A public exhibition will be held locally to inform local residents and other interested parties about the Proposed Development. The exhibition will provide information regarding wind power generally and specific details of the Proposed Development and will provide an opportunity for members of the public to ask questions about the Proposed Development. Representatives will be present to answer any questions.

3 The Proposed Development

3.1 Introduction

This section describes the Proposed Development and provides information on its location, physical characteristics, proposed components and design. The turbine and infrastructure layout would be subject to an iterative design process as part of the EIA.

The Proposed Development is located on land owned by both Glendoe and Garrogie Estates, approximately 11 km south-east of Fort Augustus within the Highland region of Scotland. The Proposed Development (see Figure 2: Proposed Development Area), is in two parts, both sitting adjacent to Stronelairg Wind Farm, currently under construction, and the operational 100 MW Glendoe Hydroelectric Scheme. It is intended that both parts of the Proposed Development would be designed, permitted, constructed and operated as a single project. One of the benefits of constructing and operating a wind farm in this location is the capacity to make use of existing infrastructure and access tracks created for Glendoe Hydroelectric scheme and Stronelairg Wind Farm, including the main access off the B862, as well as the experience gained from construction of both Glendoe and Stronelairg.

The principal permanent components of the Proposed Development are as follows:

- wind turbines and associated hard standings;
- access tracks;
- interconnecting cables between the turbines; and
- on-site substation.

In addition to the above, it is anticipated that there would be a need for temporary development areas. These are likely to comprise: one site establishment area at the wind farm site; a further site establishment area close to the B862 (to house site cabins and welfare facilities); a concrete batching plant; and borrow pits.

3.2 Site Design

As referred to above, the Proposed Development would be optimised through the EIA process taking into account all environmental, technical and economic constraints. SSE is already very familiar with the site and its constraints and opportunities, as a result of the survey, design and construction work for both Glendoe Hydroelectric scheme and Stronelairg Wind Farm, over the last 17 years. The main access road for both Glendoe Hydroelectric scheme and Stronelairg Wind Farm would be utilised for the Proposed Development. Use would also be made of the existing temporary site establishment areas and other infrastructure used for Stronelairg Wind Farm, where possible.

The design of the turbine layout would take cognisance of neighbouring developments (such as Stronelairg Wind Farm), to ensure that the turbine dimensions, layout and overall composition, is coherent, especially when viewed from key locations, in accordance with SNH current design guidance (SNH 2017b).

The dimensions of the proposed turbines will be determined as the project design progresses. At this stage it is likely that the turbines will consist of three bladed horizontal downward axis machines with a blade (rotor) diameter of circa 136m and a total maximum blade tip height of up to 175m.

The blades will be made from fibreglass-reinforced epoxy and the tower will be constructed from rolled steel plate. The finish and colour of the turbines are likely to be semi-matt and pale grey.

Blades typically rotate in the range of 6 to 18 revolutions per minute, depending on the size of the turbine generating power at wind speeds between about 3m/s and 25m/s (7-56 mph). When operating at wind speeds above 15m/s (34 mph), the turbines will regulate their output to the maximum level using pitch control, whereby the blades are feathered to reduce speed. At wind speeds generally greater than 25m/s (56 mph), the turbines will shut down for self-protection and will only restart when wind speed drops back below a reset value.

3.3 Site Description

The Proposed Development would be located within the Monadhliath Mountains, approximately 11km south-east of Fort Augustus and 14km west of Newtonmore. There are numerous distinct features within the surrounding area including: the Great Glen; the Monadhliath Mountains, Ardverikie Hills and the Cairngorms Plateau; and the low-lying Spey Valley and Glen Spean. The low lying areas of the glens and river valleys contain the majority of settlement and transport infrastructure, resulting in a greater diversity of land use which also includes agriculture, large blocks of forestry and lochs, often used for hydroelectric power generation. In contrast there is very little settlement in higher level areas and land use tends to be limited to sheep and deer grazing and estate management for shooting.

The site itself is located within a large scale high level plateau, which is surrounded by a series of high summits and ridges, providing a degree of distant enclosure. This effectively restricts distant views into and out of this area. The plateau area includes man-made structures in the form of wind turbines, hydroelectric infrastructure and associated tracks, as well as other tracks and structures used for the management of the estates.

3.4 Electrical Layout and Grid Connection

Turbines would be electrically connected to each other via inter-array cable circuits. An on-site substation, which would house transformer(s) and associated switch gear, would convert the electricity generated by the turbines into an appropriate voltage for onward transmission into the National Grid.

The Developer will make an application to National Grid for connection to the grid and the transmission network owner will be responsible for the design and construction of the grid connection works. Consideration of the environmental effects associated with the grid connection would, therefore, not be considered in the EIA Report for Cloiche Wind Farm but would be properly considered once the relevant information becomes available during the design and permitting process for the grid connection itself.

3.5 Site Access

From the B862, access to the site would be achieved by utilising the existing track infrastructure in place, initially built as part of Glendoe Hydroelectric Scheme, upgraded and modified more recently during the construction of Stronelairg Wind Farm (see Figure 2: Proposed Development Area). The track is therefore built to a high standard capable of accommodating large wind turbine deliveries.

A review of transport routes to the site would be informed following a revised transport assessment and swept path analysis.

3.6 Project Construction

It is anticipated that the construction phase of the Proposed Development would be completed over a period of up to 18-24 months.

Given the remote location, it is likely that two site establishment areas would be required during construction. One would be located within or adjacent to the proposed site, whilst another would be located close to the B862. The site establishment areas would include site cabins and welfare facilities for construction workers and could also be used as a laydown area for the delivery of some materials. A concrete batching plant would also be in operation in this area. These would be temporary facilities for use during the construction period only.

Stone and sand required to construct any new access tracks are likely to be obtained from existing borrow pits located on the site, or within the existing Glendoe / Stronelairg site. The exact location of borrow pits would be dependent upon site surveys, availability of suitable material and proximity to where it is required.

All statutory legislation would be fully complied with during construction and other best practice guidance (e.g. SEPA Pollution Prevention Guidelines and Good Practice during Wind Farm Construction (Version 3), Scottish Renewables et al, (2015)) would be adhered to.

Construction mitigation and environmental protection measures would be implemented via a Construction Environmental Management Plan (CEMP). Further information on the CEMP is provided in Section 5.4.

3.7 Project Operation and Maintenance

Routine operational and maintenance work would be carried out as necessary.

3.8 Project Decommissioning

At the end of the operational lifespan, decommissioning would take place and the turbines removed, or a new application would be made to extend the consent for the existing turbines or to replace the turbines.

4 Planning Policy Context

4.1 Introduction

This section provides an overview of the planning policy context for the Proposed Development. A more detailed discussion and evaluation of relevant policies will be included within the Planning Statement that will be provided as a supporting document with the Section 36 Application, as discussed further in Section 5.4: Supporting Documents. An up-to-date list of relevant planning policies will be contained within the EIA Report.

4.2 National Planning Framework 3

National Planning Framework (NPF) provides a framework for long-term spatial development in Scotland. The third NPF (NPF3, June 2014) (Scottish Government 2014a) was laid before the Scottish Parliament and approved in June 2014, and it sets out the Government's development priorities over the next 20-30 years and identifies national developments which support the development strategy. The central vision is set out over four key policy objectives for Scotland to be: a successful, sustainable place; a low carbon place; a natural, resilient place; and, a connected place.

4.3 Scottish Planning Policy

Scottish Planning Policy (SPP) was published by the Scottish Government in June 2014 (Scottish Government, 2014b) and sets out a national policy framework for land use planning. Guidance regarding renewable energy including onshore wind farms is contained within the renewable energy section of the document. This consolidated document supersedes previous Scottish Planning Policies (SPPs) and National Planning Policy Guidelines (NPPGs).

Onshore Wind Turbines, (Scottish Government, 2014c), provides greater clarity and focus for planning authorities in locating wind farms and assessing wind farm applications. It also places emphasis on the importance of pre-application discussions.

4.4 Local Planning Policy

The site lies entirely within the jurisdiction of Highland Council. The Highland Wide Local Development Plan (HwLDP) 2012, provides the local planning framework for the area and provides the general policy context against which the Proposed Development would be assessed. The Council has also developed Supplementary Guidance (SG), of particular relevance being the Onshore Wind Energy SG (November 2016). The Proposed Development lies partially in Group 2 (where wind farms may be appropriate in some circumstances), and partially in Group 3 (where wind farms are likely to be acceptable, subject to detailed consideration) (SPP 2014).

5 Proposed Approach to EIA

5.1 The Overall Approach to the EIA

The EIA Report will be prepared in accordance with the EIA Regulations 2017, and the Good Practice Guidance published by the Scottish Government's Energy Consents & Deployment Unit in January 2013. Consideration will also be given to advice contained in Planning Advice Note 1/2013 and Planning Circular 1/2017 (Environmental Impact Assessment) where relevant.

