

Environmental Impact Assessment

Scoping Report

LT15 – Balallan Switching Station

March 2025



QUALITY MANAGEMENT

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GLOSSARY AND ABBREVIATIONS

| | |
|---|--|
| 132 kV | 132 kilovolt (132,000 volt) capacity. |
| AC | Alternating Current |
| Amenity | The natural environment, cultural heritage, landscape and visual quality. Also includes the impact of SSEN Transmission's works on communities, such as the effects of noise and disturbance from construction activities. |
| Ancient Woodland | Ancient Woodland is defined as land that is currently wooded and has been continually wooded, at least since 1750. |
| AOD | Above Ordnance Datum |
| Best Practicable Means (BPM) | The statutory obligation to use up-to-date and effective methods for reducing detrimental environmental effects, having regard among other things to the local context, technical advancement and commercial implications. |
| British Geological Survey (BGS) | The UK's main provider of objective and authoritative scientific data, information and knowledge to help society understand the Earth |
| Biodiversity Net Gain (BNG) | A way to contribute to the recovery of nature while developing land. It is making sure the habitat for wildlife is in a better state than it was before development. |
| Construction Environmental Management Plan (CEMP) | A document detailing the overarching principles of construction, contractor protocols, construction-related environmental management measures, pollution prevention measures, the selection of appropriate construction techniques and monitoring processes. |
| CnES | Comhairle nan Eilean Siar – the Planning Authority |
| Consultation | The dynamic process of dialogue between individuals or groups, based on a genuine exchange of views and, normally, with the objective of influencing decisions, policies or programmes of action. |
| Digital Terrain Model (DTM) | A 3D representation of land elevation and topography, created from data such as satellite images or surveys, used to visualise the terrain. |
| Environmental Impact Assessment (EIA) | A formal process set down in Town & Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 used to systematically identify, predict and assess the likely significant environmental impacts of a proposed project or development. |
| Electric and Magnetic Fields (EMFs) | EMFs are generated around high-voltage power lines and electrical substations. Electric fields are produced by the voltage on the power lines, while magnetic fields result from the current flowing through them. |

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| Gardens and Designed Landscapes (GDLs) | The Inventory of Gardens and Designed Landscapes lists those gardens or designed landscapes which are considered by a panel of experts to be of national importance. |
| Gas Insulated Switchgear (GIS) | Gas Insulated Switchgear (GIS) bays are components in the electrical power transmission network housed in buildings. |
| General Environmental Management Plan (GEMP) | A document detailing the overarching principles of environmental management measures for the Proposed Development. |
| Groundwater Dependent Terrestrial Ecosystem (GWDTE) | Groundwater Dependent Terrestrial Ecosystems (GWDTE) are wetlands which critically depend on groundwater flows or chemistries. They are safeguarded by the Water Framework Directive (WFD) and are sensitive to hydrological and ecological changes caused by developments. |
| High Voltage Direct Current (HVDC) | A direct current source with a voltage greater than 1000 Volts (V). |
| Historic Environment Record (HER) | The Historic Environment Record (HER) is a database/data source that contains up-to-date data on the locations and extents of heritage assets such as Scheduled Monuments, Listed Buildings, Conservation Areas, Inventory status Garden and Designed Landscapes, and Inventory status Historic Battlefields. The HER is used during the desk-based assessment process to identify any heritage assets that could be impacted by the Proposed Development. |
| Historic Environment Scotland (HES) | Organisation responsible for investigating, caring for and promoting Scotland's historic environment. |
| HGV | Heavy Goods Vehicle |
| IEEM | Institute of Ecological and Environmental Management (IEEM) |
| Important Bird Areas (IBA) | Important Bird Areas are designated by Birdlife as places of international significance for the conservation of birds and other biodiversity. They are a non-statutory, international designation. |
| Landscape Character Type (LCT) | A landscape type that is characterised by its distinct, recognisable and consistent pattern of elements that makes one landscape different from another. LCTs are classified based on characteristics such as landform, vegetation, land use, and settlement patterns. |
| Lewis & Harris Raptor Survey Group (LHRSG) | The Lewis & Harris Raptor Survey Group (LHRSG) conducts reviews of birds, specifically raptors in the area. The LHRSG data includes information on golden eagle territories, nest sites, and other raptor activities within proximity to the Site. Their data is used in the ornithological assessments to determine the potential impact on raptor species from the Proposed Development. |

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| Mitigation | Term used to indicate avoidance, remediation, or alleviation of adverse impacts. |
| National Planning Framework 4 (NPF4) | The national spatial strategy for Scotland. It sets out the spatial principles, regional priorities, national developments and national planning policy. It replaces NPF3 and Scottish Planning Policy. |
| National Record of the Historic Environment (NRHE) | The NRHE, accessed via the online catalogue Canmore, is a comprehensive archive maintained by Historic Environment Scotland. It documents Scotland's archaeological, industrial, architectural, and maritime heritage, including over 5 million items. Developed by the Royal Commission on the Ancient and Historical Monuments of Scotland since 1908, it offers insights into Scotland's past through detailed records, images, and research. |
| NatureScot (NS) | Formerly known as Scottish Natural Heritage, is the public body responsible for Scotland's natural heritage, especially its natural, genetic and scenic diversity. It advises the Scottish Government and acts as a government agent in the delivery of conservation designations, i.e. national nature reserves, local nature reserves, national parks, Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation, Special Protection Areas and the national scenic areas. |
| NETS SQSS | National Electricity Transmission System Security and Quality of Supply |
| Non-Technical Summary (NTS) | A summary of the EIA report to aid the general public, stakeholders, and decision-makers to identify and understand the key points, impacts, and mitigation measures. |
| National Vegetation Classification (NVC) | A system used to identify, describe, and categorise various types of vegetation within a habitat. It provides a standardised way to classify plant communities based on their species composition and ecological features. |
| OPMP | Outline Peat Management Plan |
| Overhead Line (OHL) | An electric line installed above ground, usually supported by lattice steel towers or wooden poles. |
| Planning application | An application for planning permission under the Town and Country Planning (Scotland) Act 1997, as amended by the Planning etc. (Scotland) Act 2006. |
| PLHRA | Peat Landslide Hazard Risk Assessment |
| Proposed Development | Refers collectively to all elements required to construct and operate the proposed Balallan Switching Station. |
| Private Water Supply (PWS) | A private water supply is a water source that provides water to a single household or small group of households, rather than being part of a public water system. It typically comes from wells, springs, or |

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| | rainwater collection systems located on private property. |
| Residential Visual Amenity Assessment (RVAA) | An assessment that evaluates how a proposed development might impact the views and visual quality experienced by residents in nearby homes. |
| Scottish Biodiversity List (SBL) | The Scottish Biodiversity List identifies important species and habitats in Scotland that need conservation. It guides efforts to protect and manage these natural resources. |
| Scottish Hydro Electric (SHE) Transmission plc | SHE Transmission plc is the Applicant, who, operating and known as Scottish and Southern Electricity Networks Transmission (SSEN Transmission), owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands. |
| Scottish Environment Protection Agency (SEPA) | Scotland's principal environmental regulator, protecting and improving Scotland's environment. |
| Special Area of Conservation (SAC) | An area designated under Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (known as - The Habitats Directive) to ensure that rare, endangered or vulnerable habitats or species of community interest are either maintained at or restored to a favourable conservation status. |
| Species Protection Plans (SPPs) | Species Protection Plans (SPPs) are documents developed by the Applicant and agreed with NatureScot. These plans would be implemented during the construction of the Proposed Development to offer protection and manage work around sensitive species. SPPs form part of the Construction Environmental Management Plan (CEMP) to ensure that construction activities are undertaken in line with standard practices to avoid, minimise, and control adverse environmental impacts. |
| SSEN Transmission | Scottish & Southern Electricity Networks (SSEN) Transmission plc – part of Scottish and Southern Electricity Networks, and the transmission license holder for the transmission of electricity in the north of Scotland |
| LVIA | Landscape and Visual Impact Assessment |
| Special Protection Area (SPA) | An area designated under the Wild Birds Directive (Directive 79/409/EEC) to protect important bird habitats. |
| Site of Special Scientific Interest (SSSI) | A statutory designation made by NatureScot under the Nature Conservation (Scotland) Act 2004. Areas of land and water that are considered to best represent natural heritage in terms of their flora (i.e. plants), fauna (i.e. animals), and geology (i.e. rocks) and geomorphology (i.e. landform). |
| Stakeholders | Organisations and individuals who can affect or are affected by SSEN Transmission works. |

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| Study Area | A defined study area for the consideration of effects (including direct, indirect and cumulative) on each factor defined under Regulation 4(3) of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 |
| Substation | A node on the network to allow safe control of the electricity network. This could include convergence of multiple circuits, transformation of voltage or other functions to maintain and operate the electricity network. |
| Switching Station | A switching station is a 132kV component in the electrical power transmission network that directs the flow of electrical power through transmission lines. It ensures electricity reaches the right places and helps maintain the stability and reliability of the electrical grid. It also allows parts of the network to be turned off for maintenance or in case of faults, ensuring the rest of the system remains operational and safe. |
| Visual Receptors | Visual receptors are individuals or defined groups of people whose visual amenity or viewing experience may be affected by development. |
| VP | Vantage Point |
| Volts | The international unit of electric potential and electromotive force |
| Water Framework Directive (WFD) | The main aims of the Water Framework Directive (WFD) are to: prevent deterioration and enhance status of aquatic ecosystems, including groundwater, promote sustainable water use, reduce pollution, and contribute to the mitigation of floods and droughts. |
| Wild Land Areas (WLA) | Those areas comprising the greatest and most extensive areas of wild characteristics within Scotland, as classified by SNH (2014). |
| Zone of Theoretical Visibility (ZTV) | Zone of Theoretical Visibility - the computer generated theoretical visibility of an object in the landscape |

EXECUTIVE SUMMARY

Scottish Hydro Electric Transmission plc ('the Applicant'), operating and known as Scottish and Southern Electricity Networks Transmission (SSEN Transmission), owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands.

The Applicant is proposing to submit an application for full planning permission to Comhairle nan Eilean Siar (CnES) under the Town and Country Planning (Scotland) Act 1997 for permission to construct and operate a 132kV circuit breaker switching station (the 'Proposed Development') on land located approximately 100 m southwest of Balallan on the Isle of Lewis.

Ramboll (UK) Ltd has been appointed by the Applicant to undertake the Environmental Impact Assessment (EIA) for the Proposed Development. This Scoping Report is provided to support a formal request by the Applicant under the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 for a Scoping Opinion to determine the information to be provided within the EIA Report.

The proposed scope of the EIA is summarised in Table 1 below.

Table 1: Issues Scoped In and Out of the EIA Report

| Topic | Scoped In | Scoped Out |
|-----------------------------|-----------|--|
| Landscape and Visual Impact | ✓ | <ul style="list-style-type: none"> Effects on Wild Land Areas; and Effects on Seascape Character Types. |
| Cultural Heritage | ✓ | <ul style="list-style-type: none"> Direct and indirect effects on all designated heritage assets; and Direct and indirect effects on all known non-designated assets, with the exception of the Pairc Land Raiders Cairn. |
| Biodiversity | ✓ | <ul style="list-style-type: none"> Effects related to lighting, noise, dust and visual disturbance during the construction. Effects on protected or notable species with the exception of otter. Effects on ecological designated sites (Langavat SAC and Lewis Peatlands SAC). Operational effects. |
| Water Environment | ✓ | <ul style="list-style-type: none"> Effects related to flood risk; Effects on Private Water Supplies; and Effects on Ground Water Terrestrial Ecosystems. |
| Peat | ✓ | <ul style="list-style-type: none"> Effects related to contaminated land; and Effects related to geology. |
| Traffic and Transport | ✓ | <ul style="list-style-type: none"> Operational effects |
| Noise and Vibration | ✗ | ✓ |
| Land Use | ✗ | ✓ |

| Topic | Scoped In | Scoped Out |
|---|-----------|------------|
| Socio-economics, Recreation and Tourism | ✗ | ✓ |
| Population and Human Health | ✗ | ✓ |
| Major Accidents and Disasters | ✗ | ✓ |
| Air Quality | ✗ | ✓ |
| Climate Change | ✗ | ✓ |

1. INTRODUCTION

1.1 The Proposal

- 1.1.1 This Scoping Report has been prepared by Ramboll UK Ltd on behalf of Scottish and Southern Electricity Networks Transmission (SSEN Transmission) operating under licence as Scottish Hydro Electric Transmission plc, is a wholly owned subsidiary of the SSE plc group of companies. SSEN Transmission, hereafter referred to as 'the Applicant', owns and maintains the electricity transmission network across the north of Scotland and holds a license under the Electricity Act 1989 (the '1989 Act') to develop and maintain an efficient, co-ordinated and economical system of electricity transmission. In this Scoping Report, 'the Applicant' and 'SSEN Transmission' are used interchangeably unless the context requires otherwise.
- 1.1.2 The Applicant is proposing to submit an application for full planning permission to Comhairle nan Eilean Siar (CnES) under the Town and Country Planning (Scotland) Act 1997 for permission to construct and operate a 132kV circuit breaker switching station (described hereafter as the 'Proposed Development') on land located approximately 100 m southwest of Balallan on the Isle of Lewis (the 'Site'). The location of the Site is shown in **Figure 1.1: Site Location**.
- 1.1.3 This Scoping Report is provided to support a formal request by the Applicant under the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the EIA Regulations') for a Scoping Opinion to determine the information to be provided within the Environmental Impact Assessment (EIA) Report.
- 1.1.4 The Proposed Development is part of SSEN Transmission's Pathway to 2030 projects. These projects are part of a proposed major upgrade of the electricity transmission network across Great Britain to help deliver United Kingdom (UK) and Scottish Government climate change and energy security targets. They would connect UK based low carbon renewable electricity generation to areas of demand across the country, with the aim of building a cleaner, more secure and affordable energy system for homes and businesses across Great Britain. Further details on the Pathway to 2030 projects is provided at <https://www.nationalgrideso.com/future-energy/pathway-2030-holistic-network-design>.

1.2 The Regulations

- 1.2.1 Regulation 17 of the EIA Regulations states that a developer may request the relevant planning authority to adopt a Scoping Opinion on a planning application where an EIA is deemed necessary, in order to determine the scope of the EIA required for the specific development.
- 1.2.2 The EIA Regulations contain two schedules: Schedule 1 lists projects where EIA is mandatory, while Schedule 2 lists projects where EIA may be required where proposed development is considered likely to give rise to 'significant effects on the environment by virtue of factors such as its nature, size or location'.
- 1.2.3 The Proposed Development is not of a type listed within Schedule 1 of the EIA Regulations. The Proposed Development is also not directly identified within Schedule 2 of the EIA Regulations; however, the Applicant has decided to undertake

an EIA for the Proposed Development given its size and nature and its close association with other SSEN Transmission 400kV network projects.

- 1.2.4 The Proposed Development would be a major development under the Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009 (as amended) as the Site is greater than 2 hectares (ha). The Proposed Development is also of a type that would fall within National Development 3 – Strategic Renewable Energy Generation and Transmission Infrastructure, in National Planning Framework 4 (NPF4¹).

1.3 Sustainability Strategy

- 1.3.1 The Applicant's Sustainability Strategy² contains five ambitions to drive the agenda for a net zero pathway. These being: a reliable network, enabling net zero, climate action, serving their customers and their people. A key part of the Applicant's Sustainability Strategy³ is to achieve Biodiversity Net Gain (BNG)⁴ as part of project delivery. As such, the ambition is to ensure that activities not only maintain the balance that exists but enhance the biodiversity in the area.
- 1.3.2 For new infrastructure projects, the Applicant proposes to:
- Ensure natural environment considerations are included in decision making at each stage of a project's development;
 - Utilise the mitigation hierarchy to avoid impacts by consideration of biodiversity in project design;
 - Positively contribute to the United Nations (UN) and Scottish Government Biodiversity strategies by achieving an overall 'No Net Loss' on new infrastructure projects gaining consent in 2020 onwards and achieving Net Gain on projects gaining consent in 2025 onwards; and
 - Work with its supply chain to gain the maximum benefit during asset replacement and upgrades.
- 1.3.3 BNG is a key consideration throughout project development and is discussed further here in **Chapter 6: Biodiversity**.