The EIA work will comprise a series of specialist environmental studies which will be targeted to assess any potential significant effects which the Proposed Development may have on the environment. Each topic included within the EIA process 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.

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.

Cumulative Effects

For the purposes of the cumulative impact assessment, the baseline for assessment purposes would include all operational wind farms, those consented or under construction, and those for which applications for statutory consents have been submitted. Consultation and discussion with the Highland Council, SNH and other bodies as required would be carried out to determine which wind farms have the potential to cause significant cumulative effects and therefore should be included within the EIA. The approach taken to identifying the development projects that should be included in the baseline for the cumulative impact assessment will be tailored so that it is appropriate to each topic under consideration.

Other potential wind farms within the vicinity of the Proposed Development proposed for inclusion in the cumulative assessment are Stronelairg Wind Farm (currently under construction) and Dell Wind Farm (application refused in October 2017 and appeal submitted to Scottish Government in January 2018). A Scoping Opinion was requested in 2017 for a proposed wind farm at Glenshero, to the south of the Proposed Development, but at the time of writing no application has been submitted. Given the proximity, it is proposed to include Glenshero Wind Farm in the cumulative assessment. However, it is not proposed to include other proposed wind farm developments for which applications have not been submitted to the Local Planning Authority or Energy Consents Unit but for which a formal scoping opinion has been requested. It is considered this approach accords with the SNH Guidance on Assessing Cumulative Impact of Wind Energy Developments (SNH, 2012).

5.2 Structure of the EIA Report

It is anticipated that the EIA Report will be produced as four volumes:

- Volume 1: Non-Technical Summary;
- Volume 2: Written Statement;
- Volume 3: Figures; and
- Volume 4: Technical Appendices.

Volume 2 will include a set of introductory chapters that describe the background and needs case for the Proposed Development, provide the relevant energy and national policy context, and provide information with regard to the construction, operation and decommissioning of the wind farm.

For each of the environmental features assessed in Volume 2, the following information will be included in the respective chapters:

- a summary;
- an introduction to the environmental feature;
- scoping and consultation responses;
- assessment scope, methodology and study area;
- baseline conditions;
- impact assessment (including cumulative impacts) and proposed mitigation; and
- references.

Volume 2 will be concluded with a summary chapter outlining the main committed mitigation measures and an overall summary of significance in the context of the EIA Regulations.

Where required, a confidential appendix will be prepared containing sensitive, confidential ecological/ornithological information to be provided to the Scottish Government and SNH.

5.3 EIA Report Format

The EIA Report will be made available on DVD and hard copy although in the interest of the environment we would encourage take up of the DVD format. Figures/drawings and detailed specialist reports and figures will be provided in Volumes 3 and 4 respectively.

5.4 Supporting Documents

A Planning Statement will be prepared in support of the application for consent. The Planning Statement will not be part of the EIA Report. It will discuss the relevant energy and environment policies relating to wind energy development, Scottish Government's policies on renewable energy development and the Development Plan context for the Proposed Development.

A Design Statement will be prepared setting out the design principles that have influenced and shaped the design of the Proposed Development.

A Pre-application Consultation Report (PACR) will be prepared detailing engagement regarding the Proposed Development between the Developer and local Community Councils, the Highland Council, other consultees and members of the public.

An Outline CEMP will be provided as an appendix within the EIA Report and will contain general, good practice information applicable to both the construction and decommissioning phases of the Proposed Development on the following subject-matters:

- Site Induction;
- Pollution Prevention;
- Site Waste Management;
- Drainage Management;
- Watercourse Crossings;
- Water Quality Monitoring;

- Excavation Materials and Reinstatement;
- Decommissioning Restoration Plan;
- Ecological (Habitats and Species) Protection;
- Archaeological Protection; and
- Environmental Incident and Emergency Response.

6 Environmental Features

6.1 Introduction

The EIA Report will provide an assessment of effects during the construction, operation and decommissioning of the Proposed Development for the environmental features described in this section.

This section provides a brief overview of the baseline conditions, the potential effects associated with the Proposed Development and the assessment methodology for each environmental feature to be considered in the EIA Report.

6.2 Landscape and Visual

Baseline Description

The Proposed Development would be located within the Monadhliath Mountains. The surrounding landscape is one of generally large scale patterns with contrasting high mountain summits and plateaux and deep, often steeply sided glens and lochs. There are numerous distinct features within the surrounding area including: the Great Glen; the Monadhliath Mountains, Ardverikie Hills and the Cairngorms Plateau; and the low-lying Spey Valley and Glen Spean. The low lying areas of the glens and river valleys contain the majority of settlement and transport infrastructure, resulting in a greater diversity of land use which also includes agriculture, large blocks of forestry and lochs, often used for hydroelectric power generation. In contrast there is very little settlement in higher level areas and land use tends to be limited to sheep and deer grazing and estate management for shooting.

The site itself is located within a large scale high level plateau, which is surrounded by a series of high summits and ridges, providing a degree of distant enclosure. This effectively restricts distant views into and out of this area. The plateau area includes man-made structures in the form of wind turbines, hydroelectric infrastructure and associated tracks, including for management of the estate.

Designations

The site is not covered by any national or regional landscape policy designations. However, landscape designations and other areas of varying landscape importance are present in the wider area (see Figure 3: Landscape and Cultural Heritage Constraints). These include the Cairngorms National Park (CNP) and the Monadhliath Wild Land Area (WLA 20), both of which are located approximately 1km to the east of the Proposed Development at its closest point. There are other National Scenic Areas, Wild Land Areas, Special Landscape Areas and Gardens and Designed Landscapes within the wider area.

Landscape Character

The Proposed Development is located within an area covered by the following landscape character assessments:

- Inverness District Landscape Character Assessment, dated 1999 (SNH Review no. 114); and
- Cairngorms Landscape Assessment, dated 1996 (SNH Review no. 75).

The wind turbine search area is located within the Rolling Uplands Landscape Character Type (LCT), described within the Inverness District Landscape Character Assessment as being an area of large scale, smooth rounded hills, forming a broad undulating upland plateau.

For simplicity and in order to avoid duplicate assessment of areas where the SNH character assessments and the CNP character assessments overlap, a rationalisation of the character areas is proposed, whereby outwith the CNP boundary the LCTs defined by SNH will be followed, whilst within the CNP boundary those defined within the CNP landscape character assessment will be used. Any further rationalisation of LCTs would be set out within the LVIA chapter of the EIA Report.

Visual Amenity

There are a limited number of receptors within the immediate vicinity of the Proposed Development. The majority of settlement, buildings, roads and recreational routes within the wider area are located in the low-lying areas. From more elevated areas, potential visual receptors are primarily recreational users accessing mountain summits and other elevated routes.

Potential Effects

Potential effects on landscape and visual amenity which will be considered include:

(a) Construction

- temporary physical effects on landscape fabric;
- temporary effects on landscape character; and
- temporary effects on views.

(b) Operation

- long term effects on landscape character;
- long terms effects on views; and
- long term cumulative effects with other wind farms.

(c) Decommissioning

- long term effects on landscape fabric;
- temporary physical effects on landscape fabric;
- temporary effects on landscape character; and
- temporary effects on views.

Proposed Scope of Assessment

An LVIA will be undertaken in accordance with the 3rd Edition of the Guidelines for Landscape and Visual Impact Assessment (2013).

A ZTV will be used to inform the LVIA. For reference, an indicative ZTV has been included in this Scoping Report (see Figure 5: Zone of Theoretical Visibility and Proposed Viewpoints). This has been based on an indicative design representative of the maximum visibility of the largest proposed project parameters.

The key aspects of the LVIA are set out below.

Study Area

A study area of 45km from the outer turbines is proposed to assess the relationship between the Proposed Development and the wider area in terms of potential significant effects on landscape character and visual amenity. This is in line with SNH Guidance 'Visual Representation of Wind Farms Version 2.2, (SNH, 2017a) for turbines with a maximum tip height of over 150m.

For the purpose of identifying, mapping and assessing the likely significant effects of the Proposed Development on the landscape of the site and its immediate surroundings, a 'detailed study area' from the outer turbines will be defined. This detailed study area will be informed through on-going assessment work, but is likely to be between 15 km and 20 km.

Landscape Assessment

The landscape assessment will include consideration of all designated landscapes within the LVIA Study Area. More detailed assessment of effects on LCTs will be undertaken within the detailed study area. ZTVs and field reconnaissance would inform the likelihood for significant effects to occur and those areas considered very unlikely to be significantly affected would be scoped out of further assessment. Full justification would be provided for those areas scoped out.

Wild Land Assessment

The Proposed Development is not located within a Wild Land Area but has the potential to indirectly affect wild land due to potential intervisibility with turbines. However, it is likely that the extent of this intervisiblity would be generally limited to areas already affected by the Stronelairg Wind Farm. The likely extent of potential effects on wild land will be confirmed once the layout of the Proposed Development and turbine dimensions has been confirmed. However, given the limited likely range of potential effects, it is proposed that assessment of effects on Wild Land Areas will form a part of the main LVIA chapter rather than a stand-alone report. This will include consideration of how the landscape effects of the Proposed Development may alter the wildness attributes of WLA 19 (Braeroy - Glenshirra – Creag Meagaidh), and WLA 20 (Monadhliath) and a review of how / whether each of the key qualities outlined in the Wild Land Descriptions would be affected. The potential for significant wild land effects to occur on other WLAs within the LVIA Study Area is considered unlikely.

The assessment will take into account the latest guidance from SNH on the assessment of effects on Wild Land Areas (Assessing Impacts on Wild Land Areas (SNH, 2017c)).

Visual Assessment

The visual assessment will be based on a series of viewpoints which are considered to accurately represent the types of views experienced within the LVIA Study Area. It is proposed that many of the viewpoints assessed as part of the Stronelairg Wind Farm ES (2014) are used in the assessment for the Proposed Development. These viewpoints were previously agreed in consultation with The Highland Council, CNPA and SNH. In addition, new viewpoints have been identified to illustrate new areas of potential visibility and will be used to inform the turbine layout and help avoid, reduce or offset adverse visual effects of the Proposed Development.

The majority of viewpoints are anticipated to be within 20 km of the Proposed Development, but the selection process would allow for a variety of key viewpoints throughout the study area to be identified for consideration. The proposed list of viewpoint locations is detailed in Table 6.1 below and viewpoint locations are shown on Figure 5: Zone of Theoretical Visibility and Proposed Viewpoints.

Assessment will also include potential effects on settlement areas and routes, including roads, Core Paths and other walking routes, within the detailed study area, where potential visibility is indicated by the ZTV.

Table 6.1: Proposed Viewpoint List

Viewpoint No.	Location	OS Grid Reference	Reason for Selection
VP1	Beinn a' Mheadhoin (Glen Affric)	NH 21862 25560	Representative of the types of view obtained from high points within Glen Affric National Scenic Area and Central Highlands WLA.
VP2	B862 - Loch Ceo Glais	NH 57645 57645	Viewpoint used for Stronelairg Wind Farm LVIA: Representative of views obtained from local roads in the vicinity of Torness and within the Loch Ness and Duntelchaig SLA
VP3	Great Glen Way Balbeg	NH 50281 26021	Viewpoint used for Stronelairg Wind Farm LVIA: Representative of views obtained from properties, minor roads and a section of the Great Glen Way long distance walking route.
VP4	Meall Fuar-mhonaidh	NH 45817 22220	Viewpoint used for Stronelairg Wind Farm LVIA: Popular local hill summit on the west side of Loch Ness, within Loch Ness and Duntelchaig SLA
VP5	Carn na Saobhaidhe	NH 59952 14395	Viewpoint used for Stronelairg Wind Farm LVIA: Summit of Corbett. Representative of the types of views obtained from high ground to the north of the proposed development.
VP6	Carn Dubh	NH 51675 09519	Viewpoint used for Stronelairg Wind Farm LVIA: Representative of the types of views obtained from high ground to the north of the proposed development.
VP7	Glen Markie	NH 54830 07388	Viewpoint used for Stronelairg Wind Farm LVIA: Representative of views from recreational route (Scottish Hill Track 204)
VP8	Carn a Chuilinn	NH 41678 03391	Viewpoint used for Stronelairg Wind Farm LVIA: Summit of Corbett in close proximity to west of proposed development.
VP9	Carn Dearg	NH 63546 02428	Viewpoint used for Stronelairg Wind Farm LVIA: Munro summit. Representative of views from high ground near the western boundary of the Cairngorms National Park and within the Monadhliath WLA.
VP10	Geal Charn (Monadhliath)	NN 56136 98765	Viewpoint used for Stronelairg Wind Farm LVIA: Munro summit. Representative of views from high ground on the western boundary of the Cairngorms National Park.
VP11	Cairngorm Funicular Railway	NJ 00477 04899	Representative of distant views from high ground and summits within the Cairngorms National Park, The Cairngorm Mountains NSA and Cairngorms WLA.
VP12	Carn Liath (Laggan)	NN 47215 90351	Viewpoint used for Stronelairg Wind Farm LVIA: Munro summit, representative of views from high summits to the south of the proposed development and within Braeroy - Glenshirra - Creag Meagaidh WLA.
VP13	Glen Shirra	NN 53411 90479	Viewpoint used for Stronelairg Wind Farm LVIA: Located on estate track. Representative of the types of views obtained from low level locations in the Cairngorms National Park.
VP14	Meall Chuaich	NN 71633 87821	Viewpoint used for Stronelairg Wind Farm LVIA: Munro summit located in the Cairngorms National Park and Cairngorms WLA. Representative of elevated middle distance views from the east.
VP15	Geal Charn (Ardverikie)	NN 50442 81185	Viewpoint used for Stronelairg Wind Farm LVIA: Munro summit located in in Ben Alder, Laggan and Glen Banchor SLA. Representative of elevated middle distance views from the south.

VP16	A9 near Etteridge	NN 65484 86732	Representative of glimpsed views obtained by travellers on the A9 in the Cairngorms National Park and those accessing walking routes into the Cairngorms.
VP17	Urquhart Castle	NH 53014 28545	Important tourist site and Scheduled Monument. Representative of low level views obtained from western shore of Loch Ness.
VP18	A87, Loch Garry Viewpoint	NH 21165 02846	Popular stopping point on A87 tourist route. Representative of views obtained by those travelling east on this section of the A87.
VP19	B862 South of Whitebridge	NH 48080 14539	Representative of types of views obtained from local road and properties around Whitebridge, on edge of Loch Ness and Duntelchaig SLA.

Visualisations

The visual assessment will be supported by a series of photomontages and wireframes from the agreed Viewpoint locations.

Visualisations from each viewpoint will be prepared in accordance with best practice guidance (SNH, Visual Representation of Windfarms: Version 2.2, 2017a). In addition, a separate set of visualisations produced to meet standards detailed in 'Visualisation Standards for Wind Energy Developments' (THC, July 2016) would be provided to THC.

Lighting

If the Proposed Development includes turbines of 150m to tip height or above, turbine lighting may be required. The design of any turbine lighting would be carefully considered and a night time assessment may be required. SNH and THC would be consulted on the requirements for any night time visualisations.

Cumulative

In line with SNH guidance 'Assessing the Cumulative Impact of Onshore Wind Energy Developments' (SNH, 2012) the assessment will consider other wind farms within a 60km radius including those which are operational, consented and those for which an application has been submitted but which are yet to be determined. This area will then be refined to a more focussed group of cumulative sites which are considered to be most likely to be seen and experienced in combination with the Proposed Development. The final list of cumulative sites to be included in the assessment would be defined following further assessment and review of cumulative ZTVs.

Guidance

The LVIA will be prepared with reference to the following:

- Guidelines for Landscape and Visual Impact Assessment: Third Edition (Landscape Institute and IEMA, 2013);
- Visual Representation of Windfarms (Version 2.2) (SNH, 2017a);
- Visualisation Standards for Wind Energy Developments' (THC July 2016)
- Siting and Designing Windfarms in the Landscape (SNH, 2017b);
- Assessing the Cumulative Impact of Onshore Wind Energy Developments (SNH, 2012);
- Assessing the Impacts on Wild Land Interim Guidance Note (SNH, 2007);
- Assessing Impacts on Wild Land Areas – Technical Guidance (Consultative Draft) (SNH, 2017c);
- The Highland Council (2011). Assessment of Highland Special Landscape Areas (THC, 2011); and
- The Special Qualities of the National Scenic Areas, SNH Commissioned Report No. 374 (SNH, 2010).

6.3 Ecology, Biodiversity and Nature Conservation

Baseline Description

Designated Sites

There are a number of nature conservation designated sites within approximately 10km of the Proposed Development as indicated in Table 6.2 (see also Figure 4: Natural Heritage Constraints), four of which are related to birds and which are considered in Section 6.4: Ornithology, of this report. Of the remaining designated sites, it is considered only two of these sites as potentially affected by the Proposed Development:

- Monadhliath Special Area of Conservation (SAC); and
- Monadhliath Site of Special Scientific Interest (SSSI).

Table 6.2: Nature Conservation Designated Sites within 10km of the Study Area.