1.4 Purpose of the Scoping Report

The purpose of this Scoping Report is to ensure that the subsequent EIA is focused on the impacts likely to have significant effects on the environment by virtue of factors such as its nature, size or location. As well as identifying aspects to be considered in the EIA, this document also identifies those aspects that are not considered necessary to assess further, and all relevant environmental issues are identified.

- 1.4.1 In accordance with the EIA Regulations, this Scoping Report contains:
- A description of the location of the Proposed Development, including a plan sufficient to identify the land;

¹ <https://www.gov.scot/publications/national-planning-framework-4/#:~:text=National%20Planning%20Framework%204%20is%20our%20national,regional%20priorities%2C%20national%20development%20and%20national%20planning%20policy.>

² <https://www.ssen-transmission.co.uk/about-us/sustainability/sustainability-strategy/> (Accessed 4/8/2024)

³ <https://www.ssen-transmission.co.uk/about-us/sustainability/sustainability-strategy/> (Accessed 12/1/2025)

⁴ <https://www.ssen-transmission.co.uk/globalassets/documents/sustainability-strategy/sustainability-action-plan.pdf> (Accessed 12/1/2025)

- a brief description of the nature and purpose of the Proposed Development and its likely significant effects on the environment; and
- Additional supporting information or representations.

1.4.2 The Applicant invites consultees to comment on the following:

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

1.5 Consideration of Relevant Factors in the EIA Scoping Report

1.5.1 This Scoping Report is structured to provide information on the individual factors which require consideration under the EIA Regulations. The Scoping Report presents the findings of an initial appraisal of the likely environmental effects of the Proposed Development on the receiving environment, based on the current understanding of the baseline conditions. The Scoping Report identifies the potential for likely significant effects with reference to:

- The current understanding of baseline sensitivity;
- The proposed approach to further baseline data collection (where required);
- Issues that can be scoped out from further assessment;
- Issues that require further assessment on the basis of potential for significant effects; and
- The methodology proposed for the assessment of significant environmental effects in each case.

1.5.2 The EIA Regulations require an EIA Report to identify, describe and assess the likely significant effect on the factors specified in Regulation 4(3) and the interaction between those factors. Environmental topics with potential for significant effects to occur from the Proposed Development, and are therefore proposed to be scoped in the EIA are:

- Landscape and Visual Impact;
- Cultural Heritage;
- Biodiversity;
- Water Environment;
- Peat; and
- Traffic and Transport.

1.5.3 **Table 1.1:** Consideration of Factors in the EIA Scoping Report lists the factors and outlines how this EIA Scoping Report addresses each, including how the report describes the potential interactions between the factors.

1.5.4 Environmental topics with potential for significant effects to occur from the Proposed Development, and are therefore proposed to be scoped in the EIA are:

- Landscape and Visual Impact;
- Cultural Heritage;
- Biodiversity;
- Water Environment;
- Peat; and
- Traffic and Transport.

Table 1.1: Consideration of Factors in the EIA Scoping Report

| Regulation 4 (3) Factor | How this is addressed in the Scoping Report |
|--------------------------------|--|
| Landscape | Chapter 4: Landscape and Visual incorporates a consideration of potential for likely significant effects designated landscape areas, landscape character and visual receptors. |
| Cultural Heritage | Chapter 5: Cultural Heritage and Archaeology incorporates a consideration of potential for likely significant effects on cultural heritage and archaeology assets as well as the cultural setting. |
| Biodiversity | Chapter 6: Biodiversity incorporates a consideration of potential for likely significant effects on terrestrial habitats, protected mammals, reptiles and amphibians, aquatic ecology and ornithology. |
| Water Environment | Chapter 7: Water Environment incorporates a consideration of potential for likely significant effects on the water environment including hydrology, hydrogeology and GWDTEs. |
| Soil | Chapter 8: Peat incorporates a consideration of potential for likely significant effects on soils including peatland habitat. |
| Material assets | Chapter 9: Traffic and Transport incorporates a consideration of the potential for likely significant effects on transport. Chapter 10: Topics Scoped Out (Socioeconomic, Recreation and Tourism) incorporates a consideration of potential for likely significant effects on socio-economic factors, recreation and tourism. |
| Land | Chapter 10: Topics Scoped Out (Land Use), incorporates a consideration of potential for likely significant effects on land use including agriculture and forestry. |
| Population and Human Health | Chapter 10: Topics Scoped Out (Noise; and Population and Human Health) incorporates a consideration of potential for likely significant effects on human health in relation to: noise; perceived health effects related to electromagnetic fields (EMF); and potential for impact resulting from major accidents or disasters. |
| Air and Climate | Chapter 10: Topics Scoped Out (Air Quality and Climate Change) incorporates a consideration of potential for likely |

| Regulation 4 (3) Factor | How this is addressed in the Scoping Report |
|------------------------------------|--|
| | significant effects on air quality and the carbon footprint of the Proposed Development. |

2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Introduction

This chapter provides a description of the Site and the main elements of the Proposed Development. The design of the Proposed Development is currently in progress, however for the purposes of EIA scoping, the proposed area of development for the 132 kV Switching Station is shown on **Figure 2.1: Site Layout, Appendix A**.

2.2 Planning History

- 2.2.1 The south/south-east area of the Site was subject to a previous application under section 37 of the 1989 Act in 2019, which sought consent for a replacement 132 kV overhead line (OHL) from Balallan to Stornoway as well as a new switching station in the area of the Site which is the subject of this Scoping Report. The application was accompanied by an EIA Report (hereafter referred to as the '2019 EIA Report') and was withdrawn in 2020.

2.3 Site Context

- 2.3.1 The Site comprises of predominantly blanket bog habitat situated immediately east of Loch Strannadabhat, approximately 100 m south-west of the settlement of Balallan. The A859, the main road that runs north-south through the island connecting Stornoway in the north to Rodel in the south, is located along the eastern boundary of the Site, and from which access would be taken to the Switching Station.
- 2.3.2 Adjacent and surrounding land features include a mix of deep peatland including blanket bog habitats, and extensive wet heathland with cross-leaved heath. The Site and immediate surroundings are undeveloped, except for an existing track that would provide access to the Switching Station from the A859. The landscape surrounding the Site is characterised by irregular, stepped rocky topography with small hills and rocky outcrops enclosing small lochs and lochans. The Site sits within the valley of Loch Eireasort, with rugged and rocky hills to its south and north-west.

2.4 Purpose of Proposed Development

- 2.4.1 The Proposed Development is one element of a wider project, the Western Isles Connection. The Western Isles Connection will provide a connection to the Western Isles from the mainland of Scotland, allowing renewable energy generation to connect to the existing transmission network on the mainland.
- 2.4.2 The need for the Proposed Development is two-fold:
- The Isle of Lewis in the Western Isles is supplied by SSEN Transmission's network via a single radial circuit arrangement, originating from the switching station at Fort Augustus via Skye. The peak demand on Lewis and Harris currently exceeds the capacity of the existing radial circuit due to the circa 30 MW limitation of the cable section. Diesel generation at Battery Point and Arnish is used as standby generation on the island, in order to secure demand on Lewis and Harris when the radial circuit is unavailable.
 - Secondly, the Isle of Lewis is well located to harness renewable generation, particularly from wind and marine sources. This comprises 384 MW of onshore

transmission contracted wind generation and 1,235 MW of potential offshore generation (as part of the Scotwind leasing round). Therefore, there is a need for additional transmission export capability from the Western Isles to the mainland.

- 2.4.3 The consented Muaitheabhal windfarm will connect to the Proposed Development via a proposed new high voltage OHL which will be subject to a separate application.

2.5 Proposed Development Components

- 2.5.1 The Proposed Development consists of a 132 kV Switching Station, a key component of the electrical transmission network. A switching station facilitates the routing of electrical power between multiple transmission circuits, ensuring efficient and reliable power distribution. It plays a critical role in maintaining grid stability by enabling the monitoring and control of power flow. Additionally, it allows for the sectionalisation and isolation of transmission circuits for maintenance or fault management, minimising disruptions and ensuring continued network operation.
- 2.5.2 The Site would be approximately 69 ha, within which the on-site infrastructure would have an estimated operational area of approximately 1.54 ha. The proposed location of the Switching Station is illustrated in **Figure 2.1: Site Layout, Appendix A** and has been determined based on the environmental assessments, engineering and cost analysis and stakeholder consultation undertaken to date.
- 2.5.3 The infrastructure would be situated on a platform and housed in buildings up to a height of 13 m, comprising a steel portal frame with metal cladding and roof. There would be five Gas Insulated Switchgear (GIS) Bays including:
- one 132 kV Feeder Bay for the Harris-Balallan 132 kV circuit;
 - two 132 kV Feeder Bays for Lewis Hub 132 kV substation;
 - one 132 kV Feeder Bay for 189 MW Muaitheabhal Wind Farm; and
 - one 132 kV Feeder Bay for 66 MW Heastabhal Wind Farm.
- 2.5.4 There would also be space provision for an additional two 132 kV bays to facilitate future connections.
- 2.5.5 Additional areas will be required for operational landscaping, screening, drainage, peat management and biodiversity enhancement.
- 2.5.6 Access to the Site during both construction and operation would be taken off the A859 in the southern part of the Site. The existing tracks would be used and upgraded where feasible and a new access track provided.

Ancillary Works

- 2.5.7 Ancillary works would be required to facilitate construction and operation of the Proposed Development and would include:
- vegetation and site clearance;
 - excavation and groundworks;
 - potential extraction of rock from borrow pits within the Site;
 - establishment of new temporary and permanent access for the construction and maintenance of the Proposed Development;
 - upgrade of existing or establishment of new junction bellmouths;
 - establishment and reinstatement of temporary site compounds; and

- establishment and reinstatement of borrow pit areas (if required) for peat management.

Transmission / Distribution Line Connections

- 2.5.8 Connections will be required from the Proposed Development to the existing electricity transmission network on Lewis. The connections to the existing network would comprise several overhead wooden or steel pole lines carrying voltages of up to 132 kV as well as connections of lower voltages (33 kV, probably placed underground). Underground cables would comprise Permitted Development in accordance with the Town and Country Planning (General Permitted Development) (Scotland) Order 1992, while OHLs would be the subject of separate consent application to Scottish Ministers, under the 1989 Act.

Landscape Proposals

- 2.5.9 The Applicant will consider landscape mitigation measures to provide visual screening if considered necessary and help assimilate the Proposed Development into the surrounding landscape. Such measures would also seek to provide habitat enhancement and opportunities to increase the biodiversity value of the Site.
- 2.5.10 Further details on landscaping and habitat enhancement would be provided in the EIA Report.

Peat Reuse Proposals

- 2.5.11 The Applicant will consider appropriate peat mitigation measures to reuse excavated peat on-site. For example, excavated peat may be used to dress verges or reinstate areas of degraded peat within the Site.
- 2.5.12 Further details on peat management and reinstatement would be provided in the EIA Report.

2.6 Construction

Construction Programme

- 2.6.1 It is anticipated that construction would commence in 2027 (subject to consents and approvals being granted), and completed in 2029, with full energisation of the Proposed Development scheduled for 2030.
- 2.6.2 The detailed construction phasing and programme could be subject to change as the design progresses. Further information will be provided in the EIA Report on the indicative construction programme and phasing.
- 2.6.3 Construction hours, including construction deliveries, are anticipated to be as follows unless otherwise agreed with CnES:
- Monday to Friday – 07:00 to 19:00;
 - Saturday – 07:00 to 19:00; and
 - Sundays and Bank Holidays – no construction works.
- 2.6.4 The Principal Contractor may, following prior agreement with CnES, undertake construction works outside of these hours when there is a programme critical

operation that cannot be postponed until the next working day, or where it is more appropriate to undertake the works outside these hours.

- 2.6.5 Every effort would be made to cause least disturbance to landowners and local residents during construction by providing regular updates on works via the Principal Contractor.

Construction Compounds

- 2.6.6 Temporary construction compounds would be required during construction, located within the Site. It is anticipated that the Principal Contractor will identify a single main compound area, located in the southern part of the Site, adjacent to the proposed Switching Station location and access tracks. The compound(s) would provide office and welfare facilities for site staff, parking, laydown areas and holding and servicing space for construction plant.

Construction Access

- 2.6.7 To construct the Proposed Development, existing access tracks off the A859 in the southern part of the Site would be used where possible and upgraded where required. Some utility diversions may also be required. This would be determined as the project develops in more detail.
- 2.6.8 Full details of construction traffic and related analysis of transportation routes will be provided in a Construction Traffic Management Plan. Any temporary tracks would be restored as closely as possible to their pre-existing condition using natural regeneration techniques on completion of the works.
- 2.6.9 The construction will give rise to regular numbers of staff transport movements, with small work crews travelling to work site areas. It is anticipated that the main compound area, with a safe area for parking away from the public highway.
- 2.6.10 The EIA Report would provide a summary of the total anticipated traffic movements associated with construction of the Proposed Development, broken down by phases.

Construction Management

- 2.6.11 A Construction Environmental Management Plan (CEMP) will be prepared by the Principal Contractor so that all construction activities are undertaken in line with the Applicant's standard practices. The CEMP will be developed in consultation with the Applicant, and key consultees as required. The principal objective of the CEMP is to provide information on the proposed infrastructure and to aid in avoiding, minimising and controlling adverse environmental impacts associated with the Proposed Development. Furthermore, the CEMP will aim to define good practice as well as specific actions required to implement mitigation identified in the EIA, the planning process and/or other licencing or consenting processes. Mitigation measures relevant to the Proposed Development will be incorporated into the overall CEMP for the project. The CEMP will be updated during the pre-construction phase and form part of the contractual requirements between the Applicant and the Principal Contractor.
- 2.6.12 The CEMP will include reference to and adhere to applicable General Environmental Management Plans (GEMPs) and Species Protection Plans (SPPs), as appropriate. GEMPs have been developed by the Applicant and all construction work would be

undertaken in accordance with these. SPPs have been developed by the Applicant and have been agreed with NatureScot. These would be implemented during construction of the Proposed Development.

2.7 Operation and Management of the Proposed Development

It is anticipated that the Proposed Development will be operational for 40 years or more. At the end of this period, the Proposed Development could potentially be decommissioned, or the infrastructure upgraded to continue operation.

- 2.7.1 Once operational, it is likely that monthly site visits would be made to the Proposed Development by maintenance personnel to undertake routine checks and operational switching. More specialist works, such as maintenance repairs or environmental management, will be required sporadically.

2.8 Residues and Emissions

- 2.8.1 The EIA Regulations require that the EIA Report provides an estimate, by type and quantity, of expected residues and emissions (such as water, air and soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced) resulting from the construction and operation of the Proposed Development.
- 2.8.2 **Table 2.1** provides a summary of the anticipated residues and emissions for the purpose of informing the scope of the EIA.