Site Name	Designation	Size (ha)	Feature of Interest
Monadhliath	SSSI	10,671ha	Aggregations of breeding birds, dotterel, blanket bog, upland assemblage mosaic, black mountain moth and vascular plant assemblage
Monadhliath	SAC	10,671ha	Blanket bog
Glen Tarff	SSSI	273ha	Upland mixed ash woodland and the beetle *Bolitophagus reticulatus*
Ness Woods	SAC	847ha	Mixed woodland on base-rich soils associated with rocky slopes, western acidic oak woodland and otter.
Easter Ness Forest	SSSI	475ha	Upland mixed ash woodland and upland mixed oak woodland.
Glendoe Lochans	SSSI	255ha	Aggregations of breeding birds: Slavonian grebe and common scoter.
Loch Knockie and nearby lochs	SPA	397ha	Aggregations of breeding Slavonian grebe.
Creag Meagaidh	SSSI	7032ha	Rocky slopes, assemblages of; breeding birds, upland habitat (including birch woodland) and vascular plants.
Creag Meagaidh	SAC	6144ha	Upland and freshwater habitats
Creag Meagaidh	SPA	2856ha	Dotterel breeding
Creag Meagaidh	NNR	3956ha	Alpine speedwell, tufted saxifrage, woolly willow, woodland flowers
River Spey	SSSI	1,959ha	Atlantic salmon, sea lamprey, otter and freshwater pearl mussel.
River Spey	SAC	5,765ha	Atlantic salmon, sea lamprey, otter and freshwater pearl mussel.
Knockie Lochs	SSSI	141ha	Aggregations of breeding Slavonian grebe.

Previous Survey Work and Findings

Survey work undertaken for the Glendoe Hydroelectric scheme in 2002 (and monitoring work between 2006-2014), as well as survey work for Stronelairg Wind Farm in 2011, identified that habitat within the vicinity of the Proposed Development generally comprises wet modified bog, characterised by extensive hagging, evidence of deer trampling and with low plant diversity, and unmodified bog. Areas of dry and wet dwarf shrub heath were also recorded, along with areas of montane heath on the summits of higher hills.

Red deer (*Cervus elephus*) are common across the area, as are mountain hare and water vole. Occasional sightings and signs of foxes (*Vulpes vulpes*) have been recorded within the vicinity of the Proposed Development. Evidence of otter has also been recorded. Targeted field surveys, including the use of Cuddeback camera traps, failed to find any evidence of badger, pine marten or wildcat in the general area. Bat activity and roost surveys were conducted at the Stronelairg Wind Farm site in 2011. Whilst no bat roosts were found, activity surveys recorded a single soprano pipistrelle bat (*Pipistrellus pygmaeus*) at NH4944802453 (681m a.s.l.) between Meall Caca and Sidhean Dubh na Cloiche Bàine. Given the lack of apparently suitable habitat and the high altitude plateau, this was considered a surprising record. No other bats were recorded during Stronelairg Wind Farm surveys.

Only two species of reptile and amphibian were recorded during Stronelairg Wind Farm surveys: common frog and common lizard. Both species were common and widespread throughout the area. There were no other herptile records/sightings despite searching and the use of reptile boards.

One fish species was recorded during targeted ecology surveys for Stronelairg Wind Farm: brown trout. This survey identified both good and poor areas of fish habitat being present. The single biggest factor affecting fish habitat was the highly modified nature of the watercourses across the area due to existing Glendoe Hydroelectric scheme operations.

Watercourses at the site either flow into the River Killin or Allt Breineag, and onto Foyers falls which are impassable to migratory fish, or drain into the Glendoe Hydroelectric scheme reservoir. Consequently, all the aquatic habitats in the vicinity of the Proposed Development are thought to be inaccessible to Atlantic salmon. Targeted aquatic surveys had previously failed to find any evidence of freshwater pearl mussels from the potentially suitable watercourses at Stronelairg Wind Farm.

More information on the previous surveys can be made available, on request.

Potential Effects

Potential effects which will be considered may include:

(a) Construction

- Permanent or temporary losses of habitat due to new infrastructure;
- Permanent or temporary disturbances of habitat;
- Permanent losses to protected and other animal species or their sheltering, breeding or feeding habitats; and
- Temporary disturbances affecting animals, or their habitats.

(b) Operation

- Permanent effects from loss of habitats;
- Permanent or temporary impacts from ongoing running of machinery and variations in water levels; and
- Temporary impacts from maintenance activities.

(c) Decommissioning

- Temporary disturbances affecting animals, or their habitats.

6.3.1 Proposed Scope of Assessment

An Extended Phase 1 and NVC survey of the site will be undertaken (defined as the extent of the proposed infrastructure buffered to 250m). In addition, a ground water dependent terrestrial ecosystems (GWDTE) survey of the site will also be undertaken in accordance with relevant guidance.

A full protected species survey will be undertaken to allow a thorough and accurate assessment of potential impacts of the Proposed Development on protected species.

The results of these surveys will be used to inform an Ecological Impact Assessment (EcIA) of the Proposed Development in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment (2016). The hydrogeology effects on GWDTE will be undertaken in accordance with SEPA LUPS Guidance Notes 4 and 31.

Given the baseline findings from previous survey work undertaken within the vicinity of the Proposed Development, and assuming the successful implementation of site specific mitigation measures (such as the CEMP and adherence to good practice guidance during construction) it is not proposed to undertake specific surveys for the following:

- Freshwater habitat survey or electrofishing surveys;
- Freshwater Pearl Mussel surveys;
- Bat habitat or activity surveys; and
- Specific surveys for reptile and amphibians.

It is also proposed to 'scope out' an assessment of all other designated sites apart from the Monadhliath SAC and SSSI due to the low likelihood of connectivity with the sites.

6.4 Ornithology

Introduction

This section sets out the proposed approach to the assessment of the potential impacts of the Proposed Development on key bird species and their supporting habitats. This project-specific approach is based on professional judgment, informed by more than fifteen years of existing bird data for the area, relevant published research, wind farm monitoring studies, and the following core guidance:

- Scottish Natural Heritage (March 2017). Recommended bird survey methods to inform impact assessment of onshore wind farms;
- Scottish Natural Heritage (February 2018). Assessing significance of impacts from onshore windfarms on birds outwith designated areas; and
- Scottish Natural Heritage (June 2016). Assessing connectivity with Special Protection Areas.

Baseline Description

Ornithological Designations

The boundaries of designated sites (relevant to ornithology) in the vicinity of the Proposed Development are included in Figure 4: Natural Heritage Constraints.

The boundary of the Monadhliath SSSI, is located adjacent to the Proposed Development (approximately 200m to the south east at its closest point). The Monadhliath SSSI is a very extensive area of high moorland plateau comprising a range of dwarf-shrub heath and blanket bog habitats. These habitats support an assemblage of breeding upland waders including a breeding dotterel (*Charadrius morinellus*) population that is of national importance.

The Monadhliath SAC has the same boundary as the SSSI and is designated due to the international importance of the blanket bog habitats the site supports (blanket bog is a priority habitat in Annex I of the EC Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora).

Approximately 2 km to the west of the Proposed Development is the eastern boundary of the Glendoe Lochans SSSI, which forms part of the Loch Knockie and nearby Lochs Special Protection Area (SPA). The sole qualifying species for the SPA is Slavonian grebe (*Podiceps auritus*) a very rare breeding species in the UK with the national population most recently estimated at only 30 pairs (Musgrove *et al*. 2013). The SPA also supports a number of other breeding waterbirds including a nationally important population of common scoter (*Melanitta nigra*).

Previous Surveys and Assessment Key Findings

Extensive baseline data from previously completed bird surveys and raptor monitoring in the vicinity of the proposed wind farm have been reviewed in preparing this Scoping Report. This includes information from the following sources:

- Available bird survey data related to Stronelairg Wind Farm, including:
    - Results from baseline surveys and assessments completed for the EIA of Stronelairg Wind Farm, including bird flight activity data for golden eagle and other target species collected during: Summer 2009; Winter 2009/10; Summer 2010; Winter 2010/11; and Winter 2011/12.
    - Results from pre-construction surveys and Ecological Clerk of Works monitoring completed prior to and during the construction of Stronelairg Wind Farm (2015-18).
- Data provided to SSE by Highland Raptor Study Group in relation to annual monitoring of breeding golden eagle pairs with territories that may overlap with the Stronelairg Wind Farm and the Proposed Development (covering the period 2015-18).
- Data collected for the Stronelairg Grid connection (covering the period 2012 – 2014).
- Winter 2017/18 bird flight activity data for the Proposed Development collected for SSE. Limited watches were undertaken between October 2017 to March 2018, when weather and access allowed, from five VPs overlooking the Proposed Development. Winter walkovers also were conducted on part of the site between October 2017 and March 2018, when weather and access allowed.
- Data collated for the EIA, pre-construction and post-construction monitoring for the Glendoe Hydroelectric scheme (2002 -2003 and 2004, and 2006 - 2014).

More information on the previous surveys can be made available on request. Key findings from previous survey work include the following:

- Waders of conservation concern that have previously been recorded breeding within or near to the Proposed Development include golden plover (*Pluvialis apricaria*), dunlin (*Calidris alpina*) and greenshank (*Tringa nebularia*).