Table 2.1 Residues and Emissions

| Topic | Potential residue/emission |
|-------|---|
| Water | <p>Construction:</p> <p>Surface water runoff and discharge is likely during construction. In addition, occasional discharges may arise from pumping, or over-pumping to dewater foundation excavations. Pollution sources may arise from soil erosion or from oil/ fuel or chemical storage and use.</p> <p>Operation:</p> <p>No water emissions or pollution sources have been identified for the operational phase.</p> |
| Air | <p>Construction:</p> <p>The construction phase would require the transport of people and materials by air, road and ferry, with associated emissions to the atmosphere. There are no air quality management areas within the vicinity of the Proposed Development. No significant air emissions are anticipated.</p> <p>Operation:</p> <p>Due to the nature of the Proposed Development, no significant point source or diffuse air emissions would be produced during its operation.</p> |

| Topic | Potential residue/emission |
|---------------------|--|
| Soil and subsoil | <p>Construction: Soil and subsoil excavation, handling and storage would be required during construction. All soil and subsoil would be stored temporarily for use in reinstatement. An outline Peat Management Plan will be included as an appendix to the EIA Report, which will detail the proposed management techniques for handling, storing and depositing peat for reinstatement.</p> <p>Operation: No requirement for soil or subsoil excavation or handling during the operation phase has been identified. No pollution sources have been identified for the operational phase.</p> |
| Noise and Vibration | <p>Construction: Increased noise levels could result from construction activities and increased traffic flows during construction. Liaison with landowners and local residents will be carried out to ensure minimal disturbance. Appropriate working hours will also be agreed with the local planning authority.</p> <p>Operation: The Proposed Development would generate noise during operation. The location of residential receptors in relation to the Proposed Development was a consideration in the site selection and design process and the predicted noise levels are within acceptable limits without the requirement for mitigation.</p> <p>No significant sources of vibration have been identified for the operation of the Proposed Development.</p> |
| Light | <p>Construction: The temporary construction compounds are likely to be equipped with lighting installations for use during low light conditions and security lighting. All temporary lighting installations would be downward facing, and all lights would be switched off during daylight hours and out with working hours. Any effect would be temporary and not expected to be significant.</p> <p>Operation: Switching stations are not generally illuminated during operation. Floodlights would be installed at the Site but would only be used in the event of a fault or when essential maintenance needs to be carried out during the hours of darkness.</p> |
| Heat and radiation | <p>Construction: No heat or radiation sources have been identified during the construction phase.</p> <p>Operation: No significant heat or radiation sources have been identified during the operational phase.</p> |

| Topic | Potential residue/emission |
|-------------------------------------|---|
| Waste | <p>Construction: Construction will generate general waste in the form of domestic wastes and other materials, for example, wood, metals, plastics and stone.</p> <p>A CEMP will be prepared by the Principal Contractor which will provide details on pollution prevention control and site waste management that would be implemented during construction.</p> <p>Operation: The general maintenance of the Proposed Development has the potential to produce a small amount of waste. This is likely to be restricted to waste associated with employees and visiting contractors. All waste arising on the Site would be managed in accordance with the appropriate waste regulations.</p> |
| Electric and Magnetic Fields (EMFs) | <p>Construction: There is no potential for public or occupational exposure to EMFs above appropriate thresholds as a result of the construction of the Proposed Development.</p> <p>Operation: There is no potential for public or occupational exposure to EMFs above appropriate thresholds as a result of the operation of the Proposed Development.</p> |

3. EIA METHODOLOGY

3.1 Introduction

- 3.1.1 This Chapter sets out the approach that will be taken to complete the EIA of the Proposed Development, including reference to legal requirements, best practice and the assessment of parameters.

The EIA Report would be prepared to meet the requirements of Schedule 4 of the EIA regulations and the Institute of Environmental Management and Assessment (IEMA) Quality Mark criteria⁵. In line with requirements of Regulation 5(5) of the EIA Regulations, this EIA Scoping Report has been prepared by competent experts. The relevant expertise and qualifications of the technical team will be provided in the EIA Report.

- 3.1.2 The following chapters of this Scoping Report aim to provide sufficient detail to characterise the potential interactions between the Proposed Development and the environmental receptors identified. In presenting a rationale for the proposed scope of environmental assessment, this Scoping Report has taken the sensitivity of the current state of the environment into account, based on an understanding of the baseline conditions. This Scoping Report considers the typical construction and operational activities, physical characteristics and potential emissions/residues associated with the Proposed Development.
- 3.1.3 Where there is sufficient evidence to support scoping a topic out of the EIA process, this is presented. Otherwise, where it is considered that there is the potential for likely significant effects, this Scoping Report provides details of the proposed scope or detailed impact assessment, including the approach to further baseline data collection and brief details of the proposed methodology for impact assessment that would be employed for each topic.

3.2 Structure of EIA Report

- 3.2.1 The EIA Report would be structured as follows:

- Volume 1 – Non-Technical Summary (NTS), summarising the project and its likely significant effects;
- Volume 2 - Main Report, describing the project, the alternatives considered, and including an assessment undertaken for each of the environmental topics scoped into the EIA which will identify the likely significant effects from the Proposed Development and recommend suitable mitigation measures to reduce such effects;
- Volume 3a – Figures, providing supporting figures to the assessments carried out as part of Volume 2;
- Volume 3b – Visualisations, to include visualisations of the Proposed Development produced from agreed viewpoint locations described in Volume 2; and
- Volume 4 – Technical Appendices, providing supporting technical appendices to the assessments carried out as part of Volume 2.

⁵ <https://www.iema.net/corporate-programmes/eia-quality-mark> (accessed: 10/10/24)

3.3 EIA Methodology

Identification of Baseline

- 3.3.1 To identify the scale of likely significant effects as a result of the Proposed Development, it is necessary to establish the existing baseline environmental conditions.
- 3.3.2 The baseline scenario would be established through the following methods, where relevant:
- Desk-based studies, including review of existing information;
 - Site visits and surveys;
 - Modelling;
 - Review of relevant national and local planning policies;
 - Consultation with the relevant statutory consultees; and
 - Identification of Sensitive Receptors.
- 3.3.3 Consistent with Part 1 of Schedule 4 of the EIA Regulations, an identification of the aspects of the environment likely to be significantly affected by the Proposed Development has been undertaken to inform this Scoping Report. In particular; this has focused on potential impacts upon population, fauna, flora, soil, material assets including the architectural and archaeological heritage, landscape and inter-relationship between those factors.

Assessment of Likely Significant Environmental Effects

- 3.3.4 Each assessment chapter will include a:
- Detailed methodology covering the approach to establishing the current state of the baseline environment, the relevant baseline scenario used in the assessment (which may be the current baseline or a future baseline scenario) and the criteria used to identify and assess the likely significant effects;
 - Description of the relevant aspects of the current state of the environment (baseline conditions) and an outline of likely evolution of the baseline conditions in the absence of the Proposed Development (the 'do nothing' scenario) for the purpose of defining any relevant 'future baseline' scenarios that may be used as a basis for the impact assessment;
 - Description of the likely significant effects;
 - Description of the measures proposed to avoid, prevent, reduce, or, if possible, offset any likely significant effects (mitigation measures) and where appropriate, any proposed monitoring arrangements; and
 - Description of residual effects remaining following the implementation of proposed mitigation measures.
- 3.3.5 The description of the likely significant effects will cover direct effects and indirect (including secondary) effects as a result of construction or operational activities. The description of effects will identify the effect duration (short-term, medium-term and long-term), whether effects are permanent or temporary, and if effects can be categorised as adverse or beneficial.

- 3.3.6 As stated in Institute of Environmental Management and Assessment (IEMA) 'Guidelines for Landscape and Visual Impact Assessment 3 (GLVIA3)', *'identifying significant effects stresses the need for an approach that is in proportion to the scale of the project that is being assessed and the nature of its likely effects. Judgement needs to be exercised at all stages in terms of the scale of the investigation that is appropriate and proportional.'*
- 3.3.7 The result of the assessment is the determination of whether the likely effect of the Proposed Development on the receptor in the study area would be significant or not significant, and adverse or beneficial.
- Several criteria will be used to determine whether the likely environmental effects of the Proposed Development will be deemed 'significant' in terms of the EIA Regulations. The effects will be assessed quantitatively where possible. Generally, the significance of effects will be assessed using one of more of the following criteria:
- International, national and local standards;
 - Sensitivity of receiving environment;
 - Extent and magnitude of the effect; and
 - Reversibility and duration of the effect.
- 3.3.8 Where no published standards exist, the assessments presented in the technical chapters will describe the professional judgements (assumptions and value systems) that underpin the attribution of significance. For certain technical topics, such as ecology, widely recognised published significance criteria and associated terminology will be applied and these are presented in the technical chapters and associated appendices where relevant.
- 3.3.9 The assessment of significance will consider the magnitude of change (from the baseline conditions), the sensitivity of the affected environment/receptors and (in terms of determining residual effects) the extent to which mitigation and enhancement will reduce or reverse adverse effects. In general, effects of major or moderate significance are considered significant in terms of the EIA Regulations, while effects of minor or negligible significance are considered not significant.
- 3.3.10 The scope of the application is limited to construction and operation of the Proposed Development. The Proposed Development would not have a fixed operational life. It is assumed that the Proposed Development will be operational for 40 years or more. The effects associated with the construction phase can be considered to be representative of worst-case decommissioning effects, and therefore no separate decommissioning assessment is proposed as part of the EIA Report.

Cumulative Effects

- 3.3.11 The EIA Regulations require that, in assessing the effects of a particular development proposal, consideration is also given to the cumulative effects which might arise from the proposal in conjunction with other reasonably foreseeable projects which have the potential to result in significant cumulative effects in combination with those arising from the Proposed Development.
- 3.3.12 Cumulative schemes within 5 km from the Site would be considered. At this stage, the following cumulative schemes have been identified and would be considered in the EIA Report:

- Harris to Stornoway 132kV OHL Replacement (Consented, construction commencing in 2025) (ECU Ref: ECU00004490), which would connect into the Proposed Development;
- Heastabhal Wind Farm (EIA Scoping stage) (ECU Ref: ECU00005011), the site boundary for which overlaps with the Site; and
- Other SSEN Transmission plans or projects, such as the proposed Muaitheabhal Wind Farm OHL Connection, which at the time of writing this Scoping Report, are not yet the subject of any application or consent (but are foreseeable to the Applicant and relevant to this EIA).

3.3.13 The list of developments to be considered in the cumulative effects assessment will be finalised following consultation with the relevant consultees, approximately four months prior to submission to allow sufficient time to compile the EIA Report.

3.4 Assumptions and Limitations

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

- Baseline conditions have been established from a variety of sources, including historical data but, due to the dynamic nature of certain aspects of the environment, conditions would change during the construction and operation of the Proposed Development.
- Information received by third parties is complete and up to date.
- The design, construction and completed stages of the Proposed Development would satisfy minimum environmental standards, consistent with contemporary legislation, practice and knowledge.

3.5 Consultation

3.5.1 A Site Selection optioneering process took place which considered five different site options in the area. During June 2024, consultation was undertaken to seek comments from stakeholders and members of the public on the site option studies undertaken, and the rationale for, and approach to, the selection of the proposed location for the Switching Station.

3.5.2 A summary of the consultation undertaken to date is provided below.

- Public consultation events were held in October 2023 and June 2024, providing face-to-face public engagement, with a mail drop undertaken in advance to advertise the events.
- A Consultation Booklet was produced for each public consultation event, providing a summary of the site selection process.
- A Digital Consultation Document, presenting the key information alongside interactive maps and images, was presented to statutory consultees.

3.5.3 The consultation process and feedback received will be documented in a Report on Consultation which will accompany the planning application.

3.5.4 Members of the public and other interested stakeholders will be invited to attend further information events during the EIA and consenting phase of the Proposed Development, and the local community, community councils, elected

representatives, statutory and non-statutory stakeholders will continue to be engaged with as the project progresses.

4. LANDSCAPE AND VISUAL AMENITY

4.1 Introduction

4.1.1 This chapter discusses the scope, approach and methodology for the Landscape and Visual Impact Assessment (LVIA) with respect to the Proposed Development. This chapter is accompanied by the following figures:

- Figure 4.1: Preliminary Zone of Theoretical Visibility;
- Figure 4.2: Landscape Character Types;
- Figure 4.3: Landscape Designations and Classifications;
- Figure 4.4: Visual Receptors;
- Figure 4.5: Residential Properties within 1 km; and
- Figure 4.6: Viewpoint Locations.

4.2 Baseline Conditions

4.2.1 A preliminary Zone of Theoretical Visibility (ZTV) has been prepared for the Proposed Development and is shown in **Figure 4.1: Preliminary Zone of Theoretical Visibility, Appendix A**. The ZTV suggests that the Proposed Development is expected to have a subdued visual impact beyond 2.5 km, given the Site's positioning within the valley landform of Loch Eireasort, and visibility of the Proposed Development is restricted beyond this valley. Therefore a study area of 2.5 km is deemed appropriate for the assessment of landscape and visual effects. While the Proposed Development may be perceptible beyond this, its scale and nature render it a minor component likely to be recessive in longer-distance views. Therefore, significant effects are anticipated to be confined to areas within a 2.5 km radius of the Site.

4.2.2 Baseline conditions within a study area of 2.5 km from the Site, are summarised below.

Site Context

4.2.3 The landscape surrounding the Site is characterised by irregular, stepped rocky topography and small lochans, with Loch Strannadabhat located immediately west and south of the Site. The Site sits at the western end of the valley of Loch Eireasort (approximately 600 m east of the Site), with rugged and rocky hills to its south and northwest.

4.2.4 The closest transport link to the Site is the A859, on the eastern boundary of the Site, which is an artillery road that connects Stornoway from northeast of the Site to the south of the Isle of Lewis. Some crofting and settlements are seen along the sides of the road at Balallan. The A859 junction with the B8060 is approximately 460m north-east of the Site, and the B8060 routes along the south of Loch Eireasort, connecting some small settlements.

4.2.5 The majority of the settlement pattern around the Site is located to the east and associated with Loch Eireasort and the gentler sweeping slopes. The north and west of the Site have a sense of remoteness and are largely uninhabited, except for some isolated croft houses.

Landscape Fabric

- 4.2.6 The Site is situated on an elevated outcrop with peat vegetation cover. It is undeveloped, except for an existing farmer's track that provides the Site access from the A859. The wider landscape consists of small hills and rocky outcrops enclosing small lochs and lochans. There is limited tree cover within the study area, with vegetation predominantly consisting of peat vegetation. Built infrastructure in the study area is small to medium scale, and consists of transport routes, linear settlements with some scattered bungalows/farmsteads, and both low and high voltage OHLs.

Landscape Character

- 4.2.7 **Figure 4.2: Landscape Character Types, Appendix A** shows the location and extent of landscape character types (LCTs) within the study area. The key sensitive landscapes of relevance to the LVIA with potential for significant effects on landscape character are:
- LCT 323 Rocky Moorland – Outer Hebrides, the 'host' LCT in which the Site is located;
 - LCT 317 Gently Sloping Crofting, within which the north-eastern most area of the Site is located; and
 - LCT 326 Mountain Massif, situated on the south-western edge of the study area, which at its closest point, is situated approximately 300 m west of the Site.

Landscape Designations and Classifications

- 4.2.8 The Site is not subject to any landscape designations. The following classified landscapes are located within the study area (refer to **Figure 4.3: Landscape Designations and Classifications, Appendix A**) and would be subject to potential visibility of the Proposed Development:
- Wild Land Area 30 Harris – Uig Hills, which, at its closest, lies 400 m north-west of the Site; and
 - Wild Land Area 31 Eisgein, 2.2 km south of the Site.
- 4.2.9 The South Lewis, Harris and North Uist National Scenic Area is located approximately 8.4 km south-west of the Site, outside of the study area.

Visual Amenity

- 4.2.10 Visual amenity is primarily concerned with scenic views available to people and the interplay of landscape characteristics within them. This includes:
- Views from summits;
 - Views from recreational routes;
 - Views from cultural monuments;
 - Views of lochs and glens;
 - Views from settlements and residential properties, and isolated dwellings and farmsteads; and
 - Views from key transport routes.