- Merlin (*Falco columbarius*) have been recorded hunting over the western end of the Proposed Development and may nest within suitable habitat in this general area. Peregrine (*Falco peregrinus*) are known to breed in the wider area and have been observed passing over or hunting within the area, particularly the western end. Hen harrier (*Circus cyaneus*) have been noted hunting in the general area but there has been no evidence of breeding reported in recent years. White-tailed eagle (*Haliaeetus albicilla*) have occasionally been observed passing through the area.

- The Proposed Development is located within an area used by breeding and non-breeding golden eagle (*Aquila chrysaetos*). During the assessment of the Stronelairg Wind Farm, breeding golden eagle territory modelling (following the PAT methodology, McLeod *et al*. 2002) was completed. The modelling showed that Stronelairg Wind farm and immediate vicinity (within which Cloiche Wind Farm is largely situated), is located in areas that are predicted by the PAT modelling to have relatively low use by territorial golden eagles. This prediction was reflected in the Stronelairg Wind Farm EIA flight activity survey results from 2009-12.

- Other species of high conservation concern, and at risk from onshore wind farm development, present in the wider area include red-throated diver (*Gavia stellata*), known to breed to the west of the Proposed Development, and osprey (*Pandion haliaetus*), which do not nest near to the Proposed Development but do occasionally forage at Glendoe Reservoir. Slavonian grebe and common scoter breed to the west of the Proposed Development.

- Baseline waterbody searches of up to 8 km from the Stronelairg Wind Farm boundary undertaken from 2009 to 2011 failed to find any additional waterbirds or waders of note in or near to the Proposed Development.

- It was concluded in the Stronelairg Wind Farm Environmental Statement that there were potentially significant effects due to land-take on and collision mortality on breeding golden eagle (in the context of the Central Highlands Natural Heritage Zone [NHZ] population) with various uncertainties on this conclusion acknowledged. Therefore an eagle Habitat Management Plan (HMP) was proposed to mitigate these impacts and to ensure that the long-term residual effects are not significant.

Potential Effects

All relevant effects arising from the construction, operation and decommissioning of the Proposed Development on ornithological receptors, will be considered in detail within the EIA for each of the receptors. Potential effects broadly include the following:

(a) Construction

- Short-term disturbance and displacement;
- Indirect effects e.g. disruption to habitat function, effects on prey; and
- Indirect effects on designated sites.

(b) Operation

- Collision with the rotating blades of the turbines;
- Disturbance and displacement;
- Barrier effects causing disruption of flight lines due to the addition of turbines;
- Indirect effects on designated sites; and

- Indirect effects e.g. disruption to habitat function, effects on prey.

(c) Decommissioning

- Short-term disturbance and displacement.

Potential cumulative effects will also be fully considered, following the approach set out in current SNH guidance, and will be assessed at the scale of the Central Highlands Natural Heritage Zone (NHZ) (Wilson *et al*. 2015). All relevant projects that are operational, in construction and those for which applications for statutory consents have been submitted, will be considered in the cumulative assessment.

Potential effects on designated sites will be fully considered within the EIA. However, based on the conclusions from the Stronelairg EIA, (which are considered to remain relevant given the location of the Proposed Development), adverse effects on the qualifying features of the Glendoe Lochs SSSI / Loch Knockie and nearby Lochs SPA are considered unlikely.

Proposed Scope of Assessment

The impact assessment will follow the standard methodology as set out by the Chartered Institute of Ecology and Environmental Management (CIEEM 2016) and relevant SNH guidance (see above). The assessment of bird collision risk will also follow current guidance as set out by SNH[1].

Key Receptors

The assessment will focus on certain species, identified in guidance and from scientific literature, as being of moderate to high sensitivity to onshore wind farm development and whose populations are also of conservation concern in the UK and/or Europe. Table 6.3 lists the key species that will be considered in detail within the impact assessment. This list is based on a review of the current available data for the study area.

Table 6.3: List of key species[i] in taxonomic order, which will be the focus of the Proposed Development impact assessment, including their legal and conservation status at an international and national level.

Common Name	Scientific Name	Schedule 1 [ii]	Annex I [iii]	UK BoCC [iv]
Common Scoter	*Melanitta nigra*	✓		Red
Red-throated Diver	*Gavia stellata*	✓	✓	Green
Slavonian Grebe	*Podiceps auritus*	✓	✓	Red
White-tailed Eagle	*Haliaeetus albicilla*	✓	✓	Red
Hen Harrier	*Circus cyaneus*	✓	✓	Red
Golden Eagle	*Aquila chrysaetos*	✓	✓	Green
Osprey	*Pandion haliaetus*	✓	✓	Amber
Golden Plover	*Pluvialis apricaria*		✓	Green
Dunlin	*Calidris alpina schinzii*		✓	Amber
Greenshank	*Tringa nebularia*	✓		Amber
Merlin	*Falco columbarius*	✓	✓	Red
Black Grouse	*Tetrao tetrix*			Red
Peregrine	*Falco peregrinus*	✓	✓	Green

[1] See: https://www.nature.scot/professional-advice/planning-and-development/renewable-energy-development/types-renewable-technologies/onshore-wind-energy/wind-farm-impacts-birds

i. During summer 2018 very occasional activity by hunting red kite has been noted in the vicinity of Stronelairg wind farm (SSER ECoW pers. comm.). Should there be observations of red kite, or any other Schedule 1 / Annex I species not listed in the table above, during the 2018-19 surveys these species will also be recorded in detail.

ii. Species listed on Schedule 1 to the Wildlife and Countryside Act 1981 (as amended).

iii. Species listed on Annex I of the EC Birds Directive (Directive 2009/147/EC on the conservation of wild birds - the codified version).

iv. Birds of Conservation Concern (BoCC) in the UK (Eaton et al. 2015).

Although likely significant effects are considered unlikely, detailed consideration will also be given in the assessment to the potential effects of the Proposed Development, in combination with other relevant plans or projects, on the Loch Knockie and nearby Lochs SPA and the Monadhliath SSSI. Both of these designations, and the bird species that form part of their qualifying interest, will be treated as receptors within the EIA.

Assessment of Effects

The potential effects on golden eagle, particularly breeding pairs within 6 km of the Proposed Development will be the key focus of the assessment. The PAT modelling undertaken for the Stronelairg EIA will be updated to ensure that all current eagle breeding territories potentially affected by the proposed Cloiche Wind Farm and Stronelairg Wind Farm proposals combined are considered. The modelling will be used to inform the assessment of potential habitat loss though displacement and to inform any proposed mitigation and/or compensation.

The potential adverse effects from the Proposed Development, in combination with other relevant wind farm developments, on the regional golden eagle population will be fully considered in the EIA. Impacts will be assessed in the context of the breeding population within the Central Highlands NHZ, estimated at 19 occupied territories in 2017 (SSE, The Highland Council & Natural Research (2018 in draft).

Due to the Proposed Development being located adjacent to an existing wind farm (during both its construction and operational phases), disturbance and displacement of birds from their foraging habitats (especially golden eagle) are key potential effects that will be carefully considered the EIA. An updated literature review will be completed to inform the EIA, including available monitoring data / published research into the issue of wind farm displacement effects on breeding and non-breeding golden eagles.

In relation to golden eagle collision risk, a recent SNH publication (SNH 2017f) on the fates of satellite tagged golden eagles across Scotland found that *'Wind farms were not associated with any recorded golden eagle deaths, and there were very few records of tagged young golden eagles near wind farms.'* And that '*…records of tagged eagles close to wind farms were rare with only 0.005% of 360,711 fixes being within 150 m of an operational turbine. This indicated that even the risk of collision with a turbine blade was miniscule… young golden eagles appeared to avoid operational wind farms…*'

Fielding & Haworth – *Golden Eagles and Wind Farms* (2010) looked at wind farms across Scotland:

- Monitoring results from the Beinn an Tuirc wind farm reveal evidence for golden eagle displacement. However, this interpretation is confounded by habitat management which may have, by itself, resulted in a shift in range use. Few flights were reported over or through the Beinn an Tuirc wind farm after it became operational, and no foraging flights were recorded within the wind farm's footprint.

- The Ben Aketil and Edinbane wind farms on Skye have been monitored regularly since January 2007. This includes construction and operational periods. Results from more than 40 months of monitoring support the displacement hypothesis. Construction has only recently finished at Edinbane so it is not yet possible to separate out effects related to construction from those related

to the wind farm's operation. However, there have been a small number of foraging flights within the wind farm's footprint.

- Evidence from Beinn Ghlas is largely absent from the public domain, but the available evidence points to the wind farm preventing re-occupation of the golden eagle range, i.e. displacement is operating there as well.

- Evidence from the impacts of conifer afforestation on Scottish golden eagle productivity and range abandonment suggests that the effects of displacement by wind farms are likely to be site-specific.

Updates on Edinbane - *Ornithological Monitoring 2007-2014 - A review of the spatial use of the area by birds of prey* (Haworth Conservation, January 2015) – suggests that displacement effects on eagles are stronger during the construction period compared to the operational phase of the wind farm.