- 4.2.11 Visual effects are experienced by people at both static locations and sequentially as they travel along transport or recreational routes. Based on this analysis a series of visual receptors have been identified with which to assess potential effects on the visual amenity of the study area and these are shown on **Figure 4.4: Visual Receptors, Appendix A** and described below.

Settlements

- 4.2.12 There are several settlements in the study area with potential for inter-visibility with the Proposed Development:
- Balallan is a linear settlement, located 100 m north-east of the Site, along the A859, and approximately 900 m north-east of the proposed Switching Station location. Houses consist mainly of detached bungalows and 2-storey houses, and occur at intervals along the A859;
 - Sildinis is a small settlement, located 2 km east from the Site, branching off to the north of B8060 towards Loch Eireasort. The settlement comprises a few single-storey bungalows and a public house/hotel; and
 - Arivruaich is a linear settlement, located 1.6 km south-west of the Site along the A859. The settlement is comprised of scattered single-storey bungalows.

Transportation Routes

- 4.2.13 Key roads within the study area that would have potential views of the Proposed Development are as follows:
- A859, on the eastern boundary of the Site, is the main transport route through the area, connecting Stornoway in the north to Harris in the south;
 - B8060, located on the south side of Loch Eireasort, runs along the eastern boundary of the Site, approximately 400 m from the proposed Switching Station location. The B8060 connects the A859 with the settlements of Sildinis, Tabost, Kershader and Garyvard, continuing south to Gravir; and
 - Eishken Road, a single-track road located to the south of the B8060, connecting the A859 with Eshken on the eastern boundary of the Site.

Recreational Routes and Summits

- 4.2.14 There are no core paths within the study area. The Hebridean Way, a long-distance cycling and walking route that typically follows the A859, and approaches Balallan from the south-west is located in the study area. The trail temporarily splits into two alternative routes just south of Loch Stranndabhat: the cycle route continues to follow the A859, while the walking route heads around the eastern and northern sides of Loch Stranndabhat and Loch Cuthaig, before reconnecting with the cycle route at Balallan. At their closest, the walking route is located 550 m west of the Site, while the cycle route is located beyond the eastern boundary of the Site.
- 4.2.15 There are numerous nearby summits that may be used by hill walkers. These include the following:
- Ròineabhal, 281 m Above Ordnance Datum (AOD) and located 3 km northwest of the Site;
 - Sullanan Ard, 116 m AOD and located 1.5 km southwest of the Site;
 - Aird Dhubh, 77 m AOD and located just over 3 km south of the Site; and
 - Dùn Chonaill, 143 m AOD and locates just over 3 km south of the Site.

- 4.2.16 The cultural heritage asset, Pairc Land Raiders Cairn, also provides a viewpoint. It is located 220 m east of the proposed Switching Station location.

4.3 Sensitive Receptors

- 4.3.1 The following sensitive receptors have been identified in the study area with the potential to experience significant effects.

Landscape Receptors

- LCT 323 Rocky Moorland – Outer Hebrides;
- LCT 317 Gently Sloping Crofting; and
- LCT 326 Mountain Massif.

Visual Receptors

- Users of the A859;
- Users of the B8060;
- Users of the Eishken Road (connects the A859 with Eishken);
- Hebridean Way Cycle Route;
- Hebridean Way Walking Route;
- Summits within 2.5 km of the Site, including Ròineabhal, Sullanan Ard, Aird Dhubh, and Dùn Chonaill;
- Pairc Land Raiders Cairn; and
- Residential receptors at Balallan, Sildinis and Arivruaich.

4.4 Potentially Significant Effects

- 4.4.1 **Table 4.1** and **Table 4.2** below outline the potential significant landscape and visual effects to be scoped into the EIA and reasons for their inclusion.

Table 4.1 Potential Construction Effects

| Receptor | Potential significant effects |
|--------------------------|--|
| Landscape | |
| Landscape Fabric | Potential significant direct effect on the landscape fabric of the Site, however, likely to be highly localised and of short duration. |
| Landscape Character Type | Potential significant direct effects on the host LCT (LCT 323: Rocky Moorland – Outer Hebrides) and indirect effects on surrounding LCTs (LCT 326 Mountain Massif and LCT 317 Gently Sloping Crofting). These effects would, however, be alleviated by suitable construction controls and mitigation measures as defined in a CEMP. |
| Visual Amenity | |
| Road users | Potential significant effect on neighbouring roads, as identified in Section 4.3. Effects are likely to be localised and of limited duration. |
| Recreational routes | Potential significant effect on users of recreational routes, summits and vantage points within the study area, as identified in Section 4.3. |

| Receptor | Potential significant effects |
|--|--|
| | Any effects are likely to be along a short section, transient, and of a short duration. |
| Settlements and residential properties | Potential significant effect on those settlements and properties in close proximity to the Site, as identified in Section 4.3. Any effects would be of a short duration. |

Table 4.2 Potential Operational Effects

| Receptor | Potential significant effects |
|--|--|
| Landscape | |
| Landscape Fabric | Potential significant direct effect on the landscape fabric of the Site, however, effects are likely to be highly localised and minimised by the embedded mitigation. |
| Landscape Character Type and Seascape Character Type | Potential significant direct effects on the host LCT (LCT 323: Rocky Moorland – Outer Hebrides) and indirect effects on surrounding LCTs (LCT 326 Mountain Massif and LCT 317 Gently Sloping Crofting). |
| Visual Amenity | |
| Road users | <p>Potential significant effect on neighbouring roads, as identified in Section 4.3.</p> <p>Effects will be based on the experience of tourists, and visitors rather than commuters in the LVIA. This would provide a ‘worst case’ sensitivity.</p> <p>The visual effects that will be assessed include sequential effects, lighting effects and cumulative effects.</p> |
| Recreational routes | <p>Potential significant effects on recreational routes, summits and vantage points within the study area, as identified in Section 4.3.</p> <p>Visual effects, including sequential effects, lighting effects, and cumulative effects on the following summits will be addressed in the LVIA.</p> |
| Settlements and residential properties | Potential significant effect on those settlements and properties in close proximity to the Site, as identified in Section 4.3. Visual effects, including sequential effects, lighting effects and cumulative effects on views from settlements and residential receptors will be addressed in the LVIA. |

- 4.4.2 Potential operational effects of daytime and nighttime lighting on landscape character types and visual amenity will be considered within the LVIA.
- 4.4.3 In assessing potential cumulative landscape and visual effects, consideration will be given to cumulative effects arising from combined and/ or consecutive (concurrent) visibility (where the observer is able to see two or more developments from one viewpoint location), and sequential effects (where a number of similar developments would be visible individually or simultaneously over a sequence of connected viewpoints, such as would be found along a road or footpath). Cumulative developments within 5 km of the Site would be considered for the LVIA.

4.5 Issues Scoped Out

- 4.5.1 The following LCTs are located within the study area but will be scoped out of the assessment on the basis that there is no theoretical visibility of the Proposed Development:
- LCT 318 Linear Crofting;
 - LCT 319 Dispersed Crofting;
 - LCT 322 Boggy Moorland – Outer Hebrides; and
 - LCT 324 Cnoc and Lochan.
- 4.5.2 An assessment of Seascape Character Types (SCTs) within the study area will be scoped out of the EIA for the following reasons:
- SCT Type 9 Sounds, Narrows and Islands, as the ZTV indicates that there is no theoretical visibility;
 - SCT Type 13 Low Rocky Island Coasts, as significant effects on the special qualities and integrity are unlikely as the SCT is characterised by open sea views and crofting, oriented away from the Site; and
 - SCT Sub Type 13c Fragmented Low Rocky Island Coasts, for the same reasons as SCT Type 13.
- 4.5.3 No Wild Land Impact Assessment is proposed as the Site is not located within or adjacent to a WLA. This is considered consistent with the provisions of Policy 4 (g) of NPF 4 which states that “*buffer zones around wild land will not be applied, and effects of development outwith wild land areas will not be a significant consideration.*”. Upon review of the WLA special character and theoretical visibility of the Site within the WLA, no significant effects on the surrounding WLAs would be likely to occur and the effects on WLAs will not be considered in the EIA.

4.6 Assessment Methodology

Study Area

- 4.6.1 A preliminary ZTV has been prepared for the Proposed Development and is shown in **Figure 4.1: Preliminary Zone of Theoretical Visibility, Appendix A**. It is considered that the Proposed Development would be visually recessive to an average observer beyond a distance of 2.5 km. This premise has been supported by a site visit. Consequently, it has been assumed, for the purposes of the LVIA, that significant landscape or visual effects would be limited to locations within 2.5 km of the Site.
- 4.6.2 A detailed Residential Visual Amenity Assessment (RVAA) will also be undertaken in respect of individual properties within a 1 km Study Area. These are shown on **Figure 4.5: Residential Properties within 1 km, Appendix A**.

Assessment of Effects

- 4.6.3 The LVIA will consider potential impacts and likely significant effects on:
- landscape fabric, caused by changes to the form of the landscape and its physical constituents;
 - landscape character, caused by changes in the key characteristics of the landscape as a result of the Proposed Development; and

- visual amenity, caused by changes in the composition and scenic qualities of views on visual amenity as a result of the Proposed Development.

Approach to Mitigation

- 4.6.4 The primary mitigation approach will be embedded within the proposals to reduce landscape and visual effects, including cumulative effects, through the choice of location, iterative design of the layout and associated infrastructure, as seen by key receptors. Consideration will be given to the design of ancillary elements to minimise effects on nearby sensitive visual receptors.

Key Terms of Reference

- 4.6.5 The LVIA would be prepared in accordance with the following guidance and professional standards:
- The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017⁶;
 - National Planning Framework (NPF4)⁷;
 - Guidelines for Landscape and Visual Impact Assessment (GLVIA) Third Edition, Landscape Institute and Institute of Environmental Management and Assessment (2013)⁸;
 - Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (2024)⁹;
 - Landscape Character Assessment: The Countryside Agency and NatureScot (2002)¹⁰;
 - Technical Guidance Note 06/19 Visual Representation of Development Proposals, Landscape Institute (2019)¹¹;
 - Technical Guidance Note 02/17 Visual Representation of Wind Farms, Version 2.2, NatureScot (2017)¹²;
 - Technical Guidance Note 02/19 Residential Visual Amenity Assessment (RVAA), Landscape Institute (2019)¹³;
 - NatureScot Commissioned Report 103: An Assessment of the Sensitivity and Capacity of the Scottish Seascape in Relation to Windfarms (2005)¹⁴;

⁶ Gov.uk. (2017). The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017. [Online]. Scottish Statutory Instruments. Available at: https://www.legislation.gov.uk/ssi/2017/102/pdfs/ssi_20170102_en.pdf [Accessed 24-07-2024].

⁷ Scottish Government. (2023). National Planning Framework 4. [Online]. Gov.scot. Available at: <https://www.gov.scot/publications/national-planning-framework-4/documents/> [Accessed 24-07-2024].

⁸ Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidance for Landscape and Visual Impact Assessment – Third Edition

⁹ Landscape Institute. (2024). Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition. Online: Landscape Institute.

¹⁰ SNH, The Countryside Agency. (2002). Landscape Character Assessment Guidance for England and Scotland. [Online]. Nature Scot. Available at: <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/what-landscape-character-assessment> [Accessed 24-07-2024].

¹¹ Landscape Institute. (2019). Visual Representation of Development Proposals Technical Guidance Note 06/19. [Online]. Landscape Institute. Available at: https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/09/LI_TGN-06-19_Visual_Representation [Accessed 24-07-2024].

¹² Landscape Institute. (2017). Visual representation of development proposals Technical Guidance Note 02/17. [Online]. Landscape Institute. Available at: <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2016/01/02-17-Visual-Representation.pdf> [Accessed 24-07-2024].

¹³ Landscape Institute. (2019). Residential Visual Amenity Assessment Technical Guidance Note 2/19. [Online]. Landscape Institute. Available at: <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/03/tgn-02-2019-rvaa.pdf> [Accessed 24-07-2024].

¹⁴ Landscape Research Group. (2005). NatureScot Commissioned Report 103: An Assessment of the Sensitivity and Capacity of the Scottish Seascape in Relation to Windfarms. [Online]. SNH. Available at: <https://www.nature.scot/doc/naturescot-commissioned-report-103-assessment-sensitivity-and-capacity-scottish-seascape-relation> [Accessed 24-07-2024].

- Guidance - Assessing the Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments, NatureScot (2021)¹⁵;
- Landscape Sensitivity Assessment Guidance (Methodology), NatureScot (2022);
- Assessing Impacts on Wild Land Areas – Technical Guidance, NatureScot (2023)¹⁶;
- Visual Impact of Scottish Transmission Assets (VISTA), Scottish & Southern Electricity Networks Transmission (2019)¹⁷;
- Guidelines for Landscape and Visual Impact Assessment – Overhead Line Projects, SSE (2024)¹⁸; and
- Technical Appended 7.1: Technical Methodologies for Visual Representation, Scottish & Southern Electricity Networks Transmission (2023)¹⁹.

Baseline Characterisation

4.6.6 The baseline, against which the Proposed Development will be assessed, will be defined using the following sources of information:

- Ordnance Survey Terrain 5 m Digital Terrain Model (DTM);
- Ordnance Survey Mapping (1:25,000);
- NatureScot Landscape Character Assessment – 2019 on-line database²⁰;
- NatureScot Commissioned Report 103: An Assessment of the Sensitivity and Capacity of the Scottish Seascape in Relation to Windfarms (2005)²¹;
- commercially available aerial photography;
- computer generated ZTVs (based on 5 m DTM data);
- field reconnaissance/ field notes; and
- site photography.

4.6.7 Fieldwork was undertaken on the 26th and 27th August 2024 to ‘groundtruth’ and verify the findings of the preliminary desktop study. ZTV mapping represents theoretical visibility and does not factor in the recessive nature of longer-distance views. It therefore shows an over-estimation of potential visibility that would be barely visible to the human eye. Actual visibility is confirmed and refined by fieldwork. Visibility is confirmed for the assessment viewpoints included in the following section for further analysis.

¹⁵ NatureScot. (2021). Guidance - Assessing the cumulative landscape and visual impact of onshore wind energy development. [Online]. Nature Scot. Available at: <https://www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments> [Accessed 24-07-2024].

¹⁶ NatureScot. (2023). Assessing impacts on Wild Land Areas - technical guidance. [Online]. NatureScot. Available at: <https://www.nature.scot/doc/assessing-impacts-wild-land-areas-technical-guidance> [Accessed 24-07-2024].

¹⁷ SSEN. (2016). Visual Impact of Scottish Transmission Assets (VISTA). [Online]. SSEN. Available at: <https://www.ssen-transmission.co.uk/globalassets/documents/vista/vista-policy-document.pdf> [Accessed 24-07-2024].

¹⁸ SSE. (2024). Guidelines for Landscape and Visual Impact Assessment - Overhead Line Projects. Online: SSE.

¹⁹ SSEN. (2023). Technical Appended 7.1: Technical Methodologies for Visual Representation. [Online]. SSEN. Available at: <https://www.ssen-transmission.co.uk/globalassets/projects/coire-glas-section-37-documents/eia-report-volume-4-technical-appendices/volume-4-technical-appendix-7.1-technical-methodologies-for-visual-representation.pdf> [Accessed 24-07-2024].

²⁰ Available at <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions> (Last accessed 24-07-2024)

²¹ Available at <https://www.nature.scot/doc/naturescot-commissioned-report-103-assessment-sensitivity-and-capacity-scottish-seascape-relation> (Last accessed 24-07-2024)

Assessment Viewpoints

- 4.6.8 To inform and verify the assessment findings, a series of preliminary assessment viewpoints have been identified. The viewpoints have been selected to provide a range of representative views to establish an overview ‘in the round’ from a range of LCTs, classified landscapes, and visual receptors within the study area. The preliminary list of assessment viewpoints is set out in **Table 4.3** and their location shown on **Figure 4.6: Viewpoint Locations, Appendix A**.

Table 4.3 Proposed Viewpoints and associated Visual and Landscape Receptors

| VP | Name | Location (Easting & Northing) | | Visual Receptors at Viewpoint | Landscape Receptors at Viewpoint |
|----|--|-------------------------------|--------|--|---|
| 1 | Aird Dhubh | 125521 | 916490 | Recreational receptors - (hill walkers) | LCT 323 Rocky Moorland – Outer Hebrides |
| 2 | A859, Arivruaich | 125123 | 917855 | Recreational receptors (cyclists) and nearby residential receptors and road users. | LCT 323 Rocky Moorland – Outer Hebrides |
| 3 | A859, Kintaravay | 125644 | 918654 | Recreational receptors (cyclists) and road users. | LCT 323 Rocky Moorland – Outer Hebrides |
| 4 | Hebridean Way, Airigh Gil a' Bhealaich | 125235 | 919470 | Recreational receptors (hill walkers) | LCT 326 – Mountain Massif |
| 5 | Pairc Land Raiders Cairn | 126054 | 919540 | Recreational receptors | LCT 323 Rocky Moorland – Outer Hebrides |
| 6 | Hebridean Way, Airigh Gil a' Bhealaich | 125166 | 920462 | Recreational receptors (hill walkers) | LCT 323 Rocky Moorland – Outer Hebrides |
| 7 | A859, Balallan | 126536 | 920046 | Recreational receptors (cyclists) and nearby residential receptors and road users. | LCT 317 Gently Sloping Croft |
| 8 | B8060, Western Isles | 126835 | 919859 | Nearby residential receptors and road users. | LCT 317 Gently Sloping Croft |

| VP | Name | Location (Easting & Northing) | | Visual Receptors at Viewpoint | Landscape Receptors at Viewpoint |
|----|------------------|-------------------------------|--------|--|--|
| | | | | | SCT Type 13 Low Rocky Island Coasts and SCT Sub Type 13c Fragmented Low Rocky Island Coasts. |
| 9 | B8060, Sildinis | 127899 | 919564 | Nearby residential receptors and road users. | LCT 317 Gently Sloping Croft |
| 10 | Tomair, Balallan | 128515 | 920771 | Nearby residential receptors and road users. | LCT 317 Gently Sloping Croft |

- 4.6.9 Photography from each viewpoint location will be taken using a digital SLR camera and will follow Landscape Institute Technical Guidance Advice Note 06/19: Visual Representation of Development Proposals²². Fieldwork will be undertaken to capture winter photography. Where this is not possible and the seasonal variation in leaf cover may give rise to greater visibility in the winter this will be noted.
- 4.6.10 The LVIA submission will present a photograph showing the 90-degree baseline view from each viewpoint and an indicative visualisation will be presented to illustrate the potential view following the development of the Proposed Development. A 3D model, prepared in Ventus True View visualisation software will be montaged into all 10 baseline photographs to show the scale and extent of the Proposed Development. The model will be used to show the Proposed Development in Year 1 post-construction following the implementation of the Landscape and Mitigation Plan. Visual representation will take cognisance of NatureScot Technical Guidance 02/17: *Visual Representation of Wind Farms*²³.

4.7 Summary Questions to Consultees

- 4.7.1 The LVIA will identify and evaluate the likely residual effects of the Proposed Development on landscape and visual receptors within the study area. The effects of the Proposed Development on landscape character and on views and visual amenity will be assessed and mitigation measures, where appropriate, will be proposed to prevent, reduce, or offset any likely significant adverse effects identified.
- 4.7.2 As part of the request for an EIA Scoping Opinion, the Applicant would appreciate feedback on the proposed scope of the LVIA, specifically with regards to the following.
1. Do consultees agree with the extent of the Study Areas proposed: 2.5 km for the LVIA, 5 km for the cumulative assessment and 1 km for the RVAA?
 2. Do consultees agree that an assessment of impacts on WLAs and Seascape Character Types can be scoped out of the EIA?

²² Available at https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/09/LI_TGN-06-19_Visual_Representation.pdf (last accessed 24-07-2024)

²³ Available at <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2016/01/02-17-Visual-Representation.pdf> (last accessed 24-07-2024)

3. Do consultees agree that the location of assessment viewpoints proposed will provide a representative basis for the assessment?
4. Have consultees identified any further landscape or visual receptors of relevance to be considered within the assessment (i.e., where it is expected that significant effects may occur)?

5. CULTURAL HERITAGE

5.1 Introduction

- 5.1.1 This chapter of the Scoping Report provides an overview of the cultural heritage baseline within and in the vicinity of the Site, describes the potential impacts associated with construction and operation of the Proposed Development, and presents the assessment methodology to be used in the cultural heritage impact assessment.

5.2 Baseline Conditions

- 5.2.1 The cultural heritage baseline summarised below was identified through a desktop study, drawing on data from the CnES Historic Environment Record (HER), the National Record of the Historic Environment (NRHE) and designation lists held by Historic Environment Scotland (HES). The data from HES was obtained in February 2025 and data from the HER was obtained in May 2023. Both datasets will be refreshed in advance of the EIA Report phase.
- 5.2.2 A walkover survey covering part of the Site was carried out in 2018, to inform an EIA for the Balallan to Stornoway 132 kV OHL replacement. Data from that survey has been used to inform the baseline assessment in this Scoping Report. A further walkover will be undertaken to inform the EIA.

Statutory Protected Sites

- 5.2.3 There are no Scheduled Monuments, or Listed Buildings within the Site, and no part of the Site lies within a World Heritage Site, Inventory Garden and Designed Landscape, Inventory Historic Battlefield, or Conservation Area, as illustrated on **Figure 5.1: Cultural Heritage, Appendix A**.
- 5.2.4 There are no Scheduled Monuments, Listed Buildings, World Heritage Sites, Inventory Garden and Designed Landscapes, Inventory Historic Battlefields, or Conservation Areas within 3 km of the Site.

Non-Statutory Protected Sites

- 5.2.5 There are no known heritage assets recorded in the HER within the Site.
- 5.2.6 A field survey during 2018 for the proposed Balallan to Stornoway 132 kV OHL replacement found no previously unrecorded sites or features of historic environment interest within the area of the Site it covered.
- 5.2.7 The Pairc Land Raiders Cairn (MWE 118897), a commemorative monument, is situated on a ridge outwith yet surrounded by the Site, at the northwest side of the A859 public road, southwest of Balallan. As a prominent memorial integral to local history, it is assessed as having heritage value at a local level and to be of low sensitivity.

5.3 Sensitive Receptors

- 5.3.1 Based on the characteristics of the Proposed Development, it is considered that there is no potential for significant adverse effects on the setting of designated assets in the wider landscape as there are no designated assets within 3 km of the

Site. Beyond 3 km of the Site, there no designated assets have been identified which have settings sensitive to change from the Proposed Development.

- 5.3.2 Consideration should be given to the potential adverse impact to the landscape setting of the Pairc Land Raiders Cairn (MWE 118897) as an asset with commemorative significance.

5.4 Potentially Significant Effects

- 5.4.1 Potential effects on cultural heritage associated with the construction and operation of the Proposed Development would include:
- Direct Physical Construction effects: where the physical fabric of the asset is removed or damaged as a direct result of construction work associated with the Proposed Development;
 - Indirect Physical Construction effects: such as may occur as a result of vibration from piling operations or blasting for borrow pits or quarries, from the degradation of waterlogged deposits as a result of dewatering of peat deposits, or from changes in watercourse currents resulting in increased/decreased erosion;
 - Setting effects: resulting from the Proposed Development causing change within the setting of a heritage asset that affects its cultural significance or the way in which it is understood, appreciated and experienced; and
 - Cumulative effects: arising as a result of impact interactions, either of different impacts of the proposal itself or between the impacts of other projects, or additive impacts resulting from incremental changes caused by the proposal together with other projects.

5.5 Issues Scoped Out

- 5.5.1 Assessment of the effect of the Proposed Development on the settings of designated heritage assets will be scoped out. There are no assets with those designations within 3 km of the Site.
- 5.5.2 Assessment of the effect of the Proposed Development on the settings of designated heritage assets more than 3 km from the Site will be scoped out. None have been identified beyond that distance, through initial analysis, as having settings sensitive to change arising from the Proposed Development.

5.6 Assessment Methodology

- 5.6.1 The assessment of potential effects on heritage assets within the baseline will be carried out in accordance with the standards set by the Chartered Institute for Archaeologists (CIfA), and in agreement with HES and CnES.
- 5.6.2 Direct effects on archaeological remains would be assessed, informed by the results of the desk-based study already undertaken and by further desk-based assessment of historic maps and aerial photography, and verified by field survey of the Site.

Further Baseline Characterisation

Study Areas

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

- Inner Study Area: the Site(**Figure 5.1: Cultural Heritage, Appendix A**). This area will form the study area to identify any heritage assets, both those previously recorded in the HER and on designation lists, and those identified through detailed desk-based assessment, that could be directly affected by the Proposed Development.
- Outer Study Area: A wider study area, extending to 1 km from the Site, will be used to identify heritage assets within the surrounding area and in doing so inform the archaeological potential of the Inner Study Area.

Desk Based Assessment

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

- HES Spatial Data Warehouse: for up-to-date data on the locations and extents of Scheduled Monuments, Listed Buildings, Conservation Areas, Inventory status Garden and Designed Landscapes and Inventory status Historic Battlefields;
- CnES Council's HER: for up-to-date data for the Study Area;
- The NHRE database (Canmore): for any information additional to that contained in the HER;
- Map Library of the National Library of Scotland: for Ordnance Survey maps and other historical map resources that may provide information of historic settlement and land-use;
- Aerial photography and satellite imagery (Google Earth, Bing maps, ESRI World Imagery): for the identification of sites and features potentially of historic environment value not recorded elsewhere or shown on historic maps;
- Historic Land-Use Assessment Data for Scotland (HLAMap): for information on the historic land use character of the Site; and
- Scottish Remote Sensing Portal: for 1 m DTM Lidar data (where available) covering the Inner Study Area.

Field Surveys

5.6.5 A walk-over field survey will be carried out across the Inner Study Area in order to:

- locate and record the baseline character and condition of heritage assets identified through the desk-based assessment,
- identify any other heritage assets not revealed through the desk-based study, and
- assess the archaeological potential of the Site.

5.6.6 The Pairc Land Raiders Cairn (MWE 118897) will be visited to assess the potential for setting impacts on this asset as a result of the Proposed Development.

Assessment of Effects

Assessment Method

5.6.7 The effects of the Proposed Development on heritage assets will be assessed on the basis of their type (construction effects, impacts on setting, and cumulative impacts) and nature (adverse or beneficial). Effects can be permanent (lasting for a long time or forever), temporary (not lasting for very long) and/ or reversible (can be changed back to what it was before). The assessment will take into account the

value/sensitivity of the heritage asset and its setting and the magnitude of the predicted impact.

- Adverse effects are those that detract from or reduce cultural significance or special interest of heritage assets.
- Beneficial effects are those that preserve, enhance or better reveal the cultural significance or special interest of heritage assets.

Criteria for Assigning Sensitivity of Heritage Assets

- 5.6.8 Cultural heritage assets are assigned value/importance through the designation process. Designation ensures that sites and places are recognised by law through the planning system and other regulatory processes. The level of protection and how a site or place is managed varies depending on the type of designation and the laws and policies that apply to it (HES 2019²⁴).
- 5.6.9 **Table 6.1** summarises the relative sensitivity of heritage assets (including their settings) relevant to the Proposed Development, based on the guidance set out in the SNH/HES EIA Handbook (version 5; 2018²⁵).

Table 5.1 Sensitivity of Heritage Assets

| Sensitivity of Asset | Definition / Criteria |
|----------------------|---|
| High | Assets valued at an international or national level, including: Scheduled Monuments Category A Listed Buildings Inventory Gardens and Designed Landscapes Inventory Historic Battlefields Non-designated assets that meet the relevant criteria for designation (including sites recorded in HERs as non-statutory register sites of presumed national importance) |
| Medium | Assets valued at a regional level, including: Archaeological sites and areas that have regional value (contributing to the aims of regional research frameworks) Archaeologically Sensitive Areas (where these are identified in Local Authority records) Non-Inventory Designed Landscapes (where these are identified in Local Authority records) Category B Listed Buildings Conservation Areas |
| Low | Assets valued at a local level, including: Archaeological sites that have local heritage value Category C listed buildings Unlisted historic buildings and townscapes with local (vernacular) characteristics |

²⁴ HES (2019). *Designation Policy and Selection Guidance*. Edinburgh. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b> (Accessed: 24/07/2024)

²⁵ SNH / HES (2018). *Environmental Impact Assessment Handbook*, Scottish Natural Heritage and Historic Environment Scotland, Edinburgh. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0> (Accessed: 24/07/2024)

| Sensitivity of Asset | Definition / Criteria |
|----------------------|--|
| Negligible | Assets of little or no intrinsic heritage value, including: Artefact find-spots (where the artefacts are no longer in situ and where their provenance is uncertain) Poorly preserved examples of particular types of features (e.g. quarries and gravel pits, dilapidated sheepfolds, etc) |

Criteria for Assessing the Significance of Effects

- 5.6.10 The magnitude of impact (adverse or beneficial) will be assessed in the categories, high, medium, low and negligible and described in **Table 5.2**.

Table 5.2 Magnitude of Heritage Impact

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

- 5.6.11 The sensitivity of the asset (**Table 5.1**) and the magnitude of the predicted impact (**Table 5.2**) are used to inform an assessment of the significance of the effect (direct or indirect effects, or effect on setting), summarised using the formula set out in the matrix in **Table 5.3** which is based on the guidance set out in the SNH/HES EIA

Handbook (version 5; 2018). The matrix employs a graduated scale of significance (from Negligible to Major effects) and where two outcomes are possible through application of the matrix, professional judgment supported by reasoned justification, will be used to determine the level of significance.

Table 5.3 Sensitivity of Heritage Assets

| Sensitivity of Asset | Magnitude of Impact | | | |
|----------------------|---------------------|------------------|------------|-----------------|
| | High | Medium | Low | Negligible |
| High | Major | Major | Moderate | Negligible/None |
| Medium | Major | Moderate | Minor | Negligible/None |
| Low | Moderate | Minor | Minor | Negligible/None |
| Negligible | Minor/Negligible | Minor/Negligible | Negligible | Negligible/None |

- 5.6.12 Major and Moderate effects are considered to be ‘significant’ in the context of the EIA Regulations. Minor and Negligible effects are considered to be ‘not significant’.

Mitigation

- 5.6.13 Based on an initial assessment, there are no previously recorded heritage assets that could potentially receive direct construction impacts from the Proposed Development.
- 5.6.14 If required following further desk-based research and field survey, the layout of the Proposed Development would seek to avoid any newly identified constraints.
- 5.6.15 The details and scope of any further, construction phase, mitigation that may be warranted to offset any adverse effects arising from the Proposed Development would be agreed through consultation with the CnES Archaeologist.