To summarise this research, wind farms are likely to lead to the displacement and avoidance of the immediate area by eagles.

The addition of turbines around the edge of existing developments is potentially a reduced additional effect in comparison to the creation of an entirely new development, of a similar number of wind turbines, within occupied golden eagle habitat.

Additional Surveys to inform the EIA

As previously stated, a large proportion of the Proposed Development Area is located within areas that have already been subject to detailed multi-year breeding and wintering bird surveys. Therefore the existing data provides valuable background information for the design and assessment of the Proposed Development as well as for the assessment of potential effects on birds.

Due to this wealth of data, the location of the Proposed Development, and the timescale for potential construction of the Proposed Development following on from the completion of Stronelairg Wind Farm (and thus avoiding any further displacement or disturbance to birds in the vicinity), it is proposed that one year of additional surveys will be sufficient to inform the EIA. Therefore, the following surveys will be completed in conjunction with existing data (including data requested from HRSG and RSPB), to inform the iterative design and EIA process for the Proposed Development:

- Bird flight activity surveys from suitable vantage points (VPs) recording flight time within height bands appropriate to the max/min blade swept zone of the proposed wind turbines: August 2018 to September 2019 (minimum of six hours of observation per watch, per month following SNH guidance). It is proposed that the flight activity surveys will be conducted from six VPs, carefully selected to ensure sufficient coverage of the Proposed Development Area and to minimise observer effect (approximate VP locations are shown on Figure 6: Indicative Vantage Points for the Bird Flight Activity Survey).

- Breeding moorland waders: April to July 2019 (adapted version of the 'Brown & Shepherd' (Brown and Shepherd, 1993) method, 4 visits, timing based on the onset of suitable conditions in the spring for breeding as well as key periods of highest detectability for the species of interest).

- Wintering bird survey (in addition to the winter Flight Activity Survey, see above): September 2018 to April 2019 including waterbodies within c. 500 m of the Proposed Development. Twice monthly visits to monitor and record notable accumulations of waterbirds during the migration periods and winter months.

- Breeding Schedule 1/Annex 1 raptors: March to August 2019, including suitable habitats up to 2 km from the proposed wind turbines (up to 4 visits, following the species-specific methods detailed in Hardey *et al*. 2013). Occupancy / breeding activity at golden eagle sites in the wider study area to be

confirmed in co-ordination with HRSG as well as the SSE funded Regional Eagle Conservation Management Plan (RECMP).

- Breeding waterbirds (i.e. divers, common scoter and Slavonian grebe): 3-4 visits April to July 2019 (surveys to be co-ordinated with annual monitoring of SPA to avoid unnecessary duplication and disturbance).

- Black Grouse lek surveys (up to 3 visits March to May 2019, following standard guidance laid out in Gilbert *et al.* 1998)

All fieldwork will be completed by suitably experienced surveyors following current best practice methods (i.e. as set out in current onshore wind farm EIA guidance, SNH 2017e) and will include the appropriate buffer zones outside of the proposed wind turbine areas.

Suitability of proposed Survey Effort to inform the EIA

The Proposed Development is located within a zone that is subject to disturbance from the construction and operation of the Stronelairg Wind Farm (i.e. the majority of the proposed turbines are within 2 km of Stronelairg Wind Farm). Construction of Stronelairg Wind Farm is due to be completed during 2019 when the whole site will be operational. However, it is important to note that most of the turbines have been erected (summer 2018) and that at the western end of the wind farm turbines have been operational since spring 2018.

New survey data for the Proposed Development will be informed by extensive existing data gathered for the assessment and pre-construction monitoring of the Stronelairg Wind Farm project, as well as the conclusions from the EIA on the observed and potential use of the site by key species such as golden eagle. Surveys completed between winter 2017/18 and autumn 2019 would provide up to date baseline data (encompassing two winters and one breeding season). This data can be compared to the 2009-12 dataset for any variance from the pattern of use of the Proposed Development Area during that period, which could indicate any influence of construction disturbance / displacement. Additionally, the status of breeding attempts by golden eagle in the wider area will also be considered in determining the adequacy of the baseline flight activity data to inform the EIA (e.g. whether the flight activity surveys are concurrent with failed or successful breeding).

Therefore, in conclusion, taking into account the extent of the existing data for the site and the proximity of the Proposed Development to Stronelairg Wind Farm, it is considered that one year of updated bird surveys will be sufficient to undertake a reliable ornithological assessment of the Proposed Development in autumn 2019.

6.5 Geology, Soils and Water

Baseline Description

No Regionally Important Geological Sites (RIGS) or other sites of geological importance are present within the vicinity of the Proposed Development. However, as noted previously, the Monadhliath SAC and SSSI are located within 1km of the Proposed Development.

According to British Geological Society (BGS) geological maps, the solid geology beneath the site mostly comprised of hard rocks of the Allt Crom Granodiorites with rafts of the Coire Nan Laogh Semipelite Formation of Paleozoic and Neoproterozoic age.

A review of the Hydrogeology Map of Scotland indicates that the study area is underlain by impermeable rocks, generally without groundwater, except at shallow depth. These rocks mostly comprise a Precambrian

crystalline basement which offers little potential for groundwater storage and transport other than in cracks and joints which may be associated with tectonic fractures or near surface weathering. Some local intrusive rocks are present at the site, which may allow some groundwater flow in shallow cracks and joints opened up by weathering. Rare springs may be present and are generally expected to be small, except where tectonic influences have enhanced the secondary porosity.

A review of the Groundwater Vulnerability Map of Scotland indicates that the study area is underlain by weakly permeable strata that do not widely contain groundwater in exploitable quantities. However, some formations can locally yield water supplies in sufficient quantities for private / domestic use.

The site comprises a number of small loch systems and numerous tributaries which flow from the upland area down to the lower surrounding land, either draining into the River Killin, Allt Breineag or into the Glendoe Hydroelectric scheme reservoir.

No private or public water supplies have been identified within the study area.

Peat probing carried out as part of the Stronelairg Wind Farm development indicates that peat depth within this vicinity varies from shallow peat to up to 2.4m (generally, with pockets of deeper peat present). The majority of the Stronelairg Wind Farm site was characterised with peat depths of less than 1.5m, with areas of high and medium peat slide susceptibility being locally present across the site.

Potential Effects

Potential effects which will be considered may include:

(a) Construction

- Excavation, removal and storage of soils and peat;
- Impacts of Erosion;
- Impacts on Surface and Ground Water Flows and Quality; and
- Impacts on Ground Conditions.

(b) Operation

- Impacts on Ground Conditions; and
- Impacts on Surface and Ground Water Flows and Quality.

(c) Decommissioning

- Impacts on Surface and Ground Water Flows and Quality; and
- Impacts on Ground Conditions.

6.5.2 Proposed Scope of Assessment

Building on existing survey data for the wider area, further assessment of potential impacts of the Proposed Development on hydrology and ground conditions would be undertaken as part of the EIA, with reference to relevant legislation, policies and guidance.

A peat depth survey would be undertaken to inform the design and layout of the proposed wind farm. An approach to avoid deeper areas of peat would be adopted as part of the design process.

The peat depth survey would be undertaken to full depth and would include details of the basic peatland characteristics. The peat depth survey and associated assessment would accord to recognised guidance, in particular:

- Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments, Second Edition (Scottish Government, 2017b);
- Guidance on Developments on Peatland, Peatland Survey (Scottish Government, 2017c); and
- Development on Peatland: Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and the Minimisation of Waste (Scottish Renewables and SEPA, 2012).

Informed by the results of the peat depth survey, a Peat Management Plan (PMP) would be developed and would include details on the likely volumes of surplus peat generated and its re-use and preventative / mitigation measures to avoid significant drying or oxidation of peat during construction. A draft PMP would be included within the EIA Report.

Watercourse crossings would be avoided wherever possible. Where this is not possible, a water crossing assessment would be provided and consultation with SEPA would be undertaken to determine whether licensing or registration is necessary under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended). Construction details and required mitigation would be included within the watercourse crossing assessment which would detail all proposed engineering activities in the water environment, accompanied with a map of each activity. This would be included in the EIA Report.

Potential impacts as a result of borrow pit workings on the water environment would be considered.

All mitigation measures would be detailed in a CEMP, and a Pollution Prevention Plan as part of a Construction Licence application to SEPA (post consent).

6.6 Cultural Heritage

Baseline Description

Previous archaeological surveys in the vicinity of the Proposed Development include those undertaken for Glendoe Hydroelectric scheme and Stronelairg Wind Farm. On the high ground, these surveys identified features associated with sporting activities of the 19th century onwards, including grouse butts and small stone cairns of varying function, including way and boundary markers and shooting stances. These features would be considered to be of Local significance only. Shielings associated with post-mediaeval settlements were also identified on the lower ground, including a group on the Allt Ruigh an t-Sidhean at NH 54444 03909 and on the Allt na Craidhleig at NH 49102 04525.