Residual Effects

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

5.7 Summary

- 5.7.1 The baseline identified to date includes one non-designated heritage asset recorded in the CnES HER, outwith, though surrounded by, the Site: Pairc Land Raiders Cairn (MWE 118897), a commemorative monument.
- 5.7.2 Previous field survey of part of the Site in 2018 encountered no previously unrecorded heritage assets within the Site.
- 5.7.3 There are no designated heritage assets within 3 km of the Site.
- 5.7.4 Study areas for the EIA have been set out and the assessment methodology presented for approval. A further scope of desk-based assessment and field survey will be carried out to fully inform the baseline reported in the EIA and to inform mitigation proposals (to the extent these are required).
- 5.7.5 As part of the request for an EIA Scoping Opinion, the Applicant would appreciate feedback on the proposed scope of the cultural heritage assessment, in line with the following questions:

1. Do consultees agree that an assessment on designated heritage assets can be scoped out of the assessment?
2. Do consultees agree that an assessment of all known non-designated assets, with the exception of the Pairc Land Raiders Cairn, can be scoped out the assessment?

6. BIODIVERSITY

6.1 Introduction

- 6.1.1 This chapter provides a summary of baseline ecological information and potential for significant effects associated with ecology and ornithology during the construction and operation of the Proposed Development.
- 6.1.2 This scoping exercise has been undertaken in accordance with the Guidelines for Ecological Impact Assessment in the UK (Chartered Institute of Ecology and Environmental Management (CIEEM), 2018)²⁶.
- 6.1.3 This chapter is accompanied by **Figure 6.1: Ecological Designations** and **Figure 6.2: Ornithological Designations** within **Appendix A**.

6.2 Baseline Conditions

- 6.2.1 Information has been gathered to inform the baseline ecological conditions of the Site and the following study areas:
- The Site and a 5 km buffer for designated and non-designated sites (including ancient woodland); and
 - The Site and a 250 m buffer (Zone of Influence (Zol)) for habitats and 100 m buffer for protected and notable species.

Desk Study

- 6.2.2 A search of the SNH Sitelink website²⁷ and MAGIC website²⁸ was carried out to establish if any European and/or nationally designated sites are present within the study area. In addition, a search of NatureScot's Ancient Woodland Inventory was undertaken to establish the presence of ancient woodland (including those of plantation origin). National Biodiversity Network (NBN) Atlas²⁹ was consulted for biological records.

Designations

- 6.2.3 Four designated sites have been identified within the 5 km study area. Details of these designated sites, including the qualifying features associated with them, are provided in **Table 6.1**.

²⁶ CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester

²⁷ <https://sitelink.nature.scot/home> (Accessed: 23/09/2024)

²⁸ <https://magic.defra.gov.uk/> (Accessed: 23/09/2024)

²⁹ <https://scotland.nbnatlas.org/> (Accessed: 23/09/2024)

Table 6.1 Statutory Designated Sites of International and National Importance

| Site Name | Designation | Qualifying Feature | Distance and Direction from Site ³⁰ |
|-----------------|------------------------------------|--|--|
| Lewis Peatlands | Special Protected Area (SPA) | Breeding Black-throated diver <i>Gavia arctica</i> Dunlin <i>Calidris aschinzii</i> Golden eagle <i>Aquila chrysaetos</i> Golden plover <i>Pluvialis apricaria</i> Greenshank <i>Tringa nebularia</i> Merlin <i>Falco columbarius</i> Red-throated diver <i>Gavia stellata</i> | 50 m, north |
| Lewis Peatlands | Ramsar | Notified for breeding divers, waders, raptors and protected habitats | 50 m, north |
| Lewis Peatlands | Special Area of Conservation (SAC) | Classified for Blanket bog Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels Depressions on peat substrates Otter <i>Lutra lutra</i> Wet heathland with cross-leaved heath | 2.8 km, north |
| Langavat SAC | SAC | Designated for Atlantic Salmon <i>Salmo salar</i> | 3.2 km, west |

Non-statutory Designations

- 6.2.4 There are no non-statutory designations within 5 km of the Site.

Field Survey

Habitats

- 6.2.5 A habitat survey has been undertaken in July 2024 using the UK Habitat Classification (UKHab) approach³¹ for the Site and area up to 250 m from the Site. National Vegetation Classification (NVC) surveys were also carried out across the Site to help identify potential Groundwater Dependent Terrestrial Ecosystems (GWDTEs)³² in accordance with best practice guidance. Habitat Condition Assessment (HCA) was completed to determine the Site's baseline biodiversity value.
- 6.2.6 The Site is located within an area dominated by blanket bog, in the immediate vicinity of Loch Stranndabhat, to the west. Adjacent and surrounding land features include a mix of deep peatland including blanket bog habitats, and extensive wet heathland with cross-leaved heath. In several areas bedrock is apparent at the

³⁰ Measured from the closest point.

³¹ <https://ukhab.org/about-ukhab/>

³² https://www.sepa.org.uk/media/143868/lupsgu31_planning_guidance_on_groundwater_abstractions.pdf

surface. Inland surface water habitats are present in the immediate vicinity. Blanket bog, modified bog and upland heath habitats are UK BAP Priority Habitats³³, listed under Annex I of the Habitats Directive and in the Scottish Biodiversity List (SBL) as important habitats for supporting species³⁴.

Protected species

- 6.2.7 The NBN Atlas shows historical records of otter *Lutra lutra* recorded in the immediate vicinity of the Site. No other Protected Species Records are available in the NBN Atlas in relation to the Site.
- 6.2.8 A Protected Species Survey was undertaken in July 2024, covering the Site and a 100 m buffer around the Site. No evidence of protected species presence, including otter, was recorded during the survey. However, there exists potential for otter to be present within the Site during the construction or operational of the Proposed Development, due to nearby suitable habitat and historical records of this species adjacent to the Site. Therefore, otter are proposed to be scoped into the assessment.

Ornithology

- 6.2.9 A review of data from the Lewis & Harris Raptor Survey Group (LHRSG) has identified that golden eagle territories have been identified within 3 km north-west and 5 km east of the Site. Six historical golden eagle nest sites were also identified within 5 km of the Site. There is one active golden eagle nest, approximately 6 km south-east of the Site. Merlin and red-throated diver flights were also recorded 1 km south of the Site. Greenshank were also recorded in the immediate vicinity during Vantage Point surveys undertaken in 2021 for an adjacent development, the replacement Harris to Stornoway OHL (also referred to as LT245).
- 6.2.10 Bird surveys of the area (including the Site) were undertaken from March 2023 to February 2025 for the proposed Muaitheabhal Wind Farm OHL Grid Connection. These surveys involved Vantage Point surveys and Moorland Bird Surveys.
- 6.2.11 The Moorland Bird Surveys recorded greenshank and black throated diver present on Loch Stanndabhat (which is adjacent to the Site). These surveys also recorded meadow pipit, cuckoo, stonechat and greylag goose within the Site and immediately to the south.
- 6.2.12 The Vantage Point surveys identified flights of black-throated diver, red-throated diver, golden eagle and merlin (all classifying species for Lewis Peatlands SPA), within 1 km of the Site. Greenshank, curlew and white-tailed eagle were also recorded in this area.

6.3 Sensitive Receptors

- 6.3.1 The following sensitive receptors have been identified which would be scoped into the assessment:
- Designated Site: Lewis Peatlands SPA, Ramsar and IBA;

³³ <https://jncc.gov.uk/our-work/uk-bap-priority-habitats/#list-of-uk-bap-priority-habitats>

³⁴ <https://www.nature.scot/doc/scottish-biodiversity-list>

- Habitats: Blanket bog habitat (Annex I and UK BAP Priority Habitat)³⁵; Upland heathland habitat (UK BAP Priority Habitat)³⁶;
- Ornithology: Species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) and Birds of Conservation Concern (BoCC) Red and Amber listed bird species within the study area; and
- Protected species: Otter.

6.4 Potentially Significant Effects

6.4.1 The assessment would consider the potential for significant effects associated with the following.

- Direct impacts such as habitat loss and inadvertent killing or injuring of protected or otherwise notable species during construction.
- Disturbance to protected, Schedule 1 bird species, and / or birds of conservation concern, such as Red and Amber listed bird species, during construction.
- Disturbance to protected or otherwise notable species (otter), or inadvertent damage to their breeding sites, resting places and foraging resources during construction.
- Indirect impacts from potential pollution or nutrient enrichment or hydrological disruption during construction.
- Cumulative impact from other developments, either built or proposed, within the zone of influence for ecological features identified as sensitive receptors of the Proposed Development.

6.5 Issues Scoped Out

Species

- 6.5.1 Reptiles and amphibians are likely to be present in open moorland and rough grassland. Reptiles and amphibians may be negatively affected by vegetation clearance works associated with the Proposed Development. However, the impacts are considered to be small in scale relative to the extensive habitat that will still remain available for these species. Pre-construction surveys will confirm the presence of sensitive features used for shelter and hibernation and will inform micro-siting of the design. Where this is not possible, surveys will inform non-licensed precautionary methods of working under the supervision of the Ecological Clerk of Works.
- 6.5.2 Surveys for terrestrial invertebrates are considered unnecessary as the assessment will adopt a precautionary approach and include appropriate mitigation, where required, to avoid significant effects.
- 6.5.3 It is recommended that the mitigation measures required to avoid the spread of invasive species are included within the CEMP. It is therefore considered that no significant effects will occur from the spread of invasive species as a result of the Proposed Development.

³⁵ <https://data.jncc.gov.uk/data/aadfff3d-9a67-467a-ac65-45285e123607/UKBAP-BAPHabitats-03-BlanketBog.pdf>

³⁶ <https://hub.jncc.gov.uk/assets/1be8bec3-0437-4758-adc8-ac866d4e0769#UKBAP-BAPHabitats-61-UplandHeathland.pdf>

Designated Sites

- 6.5.4 Langavat SAC, designated for atlantic salmon, will not be assessed further as there is no known hydrological connection between the Site and the SAC and no adverse impacts are considered likely.
- 6.5.5 Lewis Peatlands SAC (and its qualifying terrestrial features) will not be assessed further as no pathway has been identified for impacts to the qualifying features due to the distance from the Site and no hydrological connectivity between the Site and the SAC exists. It is not considered likely that the Proposed Development will result in a significant effect upon the SAC.

Operational Effects

- 6.5.6 During operation of the Proposed Development, maintenance activities would be limited to monthly site visits by maintenance personnel to undertake routine checks and operational switching. The Proposed Development will not pose a collision risk for birds due to its relatively small size and static nature, and the area from which any birds or protected species might be displaced would be small. As such, any effects on ecological and ornithological receptors during operation are unlikely to be significant. An assessment of the operational phase will therefore be scoped out of the EIA.

6.6 Assessment Methodology

- 6.6.1 The assessment will be completed in accordance with the Institute of Ecological and Environmental Management (IEEM) Ecological Impact Assessment Guidance. The assessment will use the ecological baseline to identify the sensitive ecological receptors that could be affected by the construction or operation of the Proposed Development. Each receptor will be assigned a geographic level of importance based on its national and local conservation status and population/assemblage trends and other relevant criteria (including size, naturalness, rarity and diversity). Details of the Proposed Development will then be used to assess what level of effect each receptor is likely to receive and whether or not that impact will be beneficial or adverse, significant or negligible, and temporary or permanent.
- 6.6.2 Where appropriate, mitigation measures will be recommended within the EIA to remedy any adverse impacts and measures to enhance the local ecology will also be incorporated into the Proposed Development. An assessment of residual effects will then be undertaken and reported within the EIA Report. The mitigation hierarchy will be followed when deciding on the appropriate mitigation method to use. This sets out that the preferred options are, in order: avoid, reduce, replace and compensate. This process has been used during the design phase to avoid potential impacts on sensitive features. SSEN Transmission GEMPs and SPPs would be adopted as well as a project specific CEMP.
- 6.6.3 A Biodiversity Net Gain (BNG) assessment shall be undertaken for the Proposed Development. BNG is a process whereby development leaves biodiversity in a measurably better state than before. The HCA data is combined with habitat distinctiveness, connectivity and strategic significance to determine biodiversity units per habitat polygon. The relative biodiversity value per polygon is indicated by calculating the biodiversity units per hectare (BU/ha). Any irreplaceable habitats identified, including good/moderate condition blanket bog, will not be entered into the

optioneering toolkit. This is a requirement of the BNG process as it is not possible to compensate for losses to irreplaceable habitat and they are therefore not quantified. SSEN Transmission have a corporate commitment to achieve a 10% net gain in biodiversity on their developments, which aligns with the requirements of NPF4, specifically Policy 3.

- 6.6.4 The cumulative assessment will consider the likely significant effects associated with the Proposed Development, together with other developments proposed within the study area, to determine the potential for likely significant cumulative effects.

6.7 Summary Questions to Consultees

- 6.7.1 As part of the request for an EIA Scoping Opinion, the Applicant would appreciate feedback on the proposed scope of the biodiversity assessment, specifically regarding the following questions.
1. Do consultees agree with the proposed study area?
 2. Do consultees agree with those designated sites proposed to be scoped out of the assessment?
 3. Do consultees agree that operational effects on all ecological and ornithological receptors are considered unlikely and can therefore be scoped out of the EIA?

7. WATER ENVIRONMENT

7.1 Introduction

- 7.1.1 This chapter of the EIA Scoping Report provides an overview of the existing water environment baseline and the potential effects associated with the construction and operation of the Proposed Development relating to the water environment, and sets out the proposed approach to assessing these potential effects.
- 7.1.2 The scope of assessment is based on a high-level review of the baseline data information sources and observations made during a hydrological walkover / site visit (which was carried out in November 2024) and will be confirmed through consultation with stakeholders. The assessment will rely upon publicly available information, and information to be provided by third parties.

7.2 Baseline Conditions

- 7.2.1 The following information has been gathered through desk-based research and a site visit undertaken in November 2024, to inform the baseline hydrological conditions of the Site and the associated study area, comprising the Site and a 2 km buffer zone of influence for flood risk, water resources and downstream sensitive receptors.

Surface Water Features

- 7.2.2 Surface water features in proximity to the Site are illustrated in **Figure 7.1: Hydrology Constraints, Appendix A**. The Site is situated adjacent to (east of) Loch Stranndabhat. According to the SEPA Water Classification Hub³⁷, Loch Stranndabhat is assessed to be of High overall condition under the Water Framework Directive (WFD) classification system.
- 7.2.3 Loch Stranndabhat drains towards Lewis' eastern coast via the Albainn Mhor river (adjacent to the Site's northernmost boundary) and consequently flows into Loch Erisort which is directly connected to the Sea to the north-east. The Albainn Mhor is classified by SEPA as being of Good water quality and Good overall condition.
- 7.2.4 An unnamed watercourse flows in a westerly direction within the south-west of the Site. Aerial imagery suggests that cut drains are present in the north of the Site which lead to this watercourse, which discharges to Loch Stranndabhat. This watercourse is not assessed under the WFD classification scheme due to its small catchment size.
- 7.2.5 Aerial imagery and 50 cm SEPA Lidar³⁸ terrain data indicates that a number of drains and flow paths are present across the Site, and that the topography of parts of the Site has been subject to historical peat cutting activities. Generally, the east of the Site drains in an easterly direction to land drains, which subsequently flow in a south-westerly direction to Loch Stranndabhat. Surface water runoff from raised ground in the centre of the Site drains predominantly to the north and north-east, flowing to the unnamed watercourse within the Site. Runoff from the south of the Site drains to the south via overland flow paths, and further to cut drains and Loch Stranndabhat.

³⁷ <https://www.sepa.org.uk/data-visualisation/water-classification-hub/>

³⁸ <https://remotesensingdata.gov.scot/data#/download>

Flood Risk

- 7.2.6 Flood Risk to the Site and study area is shown in **Figure 7.2: Flood Risk, Appendix A**. According to SEPA flood maps³⁹, no areas of the Site are at risk of flooding from coastal sources. Along the north-eastern boundary of the Site, associated with the location of the Albainn Mhor watercourse, approximately 5% of on-site land is shown to be at a low, medium and high risk of fluvial flooding. Additionally, three small, isolated areas identified as being at a high probability of surface water pooling are located within the local topographic low points towards the south of the Site adjacent and along the A859 road.

Water Resources

- 7.2.7 According to Scottish Water mapping⁴⁰ there are no Drinking Water Protected Areas (DWPA) for surface water within 2 km of the Site. The nearest DWPA is approximately 10 km south-west and is not within hydrological connection to the Site.
- 7.2.8 According to records of Private Water Supplies (PWS) received by Ramboll in 2021 and 2023 from CnES, there are no records of PWS within 2 km of the Site. The nearest PWS record in 2021 was approximately 3.3 km south-east and is not within hydrological connection to the Site.

Hydrogeology and GWDTEs

- 7.2.9 According to BGS 1:625,000 hydrogeological mapping, the Site is underlain by a low productivity aquifer of mylonitic rock and fault breccia, which yield small amounts of groundwater.
- 7.2.10 There is potential that areas within and in proximity to the Site could be classified as moderate or high potentially groundwater dependent. Ramboll carried out NVC habitat surveying in July 2024 (refer to **Chapter 6: Biodiversity**), classifying communities in accordance with the NVC system⁴¹. During these surveys, habitats onsite were identified to comprise entirely of rainwater or surface water fed, blanket bog and modified grassland. No habitats considered to be GWDTEs were identified during the NVC Survey, therefore, further hydrological and hydrogeological consideration of GWDTE will not be included within the EIA Report.

7.3 Sensitive Receptors

- 7.3.1 A number of watercourses and drains are located within the Site and the part of the Site lies immediately adjacent to Loch Stranndabhat, which is assessed by SEPA to be of High overall condition under the WFD classification scheme, and is therefore assessed to be a high sensitivity receptor. Therefore, the assessment will focus on the potential impacts during the construction and operational phases of the Proposed Development on watercourses and waterbodies in the Site and study area.

7.4 Potentially Significant Effects

- 7.4.1 It is anticipated that standard best practice measures will be implemented during the construction phase of the Proposed Development, through a CEMP that would be prepared by the Principal Contractor prior to the commencement of construction. The

³⁹ <https://beta.sepa.scot/flooding/flood-maps/>

⁴⁰ <https://map.environment.gov.scot/sewebmap/>

⁴¹ Rodwell, J. S. (Ed), et al. (1991 – 2000). British Plant Communities (5 volumes). Cambridge University Press.

CEMP would ensure that a 50 m buffer is maintained between all surface water features and construction/laydown areas and would set out details of the management of surface water runoff from the construction site. The CEMP would detail a suitable sustainable drainage systems (SUDS) treatment train, such that surface water runoff rates from the Site would be controlled and no sediment laden water would be released from the Site. The CEMP would also set out measures for pollution prevention to be implemented at the Site in line with SEPA guidance⁴².

7.4.2 Based on baseline conditions described above and taking into consideration embedded mitigation, it is anticipated that the following potentially significant effects could occur as a result of the Proposed Development and will therefore be assessed in the EIA Report:

- Alterations to in-channel or overland flow regimes through excavations, disruption to artificial drains, exposure of bare earth or rock, alteration to field drains;
- Potential to disrupt surface water conditions supporting sensitive, non-groundwater dependent habitats;
- Increased erosion and transport of sediment to surface water features as a result of construction on or in close proximity to these features, vegetation and soil stripping, excavations and dewatering activities. Potential effects include indirect effects on aquatic ecology and fluvial morphology; and
- Potential to alter or disrupt shallow groundwater flow, in particular through the construction of tracks, drainage measures and infrastructure foundations.

7.5 Issues Scoped Out

Flood Risk

7.5.1 The siting of the Switching Station within the Site would be directed away from areas assessed to be at risk of flooding identified on SEPA regulatory mapping. The Site is entirely within the catchment of Loch Stranndabhat and surface water runoff drains to the loch via overland flow paths, cut drains and a small watercourse, without interacting with built assets, watercourse crossings or sensitive receptors.

7.5.2 Therefore, it is not anticipated that a Flood Risk Assessment would form part of the scope for assessment.

7.5.3 The Proposed Development would result in an increase in impermeable area, however surface water flood risk would be accounted for during detailed drainage design. A surface water drainage strategy for the Site would be prepared in consultation with SEPA and submitted as an appendix to the EIA Report.

Watercourse Crossings

7.5.4 The access route to the Site would be from the A859 along the eastern boundary of the Site. Aerial imagery suggests the presence of a small number of surface water flow paths/drains that the access route to the Site would cross. These drains/flow paths are not recorded on 1:50,000 OS mapping (and are therefore classified as minor watercourses which would not be subject to licensing for crossings). Crossings for a single-track access road are likely to comprise a limited number of closed circular culverts at regular intervals to ensure cross-drainage. Therefore, it is

⁴² <https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/>

anticipated that a watercourse crossing register would not be prepared as part of the EIA.

Private Water Supplies

- 7.5.5 Based on an review of PWS locations provided by CnES in 2021 and 2023, the Site is not in hydrological connection to any PWS or DWPA's (surface). Therefore, an assessment of potential impacts on PWS is not anticipated to be required.
- 7.5.6 Updated records of PWS will be obtained from CnES. Should new PWS be identified in the study area and be found to be in hydrological connectivity with the Site, a detailed PWS risk assessment would be carried out for these locations.

Hydrogeology and GWDTEs

- 7.5.7 There is the potential to impact upon receiving soils, groundwater and watercourse quality through the release of contaminated water and stored chemicals used onsite during construction works, with resulting direct effects on water quality and indirect effects on aquatic ecology. However, the potential for such impacts would be managed through the implementation of a CEMP and regulation of the Site under CAR⁴³. In the unlikely event that chemical storage or stockpiling of materials would be carried out in close proximity to sensitive hydrological receptors, mitigation measures to avoid impacts to water quality would be provided in the CEMP. Suitable sites and precautions for such activities will be identified in advance to avoid colocation with sensitive hydrological receptors.
- 7.5.8 Excavation of soil and bedrock during the construction phase of the Proposed Development could cause localised disruption and interruption to groundwater flow. Interruption of groundwater flow would potentially reduce the supply of groundwater to GWDTEs thereby causing an alteration / change in the quality or quantity of and/or the physical or biological characteristics of GWDTEs.
- 7.5.9 As outlined above, no GWDTEs were identified within the study area during the NVC survey of the Site undertaken in July 2024 and, as such, it is reasonable to assume that significant effects on GWDTEs are not likely and an assessment will be scoped out of the EIA Report.

7.6 Assessment Methodology

- 7.6.1 The study area, in respect of potential impacts on water resources, will include the Proposed Development extent plus a 2 km buffer. Additionally, the assessment will consider potential hydrological downstream connectivity to areas extending beyond this buffer as required.
- 7.6.2 The assessment of the significance of hydrological and hydrogeological impacts will be undertaken by determining the sensitivity of the specific attribute and the magnitude of the impact upon the attribute. Impacts will be assessed for all phases of the Proposed Development. Following the determination of impacts and assessment of likely significant effects, mitigation measures will be identified, and residual effects identified.
- 7.6.3 It is anticipated that as the assessment of potential impacts will inform the design of the Proposed Development and best practice measures would be implemented

⁴³ SEPA The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended), A Practical Guide. Version 9, January 2022. Available online: <https://www.sepa.org.uk/regulations/water/> (Accessed: 19/1/2024)

during the all phases of the Proposed Development, such that significant residual effects to the water environment would be avoided. If likely significant effects are identified through the assessment process, suitable mitigation measures will be set out in the EIA Report.

7.7 Summary Questions to Consultees

7.7.1 As part of the request for an EIA Scoping Opinion, the Applicant would appreciate feedback on the proposed scope of the water environment assessment, specifically regarding the following questions:

- 1: Do consultees agree that the scope of the proposed assessment is appropriate?
- 2: Do consultees agree with those topics and receptors proposed to be scoped out of the assessment?

8. PEAT

8.1 Introduction

- 8.1.1 This chapter of the Scoping Report provides an overview of the peat and carbon rich soils baseline for the Site, describes the potential effects associated with the construction and operation of the Proposed Development, and presents the assessment methodology to be used in the impact assessment.

8.2 Baseline Conditions

- 8.2.1 According to the British Geological Survey (BGS) 'Geology Viewer' website⁴⁴ (1:625,000), no superficial deposits are mapped in the location of the Site. The bedrock geology at the Site comprises metamorphic rocks belonging to the Outer Hebrides Thrust Zone Mylonites Complex (protocataclasite). The underlying geology at the Site is illustrated in **Figure 7.3: Geology, Appendix A**.
- 8.2.2 A review of the NatureScot Carbon and Peatland Map (2016)⁴⁵, as shown in **Figure 7.4: Peat Classification, Appendix A**, indicates that the Site is predominantly underlain by Class 1 and Class 2 peatland soils which comprise nationally important carbon-rich soils, deep peat and priority peatland habitat likely to be of high conservation value. Class 3 peatland is also located in the north-west corner of the Site.
- 8.2.3 Peat depth probing (Stage 1 survey) was undertaken in September 2024 in accordance with NatureScot guidance⁴⁶ to provide peat depth data for the Site. The survey showed that peat depths across the Site range from no peat present to peat up to 4.5 m deep, for the areas where samples were collected. A more refined Stage 2 peat depth survey will be undertaken to inform the EIA and peat and carbon rich soils assessment.
- 8.2.4 No nationally important environmental designations for peat or geological conservation are located in close proximity to the Site. No Local Geodiversity Sites are located at the Site.
- 8.2.5 An initial review of aerial imagery and OS mapping indicates that no potentially contaminative land uses are present within the Site, although several gravel pits are located to the south, north of the A589 road. There are no records of historical underground mining at the Site.

8.3 Sensitive Receptors

- 8.3.1 The main receptor identified which will be considered in EIA is peat and carbon rich soils within the Proposed Development, which are of national importance in accordance with the NatureScot Carbon and Peatland map and National Planning Framework 4 (2023)⁴⁷, and are shown to be present across the majority of the Site.

⁴⁴ <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/> [Accessed September 2024]

⁴⁵ <https://soils.environment.gov.scot/maps/thematic-maps/carbon-and-peatland-2016-map/> [Accessed December 2024]

⁴⁶ NatureScot. Peat Depth and Peatland Condition Survey. Available at: <https://www.nature.scot/sites/default/files/2021-06/Peatland%20Action%20-%20GUIDANCE%20-%20Peat%20depth%20and%20peatland%20condition%20survey%20guidance.pdf>

⁴⁷ <https://www.gov.scot/publications/national-planning-framework-4/pages/3/> (Accessed: 9/12/2024)

8.4 Potentially Significant Effects

8.4.1 Based on baseline conditions described above and taking into consideration embedded mitigation, it is anticipated that the following potentially significant effects could occur as a result of the Proposed Development and will therefore be assessed in the EIA Report.

- Potential for loss, disturbance and compaction of peat and carbon rich soils during the construction of the Proposed Development;
- Potential for peat instability during the construction of the Proposed Development which could result in peat slides;
- Erosion and disturbance of peat that may result in localised drying and resultant oxidation and carbon release.
- Construction activities and excavations that could result in surplus peat that will require sustainable re-use or reinstatement either within the Proposed Development or in suitable locations offsite.

8.4.2 Potential effects on the natural capital of peat and associated habitats will be considered in the Biodiversity chapter of the EIA Report.

8.5 Issues Scoped Out

8.5.1 Based on an initial review of the historical mapping it is proposed to scope out contaminated land from the assessment on the basis that there is limited potentially contaminative land uses at the Site.

8.5.2 No sensitive geological receptors have been identified and therefore an assessment of potential impacts on geology would also be scoped out of the EIA Report.

8.6 Assessment Methodology

8.6.1 The EIA Report will include assessment of the potential significance effects on peat and carbon rich soils resources from the Proposed Development.

8.6.2 Following the determination of impacts, mitigation measures will be identified, and residual effects identified. The significance of residual effects would be defined as a function of the sensitivity of receptors and the magnitude of change, taking account of any mitigation proposed. Differentiations between categories, and thus the final significance ratings, would be based upon professional judgement. An Outline Peat Management Plan (OPMP) will be produced in accordance with SEPA guidance⁴⁸⁴⁹ which will include information on the peat characteristics, extent, details of proposed excavation, surplus and re-use options based on peat probing data and desk-based baseline data. This will include an estimation of peat volumes and will outline measures necessary to minimise peat and habitat disturbance. It will provide a clear description of mitigation measures to minimise potential adverse impacts on peat and peatland functioning, and ensure best practice and effective excavating, moving and re-using / reinstating of peat. This would include integration of peat reuse measures with habitat management proposals within the wider Site. The OPMP will be developed using the peat mitigation hierarchy.

⁴⁸ SEPA (2012) Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and Minimisation of Waste.

⁴⁹ Scottish Government, SNH, SEPA (2017) Peatland Guidance on Development on Peatland, on-line-version-only.

8.6.3 A Peat Landslide Hazard Risk Assessment (PLHRA) will be undertaken (if required, subject to the design) in accordance with the Scottish Government guidance⁵⁰ and included as a Technical Appendix to the EIA Report. The assessment will assess the potential stability risks associated with the Proposed Development and will incorporate:

- desk study information supplemented by site reconnaissance information;
- review of peat depth survey data including peat characteristics, identification of areas of potential or past instability, flow pathways for potential peat slide events and identification of down gradient environmental receptors;
- preliminary stability analysis and hazard ranking; and
- reporting to include the assessment, identification of hazards, mitigation measures and recommendations for further assessment to be included during post-consent detailed design and construction phases.

8.7 Summary Questions to Consultees

8.7.1 The assessment will consider the potential effects on peat and carbon rich soils, and measures to minimise its disturbance, erosion and loss as part of the Proposed Development. An OPMP will be produced as an appendix to the EIA Report which will include the materials balance and mitigation measures to manage peat during construction and operation of the Proposed Development. A PLHRA will also be undertaken to determine whether the Proposed Development has the potential to affect stability of peat, and outline measures to mitigate these impacts.

8.7.2 As part of the request for an EIA Scoping Opinion, the Applicant would appreciate feedback on the proposed scope of the water and soils assessment, specifically regarding the following questions.

- 1: Do consultees agree that contaminated land and geology can be scoped out of the EIA Report?

⁵⁰ The Scottish Government (2017) Peat Landslide Hazard and Risk Assessments – Best Practice Guide for Proposed Electricity Generation Developments.

9. TRAFFIC AND TRANSPORT

9.1 Introduction

- 9.1.1 This chapter sets out the potential impacts relating to Traffic and Transport in relation to the construction phase of the Proposed Development. Traffic associated with the operation of the Proposed Development will be negligible and will therefore not be considered further.
- 9.1.2 The assessment will be based on the impacts of Heavy Goods Vehicle (HGVs), private car and delivery vehicle movements during the construction of the Proposed Development.

9.2 Baseline Conditions

- 9.2.1 Baseline traffic data will be obtained from the UK Department of Transport (DfT) traffic survey database for the following road links:
- A859;
 - A858; and
 - A857.
- 9.2.2 The above links effectively make up the study area for the traffic and transport assessment. The Proposed Development lies adjacent to the A859 so all construction traffic will use the A859 corridor to access the Site. The A859 is the main north-south route on Lewis extending from the settlement and Port of Stornoway to the north of the Site, and to Harris to the south.
- 9.2.3 The A858 runs in an east-west axis to the west of Stornoway before turning northwards and running to the north end of Lewis. It is likely that some construction materials and site staff will come from locations within this corridor so a temporary uplift in traffic levels is anticipated during the construction of the Proposed Development.
- 9.2.4 The final road link included within the study area is the A857 through Stornoway. This road links to both the A859 and A858 and provides the link between these roads and a link to the port facilities within Stornoway as well as other commercial areas of the settlement where some materials for the Proposed Development are likely to be sourced from. It is also likely that a high proportion of the construction workforce would be drawn from Stornoway.