There are no individual archaeological sites within the Proposed Development Area recorded on the Highland Historic Environment Record (HER).

Within a 15km radius of the Proposed Development there are a number of sites with statutory protection, including Scheduled Monuments and Listed Buildings. These monuments and buildings tend to be located on the valley floors and as such would likely be screened from views of the Proposed Development by intervening high ground.

Potential Effects

Potential effects on cultural heritage which will be considered include:

(a) Construction

- direct physical damage to or destruction of cultural heritage features.

(b) Operation

- effects on the setting of cultural heritage features.

(c) Decommissioning

- The potential effects of decommissioning activities will be similar to those of construction.

Proposed Scope of Assessment

Given the extensive surveys already undertaken within the vicinity of the Proposed Development, it is not anticipated that further field survey work would be required. Instead, known cultural heritage constraints would be ascertained through previous survey data, and an assessment of direct impacts undertaken in line with best practice.

An evaluation of the potential indirect impact (setting) on Scheduled Monuments, Listed Buildings and Gardens and Designed Landscapes identified by the desk based assessment would also be carried out, if ZTV analysis demonstrated potential impact.

6.7 Traffic, Access and Transport

Baseline Description

The local road network comprises the A82 and the B862, located to the west of the Proposed Development. Access into the site has involved the upgrading of estate tracks and the construction of new access tracks, as part of the Glendoe Hydroelectric scheme and Stronelairg Wind Farm. There are no public roads within the site. New purpose-built tracks to each wind turbine would be required.

Potential Effects

Potential effects of the Proposed Development which will be considered are as follows:

(a) Construction

- increased traffic flows;
- changes to the traffic composition;
- congested roads;
- journey delays;
- reduction in safety; and
- degradation of road surface.

(b) Operation

- Traffic associated with the operation of the Proposed Development is unlikely to give rise to appreciable traffic effects.

(c) Decommissioning

- Decommissioning effects are expected to be of a lower magnitude than construction effects and will result from the removal of the wind turbines from the site.

Proposed Scope of Assessment

An assessment would be carried out as part of the EIA to include the likely number of construction traffic movements and the capacity of local roads to accommodate delivery of turbine components and materials, following a swept path analysis. This would be completed with reference to best practice guidelines and in close consultation with The Highland Council and Transport Scotland.

Once operational, the number of traffic movements would be significantly reduced and it is anticipated that no further assessment on operational traffic movements would be required as part of the EIA.

6.8 Aviation

Baseline Situation

The Proposed Development falls at the edge of the safeguarded area for Inverness Airport (approximately 53km and farther from the Proposed Development). The local airspace is Class G (uncontrolled airspace) up to Flight Level (FL) 195 i.e. 19,500 feet and Class C (controlled airspace) above FL195.

The Proposed Development is also within the Military of Defence's (MoD) Low Flying Area 14 which is designated as a low priority military low flying area. There is a MoD airfield radar 91km (49 nautical miles (nm)) from the Proposed Development, although radars services are generally only provided with 40nm of the radar installation.

There are three NERL Primary Surveillance Radar (PSR) facilities within the wider area: Perwinnes (135km from the Proposed Development), Alanshill (145km from the Proposed Development) and Tiree (163km from the Proposed Development).

There are no MoD air defence units, met office radars or Helicopter Landing Sites (HLS) within the wider area.

There is a gliding soaring site along a ridgeline lying approximately 8km to the south of the Proposed Development at its closest point. The ridge line is approximately 13km in length.

Potential Effects

Turbines have the potential to act as obstructions to low flying aircraft and can be detected by aviation radars, resulting in radar clutter for air traffic controllers and airport operators.

Proposed Scope of Assessment

If the Proposed Development includes turbines of 150m to tip height or above, an aviation lighting layout would need to be agreed. Potential impacts would be assessed through consultation with NATS, MoD, Highlands and Islands Airports Limited, other airport operators as appropriate and other stakeholders, primarily through the mechanism of the consultation procedure managed by Defence Estates Wind Farm Safeguarding. The consultation would be managed in two stages: the first to gather general views regarding the suitability of the site; and a further detailed consultation to determine the potential impacts on aviation issues of the final site layout.

The potential impacts on military and commercial aviation would be undertaken through detailed consultation as part of the scoping process, and continued throughout the EIA process, if required.

6.9 Carbon Assessment

Baseline

A peat depth survey would be undertaken to inform the layout and design of the proposed wind farm (see Section 6.5: Geology, Soils and Water). An approach to avoid deeper areas of peat would be adopted during the design process.

Potential Effects

Construction of the Proposed Development could potentially result in the loss of areas which may act as a 'carbon sink', where carbon is absorbed from the atmosphere, or perhaps more significantly cause a loss of carbon store material, thus releasing carbon into the atmosphere.

Proposed Scope of Assessment

Climate effects will be assessed for the construction and operational phases in line with current guidance, most notably:

- Calculating Potential Carbon Losses & Savings from Wind Farms on Scottish Peatlands: Technical Note Version 2.10.0 (Scottish Government, 2016b); and
- Calculating Carbon Savings from Wind Farms on Scottish Peat Lands – A New Approach, (Nayak et al., 2008, 2010).

During the construction of the wind farm the movement of vehicles and on-site plant will generate exhaust emissions. The potential savings in CO_2 emissions due to the Proposed Development replacing other electricity sources over the lifetime of the wind farm will be reviewed.

6.9 Socio-Economic

SSE is already a major employer throughout the North of Scotland and particularly within the Great Glen region, providing direct employment through the development and construction of generation or infrastructure projects such as Glendoe Hydroelectric Scheme, Stronelairg and Bhlairidh Wind Farms and associated grid connections, which has made a significant contribution to the local economy.

The projected socio-economic effects of the Proposed Development would take the form of a short-term effect during development and construction through employment, spending of employees and purchase of materials and services. There will also be an opportunity for long term jobs during the operation and maintenance phases of the project, and the project would support local and Scottish supply chain initiatives. This will create jobs and leave a lasting legacy in the area as well as supporting the renewables sector as a whole.

The socio-economic benefits of the Proposed Development will be outlined in the EIA Report.

6.10 Schedule of Mitigation

A Schedule of Mitigation will be provided in the EIA Report to summarise all mitigation measures identified that are considered necessary to protect the environment prior to and during construction, operation or decommissioning of the Proposed Development.

7 Recommended Features to be Scoped Out

Assessment for the following environmental features is recommended to be scoped out of the EIA for the Proposed Development.

7.1 Forestry

There are no areas of commercial forestry within the vicinity of the Proposed Development and therefore an assessment of forestry would not be required.

7.2 Noise

There are no properties within, or in close proximity to, the Proposed Development. Killin Lodge is the closest property, located approximately 5 km from the Proposed Development, whilst all other properties are over 5 km.

The main source of noise impact during the construction phase is likely to be from increased traffic flows during construction. Construction traffic, including the delivery of components, is likely to be routed through Fort Augustus and along the B862 to the existing Glendoe access point.

Impacts from construction activities would be controlled by the adoption of best site management practices and all mitigation measures would be detailed in the CEMP.

Operational noise generated by the wind turbines is highly unlikely to adversely affect any residential properties.

Given the remote location of the Proposed Development and the distance between it and sensitive receptors (typically over 5 km) it is not considered that further assessment on noise during both construction and operation of the scheme is required.

7.3 Land Use and Recreation

The site itself is located within a large scale, high level plateau which is surrounded by a series of high summits and ridges, providing a degree of distant enclosure. The plateau area includes a network of structures and tracks relating to the operational Glendoe Hydroelectric Scheme, Stronelairg Wind Farm and management of the estate. Land use tends to be limited to deer stalking and grouse management for shooting.

There are four Munros (mountains over 3,000 feet) in the area:

- Geal Charn (Mondahliath) is located approximately 3km to the south, generally accessed from Garva Bridge on General Wade's Military Road, south of the Proposed Development; and
- A'Chailleach and Carn Sgulain are located approximately 10km to the east. These two summits are often completed together with Carn Dearg, which is approximately 7km from the Proposed Development. This assent is usually attempted from Newtonmore, or via Strath Dearn / Glen Markie Burn.

The closest Corbett (a mountain over 2,500 feet) is Meall na h-Aisre and is located approximately 1km to the south of the Proposed Development at its closest point.

A Scottish Hill Track passes through Stronelairg Wind Farm (Laggan to Whitebridge), whilst eight other hill tracks are within 15km of the Proposed Development.

The following are important tourist attractions within the wider area:

- The Great Glen Way;
- Loch Ness;
- The Caledonian Canal; and
- Urquhart Castle.

The potential effects on visual amenity for tourism and recreational locations and attractions would be fully assessed in the EIA Report as part of the landscape and visual impact assessment. It is not anticipated that the Proposed Development would result in a significant effect on access to tourism and recreational assets. It is also proposed that an Outdoor Access Plan would be prepared in advance of the construction phase, a draft of which would be included as an Appendix within the EIA Report.