9.3 Sensitive Receptors

- 9.3.1 The main sensitive receptors to increased traffic levels and associated environmental effects are likely to be residents of the nearest settlements such as Balallan and Airidh a' Bhruaich, isolated residents along the road corridors and those who use the road for leisure and recreational purposes (cyclists etc).

9.4 Potentially Significant Effects

- 9.4.1 The main impact of the Proposed Development will be increased traffic flows, or changes to the traffic composition, as a result of traffic movements during construction. In particular, there will be HGV movements carrying construction materials to the Site such as concrete, aggregates, plant and general construction

materials as well as the transmission equipment which will be accommodated within the Proposed Development. The origin of these trips will vary however the primary route to and from the Site will be via the A859. Significant effects on the receptors identified above may arise during the construction phase.

9.4.2 The key issues for consideration as part of the assessment for the construction phase will include the:

- temporary change in traffic flows and the resultant, temporary effects on the road network during the construction phase for local residents and users of the roads within the study area;
- design of new access infrastructure; and
- consideration of appropriate and practical mitigation measures to offset any temporary effects.

9.5 Issues Scoped Out

9.5.1 Once operational, the volume of traffic associated with the Proposed Development would be minimal, relating to maintenance only. No significant effects associated with vehicle movements during the operational phase are likely. The operational phase of the Proposed Development will therefore not be considered in the EIA Report.

9.6 Assessment Methodology

9.6.1 The assessment will be undertaken in accordance with the following policy and guidance documents:

- Guidelines for the Environmental Assessment of Traffic and Movement (IEMA, 2023)⁵¹;
- Transport Assessment Guidance (Scottish Government, 2012)⁵²;
- Planning Advice Note 75: Planning for Transport (Scottish Government, 2005)⁵³; and
- Design Manual for Roads and Bridges (DMRB)⁵⁴.

9.6.2 The effect of the increase in construction vehicle traffic movements will be quantified through comparison of existing traffic flows and vehicle composition (baseline data) with the flows predicted during construction of the Proposed Development.

9.6.3 Consideration of the potential impacts on other road users will also be undertaken where road links are affected by construction traffic with the following environmental effects considered:

- severance of communities;
- road vehicle driver and passenger delay;
- non-motorised user delay / non-motorised amenity;
- fear and intimidation on and by road users;

⁵¹ <https://www.iema.net/resources/blogs/2023/07/12/iema-guidance-ea-of-traffic-and-movement/> (Accessed: 19/1/2024)

⁵² https://www.transport.gov.scot/media/4589/planning_reform_-_dpmtag_-_development_management_dpmtag_ref__17_-_transport_assessment_guidance_final_-_june_2012.pdf (Accessed: 9/12/2024)

⁵³ <https://www.gov.scot/publications/planning-advice-note-pan-75-planning-transport/> (Accessed: 9/12/2024)

⁵⁴ <https://nationalhighways.co.uk/suppliers/design-standards-and-specifications/design-manual-for-roads-and-bridges-dmrbr/> (Accessed: 9/12/2024).

- road user and pedestrian safety; and
- hazardous/large loads.

9.6.4 The following rules taken from the IEMA Guidelines would be used as a screening process to define the scale and extent of the assessment required.

- Rule 1 - Include highway links where flows are predicted to increase by more than 30% or where the number of HGVs is predicted to increase by more than 30%.
- Rule 2 - Include any other specifically sensitive areas where traffic flows are predicted to increase by 10% or more.

9.6.5 Where the predicted growth in traffic flow is below the thresholds, the IEMA guidelines suggest the significance of the effects can be stated to be negligible and further detailed assessment is not warranted. Where a detailed assessment is required, sensitivity and magnitude criteria will be used in order to determine the significance of effects.

9.6.6 In addition, the potential for cumulative effects will be considered with other developments which are proposed to use the same public roads as the Proposed Development during construction.

9.6.7 An outline Construction Traffic Management Plan (CTMP) will be prepared and appended to the EIA Report, to mitigate the effects of construction traffic (and associated environmental effects). The CTMP will include measures under the following categories:

- construction programme and phasing;
- quantification of construction movements;
- defined working hours;
- measures to minimise construction traffic impacts (delivery control, sustainability, speed limits, designated haul routes, staff induction, workforce travel arrangements, signage etc); and
- communication arrangements (with local community, highway authorities and other construction Sites).

9.7 Summary Questions to Consultees

9.7.1 Potential effects of the Proposed Development associated with traffic and transport, are anticipated to be limited to the construction phase of the Proposed Development. The application will also be accompanied by an outline CTMP.

9.7.2 As part of the request for an EIA Scoping Opinion, the Applicant would appreciate feedback on the proposed scope of the traffic and transport assessment, specifically whether consultees agree the following.

1. Do consultees agree with the proposed study area?
2. Do consultees agree that significant effects during operation are unlikely and can therefore be scoped out of the EIA?

10. TOPICS SCOPED OUT

10.1 Noise and Vibration

10.1.1 The northern boundary of the Site is located approximately 100 m of the nearest residential property, at the western extent of Balallan. However, as shown in **Figure 2.1: Site Layout, Appendix A**, the proposed location of the Switching Station is situated approximately 900 m south-west of the nearest property. The closest properties to the Site are situated adjacent to the A859 and accordingly background noise at these properties is dominated by road traffic noise.

10.1.2 Construction activity has the potential for noise impacts to arise. Construction activities are likely to include: Site set up; earthworks; foundation construction; building frame construction; installation of plant equipment, construction of access roads; and landscaping. However, given the distance between the nearest receptor and the Site, significant noise effects are not anticipated from these construction activities. Embedded mitigation measures would be implemented to reduce the potential for adverse impacts which would include the following:

- Best Practicable Means will be utilised by the Principal Contractor during the works related to the construction methodologies adopted, plants and equipment selection, and employment of suitably trained and qualified personnel;
- Scheduling of Works: Construction works should take place in core hours (Mon-Fri 8am-7pm; Sat 8am-1pm; No working on Sundays);
- Vehicles and mechanical plant used will be fitted with effective exhaust silencers and will be maintained in good and efficient working order and operated to minimise noise emissions;
- Compressors and generators will use sound reduced models which have lined and sealed acoustic covers. Pneumatic percussive tools will be fitted with mufflers/silencers;
- Where machines are in intermittent use, they will be shut down in the intervening periods. If equipment which is required to run constantly, they will be housed in suitable acoustic enclosures where practicable;
- Where practicable, plant and equipment creating noise will be located away far from sensitive receptors and away from walls which could reflect noise towards receptors;
- Electrically powered construction plant equipment will be preferred over diesel/petrol where practicable;
- Vehicles will not wait/queue on public highways with engines idling;
- Site staff and personnel will be instructed on “Best Practicable Means” related to the reduction of noise and vibration during induction training. All staff will receive induction training that will incorporate environmental awareness training;
- Where noisy activities are to take place, they should be staggered in time and space where feasible;
- The use of designated access routes will be used; and
- Reversing alarms incorporating one of more of the features listed below or any other comparable system will be used where reasonably practicable: highly directional sounders; use of broad band signals; self-adjusting output sounders;

flashing warning lights; reversing alarms will be set to the minimum output noise level required for health and safety compliance.

- 10.1.3 A Construction Noise Management Plan (CNMP) would be prepared which sets out construction noise limits which would be set in accordance with BS 5228 (2009: 2014) 'Code of practice for noise and vibration control on construction and open sites' and agreed with CnES. The CNMP would outline the measures to control and limit noise emissions such that the noise limits are not exceeded at any receptors. No significant effects in relation to construction noise are considered likely.
- 10.1.4 Should extraction of rock from on-site borrow pits form part of the Proposed Development, subject to their location in relation to the nearest noise sensitive receptors, a construction noise assessment may be required to assess construction noise levels and the requirement for further noise mitigation to ensure that construction noise limits are not exceeded. This would form a Technical Appendix to the EIA Report.
- 10.1.5 As a Switching Station, the Proposed Development would not include any transformers. Operational traffic associated with the Proposed Development would be minimal and limited to monthly maintenance visits. As such, the Proposed Development is not anticipated to produce noise levels above the 55dB(A) outdoor noise limit at any receptors and accordingly no significant operational effects are considered likely.
- 10.1.6 While the noise generated by the Proposed Development could potentially disturb local sensitive bird populations, leading to minor displacement, the impact is likely to be minimal and any potential impact would be addressed in the Biodiversity chapter of the EIA Report.

10.2 Land Use

- 10.2.1 Land capability for agriculture for the Site is mostly classified in the Scottish Government Soil Map⁵⁵ as rough grazing (Class 6.3), with a small area classified as improved grassland (Class 5.2) in north-east. The Proposed Development is not located on what is considered to be good quality land for agricultural purposes.
- 10.2.2 No areas of woodland or forestry are located within or in proximity to the Site.
- 10.2.3 Land use within 3 km of the Site is primarily rural and it is anticipated that the Proposed Development would have a negligible impact on tourism and recreation in the surrounding area, during both the construction and operational phase of the development.
- 10.2.4 No potential significant effects in relation to land use and amenity have been identified. Therefore, it is proposed that all issues relating to land use are scoped out of further assessment.

10.3 Socio-Economics, Recreation and Tourism

- 10.3.1 The socio-economic assessment undertaken as part of the needs case for National Development as defined in NPF 4 is an established and settled policy in Scotland. Given that the proposed project fits within the provisions of the policy and its supporting framework it is unnecessary to revisit or argue material relevance of

⁵⁵ <https://soils.environment.gov.scot/maps/capability-maps/national-scale-land-capability-for-agriculture/>

socio-economic impact. Furthermore, any socio-economic statement would be best set out as a standalone assessment of socio-economic impacts in the context of evidence of compliance with national and local development policy.

- 10.3.2 Accordingly, a socio-economic assessment is scoped out of EIA Report based on an understanding of the relative scale of this project. A standalone report will be provided to accompany the planning application to provide information on this topic in relation to wider policy, as part of the determination process.

10.4 Population and Human Health

- 10.4.1 The Proposed Development would be located in a rural area away from nearby residential receptors. The main settlement within the vicinity of the Site is Balallan, with the nearest residential property located approximately 900 m from the proposed location of the Switching Station. The impacts on human health for a development of this nature and scale are limited to potential increased exposure to noise during the construction period (which are unlikely to be significant) and changes in amenity value of residential or recreational resources. These will be considered in the Landscape and Visual Impact chapter of the EIA Report.
- 10.4.2 The UK Health Protection Agency (HPA) is the government body responsible for policy and guidance on Electric and Magnetic Fields (EMF). Exposure guidelines have been developed by the International Commission on Non-Ionising Radiation Protection (ICNIRP)⁵⁶ to ensure protection of human health in different situations, occupational exposure and public exposure, which have been adopted by the HPA for application in the UK. The Proposed Development is a switching station which would not include transformers, a known source of EMF. There is no potential for public or occupational exposure to EMFs above appropriate thresholds as a result of the construction of the Proposed Development.
- 10.4.3 Based on the above, it is proposed that the Population and Human Health topic is scoped out of further assessment in the EIA Report.

10.5 Major Accidents and Disasters

- 10.5.1 The EIA Regulations require the consideration of the vulnerability of the Proposed Development to major accidents and disasters.
- 10.5.2 Given the nature of the Proposed Development, the potential for effects related to the vulnerability to major accidents and disasters are likely to be limited to those associated with unplanned power outages, due to extreme weather or structural damage.
- 10.5.3 Crisis management and continuity plans are in place across the SSE Group. These are tested regularly and are designed for the management of, and recovery from, significant energy infrastructure failure events. Where there are material changes in infrastructure (or the management of it) additional plans are developed.
- 10.5.4 Potential significant effects on the vulnerability of the Proposed Development to major accidents and disasters has therefore been scoped out of the EIA.

⁵⁶ International Commission on Non-Ionising Radiation Protection, 1998. Icnirp Guidelines For Limiting Exposure To Time-Varying Electric, Magnetic And Electromagnetic Fields (Up To 300 Ghz)

10.6 Air Quality

- 10.6.1 There are no Air Quality Management Areas (AQMAs) in the CnES area, indicating that the area is meeting national air quality objectives and European Directives⁵⁷ limits and target values for the protection of human health.
- 10.6.2 The Proposed Development has the potential to give rise to some localised and temporary construction related releases associated with dust (foundation construction, passage of vehicles along access tracks) and construction plant and traffic exhaust emissions. However, the nature of the construction activities is that these would be localised, short term for individual activities and intermittent. Any potential for nuisance effects on residential or recreational amenity during construction would be strictly controlled in accordance with a CEMP.
- 10.6.3 It is therefore proposed that an assessment of Air Quality would be scoped out of the EIA Report.

10.7 Climate Change

- 10.7.1 IEMA guidance⁵⁸ indicates all greenhouse gas (GHG) emissions should be considered as significant; however, in this case it is anticipated that the Proposed Development will indirectly result in a net-reduction / saving of GHG emissions.
- 10.7.2 Construction of the Proposed Development is likely to contribute to GHG emissions from vehicles travelling to and from the Site, and from the carbon footprint (embodied carbon) of the materials required to build the Proposed Development. The emissions directly associated with construction are likely to be temporary and short in duration from exhaust gases from vehicles and potentially from the construction plant. The amount of material and potential emissions required during construction and operation of the plant is not disproportionate for a development of this scale.
- 10.7.3 In relation to climate adaptation, the design and location of the Proposed Development will consider the potential risk posed by locations with increased flood risk and ground instability.
- 10.7.4 The Proposed Development is required to provide capacity for connection of distributed renewable energy generation to the electricity transmission network. The Proposed Development aligns with the "*Strategic Renewable Electricity Generation and Transmission Infrastructure*" designation within National Planning Framework 4 (NPF4)⁵⁹, which supports renewable electricity generation and the expansion of the electricity grid and emphasises the essential role of renewable energy infrastructure to meet Scotland's net-zero emissions targets by 2045. The Proposed Development would provide capacity for connecting renewable electricity generation to the transmission network, in turn displacing emissions associated with fossil fuel based electricity generation elsewhere and will play an important role in facilitating the transition to net zero emissions. Therefore, a climate change assessment to consider GHG emissions is not proposed and this topic is scoped out from further assessment.

⁵⁷ Directive 2008/50/EC, Directive 2004/107/EC and 2001/81/EC

⁵⁸ IEMA (2017). Assessing Greenhouse Gas Emissions and Evaluating their Significance. Available at:

https://www.iema.net/media/xmgpook/2022_iema_greenhouse_gas_guidance_eia.pdf . (Accessed 06/08/2024)

⁵⁹ <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf> (Accessed 5/10/2024)

- 10.7.5 The Proposed Development's vulnerability to climate change hazards is considered low on the basis that design (to be set out in the EIA Report) will include embedded mitigation to ensure any significant effects are avoided or reduced to an acceptable level. An assessment of the vulnerability of the Proposed Development to climate change hazards is not proposed as part of the EIA Report.

11. NEXT STEPS

11.1.1 The Applicant invites consultees to comment on the following:

- What environmental information do you hold or are aware of that will assist in the EIA described here?
- Do you agree with the proposed approach for baseline collection, prediction and significance assessment?
- Are there any key issues or possible effects which have been omitted?
- Do you agree with the list of issues to be scoped out, and the rationale behind the decision?

11.1.2 All responses should be addressed to CnES at planning@cne-siar.gov.uk or:

Planning (Development Management)

Comhairle nan Eilean Siar

Sandwick Road

Stornoway

Isle of Lewis

HS1 2BW

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

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

APPENDIX A: FIGURES