The EIA Report will include consideration of potential disruption or disturbance to existing land use and recreational activities during the construction and operational phases of the development.

Given the above, it is therefore proposed that an assessment of land use and recreation is scoped out of the EIA.

7.4 Air Quality

The local air quality at this site is expected to be good due to the rural location, with few pollution sources. The main pollution source is likely to be local emissions from traffic on the A82 and B862.

During the construction of the wind farm the movement of vehicles and on-site plant would generate exhaust emissions. Given the short term nature of the construction period, and the limited area to be developed within the context of the large-scale nature of the site, effects on local air quality are likely to be negligible.

Construction activities also have the potential to generate dust during dry spells (such as borrow pit quarrying), which may adversely affect local air quality. Given the scale and nature of construction activities, compared with the distances between the construction areas and the nearest residential properties, it is considered that dust from construction is unlikely to cause a nuisance.

An operational wind farm produces no notable atmospheric emissions. The operation of the wind farm would therefore have no discernible adverse effects on local or national air quality.

It is therefore proposed that an assessment of air quality is scoped out of the EIA. Relevant mitigation measures for air quality and pollution control will be captured within the site specific CEMP.

7.5 Shadow Flicker

Shadow flicker can arise from the moving shadow of the turbine rotor blade passing over a narrow opening such as the window of a nearby residence. The likelihood and duration of shadow flicker depends upon the positioning of the sun, turbine and window locations, turbine orientation, time of day and year and weather conditions.

Shadow flicker effects may occur within ten rotor diameters and up to 130 degrees either side of north relative to a turbine.

As the nearest occupied property would be located approximately 5km from the nearest turbine, there is no potential for effects to occur and shadow flicker is therefore proposed to be scoped out of the EIA.

7.6 Ice Throw

During icing conditions there are two types of risks associated with ice collecting on turbines:

- fragments are thrown off from the operating turbine due to aerodynamic and centrifugal forces; or
- Ice falls down from the turbine when the blades are stationary.

Given the remote location of the Proposed Development, ice throw affecting members of the public is considered to be extremely low.

The low risk of ice throw is reduced further as turbines are fitted with vibration sensors, which detect any imbalance that might be caused by icing, which led to the affected turbines being shut down. In addition public notices would be placed at access points alerting members of the public and staff accessing the site, of the possible risk of ice throw under certain weather conditions.

It is therefore proposed that an assessment of ice throw is scoped out of the EIA.

7.7 Telecommunications, TV and Radio Links

Wind farms can cause television, radio and microwave interference by blocking and / or causing part of the signal to be delayed.

A previous assessment was undertaken in relation to Stronelairg Wind Farm to determine its potential effect on telecommunications, TV and radio interference. The assessment identified transmitter masts, microwave links and TV signal strength in communities within the wider area.

The assessment concluded that the Stronelairg Wind Farm is not anticipated to result in any potentially significant effects on television, radio and microwave links.

Given the previous assessment findings, and considering the proximity of the Proposed Development to Stronelairg Wind Farm, it is proposed that an assessment of television, radio and microwave interference is scoped out of the EIA.

7.8 Climate Change

With regard to climate change, 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.

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.

In terms of climate adaptation, consideration would be given to the potential implications of climate change on design of turbines (e.g. design for increased flood risk and adverse weather); however, no potential for significant impacts have been identified and it is therefore proposed that an assessment of climate change is scoped out of the EIA.

7.9 Human Health

Potential effects on human health as a result of the Proposed Development could relate to noise during construction, or shadow flicker. Both of these topics are not considered to result in a significant effect and are proposed to be scoped out of the EIA Report. It is therefore proposed that an assessment of human health is scoped out of the EIA.

7.10 Risk of Major Accidents and / or Disasters

Given the nature of the Proposed Development, and its remote location, the risk of a major accident or disaster is considered to be extremely low. Furthermore, the Principal Designer would need to fully assess risks and mitigate as appropriate during the design stage as part of the requirements of the Construction (Design and Management) Regulations (2015).

A peat slide risk assessment will be undertaken as part of the EIA Report, as detailed in Section 6.5: Geology, Soils and Water.

It is therefore proposed that an assessment of the risk of major accidents and / or disasters is scoped out of the EIA.

8 Response to the Scoping Report

This Scoping Report has been issued to the Energy Consents Unit (ECU) in support of a request for a Scoping Opinion under Regulation 12 of the EIA Regulations.

The responses to the Scoping Report will inform the detailed methodology for each aspect of the impact assessment and, at each stage, dialogue will be maintained with statutory bodies and key stakeholders to ensure that methods are both appropriate and robust.

The ECU will seek the views of those consultees listed in Section 2.2 in forming its Scoping Opinion. All responses should be sent to the following address:

Energy Consents Unit
4th Floor, 5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU
Representations_Mailbox@gov.scot

In submitting your response to the ECU, the Developer would be grateful if you could send a copy of your response to them at the address below:

For the attention of Jon Soal
SSE Renewables Developments (UK) Limited
Inveralmond House
200 Dunkeld Road
Perth
PH1 3AQ
Jon.Soal@sse.com

All other responses or comments relating to the Proposed Development should be entitled ‘Cloiche Wind Farm’ and sent to the above address.

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Glossary

Baseline
The current, pre-construction condition against which a development proposal is assessed.

Borrow pit
An area where soil, sand or gravel has been dug up for use elsewhere.

Cumulative Assessment
The assessment of effects which may occur where more than one development of a particular type combine to create a greater level of effect.

Effect
The result of change or changes on specific environmental resources or receptors.

EIA Directive
Directive 85/33/EEC (as amended) on the assessment of certain public and private projects on the environment

EIA Regulations
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017

Environmental Impact Assessment (EIA)
The process by which information about the environmental effects of a project are evaluated and mitigation measures identified.

EIA Report
Document provided by the Developer to the Competent Authority, containing environmental information required under Directive 85/337/EEC, as amended.

Groundwater
Water below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

Ground Water dependent Terrestrial Ecosystem (GWDTE)
Wetlands which critically depend on groundwater flows or chemistries. They are safeguarded by the Water Framework Directive and are sensitive to hydrological and ecological changes caused by developments.

Habitat
Term most accurately meaning the place in which a species lives, but also used to describe plant communities or agglomerations of plant communities, as used, for example in a “Phase 1 Habitats Survey”.

Hydrological
The exchange of water between the atmosphere, the land and the oceans.

Impact
Any changes attributed to the proposed development that have the potential to have environmental effects (i.e. the causes of the effects).

Listed Building
Building included on the list of buildings of special architectural or historic interest and afforded statutory protection under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 and other planning legislation. Classified categories A-C(s).

Magnitude
Size, extent, scale and duration of an impact.

Mitigation
Term used to indicate avoidance, remediation or alleviation of adverse impacts.

National Scenic Area (NSA)
Areas identified as having outstanding scenic value in a national context which should be protected in the national interest.

National Vegetation Classification (NVC)
A recognised system of classification and description of plant communities of Britain.

Phase 1
A standardised system to record semi-natural vegetation and other wildlife habitats which presents the user with a basic assessment of habitat type and potential importance for nature conservation.

Ramsar Site
Wetlands of international importance, designated under the Ramsar Convention.

Scheduled Monument (SM)
A monument which has been scheduled by the Scottish Ministers as being of national importance under the terms of the Historic Environment Scotland Act 2014.

Significant Effects
Identified environmental effects considered to be significant in terms of the EIA Regulations

Site 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. The site network is protected under the provisions of Sections 28 and 19 of the Wildlife and Countryside Act 1981 as well as the Amendment Act 1985, the Environmental Protection Act 1990 and the Nature Conservation (Scotland) Act 2004.

Special Landscape Area (SLA)
Non-statutory designation applied by the Highland Council to areas of landscape considered to be of regional importance for their scenic qualities.

Special Protection Area (SPA)
An area designated under the Wild Birds Directive to protect important bird habitats. Implemented initially under the Wildlife and Countryside Act 1981.

Water Framework Directive (WFD)
Wide-ranging European environmental legislation (2000/60/EC) relevant to inland surface waters, estuarine and coastal waters and groundwater. The fundamental objective of the WFD is to maintain 'high status' of water quality where it exists, preventing any deterioration in the existing status of waters and achieving at least 'good status' in relation to all waters by 2015.

Wild Land Area (WLA)
Area identified by Scottish Natural Heritage through the Mapping Scotland's Wildness Project as comprising the greatest and most extensive areas of wild characteristics within Scotland.

Wildlife and Countryside Act 1981 (WCA)
Principal mechanism for wildlife protection in the UK.

Zone of Theoretical Visibility (ZTV)
A computer generated diagram which uses a 3d terrain model to indicate areas from which a development would theoretically be visible.